

List of abbreviations

| | | | |
|--------------|---|------------|---|
| ANSI | American National Standard | d | Pipe outside diameter |
| ASTM | American Society for Testing and Materials | DN | Nominal bore |
| BS | British Standard | PN | Nominal pressure at 20°C, water |
| DIN | Deutsche Industrie-Normen | kg | Weight in kilograms |
| ISO | International Standardization Organisation | SP | Standard pack. The figure given indicates the quantity of fittings contained in a standard pack |
| ABS | Acrylnitril Butadien Styrene | | |
| PVC-U | Polyvinyl Chloride | GP | Gross pack. The figure given indicates the quantity of fittings contained in a gross pack |
| PVC-C | Polyvinyl Chloride chlorinated | G | Pipe thread, not pressure tight in the thread to ISO 228-1 |
| PP | Polypropylene, heat stabilised | NPT | Taper male thread pressure tight in the thread to ANSI B 1.20.1 |
| PE | Polyethylene | R | Taper male thread, pressure tight in the thread to ISO 7-1/DIN 2999-1 |
| PVDF | Polyvinylidene fluoride | Rc | Taper female thread, pressure tight in the thread to ISO 7-1/DIN 2999-1 |
| EPDM | Ethylene Propylene Rubber | Rp | Parallel female thread, pressure tight in the thread to ISO 7-1/DIN 2999-1 |
| FPM | Fluorine Rubber, e.g. Viton® | Tr | Trapezoid thread |
| NBR | Nitrile Rubber | SC | Size of hexagon bolts |
| IIR | Butyl Rubber | s | A/F |
| CSM | Chlore Sulphonyl Polythene, e.g. Hypalon® | e | Wall thickness |
| CR | Chloroprene Rubber, e.g. Neoprene® | AL | Number of bolt holes |
| PTFE | Polytetrafluorethylene, e.g. Teflon® | ® | Registered trade-mark |
| PBTP | Polybutylene terephthalate | | |
| UP-GF | Unsaturated polyester resin glassfibre reinforced | | |
| St | Steel | | |
| Ms | Brass | | |
| Tg | Malleable Iron | | |



Creating connections for life

As the leading flow solutions provider for the safe and sustainable transport of fluids, GF Piping Systems creates connections for life. The division focuses on industry leading leak free piping solutions for numerous demanding end market segments. Its strong focus on customer centricity and innovation is reflected by its global sales, service, and manufacturing footprint and its award winning portfolio, including fittings, valves, pipes, automation, fabrication, and jointing technologies.

+ Maintenance-free plastic

Piping systems made of plastics are maintenance-free, light and very durable. They help reduce repair and overall costs and are suitable for the transport of drinking water, abrasive and aggressive liquids, as well as gas.

+ Complete system solutions

With more than 60'000 products, GF Piping Systems can offer complete system solutions. In addition, custom-made special parts and special series are also possible. Customers benefit from perfectly matched solutions from a single source.

+ Local support

GF Piping Systems has its own sales companies in 31 countries, which means it is always by its customers' side. Our production sites in 36 locations in America, Europe, and Asia ensure sufficient availability and quick, reliable delivery.

+ Service in all project phases

GF Piping Systems supports its customers both in the initial switch from metal to plastic and in retrofits – across all project phases. They benefit from more than 60 years of experience in plastic systems and application knowledge from 100 countries.

+ Partner for digitization

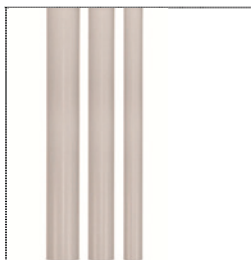
With its advanced automation and digitization solutions, GF Piping Systems allows its customers to optimize their applications and gives them easier access to their system data. Digital tools support you in every phase of the project.

Facts and figures (2022)

- **Established:** 1802 (Georg Fischer AG) in Schaffhausen, Switzerland
- **Sales:** 2'160 million CHF
- **Employees:** 8'085
- **Sales companies** in 31 countries
- **Production sites** in 36 locations in America, Europe and Asia

PVC-C Piping System

PVC-C piping systems, having an operational temperature range from 0 °C to 80 °C, are suitable for high temperature environments. The excellent mechanical properties such as a high tensile strength, stiffness and impact strength are evident even at increased temperatures. PVC-C systems are used wherever aggressive media such as mixed acid waste or acids at a high temperature are transported, for example, in the chemical, paper and pulp industry or in metal treatment and microelectronic production.



Pipes



Fittings



Joining technology



Automation



Valves

Essential system properties

- Very good mechanical properties, even at higher temperatures
- Flame-retardant and self-extinguishing
- Safe and simple joining technology with low costs for tools and materials

Most important market segments

- Chemical process industry
- Marine
- Microelectronics
- Energy

Technical data

| | |
|--|--|
| Nominal pressure | Up to 16 bar |
| Temperature range | 0 °C to 80 °C |
| Joining technology | Solvent cementing |
| Standards and guidelines ¹⁾ | ISO, EN ISO, DIN, DVS |
| Approvals ¹⁾ | GOST-R, ABS, BV, CCS, DNV, GL, LR, RINA, RMROS |

¹⁾ For additional information about standards, guidelines and approvals, see www.gfps.com

PVC-C product overview

The following table uses metric units of measure.

| Products | PN (bar) | d (mm) | | | | | | | | | | | | | | | | | |
|----------------------------|----------|---------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|
| | | DN (mm) | 10 | 15 | 20 | 25 | 32 | 40 | 50 | 63 | 75 | 90 | 110 | 125 | 140 | 160 | 180 | 200 | 225 |
| Pipes | 16 | | | | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | |
| Fittings | 16 | | | | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | |
| Ball valves | 6 | | | | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | |
| Butterfly valves | 16 | | | | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | |
| Check valves | 16 | | | | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | |
| Diaphragm valves | 16 | | | | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | |
| Pressure regulating valves | 16 | | | | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | |
| Flanges | 16 | | | | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | |
| Gaskets and pipe clips | 16 | | | | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | |
| Automation | 16 | | | | | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | | |


















For more information about the system specification of PVC-C, visit www.gfps.com


















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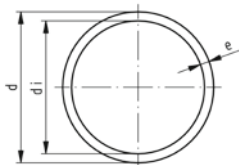
PVC-C metric



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|  | Ball valves electric type 167 | 84 |
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|  | Ball valves pneumatic type 285 | 123 |
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| | | |
|--|--|-----|
|  | Butterfly valves electric type 146 | 141 |
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Pipes

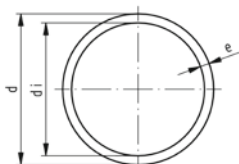


Pipe PVC-C grey SDR9/PN25/S4

Model:

- Material: PVC-C, heat resistant
- Dimension: acc. to DIN 8079/80
- Colour: agate grey RAL 7038
- Pipe length: 5000mm, with plain ends
- Attention: Pressure rates refer to operating temperatures at 20°C. Higher temperatures and aggressive flow media reduce pressure load (see above DIN and our technical documentation). Pressure load capacity has to be determined in consideration with safety demands of the respective applications and calculated in accordance.

| Note | d (mm) | SDR | PN (bar) | Code | Weight (kg/m) | e (mm) |
|------|-----------|-----|-------------|--------------------|------------------|-----------|
| | 16 | 9 | 25 | 163 017 130 | 0.136 | 1.8 |
| | 20 | 9 | 25 | 163 017 131 | 0.217 | 2.3 |
| | 25 | 9 | 25 | 163 017 132 | 0.326 | 2.8 |
| | 32 | 9 | 25 | 163 017 143 | 0.534 | 3.6 |
| | 40 | 9 | 25 | 163 017 144 | 0.830 | 4.5 |
| | 50 | 9 | 25 | 163 017 145 | 1.290 | 5.6 |
| | 63 | 9 | 25 | 163 017 146 | 2.050 | 7.1 |



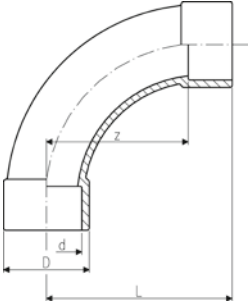
Pipe PVC-C grey SDR13,6/PN16/S6,3

Model:

- Material: PVC-C, heat resistant
- Dimension: acc. to DIN 8079/80
- Colour: agate grey RAL 7038
- Pipe length: 5000mm, with plain ends
- Attention: Pressure rates refer to operating temperatures at 20°C. Higher temperatures and aggressive flow media reduce pressure load (see above DIN and our technical documentation). Pressure load capacity has to be determined in consideration with safety demands of the respective applications and calculated in accordance.

| d (mm) | SDR | PN (bar) | Code | Weight (kg/m) | e (mm) |
|-----------|------|-------------|--------------------|------------------|-----------|
| 32 | 13.6 | 16 | 163 017 133 | 0.379 | 2.4 |
| 40 | 13.6 | 16 | 163 017 134 | 0.582 | 3.0 |
| 50 | 13.6 | 16 | 163 017 135 | 0.896 | 3.7 |
| 63 | 13.6 | 16 | 163 017 136 | 1.430 | 4.7 |
| 75 | 13.6 | 16 | 163 017 137 | 2.020 | 5.6 |
| 90 | 13.6 | 16 | 163 017 138 | 2.880 | 6.7 |
| 110 | 13.6 | 16 | 163 017 139 | 4.270 | 8.1 |
| 160 | 13.6 | 16 | 163 017 142 | 8.980 | 11.8 |

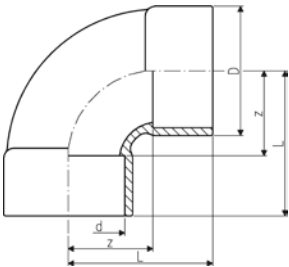
Fittings



Bend 90° PVC-C metric

- Radius = 2 d

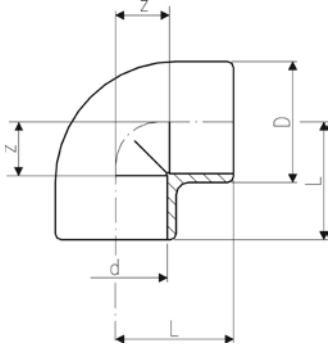
| d (mm) | Size (inch) | PN (bar) | Code | SP Weight (kg) | z (mm) | D (mm) | L (mm) |
|-----------|----------------|-------------|--------------------|-------------------|-----------|-----------|-----------|
| 20 | | 16 | 723 000 106 | 10 | 0.032 | 40 | 27 |
| 25 | | 16 | 723 000 107 | 10 | 0.055 | 50 | 35 |
| 32 | | 16 | 723 000 108 | 10 | 0.080 | 64 | 38 |
| 40 | | 16 | 723 000 109 | 30 | 0.143 | 80 | 54 |
| 50 | | 16 | 723 000 110 | 5 | 0.327 | 100 | 61 |
| 63 | | 16 | 723 000 111 | 5 | 0.547 | 126 | 76 |
| 75 | 2 ½ | 16 | 723 000 112 | 5 | 0.847 | 150 | 90 |
| 90 | | 16 | 723 000 113 | 5 | 1.470 | 180 | 113 |
| 110 | | 16 | 723 000 114 | 5 | 2.943 | 220 | 137 |
| 160 | | 16 | 723 000 117 | 1 | 5.247 | 320 | 192 |



Bend 90° short pattern PVC-C metric

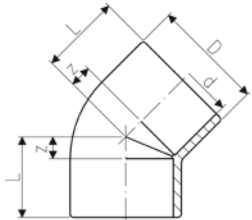
- Radius = 0,75 d

| d (mm) | PN (bar) | Code | SP Weight (kg) | z (mm) | D (mm) | L (mm) |
|-----------|-------------|--------------------|-------------------|-----------|-----------|-----------|
| 225 | 10 | 723 010 120 | 1 | 7.930 | 168 | 256 |



Elbow 90° PVC-C metric

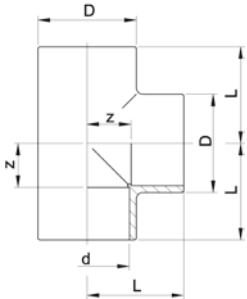
| d (mm) | Size (inch) | PN (bar) | Code | SP | Weight (kg) | z (mm) | D (mm) | L (mm) |
|-----------|----------------|-------------|--------------------|----|----------------|-----------|-----------|-----------|
| 16 | | 16 | 723 100 105 | 10 | 0.015 | 9 | 21 | 23 |
| 20 | | 16 | 723 100 106 | 10 | 0.014 | 11 | 25 | 27 |
| 25 | | 16 | 723 100 107 | 10 | 0.025 | 14 | 31 | 33 |
| 32 | | 16 | 723 100 108 | 10 | 0.047 | 17 | 40 | 39 |
| 40 | | 16 | 723 100 109 | 10 | 0.077 | 21 | 49 | 47 |
| 50 | | 16 | 723 100 110 | 10 | 0.139 | 26 | 61 | 57 |
| 63 | | 16 | 723 100 111 | 10 | 0.259 | 33 | 76 | 72 |
| 75 | 2 ½ | 16 | 723 100 112 | 5 | 0.437 | 40 | 90 | 84 |
| 90 | | 16 | 723 100 113 | 5 | 0.626 | 46 | 110 | 97 |
| 110 | | 16 | 723 100 114 | 3 | 1.085 | 61 | 128 | 116 |
| 160 | | 16 | 723 100 117 | 1 | 3.097 | 80 | 185 | 166 |



Elbow 45° PVC-C metric

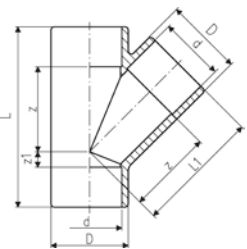
| d (mm) | Size (inch) | PN (bar) | Code | SP | Weight (kg) | z (mm) | D (mm) | L (mm) |
|-----------|----------------|-------------|--------------------|----|----------------|-----------|-----------|-----------|
| 16 | | 16 | 723 150 105 | 10 | 0.008 | 5 | 21 | 19 |
| 20 | | 16 | 723 150 106 | 10 | 0.011 | 5 | 25 | 21 |
| 25 | | 16 | 723 150 107 | 10 | 0.021 | 6 | 31 | 25 |
| 32 | | 16 | 723 150 108 | 10 | 0.037 | 8 | 40 | 30 |
| 40 | | 16 | 723 150 109 | 5 | 0.063 | 10 | 49 | 36 |
| 50 | | 16 | 723 150 110 | 5 | 0.110 | 12 | 61 | 43 |
| 63 | | 16 | 723 150 111 | 10 | 0.207 | 14 | 76 | 52 |
| 75 | 2 ½ | 16 | 723 150 112 | 5 | 0.323 | 17 | 88 | 61 |
| 90 | | 16 | 723 150 113 | 4 | 0.526 | 20 | 106 | 71 |
| 110 | | 16 | 723 150 114 | 10 | 0.782 | 28 | 137 | 89 |
| 160 | | 16 | 723 150 117 | 1 | 2.384 | 36 | 185 | 122 |
| 225 | | 10 | 723 150 120 | 1 | 4.833 | 49 | 250 | 168 |

Tee 90° PVC-C metric



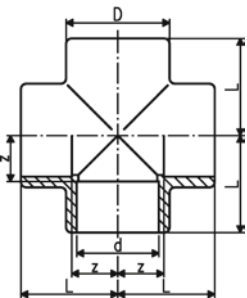
| d (mm) | PN (bar) | Size (inch) | Code | SP | Weight (kg) | z (mm) | D (mm) | L (mm) |
|-----------|-------------|----------------|-------------|----|----------------|-----------|-----------|-----------|
| 16 | 16 | | 723 200 105 | 10 | 0.014 | 9 | 21 | 23 |
| 20 | 16 | | 723 200 106 | 10 | 0.020 | 11 | 25 | 27 |
| 25 | 16 | | 723 200 107 | 10 | 0.035 | 14 | 31 | 33 |
| 32 | 16 | | 723 200 108 | 10 | 0.061 | 17 | 40 | 39 |
| 40 | 16 | | 723 200 109 | 10 | 0.111 | 21 | 49 | 47 |
| 50 | 16 | | 723 200 110 | 5 | 0.198 | 26 | 61 | 57 |
| 63 | 16 | | 723 200 111 | 10 | 0.365 | 34 | 76 | 72 |
| 75 | 16 | 2 ½ | 723 200 112 | 5 | 0.581 | 40 | 90 | 84 |
| 90 | 16 | | 723 200 113 | 4 | 0.945 | 47 | 107 | 98 |
| 110 | 16 | | 723 200 114 | 6 | 1.450 | 55 | 128 | 116 |
| 160 | 16 | | 723 200 117 | 4 | 5.580 | 81 | 193 | 167 |
| 225 | 10 | | 723 200 120 | 1 | 9.560 | 114 | 256 | 233 |

Tee 45° PVC-C metric

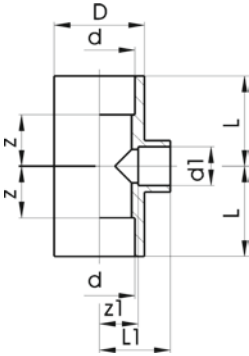


| d (mm) | PN (bar) | Size (inch) | Code | SP | Weight (kg) | z (mm) | z1 (mm) | D (mm) | L (mm) | L1 (mm) |
|-----------|-------------|----------------|-------------|----|----------------|-----------|------------|-----------|-----------|------------|
| 20 | 10 | | 723 250 106 | 10 | 0.039 | 30 | 6 | 28 | 68 | 46 |
| 25 | 10 | | 723 250 107 | 10 | 0.062 | 36 | 9 | 33 | 83 | 55 |
| 32 | 10 | | 723 250 108 | 10 | 0.102 | 45 | 10 | 41 | 99 | 67 |
| 40 | 10 | | 723 250 109 | 10 | 0.172 | 56 | 10 | 50 | 118 | 82 |
| 50 | 10 | | 723 250 110 | 8 | 0.289 | 66 | 12 | 60 | 140 | 97 |
| 63 | 10 | | 723 250 111 | 6 | 0.449 | 85 | 14 | 74 | 175 | 123 |
| 75 | 6 | 2 ½ | 723 250 112 | 5 | 0.857 | 101 | 18 | 91 | 207 | 145 |
| 90 | 6 | | 723 250 113 | 1 | 1.334 | 122 | 20 | 107 | 245 | 173 |
| 110 | 6 | | 723 250 114 | 3 | 2.677 | 149 | 27 | 134 | 298 | 210 |

Cross PVC-C metric



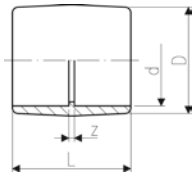
| d (mm) | PN (bar) | Code | SP | Weight (kg) | z (mm) | D (mm) | L (mm) |
|-----------|-------------|-------------|----|----------------|-----------|-----------|-----------|
| 32 | 16 | 723 300 108 | 10 | 0.101 | 17 | 43 | 39 |
| 63 | 16 | 723 300 111 | 5 | 0.511 | 34 | 79 | 72 |



Tee 90° reducing PVC-C metric

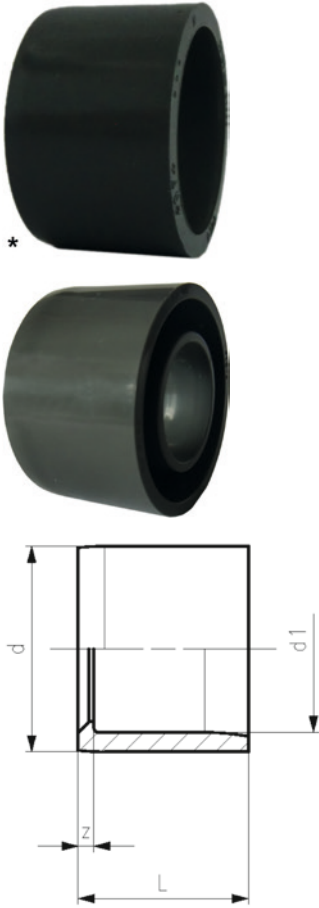
*Tee 90° delivered with the required reducing bushes

| d (mm) | d1 (mm) | PN (bar) | Size (inch) | Code | SP (kg) | Weight (kg) | z1 (mm) | L1 (mm) | z (mm) | D (mm) | L (mm) |
|-----------|------------|-------------|----------------|--------------------|------------|----------------|------------|------------|-----------|-----------|-----------|
| 25 | 20 | 16 | | 723 200 134 | 10 | 0.042 | 14 | 30 | 14 | 33 | 33 |
| 32 | 25 | 16 | | 723 200 138 | 10 | 0.069 | 17 | 36 | 17 | 41 | 39 |
| 40 | 25 | 16 | | 723 200 151 | 10 | 0.120 | 23 | 42 | 23 | 50 | 49 |
| 40 | 32 | 16 | | 723 200 147 | 10 | 0.120 | 23 | 45 | 23 | 50 | 49 |
| 50 | 20 | 16 | | 723 200 009 | 5 | 0.196 | 28 | 44 | 28 | 62 | 59 |
| 50 | 25 | 16 | | 723 200 010 | 5 | 0.192 | 28 | 47 | 28 | 62 | 59 |
| 50 | 32 | 16 | | 723 200 164 | 10 | 0.199 | 28 | 50 | 28 | 62 | 59 |
| 63 | 25 | 16 | | 723 200 011 | 10 | 0.358 | 34 | 53 | 34 | 77 | 73 |
| 63 | 32 | 16 | | 723 200 178 | 5 | 0.368 | 34 | 56 | 35 | 77 | 73 |
| 63 | 50 | 16 | | 723 200 170 | 5 | 0.096 | 34 | 65 | 35 | 77 | 73 |
| * | 75 | 63 | 2 ½ | 723 200 184 | 8 | 0.766 | 47 | 84 | 41 | 92 | 84 |
| * | 90 | 32 | | 723 200 142 | 6 | 1.436 | 75 | 97 | 46 | 111 | 97 |
| * | 90 | 63 | | 723 200 145 | 5 | 1.166 | 66 | 97 | 46 | 111 | 97 |
| * | 110 | 32 | | 723 200 135 | 3 | 2.796 | 101 | 116 | 55 | 128 | 116 |
| * | 110 | 90 | | 723 200 137 | 3 | 1.780 | 71 | 116 | 55 | 128 | 116 |



Socket PVC-C metric

| d (mm) | PN (bar) | Code | SP (kg) | Weight (kg) | z (mm) | D (mm) | L (mm) |
|-----------|-------------|--------------------|------------|----------------|-----------|-----------|-----------|
| 16 | 16 | 723 910 105 | 10 | 0.008 | 3 | 22 | 31 |
| 20 | 16 | 723 910 106 | 10 | 0.010 | 3 | 26 | 35 |
| 25 | 16 | 723 910 107 | 10 | 0.017 | 3 | 31 | 41 |
| 32 | 16 | 723 910 108 | 10 | 0.029 | 3 | 39 | 47 |
| 40 | 16 | 723 910 109 | 10 | 0.049 | 3 | 49 | 55 |
| 50 | 16 | 723 910 110 | 10 | 0.085 | 3 | 61 | 65 |
| 63 | 16 | 723 910 111 | 10 | 0.155 | 3 | 76 | 79 |
| 75 | 16 | 723 910 112 | 20 | 0.204 | 4 | 87 | 92 |
| 90 | 16 | 723 910 113 | 10 | 0.338 | 5 | 110 | 107 |
| 110 | 16 | 723 910 114 | 5 | 0.769 | 5 | 131 | 132 |
| 160 | 16 | 723 910 117 | 2 | 1.605 | 8 | 183 | 180 |
| 225 | 10 | 723 910 120 | 1 | 3.644 | 10 | 253 | 248 |

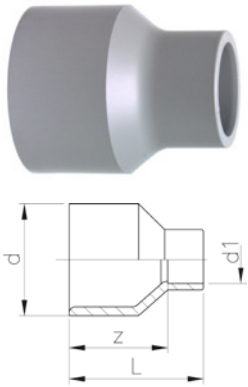


Reducing bush short pattern PVC-C metric

Model:

- With solvent cement spigot and socket metric

| | d (mm) | d1 (mm) | PN (bar) | Size (inch) | Code | SP | Weight (kg) | z (mm) | L (mm) |
|---|-----------|------------|-------------|----------------|-------------|----|----------------|-----------|-----------|
| * | 20 | 16 | 16 | | 723 900 334 | 10 | 0.004 | 2 | 16 |
| * | 25 | 20 | 16 | | 723 900 337 | 10 | 0.004 | 3 | 19 |
| * | 32 | 20 | 16 | | 723 900 342 | 10 | 0.015 | 6 | 22 |
| * | 32 | 25 | 16 | | 723 900 341 | 10 | 0.010 | 4 | 22 |
| | 40 | 20 | 16 | | 723 900 348 | 10 | 0.023 | 10 | 26 |
| | 40 | 25 | 16 | | 723 900 347 | 10 | 0.024 | 7 | 26 |
| * | 40 | 32 | 16 | | 723 900 346 | 10 | 0.017 | 4 | 26 |
| | 50 | 20 | 16 | | 723 900 355 | 10 | 0.036 | 15 | 31 |
| | 50 | 25 | 16 | | 723 900 354 | 10 | 0.037 | 12 | 31 |
| | 50 | 32 | 16 | | 723 900 353 | 10 | 0.050 | 9 | 31 |
| * | 50 | 40 | 16 | | 723 900 352 | 10 | 0.032 | 5 | 31 |
| | 63 | 32 | 16 | | 723 900 360 | 10 | 0.086 | 16 | 38 |
| | 63 | 40 | 16 | | 723 900 359 | 10 | 0.074 | 12 | 38 |
| * | 63 | 50 | 16 | | 723 900 358 | 10 | 0.061 | 6 | 38 |
| | 75 | 50 | 16 | 2 ½ | 723 900 365 | 10 | 0.115 | 13 | 44 |
| * | 75 | 63 | 16 | 2 ½ | 723 900 364 | 10 | 0.086 | 6 | 44 |
| | 90 | 50 | 16 | | 723 900 372 | 10 | 0.196 | 20 | 51 |
| | 90 | 63 | 16 | | 723 900 371 | 10 | 0.183 | 14 | 51 |
| * | 90 | 75 | 16 | | 723 900 370 | 10 | 0.146 | 8 | 51 |
| | 110 | 63 | 16 | | 723 900 378 | 5 | 0.329 | 24 | 61 |
| * | 110 | 90 | 16 | | 723 900 376 | 5 | 0.283 | 10 | 61 |
| | 160 | 110 | 16 | | 723 900 390 | 6 | 0.956 | 25 | 86 |
| | 225 | 160 | 16 | | 723 900 396 | 2 | 2.380 | 33 | 119 |

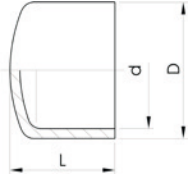


Reducing bush long pattern PVC-C metric

Model:

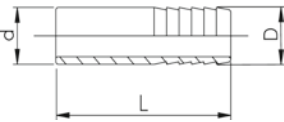
- With solvent cement spigot and socket metric

| | d (mm) | d1 (mm) | PN (bar) | Size (inch) | Code | SP | Weight (kg) | z (mm) | L (mm) |
|--|-----------|------------|-------------|----------------|-------------|----|----------------|-----------|-----------|
| | 32 | 20 | 16 | | 723 910 342 | 10 | 0.021 | 30 | 46 |
| | 40 | 25 | 16 | | 723 910 347 | 10 | 0.036 | 36 | 55 |
| | 50 | 25 | 16 | | 723 910 354 | 10 | 0.058 | 44 | 63 |
| | 63 | 32 | 16 | | 723 910 360 | 10 | 0.110 | 54 | 76 |
| | 75 | 40 | 16 | 2 ½ | 723 910 366 | 5 | 0.165 | 62 | 88 |
| | 90 | 63 | 16 | | 723 910 371 | 5 | 0.466 | 74 | 112 |



Cap PVC-C metric

| d (mm) | PN (bar) | Code | SP | Weight (kg) | D (mm) | L (mm) |
|-----------|-------------|--------------------|----|----------------|-----------|-----------|
| 16 | 16 | 723 960 105 | 10 | 0.008 | 26 | 23 |
| 20 | 16 | 723 960 106 | 10 | 0.011 | 30 | 25 |
| 25 | 16 | 723 960 107 | 10 | 0.018 | 37 | 30 |
| 32 | 16 | 723 960 108 | 10 | 0.029 | 44 | 34 |
| 40 | 16 | 723 960 109 | 10 | 0.046 | 51 | 41 |
| 50 | 16 | 723 960 110 | 10 | 0.064 | 64 | 44 |
| 63 | 16 | 723 960 111 | 5 | 0.120 | 80 | 54 |
| 75 | 16 | 723 960 112 | 5 | 0.162 | 87 | 66 |
| 90 | 16 | 723 960 113 | 10 | 0.315 | 112 | 75 |
| 110 | 16 | 723 960 114 | 5 | 0.692 | 134 | 93 |
| 160 | 10 | 723 960 117 | 2 | 1.599 | 189 | 130 |



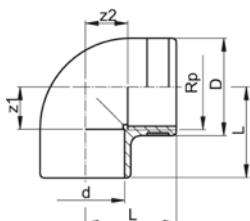
Hose nozzle PVC-C metric

Model:

- With solvent cement spigot and parallel hose connection

| d (mm) | PN (bar) | Code | SP | Weight (kg) | D (mm) | L (mm) |
|-----------|-------------|--------------------|----|----------------|-----------|-----------|
| 16 | 16 | 723 960 405 | 10 | 0.009 | 16 | 57 |
| 20 | 16 | 723 960 406 | 10 | 0.016 | 20 | 73 |
| 25 | 16 | 723 960 407 | 10 | 0.023 | 25 | 79 |
| 32 | 16 | 723 960 408 | 10 | 0.038 | 30 | 89 |

Adaptor fittings

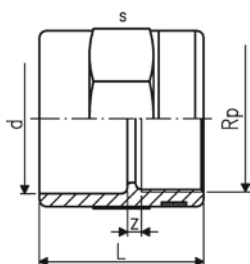


Elbow 90° PVC-C metric Rp

Model:

- With solvent cement socket metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Install with low mechanical stress and avoid large cyclic temperature changes
- Do not use thread sealing pastes that are harmful to PVC-C

| Rp (inch) | d (mm) | PN (bar) | Code | SP Weight (kg) | z1 (mm) | z2 (mm) | D (mm) | L (mm) |
|--------------|-----------|-------------|--------------------|-------------------|------------|------------|-----------|-----------|
| ½ | 20 | 16 | 723 100 206 | 10 | 0.024 | 11 | 14 | 30 |
| ¾ | 25 | 16 | 723 100 207 | 10 | 0.037 | 14 | 17 | 35 |
| 1 | 32 | 16 | 723 100 208 | 10 | 0.063 | 17 | 22 | 45 |
| 1 ¼ | 40 | 16 | 723 100 209 | 10 | 0.134 | 23 | 27 | 55 |
| 1 ½ | 50 | 16 | 723 100 210 | 5 | 0.199 | 27 | 36 | 62 |
| 2 | 63 | 16 | 723 100 211 | 10 | 0.337 | 33 | 46 | 75 |

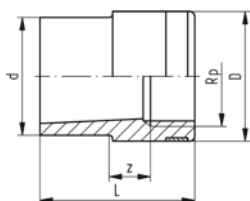


Socket PVC-C metric Rp

Model:

- With solvent cement socket metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Install with low mechanical stress and avoid large cyclic temperature changes
- Do not use thread sealing pastes that are harmful to PVC-C

| d (mm) | Thread Type | Size (inch) | PN (bar) | Code | SP Weight (kg) | z (mm) | L (mm) | s (mm) |
|-----------|-------------|----------------|-------------|--------------------|-------------------|-----------|-----------|-----------|
| 20 | Rp | ½ | 16 | 723 910 206 | 10 | 0.027 | 4 | 35 |
| 25 | Rp | ¾ | 16 | 723 910 207 | 10 | 0.035 | 3 | 40 |
| 32 | Rp | 1 | 16 | 723 910 208 | 10 | 0.059 | 3 | 45 |
| 40 | Rp | 1 ¼ | 16 | 723 910 209 | 10 | 0.093 | 5 | 51 |
| 50 | Rp | 1 ½ | 16 | 723 910 210 | 10 | 0.133 | 7 | 59 |
| 63 | Rp | 2 | 16 | 723 910 211 | 5 | 0.211 | 7 | 69 |

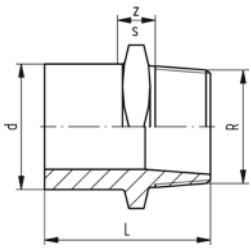


Reducing bush PVC-C metric Rp

Model:

- With solvent cement spigot metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Install with low mechanical stress and avoid large cyclic temperature changes

| d (mm) | Thread Type | Size (inch) | PN (bar) | Code | SP Weight (kg) | z (mm) | D (mm) | L (mm) |
|-----------|-------------|----------------|-------------|--------------------|-------------------|-----------|-----------|-----------|
| 20 | Rp | ¾ | 16 | 723 910 434 | 10 | 0.016 | 7 | 25 |
| 25 | Rp | ½ | 16 | 723 910 437 | 10 | 0.022 | 7 | 30 |
| 32 | Rp | ¾ | 16 | 723 910 441 | 10 | 0.033 | 15 | 35 |
| 40 | Rp | 1 | 16 | 723 910 446 | 10 | 0.061 | 20 | 45 |
| 50 | Rp | 1 ¼ | 16 | 723 910 452 | 10 | 0.105 | 20 | 55 |
| 63 | Rp | 1 ½ | 16 | 723 910 458 | 5 | 0.161 | 10 | 62 |

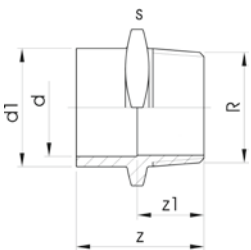


Adaptor nipple PVC-C metric R

Model:

- With solvent cement spigot metric and taper male thread R
- Install with low mechanical stress and avoid large cyclic temperature changes
- Do not use thread sealing pastes that are harmful to PVC-C

| Thread Type | Size | d | PN | Code | SP | Weight | L | z | s |
|-------------|--------|------|-------|--------------------|----|--------|------|------|------|
| | (inch) | (mm) | (bar) | | | (kg) | (mm) | (mm) | (mm) |
| R | 3/8 | 16 | 16 | 723 910 505 | 10 | 0.012 | 35 | 8 | 27 |



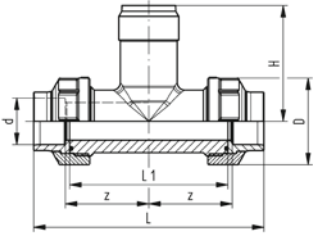
Adaptor socket nipple PVC-C metric R

Model:

- With solvent cement spigot/socket metric and taper male thread R
- Install with low mechanical stress and avoid large cyclic temperature changes
- Do not use thread sealing pastes that are harmful to PVC-C

| d | PN | Thread Type | Size | d1 | Code | SP | Weight | z | z1 | s |
|------|-------|-------------|--------|------|--------------------|----|--------|------|------|------|
| (mm) | (bar) | | (inch) | (mm) | | | (kg) | (mm) | (mm) | (mm) |
| 16 | 16 | R | 1/2 | 20 | 723 910 556 | 10 | 0.017 | 42 | 28 | 32 |
| 20 | 16 | R | 3/4 | 25 | 723 910 557 | 10 | 0.026 | 47 | 31 | 36 |
| 25 | 16 | R | 1 | 32 | 723 910 558 | 10 | 0.043 | 54 | 35 | 46 |
| 32 | 16 | R | 1 1/4 | 40 | 723 910 559 | 10 | 0.065 | 60 | 38 | 55 |
| 40 | 16 | R | 1 1/2 | 50 | 723 910 560 | 10 | 0.102 | 66 | 40 | 65 |
| 50 | 16 | R | 2 | 63 | 723 910 561 | 5 | 0.173 | 78 | 47 | 80 |

Installation fittings



Installation fitting type 310 PVC-C For socket systems metric

Range of use:

- Compatible Signet flow sensors: type 2551, 2537, 515, 8510, 2536, 8512
- Compatible Signet pH/ORP sensors: type 2724, 2725, 2726, 2734, 2736, 2735

Attention:

- sensor length depends on installation fitting

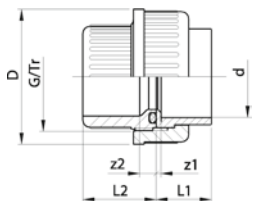
Model:

- Threaded outlet 1 ¼" NPSM
- Body and union nut PVDF
- Union end with solvent cement socket PVC-C

| d (mm) | DN (mm) | PN (bar) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|-------------|--------------|----|----------------|-------------|----|----------------|
| 20 | 15 | 16 | 723 310 006 | 1 | 0.250 | 723 310 036 | 1 | 0.250 |
| 25 | 20 | 16 | 723 310 007 | 1 | 0.355 | 723 310 037 | 1 | 0.355 |
| 32 | 25 | 16 | 723 310 008 | 1 | 0.427 | 723 310 038 | 1 | 0.427 |
| 40 | 32 | 16 | 723 310 009 | 1 | 0.700 | 723 310 039 | 1 | 0.700 |
| 50 | 40 | 16 | 723 310 010 | 1 | 0.850 | 723 310 040 | 1 | 0.850 |
| 63 | 50 | 16 | 723 310 011 | 1 | 1.182 | 723 310 041 | 1 | 1.182 |

| d (mm) | DN (mm) | D (mm) | L (mm) | L1 (mm) | H (mm) | z (mm) | Sensor Type |
|-----------|------------|-----------|-----------|------------|-----------|-----------|----------------|
| 20 | 15 | 45 | 132 | 90 | 76 | 49 | flow X0; pH XX |
| 25 | 20 | 55 | 148 | 100 | 78 | 53 | flow X0; pH XX |
| 32 | 25 | 62 | 164 | 110 | 81 | 58 | flow X0; pH XX |
| 40 | 32 | 75 | 172 | 110 | 85 | 58 | flow X0; pH XX |
| 50 | 40 | 84 | 188 | 120 | 89 | 63 | flow X0; pH XX |
| 63 | 50 | 101 | 212 | 130 | 95 | 68 | flow X0; pH XX |

Unions



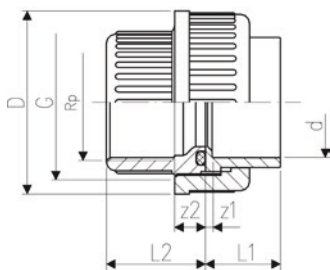
Union PVC-C metric

Model:

- Union End: PVC-C solvent cement socket metric
- Union bush: PVC-C solvent cement socket metric
- Gasket: O-ring EPDM code no. 748 410 005-016, for d90 748 410 248
- Gasket: O-ring FKM code no. 749 410 005 -016, for d90: 749 410 248

| d (mm) | Size (inch) | PN (bar) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) | |
|-----------|----------------|-------------|--------------------|----------------------|--------------------|----------------------|-------|
| 16 | | 16 | 723 510 105 | 10 | 723 510 130 | 10 | 0.027 |
| 20 | | 16 | 723 510 106 | 10 | 723 510 131 | 10 | 0.044 |
| 25 | | 16 | 723 510 107 | 10 | 723 510 132 | 10 | 0.072 |
| 32 | | 16 | 723 510 108 | 10 | 723 510 133 | 10 | 0.098 |
| 40 | | 16 | 723 510 109 | 10 | 723 510 134 | 10 | 0.167 |
| 50 | | 16 | 723 510 110 | 5 | 723 510 135 | 2 | 0.098 |
| 63 | | 16 | 723 510 111 | 5 | 723 510 136 | 10 | 0.362 |
| 75 | 2 ½ | 10 | 723 510 112 | 2 | 723 510 137 | 2 | 0.670 |
| 90 | | 10 | 723 510 313 | 2 | 723 510 338 | 2 | 1.008 |
| 110 | | 10 | 723 510 114 | 1 | 723 510 139 | 1 | 1.523 |

| z1 (mm) | z2 (mm) | D (mm) | L1 (mm) | L2 (mm) | G/Tr (inch) |
|------------|------------|-----------|------------|------------|----------------|
| 3 | 8 | 35 | 19 | 24 | 3/4 |
| 3 | 9 | 43 | 21 | 26 | 1 |
| 3 | 9 | 53 | 24 | 29 | 1 1/4 |
| 3 | 9 | 60 | 27 | 33 | 1 1/2 |
| 3 | 10 | 74 | 32 | 39 | 2 |
| 3 | 10 | 83 | 33 | 46 | 2 1/4 |
| 3 | 10 | 103 | 40 | 58 | 2 3/4 |
| 3 | 18 | 135 | 47 | 62 | Tr108x5 |
| 5 | 18 | 158 | 56 | 69 | Tr128x5 |
| 5 | 11 | 188 | 66 | 72 | Tr154x6 |



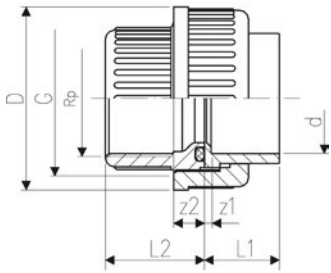
Adaptor union PVC-C metric Rp

Model:

- Union End: PVC-C solvent cement socket metric
- Union Bush: PVC-C parallel female thread Rp
- Gasket: O-ring EPDM code no. 748 410 005-011
- Gasket: O-ring FKM code no. 749 410 005-011
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-C

| d (mm) | Thread Type | Size (inch) | PN (bar) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) | |
|-----------|-------------|----------------|-------------|--------------------|----------------------|--------------------|----------------------|-------|
| 16 | Rp | ¾ | 10 | 723 510 205 | 10 | 723 510 230 | 1 | 0.022 |
| 20 | Rp | ½ | 10 | 723 510 206 | 10 | 723 510 231 | 1 | 0.040 |
| 25 | Rp | ¾ | 10 | 723 510 207 | 10 | 723 510 232 | 1 | 0.065 |
| 32 | Rp | 1 | 10 | 723 510 208 | 10 | 723 510 233 | 1 | 0.103 |
| 40 | Rp | 1 ¼ | 10 | 723 510 209 | 10 | 723 510 234 | 1 | 0.174 |
| 50 | Rp | 1 ½ | 10 | 723 510 210 | 2 | 723 510 235 | 1 | 0.239 |
| 63 | Rp | 2 | 10 | 723 510 211 | 2 | 723 510 236 | 1 | 0.435 |

| d (mm) | z1 (mm) | z2 (mm) | D (mm) | L1 (mm) | L2 (mm) | G (inch) |
|-----------|------------|------------|-----------|------------|------------|-------------|
| 16 | 3 | 13 | 35 | 17 | 24 | 3/4 |
| 20 | 3 | 13 | 43 | 19 | 26 | 1 |
| 25 | 3 | 14 | 51 | 22 | 29 | 1 1/4 |



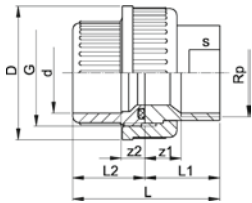
| d | z1 | z2 | D | L1 | L2 | G |
|------|------|------|------|------|------|--------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (inch) |
| 32 | 3 | 15 | 58 | 25 | 32 | 1 1/2 |
| 40 | 3 | 19 | 74 | 31 | 38 | 2 |
| 50 | 3 | 26 | 83 | 34 | 45 | 2 1/4 |
| 63 | 3 | 33 | 100 | 41 | 56 | 2 3/4 |



Adaptor union PVC-C metric stainless steel Rp

Model:

- Union Nut: PVC-C
- Union Bush: Solvent cement socket PVC-C metric
- Union End: Stainless Steel WN 1.4404 (316L), parallel female thread Rp
- Gasket: O-ring EPDM code no. 748 410 005-011



| d | Thread Type | Size | PN | EPDM Code | SP Weight | FKM Code | SP Weight |
|------|-------------|--------|-------|--------------------|-----------|----------|--------------------|
| (mm) | | (inch) | (bar) | | (kg) | | (kg) |
| 16 | Rp | 3/8 | 16 | 723 540 205 | 10 | 0.053 | 723 540 230 |
| 20 | Rp | 1/2 | 16 | 723 540 206 | 10 | 0.096 | 723 540 231 |
| 25 | Rp | 3/4 | 16 | 723 540 207 | 5 | 0.154 | 723 540 232 |
| 32 | Rp | 1 | 16 | 723 540 208 | 5 | 0.212 | 723 540 233 |
| 40 | Rp | 1 1/4 | 16 | 723 540 209 | 2 | 0.356 | 723 540 234 |
| 50 | Rp | 1 1/2 | 16 | 723 540 210 | 2 | 0.455 | 723 540 235 |
| 63 | Rp | 2 | 16 | 723 540 211 | 2 | 0.721 | 723 540 236 |

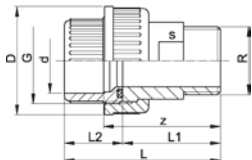
| z1 | z2 | D | L | L1 | L2 | G | s |
|------|------|------|------|------|------|--------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (inch) | (mm) |
| 9 | 10 | 35 | 43 | 19 | 24 | 3/4 | 19 |
| 11 | 10 | 43 | 50 | 24 | 26 | 1 | 24 |
| 11 | 10 | 51 | 55 | 26 | 29 | 1 1/4 | 29 |
| 12 | 10 | 58 | 61 | 29 | 33 | 1 1/2 | 36 |
| 14 | 12 | 74 | 71 | 33 | 39 | 2 | 45 |
| 15 | 14 | 83 | 79 | 34 | 46 | 2 1/4 | 54 |
| 15 | 18 | 100 | 95 | 39 | 58 | 2 3/4 | 63 |



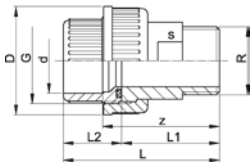
Adaptor union PVC-C metric stainless steel R

Model:

- Union Nut: PVC-C
- Union Bush: Solvent cement socket PVC-C metric
- Union End: Stainless Steel WN 1.4404 (316L), taper male thread R
- Gasket: O-ring EPDM code no. 748 410 005-011



| d | Thread Type | Size | PN | EPDM Code | SP Weight | FKM Code | SP Weight |
|------|-------------|--------|-------|--------------------|-----------|----------|--------------------|
| (mm) | | (inch) | (bar) | | (kg) | | (kg) |
| 16 | R | 3/8 | 16 | 723 540 705 | 10 | 0.073 | 723 540 730 |
| 20 | R | 1/2 | 16 | 723 540 706 | 10 | 0.126 | 723 540 731 |
| 25 | R | 3/4 | 16 | 723 540 707 | 5 | 0.174 | 723 540 732 |
| 32 | R | 1 | 16 | 723 540 708 | 5 | 0.262 | 723 540 733 |
| 40 | R | 1 1/4 | 16 | 723 540 709 | 2 | 0.476 | 723 540 734 |
| 50 | R | 1 1/2 | 16 | 723 540 710 | 10 | 0.535 | 723 540 735 |
| 63 | R | 2 | 16 | 723 540 711 | 2 | 0.931 | 723 540 736 |



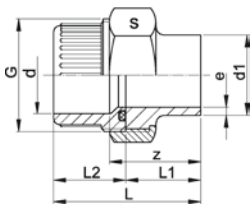
| z | D | L | L1 | L2 | G | s |
|------|------|------|------|------|--------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (inch) | (mm) |
| 40 | 35 | 54 | 30 | 24 | 3/4 | 19 |
| 44 | 43 | 60 | 34 | 26 | 1 | 24 |
| 46 | 51 | 65 | 36 | 29 | 1 1/4 | 32 |
| 50 | 58 | 72 | 40 | 33 | 1 1/2 | 37 |
| 58 | 74 | 84 | 46 | 39 | 2 | 48 |
| 62 | 83 | 93 | 48 | 46 | 2 1/4 | 54 |
| 73 | 100 | 111 | 55 | 58 | 2 3/4 | 69 |



Adaptor union PVC-C metric stainless steel welding end

Model:

- Union Nut: Stainless Steel WN 1.4404 (316L)
- Union Bush: Solvent cement socket PVC-C metric
- Union End: Stainless Steel 1.4404 (316L) with welding end
- Gasket: O-ring EPDM code no. 748 410 005-011



| d | PN | d1 | EPDM Code | SP Weight | FKM Code | SP Weight |
|------|-------|------|--------------------|-----------|----------|--------------------|
| (mm) | (bar) | (mm) | | (kg) | | (kg) |
| 16 | 16 | 17 | 723 545 505 | 10 | 0.101 | 723 545 530 |
| 20 | 16 | 21 | 723 545 506 | 10 | 0.176 | 723 545 531 |
| 25 | 16 | 27 | 723 545 507 | 5 | 0.204 | 723 545 532 |
| 32 | 16 | 34 | 723 545 508 | 5 | 0.313 | 723 545 533 |
| 40 | 16 | 42 | 723 545 509 | 2 | 0.493 | 723 545 534 |
| 50 | 16 | 48 | 723 545 510 | 2 | 0.566 | 723 545 535 |
| 63 | 16 | 60 | 723 545 511 | 2 | 0.902 | 723 545 536 |

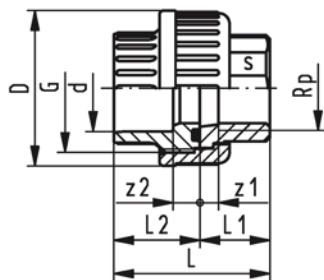
| z | L | L1 | L2 | e | G | s |
|------|------|------|------|------|--------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (inch) | (mm) |
| 28 | 42 | 18 | 24 | 1.6 | 3/4 | 32 |
| 32 | 48 | 22 | 26 | 2.0 | 1 | 41 |
| 33 | 52 | 23 | 29 | 2.0 | 1 1/4 | 46 |
| 36 | 58 | 26 | 33 | 2.0 | 1 1/2 | 55 |
| 38 | 64 | 26 | 39 | 2.0 | 2 | 68 |
| 42 | 73 | 28 | 46 | 2.0 | 2 1/4 | 74 |
| 50 | 88 | 32 | 58 | 2.6 | 2 3/4 | 88 |



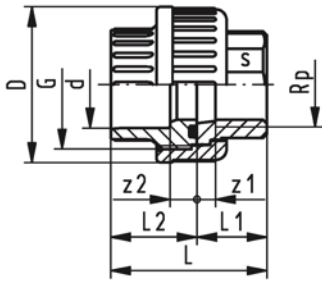
Adaptor union PVC-C metric malleable iron galvanised Rp

Model:

- Union Nut: PVC-C
- Union Bush: Solvent cement socket PVC-C metric
- Union End: malleable iron with parallel female thread Rp
- Gasket: O-ring EPDM code no. 748 410 006-011



| d | Thread Type | Size | Code | SP Weight |
|------|-------------|--------|--------------------|-----------|
| (mm) | | (inch) | | (kg) |
| 20 | Rp | 1/2 | 723 530 306 | 10 0.075 |
| 25 | Rp | 3/4 | 723 530 307 | 5 0.112 |
| 32 | Rp | 1 | 723 530 308 | 5 0.157 |
| 40 | Rp | 1 1/4 | 723 530 309 | 2 0.300 |
| 50 | Rp | 1 1/2 | 723 530 310 | 2 0.384 |
| 63 | Rp | 2 | 723 530 311 | 5 0.603 |



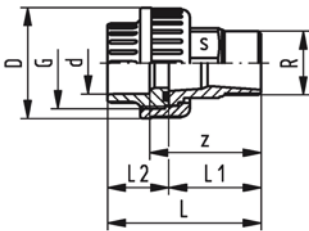
| d | D | L | L1 | L2 | G | z1 | z2 | s |
|------|------|------|------|------|--------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (inch) | (mm) | (mm) | (mm) |
| 20 | 43 | 48 | 22 | 26 | 1 | 9 | 10 | 25 |
| 25 | 51 | 51 | 22 | 29 | 1 1/4 | 7 | 10 | 31 |
| 32 | 58 | 58 | 26 | 33 | 1 1/2 | 9 | 10 | 38 |
| 40 | 72 | 69 | 31 | 39 | 2 | 12 | 12 | 48 |
| 50 | 83 | 78 | 33 | 46 | 2 1/4 | 14 | 14 | 54 |
| 63 | 100 | 91 | 35 | 58 | 2 3/4 | 11 | 18 | 67 |



Adaptor union PVC-C metric malleable iron galvanised R

Model:

- Union Nut: PVC-C
- Union End: Malleable iron with taper male thread R
- Union Bush: Solvent cement socket PVC-C metric
- Gasket: O-ring EPDM code no. 748 410 006-011



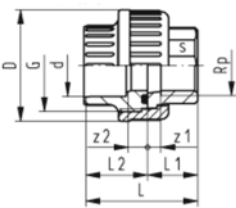
| d | Thread Type | Size | Code | SP Weight | s | L2 | G | z | L1 | D | L | |
|------|-------------|--------|--------------------|-----------|-------|------|--------|-------|------|------|------|-----|
| (mm) | | (inch) | | (kg) | (mm) | (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | |
| 20 | R | 1/2 | 723 530 806 | 10 | 0.114 | 25 | 26 | 1 | 50 | 40 | 43 | 66 |
| 25 | R | 3/4 | 723 530 807 | 5 | 0.165 | 31 | 29 | 1 1/4 | 53 | 43 | 51 | 72 |
| 32 | R | 1 | 723 530 808 | 5 | 0.205 | 38 | 33 | 1 1/2 | 58 | 48 | 58 | 80 |
| 40 | R | 1 1/4 | 723 530 809 | 2 | 0.403 | 48 | 39 | 2 | 69 | 57 | 72 | 95 |
| 50 | R | 1 1/2 | 723 530 810 | 2 | 0.539 | 54 | 46 | 2 1/4 | 73 | 59 | 83 | 104 |
| 63 | R | 2 | 723 530 811 | 8 | 0.787 | 67 | 58 | 2 3/4 | 80 | 62 | 100 | 118 |



Adaptor union PVC-C metric brass Rp

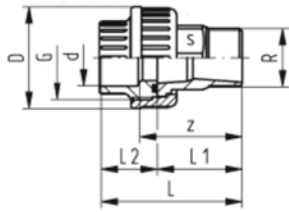
Model:

- Union Nut: PVC-C
- Union Bush: Solvent cement socket PVC-C metric
- Union End: Brass with parallel female thread Rp
- Gasket: O-ring EPDM code no. 748 410 006-011



| d | Thread Type | Size | PN | Code | SP Weight | |
|------|-------------|--------|-------|--------------------|-----------|-------|
| (mm) | | (inch) | (bar) | | (kg) | |
| 20 | Rp | 1/2 | 16 | 723 550 506 | 10 | 0.093 |
| 25 | Rp | 3/4 | 16 | 723 550 507 | 5 | 0.152 |
| 32 | Rp | 1 | 16 | 723 550 508 | 5 | 0.198 |
| 40 | Rp | 1 1/4 | 16 | 723 550 509 | 2 | 0.351 |
| 50 | Rp | 1 1/2 | 16 | 723 550 510 | 2 | 0.507 |
| 63 | Rp | 2 | 16 | 723 550 511 | 5 | 0.809 |

| d | L1 | D | L | L2 | s | z1 | z2 | G |
|------|------|------|------|------|------|------|------|--------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (inch) |
| 20 | 22 | 43 | 48 | 26 | 25 | 7 | 10 | 1 |
| 25 | 25 | 51 | 54 | 29 | 30 | 9 | 10 | 1 1/4 |
| 32 | 27 | 58 | 60 | 33 | 36 | 8 | 11 | 1 1/2 |
| 40 | 31 | 72 | 70 | 39 | 46 | 10 | 13 | 2 |
| 50 | 35 | 83 | 81 | 46 | 55 | 13 | 15 | 2 1/4 |
| 63 | 40 | 100 | 98 | 58 | 65 | 14 | 21 | 2 3/4 |



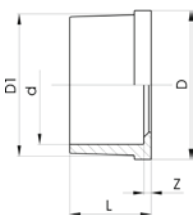
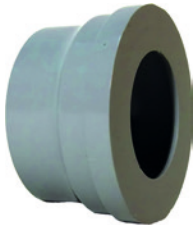
Adaptor union PVC-C metric brass R

Model:

- Union Nut: PVC-C
- Union Bush: Solvent cement socket PVC-C metric
- Union End: Brass with taper male thread R
- Gasket: O-ring EPDM code no. 748 410 006-011

| d (mm) | Thread Type | Size (inch) | PN* (bar) | Code | SP | Weight (kg) |
|-----------|-------------|----------------|--------------|--------------------|----|----------------|
| 20 | R | ½ | 16 | 723 550 906 | 10 | 0.132 |
| 25 | R | ½ | 16 | 723 550 957 | 5 | 0.230 |
| 25 | R | ¾ | 16 | 723 550 907 | 5 | 0.203 |
| 25 | R | 1 | 16 | 723 550 967 | 5 | 0.312 |
| 32 | R | ½ | 16 | 723 550 958 | 5 | 0.302 |
| 32 | R | ¾ | 16 | 723 550 968 | 5 | 0.302 |
| 32 | R | 1 | 16 | 723 550 908 | 5 | 0.393 |
| 40 | R | 1 ¼ | 16 | 723 550 909 | 2 | 0.493 |
| 50 | R | 1 ½ | 16 | 723 550 910 | 2 | 1.468 |
| 63 | R | 2 | 16 | 723 550 911 | 2 | 1.103 |

| d (mm) | z (mm) | s (mm) | G (inch) | L1 (mm) | D (mm) | L (mm) | L2 (mm) |
|-----------|-----------|-----------|-------------|------------|-----------|-----------|------------|
| 20 | 47 | 25 | 1 | 37 | 43 | 63 | 26 |
| 25 | 47 | 30 | 1 1/4 | 37 | 51 | 66 | 29 |
| 25 | 52 | 30 | 1 1/4 | 42 | 51 | 71 | 29 |
| 25 | 56 | 30 | 1 1/4 | 46 | 51 | 75 | 29 |
| 32 | 48 | 36 | 1 1/2 | 37 | 58 | 70 | 33 |
| 32 | 53 | 36 | 1 1/2 | 52 | 58 | 75 | 33 |
| 32 | 57 | 36 | 1 1/2 | 46 | 58 | 79 | 33 |
| 40 | 65 | 46 | 2 | 52 | 72 | 91 | 39 |
| 50 | 71 | 55 | 2 1/4 | 56 | 83 | 102 | 46 |
| 63 | 87 | 65 | 2 3/4 | 67 | 100 | 125 | 58 |



Union end PVC-C metric

Model:

- For union 723 510 105-114
- With solvent cement socket metric

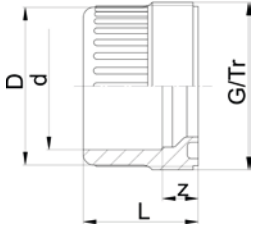
| d (mm) | Size (inch) | PN (bar) | Code | SP | Weight (kg) | z (mm) | D (mm) | D1 (mm) | L (mm) |
|-----------|----------------|-------------|--------------------|----|----------------|-----------|-----------|------------|-----------|
| 16 | | 16 | 723 800 105 | 10 | 0.005 | 3 | 24 | 22 | 19 |
| 20 | | 16 | 723 800 106 | 10 | 0.010 | 3 | 30 | 28 | 21 |
| 25 | | 16 | 723 800 107 | 10 | 0.018 | 3 | 39 | 36 | 24 |
| 32 | | 16 | 723 800 108 | 10 | 0.023 | 3 | 44 | 41 | 27 |
| 40 | | 16 | 723 800 109 | 10 | 0.062 | 3 | 57 | 53 | 31 |
| 50 | | 16 | 723 800 110 | 10 | 0.064 | 3 | 63 | 59 | 34 |
| 63 | | 16 | 723 800 111 | 10 | 0.120 | 3 | 78 | 74 | 41 |
| 75 | 2 ½ | 10 | 723 800 162 | 20 | 0.157 | 3 | 101 | 91 | 47 |
| 90 | | 10 | 723 800 163 | 12 | 0.260 | 5 | 121 | 108 | 56 |
| 110 | | 10 | 723 800 164 | 10 | 0.418 | 5 | 146 | 131 | 66 |



Union bush PVC-C metric

Model:

- Solvent cement socket metric
- For union 723 510 105-114
- Jointing face: with O-ring groove
- Gasket: O-ring EPDM code no. 748 410 005-016



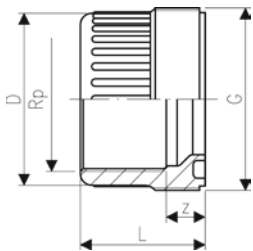
| d | Size | PN | Code | SP | Weight | z | D | L | G/Tr |
|------|--------|-------|--------------------|----|--------|------|------|------|---------|
| (mm) | (inch) | (bar) | | | (kg) | (mm) | (mm) | (mm) | (inch) |
| 16 | | 16 | 723 840 105 | 10 | 0.009 | 11 | 24 | 25 | 3/4 |
| 20 | | 16 | 723 840 106 | 10 | 0.014 | 12 | 28 | 26 | 1 |
| 25 | | 16 | 723 840 107 | 10 | 0.024 | 11 | 33 | 29 | 1 1/4 |
| 32 | | 16 | 723 840 108 | 10 | 0.038 | 10 | 41 | 33 | 1 1/2 |
| 40 | | 16 | 723 840 109 | 10 | 0.066 | 12 | 50 | 39 | 2 |
| 50 | | 16 | 723 840 110 | 10 | 0.083 | 14 | 62 | 46 | 2 1/4 |
| 63 | | 16 | 723 840 111 | 10 | 0.158 | 19 | 77 | 58 | 2 3/4 |
| 75 | 2 1/2 | 10 | 723 840 112 | 20 | 0.230 | 18 | 93 | 62 | Tr108x5 |
| 90 | | 10 | 723 840 123 | 12 | 0.381 | 18 | 110 | 69 | Tr128x5 |
| 110 | | 10 | 723 840 114 | 10 | 0.480 | 11 | 133 | 72 | Tr154x6 |



Union bush PVC-C Rp

Model:

- With parallel female thread Rp
- For union 723 510 105-114
- Jointing face: with O-ring groove
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-C
- Gasket: O-ring EPDM code no. 748 410 005-011



| Thread Type | Size | PN | Code | SP | Weight | z | D | L | G |
|-------------|--------|-------|--------------------|----|--------|------|------|------|--------|
| | (inch) | (bar) | | | (kg) | (mm) | (mm) | (mm) | (inch) |
| Rp | 3/8 | 10 | 723 840 605 | 10 | 0.010 | 13 | 24 | 24 | 3/4 |
| Rp | 1/2 | 10 | 723 840 606 | 10 | 0.015 | 13 | 29 | 26 | 1 |
| Rp | 3/4 | 10 | 723 840 607 | 10 | 0.024 | 14 | 34 | 29 | 1 1/4 |
| Rp | 1 | 10 | 723 840 608 | 10 | 0.039 | 15 | 42 | 32 | 1 1/2 |
| Rp | 1 1/4 | 10 | 723 840 609 | 10 | 0.069 | 19 | 53 | 38 | 2 |
| Rp | 1 1/2 | 10 | 723 840 610 | 10 | 0.092 | 26 | 63 | 45 | 2 1/4 |
| Rp | 2 | 10 | 723 840 611 | 10 | 0.114 | 33 | 78 | 56 | 2 3/4 |

Flange adaptors



Flange adaptor PVC-C Combined jointing face flat and serrated metric

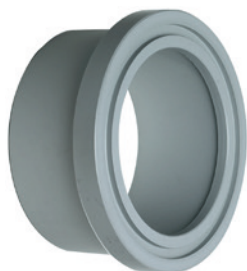
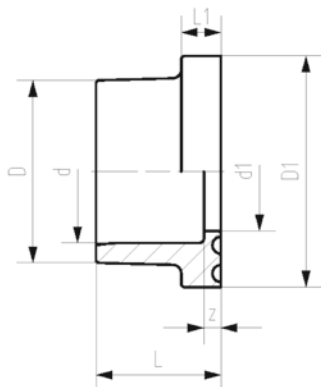
Model:

- Gasket: flat gasket EPDM code no. 748 400 306-320
- Gasket: profile flange gasket EPDM code no. 748 440 706-720, FKM code no. 749 440 706-720
- Flanges (metric & ANSI): PVC-U, PP-V, PP-Steel

Note:

* bevel on pipe may be needed if used with butterfly valve type 037/038/039

| | d (mm) | DN (mm) | PN (bar) | Code | SP | Weight (kg) | D (mm) | D1 (mm) | d1 (mm) | L (mm) | L1 (mm) | z (mm) |
|---|-----------|------------|-------------|--------------------|----|----------------|-----------|------------|------------|-----------|------------|-----------|
| * | 200 | 200 | 10 | 723 790 119 | 2 | 1.630 | 224 | 250 | 192.0 | 112 | 24 | 6 |

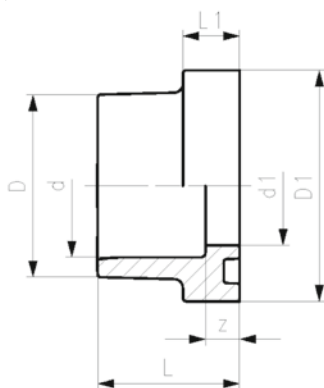


Flange adaptor PVC-C with O-ring groove metric

Model:

- Counterpart: flange adaptor code no. 723 790 117, 723 790 120
- Gasket: O-ring EPDM code no. 748 410 019, 748 410 022; FKM code no. 749 410 019, 749 410 022
- Flange: code no. 727 700 406-420, 727 700 206-220, 721 700 006-020

| | d (mm) | PN (bar) | Code | SP | Weight (kg) | D (mm) | D1 (mm) | d1 (mm) | L (mm) | L1 (mm) | z (mm) |
|--|-----------|-------------|--------------------|----|----------------|-----------|------------|------------|-----------|------------|-----------|
| | 160 | 16 | 723 810 117 | 12 | 1.252 | 188 | 213 | 152 | 97 | 22 | 11 |
| | 225 | 10 | 723 810 120 | 2 | 2.050 | 248 | 274 | 217 | 131 | 31 | 12 |



Process Automation made easy



Accurate measurement
Precise control
Reliable actuation
Comprehensive valves

Together as one

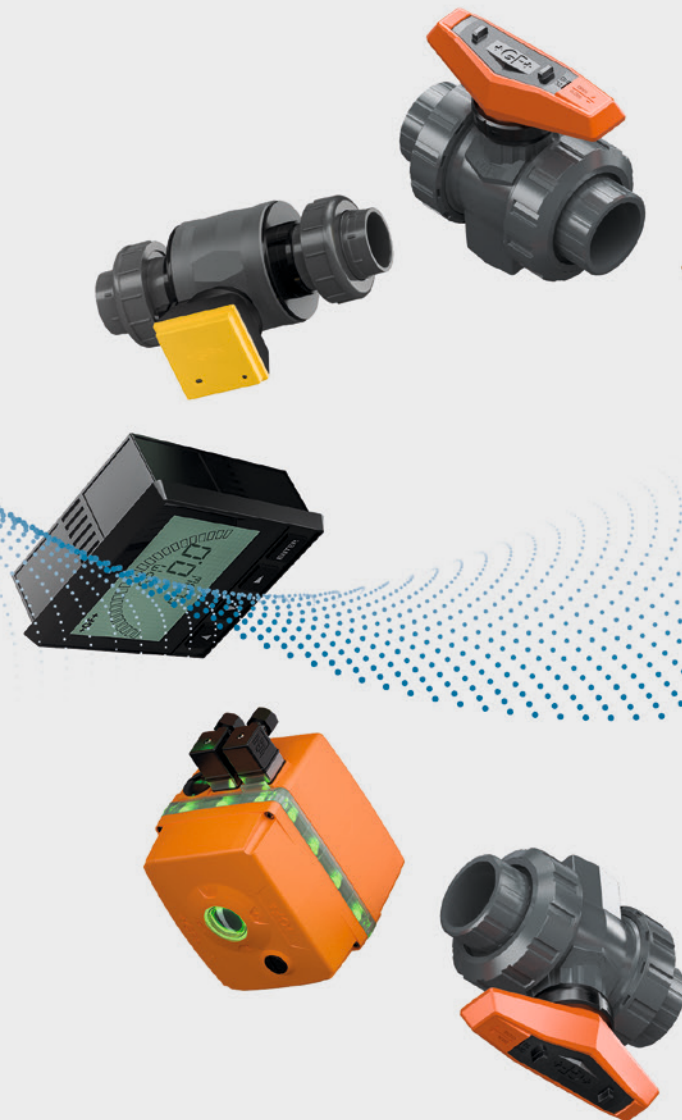
We make Process Automation easy

The water treatment market faces several critical issues: increasing urbanization and global warming resulting in one of the biggest concerns, namely water scarcity. Process Automation has an integral role in the growing needs of water conservation.

GF Piping Systems offers deep application knowledge of the entire process within the water treatment industry. Depending on the application area, there are different water treatment process challenges, ranging from guaranteeing high water qualities and providing reliable measurements to assuring stringent regulations. Plastic piping solutions from GF Piping Systems provide higher efficiency around the water cycle with increased productivity and lower operational and overall costs.

Features & Benefits

- Non-corrosive solutions
- Higher efficiency around the water cycle with increased productivity
- Lower operational and overall costs





One user experience across the whole control loop

GF Piping Systems is your experienced partner with a full portfolio of measurement, control, and actuation components, which are easy to install and use and have local support through all project phases. We offer the full package with our products and solutions, providing top-quality installation, a highly skilled team of experts standing by our customers' side every step of the way worldwide, and digitalized services ensuring a project is at the forefront of the market.



Design (Planning phase)

Easy planning thanks to application-specific solutions making an effortless combination around the complete control loop.



Select (Ordering phase)

Easy to select and order via configurators and matching components throughout the whole portfolio.



Install (Building phase)

Easy planning thanks to application-specific solutions making an effortless combination around the complete control loop.



Own (Operation phase)

Easy monitoring once installed, including spare part availability. Long lifetime and low maintenance make for reduced downtime.

Automation

The complete control loop

We offer the full package with our products and solutions, providing top-quality installation, a highly skilled team of experts standing by our customers' side every step of the way worldwide, and digitalized services ensuring a project is at the forefront of the market.



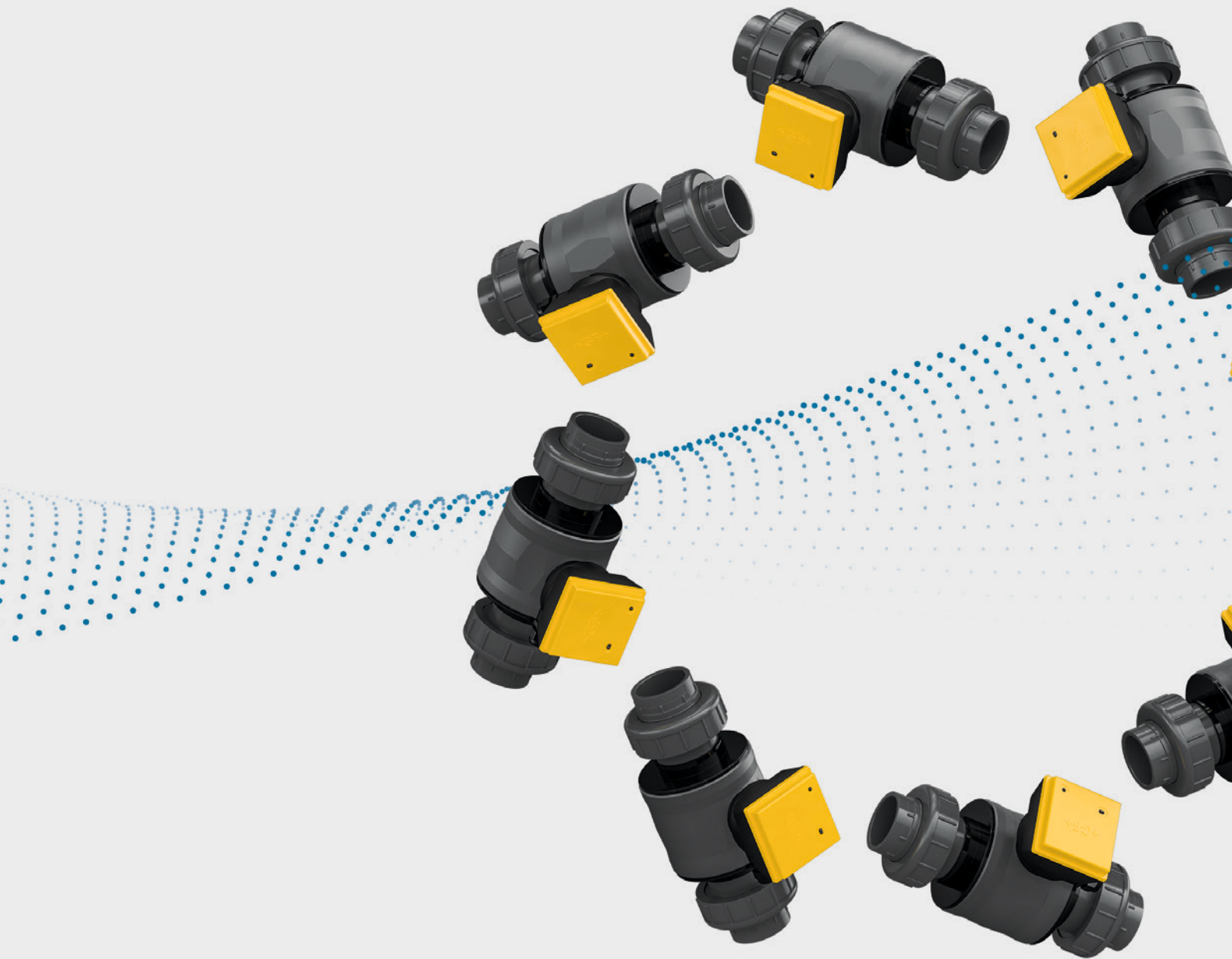
Your key benefits

- Accurate measurement is the basis for reliable process control
- Precise control throughout your automation loop
- Reliable actuation with configuration flexibility
- Comprehensive valves - the right valve for your application



One process

Accurate measurement is the basis
for reliable process control



Measurement

GF Piping Systems offers a wide range of technologies for quality flow and analytical products which are simple to operate and generate reliable results for all process requirements. Committed to product excellence, GF Piping systems continues its pursuit of quality through innovative, leading-edge technology in flow control and measurement. Our instruments are used in applications ranging from water and wastewater treatment to chemical processing.

Main benefits

- Each instrument is engineered to provide reliable and accurate information
- Simple to operate and easy installation

Product overview

- Flow
- Level
- Transmitters
- Controller
- pH/ORP
- Conductivity/resistivity
- Temperature and pressure sensors
- Water analysis
- Accessories

Flow – Product overview

All flow sensors comply with the high and specific requirements of the industry. GF Piping Systems provides reliable quality systems with worldwide support, long service life and cost-efficiency. Flow rate measurements can be conducted in media ranging from highly pure to highly contaminated, and allows a tailor made solution for almost any application in accordance with the application requirements.

Paddlewheel flow sensor

Paddlewheel flow sensors are highly repeatable, rugged sensors that offer exceptional value with little or no maintenance. Easy to install and offering proven, reliable performance, Paddlewheel flow sensors are available in a variety of materials for a wide range of pipe sizes and insertion configurations. The many material choices, which include PP, PVDF and stainless steel, make paddlewheels highly versatile and chemically compatible in many liquid process applications.

Main applications

- Filtration Systems
- Chemical Production
- Liquid Delivery Systems
- Pump Protection
- Scrubber/Gas Stacks



Rotor-X paddlewheel flow sensor type 515

- Non-powered
- 0.3 - 6 m/s (1 to 20 ft/s)
- DN15 - DN900 (½ to 36 in.)
- PP 12.5 bar @ 20 °C (180 psi @ 68 °F)
- PVDF 14 bar @ 20 °C (203 psi @ 68 °F)
- 19.7 Hz per m/s nominal (6 Hz per ft/s nominal)
- Wet tap sensors available



Rotor-X paddlewheel flow type 2536

- 0.1 - 6 m/s (0.3 to 20 ft/s)
- DN15 - DN900 (½ to 36 in.)
- DN15 - DN100 (½ to 4 in.) for PVC
- PP 12.5 bar @ 20 °C (180 psi @ 68 °F)
- PVDF 14 bar @ 20 °C (203 psi @ 68 °F)
- PVC 14 bar @ 20 °C (203 psi @ 68 °F)
- 49 Hz per m/s nominal (15 Hz per ft/s nominal)



Paddlewheel flow sensor type 2537

- 0.1 - 6 m/s (0.3 to 20 ft/s)
- DN15 - DN200 (½ to 8 in.)
- PP 12.5 bar @ 20 °C (181 psi @ 68 °F)
- PVDF 14 bar @ 20 °C (203 psi @ 68 °F)
- 4-20 mA, digital (S²L), flow switch or pulse outputs (based on part number)



Metalex paddlewheel flow sensor type 525

- 0.5 - 6 m/s (1.6-20 ft/s)
- DN15 - DN300 (½-12 in.)
- 316 stainless steel
- 103 bar (1500 psi @ safety factor 1.5) @ 149 °C (300 °F)
- 39 Hz per m/s nominal (12 Hz per ft/s nominal)



Stainless steel paddlewheel flow sensor type 2540

- 0.1 - 6 m/s (0.3 to 20 ft/s)
- DN40 - DN900 (1½ to 36 in.)
- 316 stainless steel
- 17 bar @ 100 °C (250 psi @ 212 °F)
- 49 Hz per m/s nominal (15 Hz per ft/s nominal)
- Open collector output

Magmeter

Magmeters are versatile, easy-to-install sensors with no moving parts and patented Magmeter technology. Design provides easier installation and removal than full-line magmeters. Corrosion-resistant materials are available for various applications.

Main applications

- Chemical Processing
- Water and Wastewater Monitoring
- Commercial Pools, Spas, and Aquariums
- HVAC
- Cooling Tower
- Neutralization Systems
- Industrial Water Distribution



FlowtraMag® Meter type 2581 (Hastelloy® C)

- 0.02 - 10 m/s (0.07 to 33 ft/s)
- DN25 to DN100 (1 to 4 in.)
- 10 bar @ 23 °C (145 psi @ 73 °F)
- 4 - 20 mA, 4 to 20 mA per ANSI-ISA 50.00.01 Class H



Magmeter (blind or display) type 2551

- 0.05 - 10 m/s (0.15 to 33 ft/s)
- DN15 - DN900 (½ to 36 in.)
- 10.3 bar @ 25 °C (150 psi @ 77 °F)
- 4 - 20 mA, or frequency/digital (S³L) outputs
- Optional relay outputs



Metal magmeter type 2552

- 0.05 - 10 m/s (0.15 to 33 ft/s)
- DN50 - DN2550 (2 to 102 in.)
- 316 stainless steel & PVDF
- 20.7 bar @ 25 °C (300 psi @ 77 °F)
- 4 - 20 mA, frequency/digital (S³L)
- Hot-tap using ball or gate valves

Inline flow sensors

Flow through the body design of the rotor sensor provides easy access for cleaning, inspection and rotor replacement without the need for powering down. Flexibility with end connections enable flexible tubing or rigid pipe installations. The injection-molded PVDF body and ceramic bearings provide excellent chemical compatibility and long service in dosing and batching applications.

Main applications

- Chemical addition
- High-purity chemical dispensing
- Batch processes
- Chemical dosing



Turbine flow sensor type 2100

- 0.38 to 38 lpm (0.10 to 10 gpm)
- DN15 (½ in.)
- PVDF
- 16 bar @ 20 °C (232 psi @ 68 °F)
- Open collector output
- Use with end fitting: 3-2100-31 to 3-2100-38



Mini-flow rotor sensor type 2507

- 400 - 12 000 mL/m (0.1 to 3.2 U.S. gpm)
- G ¼ in. ports, ¼ in. NPT pipe adapters
- PVDF
- 5.5 bar @ 24 °C (80 psi @ 75 °F)
- Open Collector output
- Standard cable 7.6 m (25 ft)



Micro-flow rotor sensor type 2000

- 0.11 - 12.11 lpm (0.03 - 3.2 gpm)
- ¼ in. NPT or ISO 7/1-R1/4 threads
- Polyphenylene sulphide and PEEK
- 5.5 bar @ 0 ° to 80 °C (80 psi @ 32 °F to 176 °F)
- Open collector output
- Standard cable 7.6 m (25 ft)

Measurement – Flow

Variable area flow meters

Variable area flow meters (VAFM) are dismountable meters for flow measuring in industrial piping applications. The measurement ranges, which are attuned to our customers' needs, and the range of materials available for the tubes and connection ends, mean that the flow meters can be used for a wide range of applications and a great variety of media.



Variable area flow meters type 335 / 350, SK50-73

- Taper tubes in PVC transparent, PA, PSU
- Union connection with PVC (std)*
- DN10 - DN65 (3/8" - 3 1/2")
- PN10
- Optional switch feedback
- Special scales on request

*others on request

Main applications

- Water treatment
- Chemical process industry
- Microelectronics
- Food industry
- Ship building

Ultrasonic Flow Meter

Ultrasonic flow sensors perform highly accurate flow rate measurements of liquid media without coming into contact with the actual medium. Customers use ultrasonic technology, no invasive intervention is required. This advantage comes into play especially in areas in which one would like to avoid contamination, such as with ultrapure water. Their installation also requires no interruption of processes.

Main applications

- Ultrapure water measurement
- Heatingsystems
- Chilled water metering
- Flow measurement for energy metering
- Monitoring of manufacturing processes



Ultrasonic Flowmeter type U1000 V2

- 0.1 m/s - 10 m/s
- d22 - d180
- DC 12 - 24 V
- Output: 4-20 mA, pulse/frequency, Modbus
- Transit-time measurement
- Heatmeter option available



Portable ultrasonic flowmeter type PF220 / PF330

- 0.1 m/s - 20 m/s
- d13 - d2000
- Battery powered, AC 110 - 240 V
- Output: 4-20 mA, USB
- Integrated datalogger (PF330)
- Transit-time measurement



Ultrasonic wall mount flowmeter type U3000 / U4000

- 0.1 m/s - 20 m/s
- d13 - d2000
- DC 24 V or AC 86 - 240 V
- Output: 4-20 mA, pulse/frequency, RS232, USB
- Integrated datalogger (U4000)
- Transit-time measurement



Ultrasonic doppler flowmeter type UD2100

- Especially designed for dirty/aerated liquids
- 0.03 m/s - 12.2 m/s
- d16 - d4000
- DC 24 V or AC 86 - 240 V
- Output: 4 - 20 mA, pulse/frequency, Modbus
- Integrated datalogger
- Doppler measurement

Level – Product overview

Continuous level control detects the level in a tank continuously. Depending on application requirements and characteristics of the process liquid, either a non-contact or contact device can be utilized. GF level sensors provide accurate level information through analogue or digital signals to ensure easy interfacing with PLCs.

Point level detection

To maintain full control over the liquid level in tanks, point level switches can be used for a physical detection of critical filling levels. These instruments provide additional safety and control. They are often installed together with a continuous level sensor as a back-up system. They can also be used to directly control filling and emptying process.

Main applications

- Overfill protection
- High and low level alarms
- Pump control
- Dry-run protection for pumps



Vibration forks type 2280

- For safe operation in critical applications
- Cable, DIN connector and connection terminals
- Easy wiring in various applications
- No moving parts
- No maintenance costs



Conductive multipoint switch type 2281

- Individual cutting of electrodes
- Most economic solution to indicate multiple point levels
- Easy adaptation of switching points on site
- Up to 4 switching points in one sensor
- 4 times faster installation
- Cost effective solution



Float switch type 2285

- Double chambered enclosure
- Easiest way to monitor point levels in open tanks and basins
- High operational safety
- Mercury free switching contact
- Safe use in drinking- and waste water applications



Ultrasonic gap switch type 2284

- PPS Full-plastic body
- Reliable point level detection even in very corrosive or viscous liquids
- Optimized chemical compatibility
- Compact size
- Easy installation in pipes and small systems
- Robust ultrasonic principle even in highly viscous liquid



Guided float switch type 2282

- PP or PVDF full-plastic body
- Compact and cost attractive solution for small vessels
- Optimized chemical compatibility
- Ultra compact housing
- Easy installation in compact systems

Measurement – Level

Continuous level control

For continuous tank level detection, GF offers a variety of measurement technologies. Depending on application requirements and characteristics of the process liquid, either a non-contact or contact device can be utilized. GF level sensors provide accurate level information through analog or digital signals to ensure easy interfacing with programmable logic controllers (PLC).

Main applications

- Inventory management
- Batching and dosing processes
- Storage Tank Monitoring
- Neutralization Tanks
- Plating Lines
- Waste Sumps
- Clarifiers
- Overflow Protection



Guided radar level transmitter type 2291

- Reliable guidance of measuring signal along probe
- Advanced resilience in case of extreme fumes, thick foam layers or agitation
- Great performance also on media of low dielectric constants
- Special coatings for probes available: PP, PFA and FEP



Ultrasonic level sensor type 2270

- Non-contact principle
- Narrow 5 and 6° beam
- Range: 4, 6, meters (13, 20 ft)
- 4-20 mA, HART
- PP and PVDF bodies
- Easy to use EView programming software
- Allows for open channel measurement



Non-contact principle radar level transmitter type 2290

- Non-contact principle
- Robust against most interfering factors such as fumes, light foaming or fluctuations of pressure or temperature
- Display and comprehensive configuration menu
- PP, PTFE or steel antenna enclosures



Ultrasonic integral level transmitter type 2260

- Non-contact principle
- Narrow 5 and 6° beam
- Range: 4, 6, 15 meters (13, 20, 50 ft)
- 4-20 mA, HART, relay output
- PP and PVDF bodies
- ATEX versions
- Quick-set and advanced menu
- Large multi-parameter display
- Allows for open channel measurement



Hydrostatic level sensor type 2250

- 0-10 psi = 0-7.03 m = 0-23.06 ft
- 0-50 psi = 0-35.15 m = 0-115.32 ft
- Wetted material: PVDF, PVC, ceramic and FKM
- Submersible sensor
- 4-20 mA or digital (S³L)
- Uses hydrostatic pressure for level and depth control

Conductivity/resistivity – Product overview

The Conductivity / Resistivity electrodes are suitable for a variety of applications ranging from high-purity water quality monitoring to weak acids and bases.

Main applications

- Water Treatment and Water Quality Monitoring
- Aquatic Animal Life Support Systems
- Deionization
- Plating Bath
- Dry-run protection for pumps



Conductivity integral system with 9900 transmitter

- Local display for sensor mounted instruments
- Provides 4 - 20 mA output
- "At a glance" visibility
- "Dial-type" digital bar graph
- NEMA 4X/IP65



Conductivity/resistivity electrodes type 2818 - 2823

- 0.055 - 400 000 μS (0.02-200 000 ppm) (18.2 M Ω - 1 K Ω)
- 316 SS or titanium (Hastelloy C also available upon request)
- Reversible threads or sanitary flange connections
- Connect to 2850 sensor electronics



Conductivity sensor electronics with PVDF type 2850

- 0.055 - 400 000 μS (0.02 - 200 000 ppm) (18.2 M Ω - 1 K Ω)
- PBT (integral mount) /PBT/CPVC (universal J-box)
- Integral systems connect to the 2839 series electrodes or 2819 series electrode via 3-286X universal j-box assembly
- 4 - 20 mA or digital (S³L)
- Factory NIST certified



PVDF conductivity electrodes type 2839 - 1V(D) - 2842 - 1V(D)

- 0.055-200 000 μS (0.02-100 000 ppm) (18.2 M Ω - 1 K Ω)
- 316 SS and PVDF
- Dual threaded NPT or ISO
- Connection to 9900 and 9950 instruments or 2850 sensor electronics
- NIST certificate

PH/ORP – Product overview

PH/ORP electrodes are versatile process sensors with unique designs and long service lives for use in everything from general purpose to harsh media applications. When connected to the 2751 pH/ORP smart sensor electronics and 9900/9950 Transmitter, customers have available to them a wide range of features and benefits.

Main applications

- Water and Wastewater Treatment
- Neutralization Systems
- Scrubber Control
- Effluent Monitoring
- Surface Finishing
- Flocculent Coagulation
- Heavy Metal Removal and Recovery
- Toxics Destruction
- Sanitization Systems
- Pool & Spa Control
- Aquatic Animal Life Support Systems

DryLoc pH/ORP electrodes for harsh applications – type 2734-2736



- Enhanced reference and bridge gels to resist chemical poisoning
- Ryton (PPS) body and PTFE junction for broad range of chemical compatibility
- PTFE reference junction resists fouling and chemical attack
- Mounts in Signet standard fittings from DN15 to DN100 (1/2 to 4 in.)

DryLoc pH/ORP electrodes type 2724-2726



- 0-14 pH, $\pm 2,000$ mV ORP
- Ryton body, PE junction
- Use fittings for in-line applications or 3/4" NPT or ISO
- Suitable for submersible applications
- DryLoc preamplifier connection with gold plated pins

Threaded DryLoc pH/ORP electrode - type 2774 - 2777



- 0 - 14 pH, $\pm 2,000$ mV ORP
- Ryton body, PTFE junction
- Use sensor 3/4" threads for mounting
- DryLoc preamplifier connection with gold plated pins
- Suitable for submersible applications
- For use with 2751/2760 preamplifiers

pH/ORP Wet-Tap assembly - type 3719/2756, Wet-Tap electrodes type 2757



- Use a wet-tap style sensor for 0 - 14 pH, $\pm 2,000$ mV ORP
- CPVC, PVC
- 1 1/2 or larger
- 1 1/2 or 2 NPT, ISO 7/1 - R1.5 or R2
- Electrode removal without process shutdown

Differential DryLoc pH/ORP electrodes type 2744 - 2747



- 0 - 14 pH, ± 1500 mV ORP
- Ryton body, PTFE double junction
- Use sensor 1 inch threads for mounting
- DryLoc preamplifier connection with gold plated contacts
- For use with 2751/2760 preamplifiers

DryLoc pH/ORP Smart Sensor Electronics type 2751



- -1 - 15 pH, $\pm 2,000$ mV ORP
- PBT, CPVC (PVC-C)
- Probe health monitoring, glass impedance and broken glass detection
- Memory chip interface
- Use with 9900 and 9950
- In-line and submersible versions available

Temperature and pressure sensors – Product overview

The temperature and pressure sensors are versatile sensors with the ability to outlast metal sensors in aggressive liquids and eliminate the need for costly custom thermowells.

Main applications

- Plating Bath Temperature Control
- Heat Exchange Monitor
- R.O. and D.I. System Monitor
- Hot/Cold Mixing System Monitor
- Data Acquisition
- Cooling Loops
- Effluent Monitoring
- HVAC
- Chemical Processing



Temperature integral system with 9900 transmitter

- Local display for sensor mounted instruments
- Provides 4-20 mA output
- "At a glance" visibility
- "Dial-type" digital bar graph
- NEMA 4X/IP65



Pressure integral system with 9900 transmitter

- Utilizes the 2450 sensor for pressure or hydrostatic level measurement
- Local display for sensor mounted instruments
- Provides 4-20 mA output
- "At a glance" visibility
- "Dial-type" digital bar graph
- NEMA 4X/IP65



Temperature sensor type 2350

- In-line mounting: 10 °C to 100 °C (14 °-212 °F)
- Submersible mounting: 10 °C to 85 °C (14 °-185 °F)
- PVDF
- 3/4 inch dual threaded for in-line or submersible installation
- 4-20 mA or digital (S³L)



Pressure sensor type 2450

- 0-0.7 bar (0-10 psig) - U
- 0-3.4 bar (0-50 psig) - L
- 0-17 bar (0-250 psig) - H
- Vacuum range available
- Wetted material: PVDF, ceramic and FKM
- 1/2" union, dual threaded
- 4-20 mA or digital (S³L)

Transmitters – Product overview

The the 9900 and 8150 Transmitter provide a single channel interface for many different sensor types including Flow, pH/ORP, Conductivity/Resistivity, Salinity, Temperature, Pressure, Level, Dissolved Oxygen and other sensors that output a 4 to 20 mA signal. Each release of the 9900 Transmitter has included new features and capabilities in addition to the already extensive list of capabilities.

Main applications

- Wastewater Flow Accumulation
- Water Treatment Systems
- Remote or Mobile Treatment
- Distribution Systems
- Irrigation Systems
- Filtration Systems
- Commercial Pools & Spas
- Groundwater Remediation
- R.O. Concentrate
- Process Flow Monitoring
- UPW Distribution
- Demineralizer Regeneration
- Process Cooling Water



Flow integral mount type 9900

- Local display for sensor mounted instruments
- Provides 4 - 20 mA output
- "At a glance" visibility
- "Dial-type" digital bar graph
- NEMA 4X/IP65



Battery powered flow totaliser type 8150

- Displays GPS, GPM, GPH, GPD, LPS, LPM, LPH, LPD
- Battery powered
- Single input
- Panel or field mount
- 3 totalisers, auto calibration
- Use with 515 or 525 flow sensors

Water analysis – Product overview

The Chlorine Analyzer System is an integrated, all-in-one system designed to measure free chlorine or chlorine dioxide. Quick to set up and easy to install, the analyzers are supplied with a 100-240 VAC power supply, two 4 to 20 mA outputs and two dry contact mechanical relays.

Main applications

- Water Distribution
- Ground Water
- Surface Water
- HVAC Applications (cooling water)
- Food and Beverage
- Swimming Pools
- Water Parks



**Chlorine analyzer system
type 4630**

- Continuous free chlorine measurement without chemical reagents
- Optional pH sensor for increased accuracy
- Pre-wired panel for easy installation
- Built in pressure regulator and variable area flow meter



**Chlorine dioxide system
type 4632**

- Complete turnkey system – no additional parts required to install
- Now available with a flow switch interrupt (chlorine and chlorine dioxide)
- Complies with EPA standard 334.0
- Chemical free measuring system – 0 - 2 ppm
- Optional pH measurement



**Process optical dissolved
oxygen sensor type 2610**

- Optical DO measurement with no flow requirements
- No membranes or filling solutions
- Flexible communications, 4 - 20 mA or modbus 3-2610-51
- Measurement range: 0 - 20 mg/L, 0 - 200 % saturation

Accessories

**Switching power supplies
type 7310**



- Universal AC input/full range
- Protections: short circuit/overload/over-voltage
- Cooling by free air convection
- Install on DIN rail TS-35/7.5 or 15
- Built in DC OK active signal
- LED indicator for power on

**i-GO signal converter
type 8058**



- Connects third party 4 - 20 mA signals to the 9900
- Available for single or dual 4 - 20 mA sensor inputs
- Compatible with 9900 and 9950

**8059 external relay
module**



- AC and DC powered versions
- External relays controlled by host instrument
- Digital pass-through (DC versions) to simplify wiring
- Relay can be tested locally, and also via the host instrument
- Only compatible with 8900

**HART –
USB modem**



- HART to USB converter
- Portable or DIN rail version
- ATEX

**pH/ORP system tester
type 2759**



- Battery powered
- Simulates pH and ORP
- Compatible with 2751 and 2760 preamp
- Connects to any pH/ORP instrument

Configuration tool type 0252



- Back up and restore SmartPro transmitters and blind sensors
- configurations to a computer file
- User-friendly interface
- Configure settings such as instrument type, units, scale 4 to 20 current loops and modify labels from the computer
- Use a single file to clone multiple SmartPro transmitters and blind sensors

**Conductivity/resistivity tools
type 2850 - 101 - X**



- Available in 5 different values
- Verifies electronic independent of electrode
- Compatible with all conductivity and resistivity instruments
- Temperature compensated to 25 °C

9900 pH/ORP Calibrator



- 9900 battery operated calibrator
- Works with new line of 2751 Smart pH/ ORP sensor electronics
- This unit can be kept in a lab or taken in to the field
- Runs on (8) AA Alkaline batteries (included)
- Allows the user the ability to rotate electrodes, meaning unplug an aged/dirty electrode replace with a pre-calibrated electrode

**Flow wet-tap valve
type 3519**



- DN15 - DN900 (½ to 36 in.)
- PVC
- 7 bar @ 20 °C (100 psi max @ 68 °F)
- Use with wet-tap paddlewheel flow sensors type 515 and 2536



**Buffer solutions
type pH/ORP**

- NIST Traceable
- Easily identifiable colour coded buffer solutions
- Liquid or powder versions
- Temperature compensated values
- Kits for easy use



**Wall mount
accessory kit**

- Compact enclosure that works with 9900 transmitter and other ¼ DIN size instruments
- Equipped with a ¼ DIN cutout and two ½" holes at the base
- Mounting hardware and liquid tight connectors are included



**Limit contacts GK 10/GK11 VAFM
type 335/350 /123**

- Reed contact
- IP65
- 230 V



**4 - 20 mA sensor GK 15 for VAFM
type 335/350**

- 12 - 24 V DC
- IP 65
- 4 - 20 mA (3 wire)



Rear enclosure kits for 9900

- Compatible with all existing 9900-1P transmitters
- NEMA TYPE 4X/IP66 rated for indoor or outdoor installations
- Spacious for any 9900 transmitter accessory module
- Hinged cover design for easy to access wiring
- Hinged cover suitable for wall mount or pipe mount installations



Measurement

Installation fitting tees



Plastic - metric tees

- ABS* DN20 - DN50
- PVC DN15 - DN50
- PP DN15 - DN50
- PVDF DN15 - DN50
- PE DN15 - DN50



Plastic - fiberglass tees

- Fiberglass 1.5 - 2.0" / SCH 80
- Special order 1/2 saddles available up to 12 inch / DN 300



Plastic - PVC tees

- PVC 0.50 - 2.0" / SCH 80
- PVC-C 0.50 - 2.0" / SCH 80
- PVC BSP* 0.50 - 2.0"
- Fiberglass 1.50 - 2.0" / SCH 80



Metal - tees

- Carbon steel NPT 0.50 - 2.0" / SCH 40
- Copper sweat-on 0.50 - 2.0" / SCH K
- Galvanized iron NPT 1.00 - 2.0" / SCH 40



Metal - tees

- 316 SS NPT 0.50 - 2.00" / SCH 40
- Brass NPT 1.00 - 2.00" / SCH 40

* BSP and ABS fittings are available through your local Georg Fischer sales company.

Weldolets / brazolets



Weldolet

- PVC-U DN65 - DN600
- PP DN65 - DN600
- PE DN65 - DN600
- PVDF DN65 - DN600
- SS DN50 - DN630



Weldolets / brazolets

- Carbon steel 2.5 - 12.0" / SCH 40
- Brass 2.5 - 12.0" / SCH 40
- 316 SS 2.5 - 12.0" / SCH 40



Metalex



Metalex

- SS socket 0.50 - 1.00"
- SS weld-on 1.25 - 12"



Metalex weld-on mini-tap

- 1.25 - 12"

Wafer fittings



Wafer

- PP DN65 - DN300 (2.5 - 4.0")
- PVDF DN65 - DN200 (3.0")

Saddles



Electrofusion transition

- PE 2.0 - 12.0"



Electrofusion

- PE DN65 - DN400



Clamp-on

- PVC 2.0 - 8.0"/SCH 80
- PVC-U metric DN65 - DN200
- BSP 3" - 6"



PVC-U Glue-on

- PVC 10" - 12"/SCH 80
- Special order up to 20 inch



Strap-on

- Iron 2.0 - 12.0"/SCH 80
- Schedule 80 available up to 48 inches/DN 1200
- Sch 52 and K9 metric ductile iron saddle 56 to 400 mm

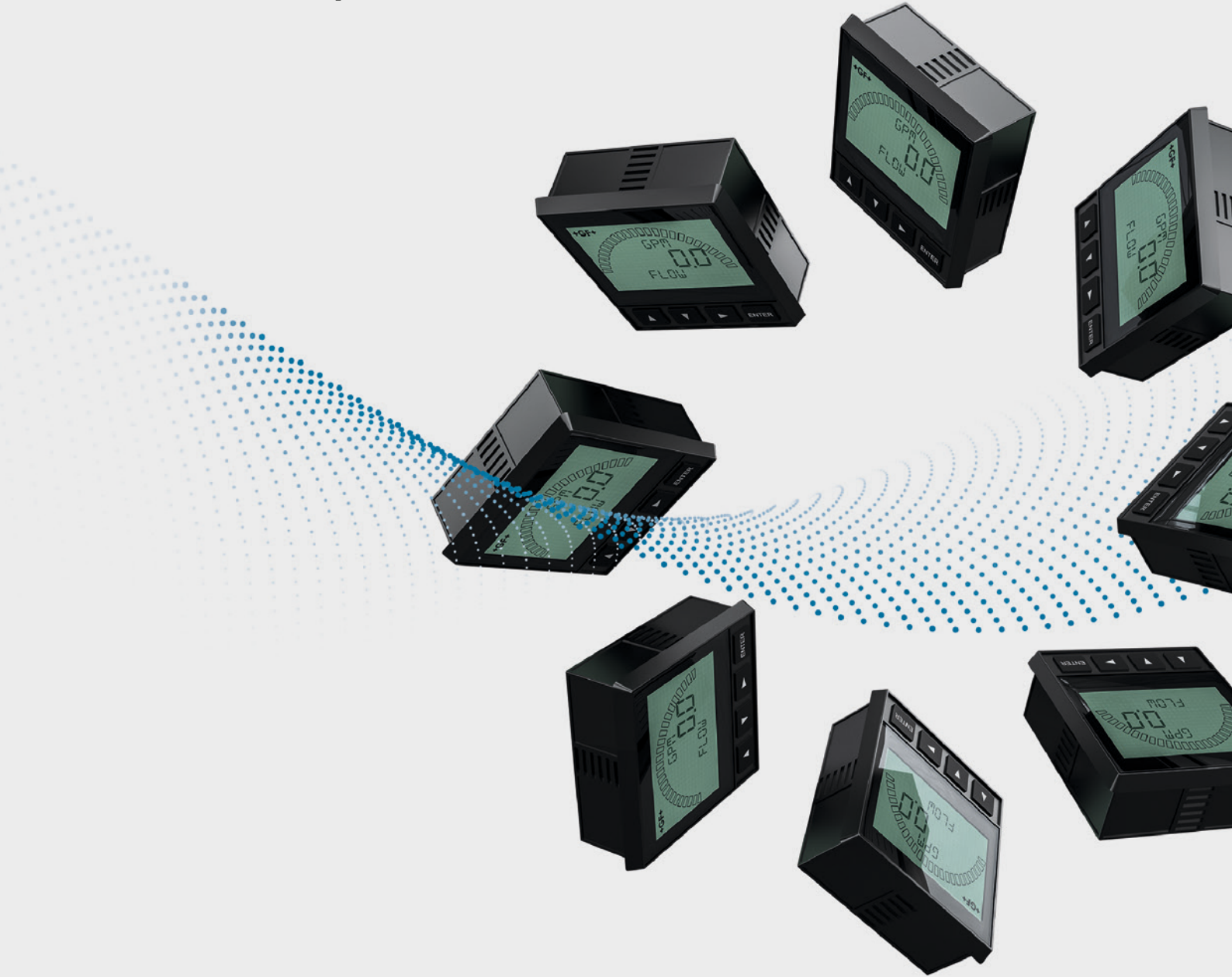


Glue-on

- PVC-U DN65 - DN300
- ABS DN65 - DN200

One platform

Precise control throughout your automation loop



Control

Thanks to the clever design, our control products make life easy. Each one is simple to operate, thanks to the intuitive menu structures, and all of our measurement parameters connect with the same transmitter, ensuring a true multiparameter controller. Because of the modular design, you can add additional functionalities like batch control or communication technologies and upgrade at any time.

Main benefits

- Compatible with all GF sensors
- Configurable display
- Multiple sensor types in one instrument
- Optional modules for additional capabilities

Product overview

- Multi-parameter instruments
- Accessories
- Modules

Multi-parameter instruments – product overview

As a member of the Signet SmartPro® family of instruments, the Signet 9900 Transmitter provides a single channel interface for many different sensor types including Flow, pH/ORP, Conductivity/Resistivity, Salinity, Temperature, Pressure, Level, Dissolved Oxygen and other sensors that output a 4 to 20 mA signal. Each release of the 9900 Transmitter has included new features and capabilities in addition to the already extensive list of capabilities.

Main applications

- Wastewater Flow Accumulation
- Water Treatment Systems
- Remote or Mobile Treatment/
- Distribution Systems
- Irrigation Systems
- Filtration Systems
- Commercial Pools & Spas
- Groundwater Remediation
- R.O. Concentrate
- Process Flow Monitoring
- UPW Distribution
- Demineralizer Regeneration
- Process Cooling Water



SmartPro transmitter type 9900

- Multi-parameter input selection
- Large auto-sensing backlit display
- „Dial-type“ digital bar graph
- Optional field upgradable relays
- Selectable error mode for current outputs, 3.6 mA or 22 mA
- Optional relay, direct conductivity/resistivity, 4-20 mA output, and HART modules are available



Dual channel transmitter type 9950

- Independent dual channel multi-parameter, flow, pH, ORP, conductivity, resistivity, pressure, temperature, level, volume, salinity, dissolved oxygen, other (4-20 mA)
- 2 Passive 4-20 mA loop outputs standard
- Options for up to 4 relays – dry contact or solid state
- Derived functions: ratio, difference, sum, % rejection, % recovery

Accessories



i-GO signal converter type 8058

- Connects third party 4-20 mA signals to the 9900
- Available for single or dual 4-20 mA sensor inputs
- Compatible with 9900
- Requires programming at the factory
- with the 8350, 8450



PID controller type 3216

- Easy set-up
- Auto-tune
- 24 V or 100-230 V
- External set-point
- Manual override via push button
- Compact design



Modules



**Relay Module
type 9900**

- Adds two programmable dry-contact relays
- Hysteresis and time delay available for each relay
- Depending on the sensor type, there are a total of 23 relay modes available



**Conductivity/Resistivity Module
type 9900**

- Interfaces Conductivity/Resistivity and Salinity directly to the 9900 transmitter
- Conductivity/Resistivity and Salinity measurements may also be performed via the 2850 Sensor Electronics connected through the 9900 Digital (S³L) inputs)



**H COMM Module
type 9900**

- Allows communication between the 9900 Transmitter and a HART®-enabled device
- Allows access to primary and secondary measurements remotely
- Allows user to remotely adjust the 4 and 20 mA settings
- Not compatible with Batch module



**Batch Module
type 9900**

- Adds batch capability to the 9900 Transmitter (Generation II or later)
- Compatible with all Signet flow sensors
- Up to 10 batch sizes can be stored in one 9900 with customized names and K-Factors available for each batch
- Batch module plugs in the same location as the conductivity and 4-20 mA module. Only one can be used at one time



**4 to 20 mA Module
type 9900**

- Adds one extra 4-20 mA output to the
- Output can be used for primary or secondary measurement
- Settings are independent from 4-20 mA output in base unit



**Modbus Module
type 9900**

- Ability to transfer live readings, units of measure, and measurement status
- Connects to PLCs and SCADA system
- Supports the serial Modbus RS485 standard



**Relay Module
type 9950**

- Interface up to four binary inputs
- Binary inputs are compatible with either open collector or mechanical contacts
- The binary inputs can supply power to the four inputs or accepts powered outputs from external devices



**Dual Channel 4 to 20 mA Module
Current Loop Output Module
type 9950**

- Up to six 4 to 20mA current loops in one 9950
- Passive loops, requires external 12 to 24 VDC power



**Single Channel Conductivity/Resistivity
Module type 9950**

- Two conductivity modules can be added for conductivity, resistivity or salinity measurements



**Dual Channel Conductivity Module
type 9950**

- Monitor two different conductivities with a single module
- The module design allows for additional expansion opportunities with the 9950 such as additional current loop outputs

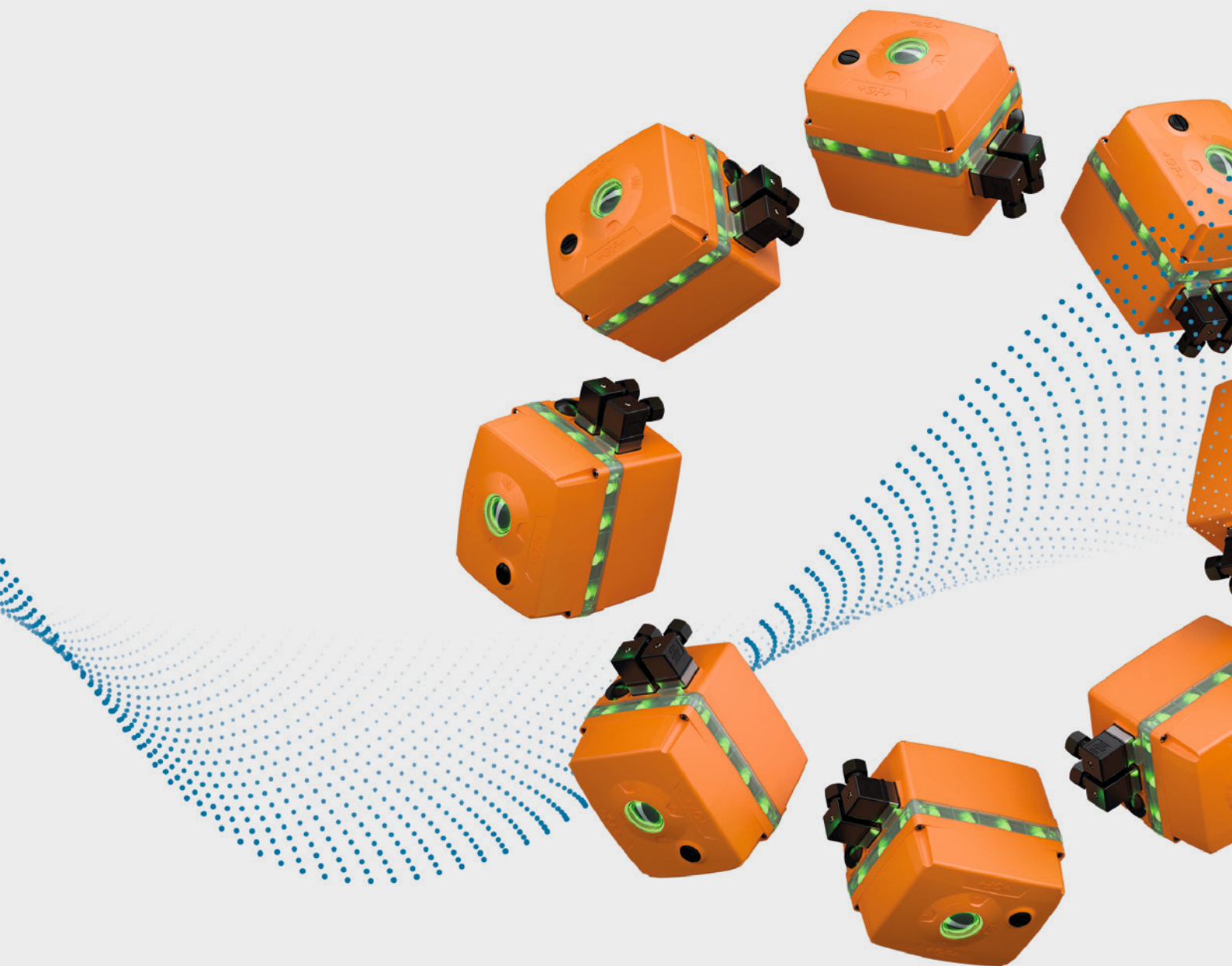


**Modbus Module
type 9950**

- Connects the 9950 to existing Modbus RTU, serial RS485 and automation networks
- Allows digital access to live measurement readings
- Simplifies the interfacing of the 9950 to automation networks

One partner

Reliable actuation with
configuration flexibility





Actuation

With our modular set-up, valves and actuators can be combined for flexibility and additional functionalities, and positioners or monitoring devices can be added optionally. Naturally, we offer the whole range in all-plastic designs, which are capable of withstanding harsh environments.

A wide range of pressure regulating valves and accessories complete our actuation portfolio.

Main benefits

- Robust and durable
- Fail-safe mode
- Extremely high reliability
- Compact and lightweight

Product overview

- Electric Actuators
- Pneumatic Actuators
- Actuated Butterfly valves
- Actuated Ball Valves
- Actuated Diaphragm Valves
- Actuated Process Control Valves
- Pressure Regulating Valves
- Electric Accessories
- Pneumatic Accessories

Actuation

Electric Actuators

Electric actuators are used to open and close valves and regulate the flow of liquids, with electrical actuators being powered by an electric motor. Electric actuators are highly reliable and very easy to set up and operate. In addition, the latest generation of actuators offers many intelligent features. Modular accessories such as electric interfaces, integrated battery-powered fail-safe units and visual system feedback are also available.

Main applications

- Chemical process industry
- Water treatment
- Refrigeration



Electric actuator smart type dEA25/45/120/250

- 100–230 V AC, 24 V AC/DC
- Torques from 10 Nm – 250 Nm
- LED stripe for visual open/close
- 360° feedback
- Heating element, position feedback (Open/Close/ Middle)
- Connectivity via NFC and Wi-Fi Direct ensuring control



Electric actuator type EA25, 45, 120, 250

- 100–230 V AC, 24 V AC/DC
- Torques from 25 Nm – 250 Nm
- LED enforced position feedback
- Standard: position feedback, heater
- Optional: fail-safe return unit integrated, positioner, monitoring, profibus DP VO



Electric actuator type EA15

- 100–230 V AC, 24 V AC/DC
- Torques from 20 Nm
- LED enforced position feedback
- Standard: position feedback, heater
- Optional: fail-safe return unit integrated

Pneumatic Actuators

GF Piping Systems pneumatic actuators are suitable for a wide range of environments and guarantee high levels of safety and reliability thanks to their fail-safe operation, robust design and high functionality, such as fast cycle times and adjustable travel. They are an economical, functional and reliable solution, especially for installations with a high number of actuated valves.

Main applications

- Chemical process industry
- Water treatment
- Refrigeration



Plastic pneumatic actuator type PPA

- FC, FO, DA
- Rack and pinion principle
- Integrated NAMUR interfaces
- Glass-fiber reinforced polypropylene



Pneumatic actuator type PA11/PA21

- FC, FO, DA
- Rack and pinion principle
- Accessory interface acc. ISO5211
- Visual position indication
- Full plastic solution
- PA11: 10 Nm / PA21: 20 Nm



Pneumatic actuator type PA30 - PA90

- FC, FO, DA
- Scotch Yoke principle
- Accessory interface acc. ISO5211
- Visual position indication
- Adjustable end stops
- Various coatings on request



Actuated Butterfly Valves

Thanks to a wide range of accessories, GF Piping Systems butterfly valves can be equipped with the appropriate pneumatic or electric actuators and thus used as process and control valves. Double sensors enable hereby the end position detection (open/closed disc).

Main applications

- Drinking water process
- Industrial process water
- Industrial waste water
- Municipal waste water
- Desalination plant
- Aquarium/ Oceania
- Swimming pools
- Cruise ships
- Offshore
- Vessels and merchant fleet



Butterfly valve electric type 565

- Electric actuated butterfly valve
- Actuator type: EA25-250 and dEA (24 V, 100 - 230 V)
- Plastic butterfly valve wafer style
- ABS, PVC-U, PVC-C, ecoFIT and PROGEF
- DN50 - DN300



Butterfly valve electric type 145/146/147*

- Electric actuated butterfly valve
- Actuator type: dEA45/120/250 and EA45/120/250 (24 V, 110 - 230 V)
- Plastic butterfly valve wafer/lugstyle
- Butterfly valve type 567/578
- PVC-U, PVC-C, ABS, PP-H, PVDF
- 567: DN50 - DN600; 578: DN50 - DN300



Butterfly valve electric type 038-E/039-E

- Electric actuated butterfly valve
- Actuator type: dEA45/120/250 and EA45/120/250 (24 V, 110 - 230 V)
- Metal butterfly valve wafer/lugstyle
- Butterfly valve type 038/039
- 038/039: Ductile iron with powder/epoxy/rilsan coating
- 038: DN50 - DN600, 039: DN50 - DN1200

* Predecessor type 140/143/144 with electric actuators type EA31/42



Butterfly valve pneumatic type 565

- Pneumatic actuated butterfly valve
- Actuator type: PA30-PA70
- Plastic butterfly valve wafer
- ABS, PVC-U, PVC-C, ecoFIT and PROGEF
- DN50 - DN300



Butterfly valve pneumatic type 240/243/244

- Pneumatic actuated butterfly valve
- Actuator type: PA30-PA90
- Plastic butterfly valve wafer/lugstyle
- Butterfly valve type 567/578
- PVC-U, PVC-C, ABS, PP-H, PVDF
- 567: DN50 - DN600; 578: DN50 - DN300



Butterfly valve pneumatic type 038-P/039-P

- Pneumatic actuated butterfly valve
- Actuator type: PA30 - PA70
- Metal butterfly valve wafer/lugstyle
- Butterfly valve type 038/039
- 038/039: ductile iron with powder/epoxy coating/rilsan coating
- 038: DN50 - DN600; 039: DN50 - DN1200

Actuation

Actuated Ball Valves



Pneumatic ball valve type 546 Pro P

- Pneumatic actuated 2-way ball valve
- Actuator type: PA11/PA21 (<DN65)
- Actuator type: PA30-PA90 (>DN50)
- Ball valve 546 Pro
- ABS, PVC-C, PVC-U, PP-H, PVDF
- DN10-DN100



Electric ball valve type 127

- Electric actuated 2-way ball valve
- Actuator type: EA15 (24 V, 110-230 V)
- Actuating angle 90°
- Ball valve 546 Pro
- ABS, PVC-C, PVC-U, PP-H, PVDF
- DN10-DN50



Pneumatic ball valve type 543 Pro P

- Pneumatic actuated 3-way ball valve
- Actuator type: PA11/PA21
- Actuating angle 90°
- Ball valve 543 Pro
- ABS, PVC-C, PVC-U, PP, PVDF
- DN10-DN50



Electric ball valve type 167-170**

- Electric actuated 3-way ball valve
- Actuator type: dEA25 and EA25 (24 V, 110-230 V)
- Actuating angle 90°; max. 180°
- Ball valve 543 Pro
- ABS, PVC-C, PVC-U, PP, PVDF
- DN10-DN50



Electric ball valve type 179-184*

- Electric actuated 2-way ball valve
- Actuator type: dEA25/45/120 and EA25/45/120(24 V, 110-230 V)
- Actuating angle 90°
- Ball valve 546 Pro
- ABS, PVC-C, PVC-U, PP-H, PVDF
- EA25 DN10-DN50; EA45/120 DN65-DN100



Electric ball valve type 104

- Electric actuated 2-way ball valve
- Actuator type: EA04 (24V, 85-230V)
- Actuating angle 0 - 90°
- Ball valve 546 Pro
- PVC-C, PVC-U, PP-H
- DN10 - DN50 3/8 - 2"
- Limited access sory range
- Low cycle applications

* Predecessor type 130 - 135 with electric actuators type EA21 / 31

** Predecessor type 185 - 188 with electric actuator type EA21

Actuated Diaphragm Valves



Diaphragm valve type 604/605

- PVC-U, PVC-C, PP-H, PVDF
- EPDM, FKM, PTFE / EPDM, PTFE / FKM
- DN15
- PN6
- pneumatic actuated FC, FO, DA



Diaphragm valve DIASTAR Sixteen

- PVDF, PVDF-HP
- EPDM, FKM, PTFE/EPDM, PTFE/FKM
- DN15-DN50
- PN16
- pneumatic actuated FC, FO, DA
- Accessories available



Diaphragm valve DIASTAR Six

- ABS, PVC-U, PVC-C, PP-H
- EPDM, FKM
- DN15 - DN50
- PN6
- pneumatic actuated FC



Diaphragm valve DIASTAR 025

- ABS, PVC-U, PVC-C, PP-H, PVDF, PVDF-HP
- EPDM, FKM, PTFE/EPDM, PTFE/FKM
- DN65 - DN150
- up to PN10
- pneumatic actuated FC, FO, DA
- Accessories available



Diaphragm valve DIASTAR Ten

- ABS, PVC-U, PVC-C, PP-H, PP-N, PVDF, PVDF-HP
- EPDM, FKM, PTFE/EPDM, PTFE/FKM
- DN15 - DN50
- PN10
- pneumatic actuated FC, FO, DA
- Accessories available



eDiastar – type 514 (threaded sockets) and type 515 (spigots)

- PVC-U, PVC-C, ABS, PP-H, PVDF
- Retrofittable: PVDF-HP
- EPDM, PTFE/EPDM, NBR, FKM, PTFE/FKM
- d32/DN25 and d63/DN50
- DN25: PN10 / DN50: PN6
- electric actuated FC



Diaphragm valve DIASTAR TenPLUS

- ABS, PVC-U, PVC-C, PP-H, PVDF, PVDF-HP
- EPDM, FKM, PTFE/EPDM, PTFE/FKM
- DN15 - DN50
- PN10 (both sides)
- pneumatic actuated FC, FO, DA
- Accessories available

Actuated process control valves



Solenoid valve type 157

- direct acting pivoted armature valve
- 2/2-Ways
- PVC-U
- EPDM, FKM
- 230 V AC, 24 V AC, 24 V DC
- DN4-DN8
- 0 - 4 bar depending on dimension



Solenoid valve type 160/161

- direct acting pivoted armature valve
- 2/2- or 3/2-ways
- PVC-U
- EPDM, FKM
- 230 V AC, 24 V AC, 24 V DC
- DN10-DN20
- 0 - 3 bar depending on dimension



Solenoid valve type 165

- Pilot assisted solenoid valve
- 2/2-Ways
- PVC-U, PVDF
- EPDM, FKM
- 230 V AC, 110 V AC, 24 V AC, 24 V DC
- DN15 - DN50
- 0.5 - 6 bar



Solenoid valve type 166

- direct acting pivoted armature valve
- 2/2- or 3/2-Ways
- PVDF
- EPDM, FKM
- 230 V AC, 110 V AC, 24 V AC, 24 V DC
- DN3 - DN5
- 0 - 10 bar depending on dimension

Actuation

Pressure regulating valves

Full pressure regulation, zero safety risk with the pressure regulating valves. Made from hardwearing fully molded plastic parts, the range of pressure regulating valves keeps the pressure in a pipe system at a pre-defined value and eliminates the risk of overload. Containing the latest in pressure-regulating technology, these valves are compact and easy to install and can be configured to either reduce or retain the pressure. The innovative cartridge design minimizes maintenance.

Main applications

- Water treatment
- Chemical process industry
- Semiconductor industry



Pressure reducing valve type 582

- PVC-U, PVC-C, PP-H, PVDF, PVDF-HP
- Spigot or union connection
- O-ring Material: EPDM, FKM
- DN10 - DN50
- 0.5 - 9 bar or 0.3 - 3 bar
- Manometer with or without gauge guard optional



Pressure retaining valve type 586

- PVC-U, PVC-C, PP-H, PVDF
- Spigot or union connection
- O-ring Material: EPDM, FKM
- DN10 - DN50
- 0.5 - 9 bar or 0.3 - 3 bar
- Manometer with or without gauge guard optional



Pressure reducing valve type V82

- PVC-U, PP, PVDF
- EPDM, EPDM-PTFE-coated
- Adjustment range:
DN65 - 80: 0.5 - 5 bar
DN100: 1 - 3 bar



Pressure retaining valve type V86

- PVC-U, PP, PVDF
- EPDM, EPDM-PTFE-coated
- V86 DN65 - 80: 1 - 6 bar
DN100: 1 - 4 bar

Electric accessories

Monitoring board (EA15 - 250)



- Easy monitoring for on/off actuation
- "Plug & Play" installation
- Cycle time extension
- Cycle time monitoring
- Cycle counter
- Motor current monitoring



Profibus (EA25 - 250)

- Version DP VO
- M12 connectors for daisy chain
- Integrated in actuator housing (no external box)
- Can be used in combination with fail-safe return unit
- Monitoring or positioner can be activated via software



Fail-safe return unit (E15 - 250)

- Integrated battery including charging management
- Error messages for low battery
- Optional fail safe open/fail safe close
- Optional without battery for external 24V DC source



Modbus

- Modbus interface network upgrade for EA25-250 electric actuators
- Integrated in actuator housing (no external box)
- Control and setup functions via Modbus
- Serial Modbus via RS485
- Bidirectional Modbus enabling control & live diagnostics



Positioner (EA25 - 250)

- Input 4-20mA or 0-10V (can be inverted)
- Output/Feedback 4-20 mA (can be inverted)
- Motor current monitoring on board
- "Plug & Play" installation

Pneumatic accessories



Electro-pneumatic Positioner for rotary actuators

- For pneumatic actuators in double-acting and singleacting function
- Power supply voltage 24V DC
- Activation 0-10 V, 0-5 V, 4-20 mA, 0-20 mA adjustable
- Multi-pin plug electrical connection
- Operation/configuration via display or internal DIP switch
- Protection rating IP65/IP67
- Binary input (fail-safe position, changeover)
- Operating mode (Automatic/Manual)
- Analog position indicator (0/4 to 20 mA, 0 to 5/10 V) for setpoints and actual values
- Approved and listed according to cULus and cCSAus



Electro-pneumatic Positioner for linear stroke actuators

- For pneumatic actuators in single-acting function
- Power supply voltage 24V DC
- Activation 0-10 V, 0-5 V, 4-20 mA, 0-20 mA adjustable
- Multi-pin plug electrical connection
- Operation/configuration via display or internal DIP switch
- Protection rating IP65/IP67
- Binary input (fail-safe position, changeover)
- Operating mode (Automatic/Manual)
- Analog position indicator (0/4 to 20 mA, 0 to 5/10 V) for setpoints and actual values
- Approved and listed according to cULus and cCSAus



Solenoid pilot valve type MNL 532

- Version for 3/2-way and 5/2-way
- Namur connection
- Material of body: Aluminum
- 24 V AC, 24 V DC, 48 V AC, 110 V AC, 230 V AC
- DN 5
- 950 l/min



Solenoid pilot valve 4/2-ways type 5470

- for double acting pneumatic actuators (DA)
- NAMUR connection
- Material of body: Polyamid
- 24 V AC/DC, 110 V AC/DC, 230 V AC/DC
- DN 4
- 300 l/min



Solenoid pilot valve type 2000

- Modular version for 3/2-way and 5/2-way valves
- 24 V DC
- Connection module AS-Interface
- Connection module profibus interface



Electric position feedback type ER 52-1/ER53-1

- For pneumatic stroke actuators
- For DIASTAR Ten, TenPLUS, Sixteen, 025
- Mechanical switches (AgNi or Au)
- NPN/PNP, Namur connection
- With visual position indication



Electric position feedback limit switch box

- For pneumatic rotary actuators
- For PPA08 - 80 and PA11 - 90
- Mechanical switches (AgNi or Au)
- NPN/PNP, Namur connection
- With visual position indication



Stroke limiter/ manual override

- For DIASTAR all type Ten, TenPLUS, Sixteen, 025

Actuation

Communication Products

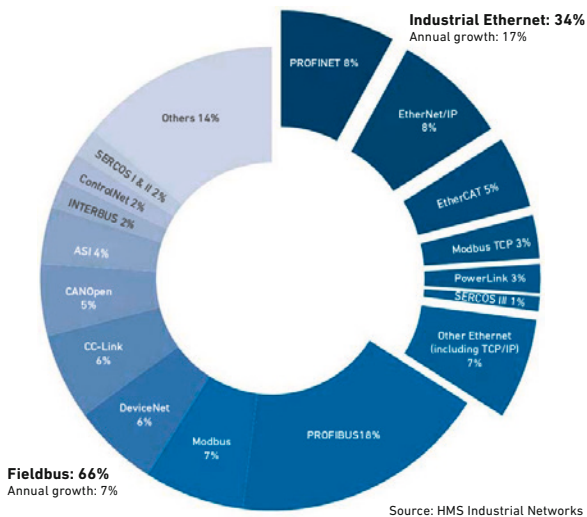
Our automation loop can be managed with various communication technologies and can therefore be seamlessly integrated into existing plant management systems. We offer analogue and digital communication technologies which support on/off or continuous control loops. Benefits are less wiring, faster installations and more efficient diagnostic and parameterization capabilities.



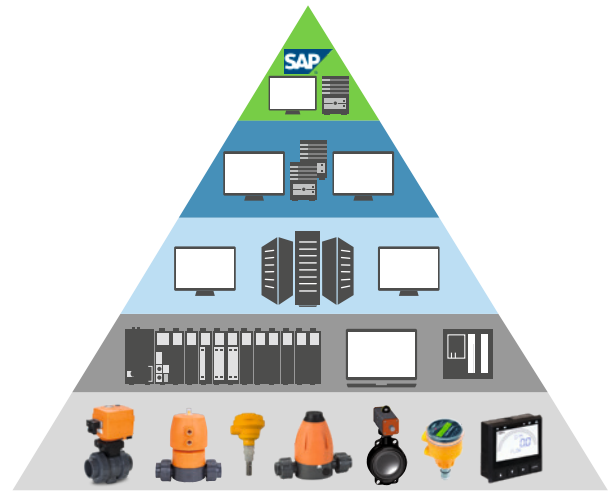
The ability to digitally control and gather information from remote devices offers increased flexibility. Internet of Things (IoT), Industrial Internet of Things (IIoT), and Industry 4.0 (i 4.0) are movements in technology that connect individual sensors and actuators to information networks allowing automation and enterprise systems unparalleled access to real time data and information. GF is providing options for Profibus, HART and AS-Interface. For the bus communication split please refer to the chart. The ability to digitally control

and gather information from remote devices offers increased flexibility. Internet of Things (IoT), Industrial Internet of Things (IIoT), and Industry 4.0 (i 4.0) are movements in technology that connect individual sensors and actuators to information networks allowing automation and enterprise systems unparalleled access to real time data and information. GF is providing options for Profibus, HART and AS-Interface. For the bus communication split please refer to the chart.

Fieldbus vs. industrial ethernet

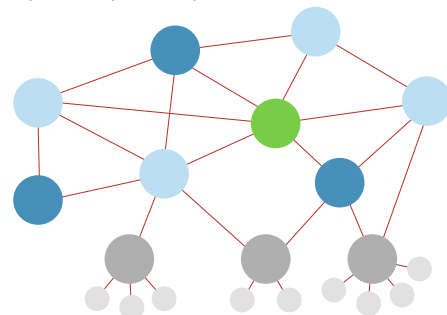


Today (Automation pyramid/hierarchic)



IIoT/i 4.0

Future (Cyber-Physical-Systems)





Profibus concentrator type 3 - 0486



- Connect GF actuated valves and sensors to profibus automation networks
- Supports six S³L sensors or relay modules plus a proportional controlled actuated valve
- Four of the (S³L) inputs support flow frequency devices for cost effective flow monitoring
- Two of the (S³L) inputs support 4 to 20 mA current loop inputs for connections to third party sensors

Profibus (EA25 – 250)



- Connectable to Profibus DPVO networks
- Using all the advantages of the standard full plastic GF electric actuator

Modbus



Modbus (EA25 – 250)

- Modbus interface network upgrade for EA25-250 electric actuators
- Using all the advantages of the standard full plastic GF electric actuator
- For 24 VAC/DC as well as for 100-230 VAC actuator versions
- Serial Modbus via RS485
- Bidirectional Modbus enabling control & live diagnostics

Profibus for valve cluster



- Modular version for 3/2-way and 5/2-way valves
- Connection module profibus interface
- 24 V DC
- Optional available module AS-Interface



Transmitter type 9900



- Optional module available

Ultrasonic level sensor type 2260/ ultrasonic level transmitter type 2270



- Non-contact principle
- Robust against most interfering factors such as fumes, light foaming or fluctuations of pressure or temperature
- Display and comprehensive configuration menu
- PP, PTFE or steel antenna enclosures

Non-contact principle radar level transmitter type 2290



- Non-contact principle
- Robust against most interfering factors such as fumes, light foaming or fluctuations of pressure or temperature
- Display and comprehensive configuration menu
- PP, PTFE or steel antenna enclosures



AS-Interface for pneumatic rotary actuators



- Pilot valve 5/2-ways
- Electric feedback integrated
- Full plastic housing
- Optical status indicator
- AS interface version 3.0

AS-Interface for sensor with switch output



- With switching output
- For level switch
- For flow switch
- For pressure switch
- For temperature switch

AS-Interface for manual valves with feedback



- With integrated feedback
- Ideal for ball valves
- Ideal for butterfly valves
- Ideal for diaphragm valves

AS-Interface for electric actuators



- Integrated control and electric feedback
- For 24 V DC actuators
- For EA11 - EA42
- Manual override standard

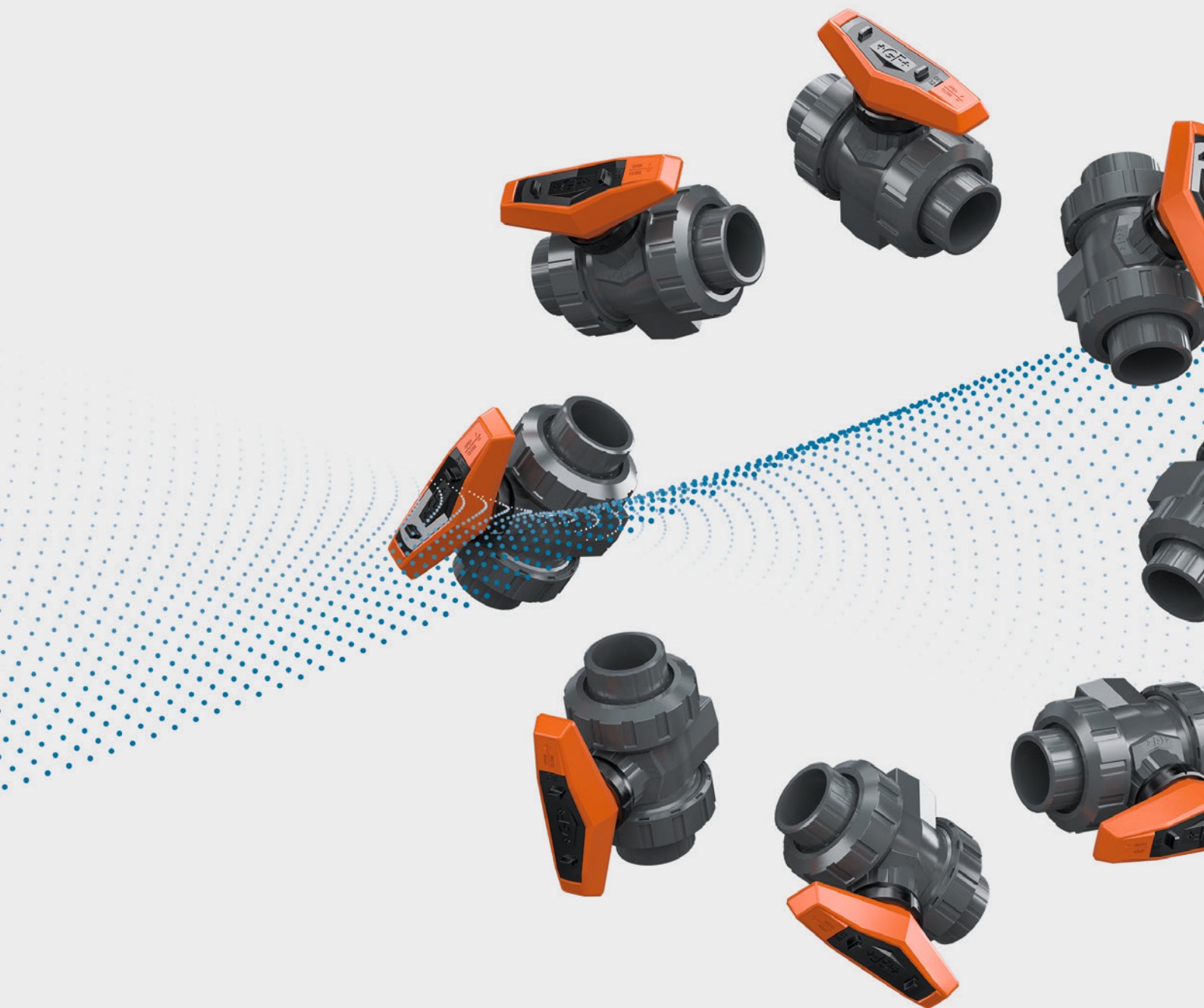
AS-Interface for pneumatic stroke actuators



- Pilot valve 3/2-ways
- Compact design
- Full plastic housing
- Optical status indicator
- AS Interface Version 3.0

One provider

The right valve for your application



A decorative graphic on the left side of the page. It features several valve handles in orange and grey, arranged vertically. A pattern of blue dots starts from the bottom right and curves upwards and to the left, creating a sense of motion or flow. The background is a light grey gradient.

Valves

We offer one of the most comprehensive valve product ranges, which enables you to find the right match for your application. Our valves are available in a wide selection of dimensions, materials, chemical resistances, standards, actuation, operation principles and pipe connections and are designed for long service life. The combination of the right valve selection and our high product quality leads to a favorable total cost of ownership.

Main applications

- Flexible and versatile
- Simple operation
- User-friendly
- Excellent corrosion resistance

Product overview

- Ball Valves
- Diaphragm Valves
- Butterfly Valves
- Process control valves
- Accessories

Valves

Ball Valves

High-quality components are essential for the reliable and efficient operation of piping systems. That is why ball valves from GF Piping Systems are always the ideal solution. Whether in the chemical process industry, microelectronics or water treatment: GF Piping Systems reliably covers a variety of applications with its broad product range. From a simple, manually operated shut-off valve to a fully automated ball valve.

Main applications

- Chemical process industry
- Life science industry
- Microelectronics
- Measurement and control technology
- Water treatment
- Food and beverage industry
- Shipbuilding



**Ball valve
type 546 Pro**

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FKM, ball seat: PTFE, PVDF
- DN10 - DN100
- Up to PN16 = PVC-U, PVC-C, PVDF;
up to PN10 = PP-H, ABS
- Lockable lever, multifunctional module
- Linear version



**Ball valve
type 542**

- PVC-U / PVC-C PP-H
PE (blue lever)
PTFE (red lever)
- EPDM, FKM, ball seat: PTFE, PVDF
- DN 10 - 50 (3/8"-2")
- PN 10 for PP-H
PN 16 for PVC-U and PVC-C



**Metering ball valve
type 523**

- PVC-U, PP-H, PVDF
- EPDM, FKM, Ball Seat: PTFE
- DN10 - DN15
- Up to PN16



**Linear ball valve
type 546**

- PVC-U, PVC-C, ABS, PP-H, PVDF
- DN15 - DN50
- Lockable lever
- Multifunctional module



**3-Way ball valve
type 543 Pro**

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FKM, ball seat: PTFE, PVDF
- DN10 - DN50
- Up to PN10
- Lockable Lever, multifunctional module



**Ball valve
type 375**

- PVC-U, PVC-C
- EPDM, FKM, ball seat: PTFE
- DN10 - DN100
- PN16
- Not actuated

Diaphragm Valves

The GF Piping Systems range of plastic diaphragm valves includes manual, pneumatic and electric units in various sizes and for different pressure ranges, guaranteeing the right valve for any piping system. Designed to optimize the flow profile of the liquid inside the pipe, these valves are made entirely of plastic for excellent durability and reliability. The modular design allows them to be easily adapted to process conditions.

Main applications

- Chemical process industry
- Microelectronics
- Water treatment
- Cooling
- Control applications



Diaphragm valve type 514

- PVC-U, PVC-C, ABS, PP-H, PVDF, PVDF-HP
- EPDM, PTFE/EPDM, FKM, PTFE/FKM
- DN15 - DN50
- Up to PN16
- Lockable handwheel
- Electrical feedback module



Diaphragm valve type 517 (317)

- PVC-U, PVC-C, PP-H, PVDF, PVDF-HP
- EPDM, PTFE/EPDM, FKM, PTFE/FKM
- DN15 - DN50 (type 317: DN65 - DN150)
- Up to PN16
- Lockable handwheel
- Electrical feedback module



Diaphragm valve type 515

- PVC-U, PVC-C, ABS, PP-H, PP-N, PVDF, PVDF-HP
- EPDM, PTFE/EPDM, FKM, PTFE/FKM
- DN15 - DN50
- Up to PN16
- Lockable handwheel
- Electrical feedback module



Diaphragm valve type 519

- PP-H, PP-N, PVDF-HP
- EPDM, PTFE/EPDM, PTFE/FKM
- DN20 - DN20 : d160 - d63
- Up to PN16
- Lockable handwheel
- Electrical feedback module



Valves

Butterfly Valves

As well as being easy to open and close, butterfly valves have to be versatile enough to be combined with a huge range of system components. All GF Piping Systems butterfly valves are modular, enabling them to be integrated into any gas or liquid piping system with ease. Their innovative operating principle protects the valve seal and extends the system's overall service life, while the high-performance plastic withstands corrosion.

Main applications

- Water Treatment
- Chemical Process Industry
- Microelectronics
- Marine



Butterfly valve manual type 565

- ABS, PVC-C, PVC-U, PP-H, PVDF
- Sealings: EPDM, FKM
- DN50-DN300
- DN50-150: PN16 / DN200-250: PN10 / DN300: PN6
- Lever, Gear, 230 V o. 24 V, FC /FO/DA
- Optional: Integrated position indicator in valve body



Butterfly valve manual type 567

- ABS, PVC-C, PVC-U, PP-H, PVDF
- Sealings: EPDM, FKM, PTFE/FKM
- DN50 - DN600
- PN10
- Lever, Gear, 230 V o. 24 V, FC /FO/DA
- Optional: Integrated position indicator in valve body



Butterfly valve manual type 578

- ABS, PVC-C, PVC-U, PP-H, PVDF
- Sealings: EPDM, FKM, PTFE/FKM
- DN50 - DN300
- PN10
- Lever, gear, 230 V o. 24 V, FC/FO/DA
- Optional: Integrated position indicator in valve body



Metal butterfly valve type 038/039

- 038: GGG, LUG; 039: GGG Wafer
- Sealings: EPDM, FKM
- 038: DN50 - DN300;
- 039: DN50 - DN1200
- PN10/PN16
- Lever, gear, 230 V o. 24 V, FC/FO/DA

Accessories



Manual interface module

- Accessory for manual ball valve type 546 Pro and 543 Pro
- Possibility of electrical feedback, incl. LED in combination with double sensor (accessory)
- Inclusive labelling clip



Manual spring return unit Retrofit kit

- Manual spring return unit („Dead-man lever“) ensures that the valve closes after operation
- For safe sampling, dosing, cleaning or draining - Retrofit possible with ball valve 546 Pro and 543 Pro
- Includes transparent clip for valve labelling
- Option: double sensor for position feedback



Interface module for GF actuators

- Accessory for ball valve type 546 Pro and 543 Pro
- Interface module acts as interface for GF actuators
- Possibility of electrical feedback, incl. LED in combination with double sensor (accessory)
- Inclusive labelling clip



Electrical feedback module

- Electrical feedback module
- Accessory for (manual) diaphragm valves 514 - 519
- Limit switch AgNi or Au
- Self adjusting mechanism



Interface module for norm actuators

- Accessory for ball valve type 546 Pro and 543 Pro
- For ball valve norm interfaces according to EN ISO 5211
- Inclusive labelling clip



Ball valve labeling

- Labelling system for ball valve 546 Pro/543 Pro/523/547



Double sensor for electrical position feedback

- Accessory for ball valve type 546 Pro and 543 Pro
- Enables electrical position feedback, incl. LED, in combination with GF interface module
- IP67 rating
- Accessory for butterfly valve 565



Integrated position indicator

- Integrated position indicator
- Accessory for butterfly valves 567/578
- Limit switch AgNi, AU, Namur, NPN, PNP

Process Control Valves



Check valve type 561/562

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FKM
- DN10 - DN100
- Up to PN16
- Type 562 with spring



Ventilating valve type 595 / Ventilating and bleed valve type 591

- ABS, PVC-C, PVC-U, PP-H, PVDF
- EPDM, FKM
- DN10 - DN100
- Up to PN16
- Type 595 with spring
- Float PP-H / PVDF



Angle seat check valve type 303/304

- PVC-U, ABS)
- EPDM, FKM
- DN10 - DN80
- PN10



Wafer check valve type 369

- PVC-U, PP-H, PVDF
- EPDM, FKM
- DN32 - DN300, 1¼ - 12"
- PN10



Line strainer type 305/306

- PVC-U, PVC-C, ABS, PP-H, PVC-U transparent
- EPDM, FKM
- DN15 - DN50, PVC-U up to DN80
- PN10
- Screen: stainless-steel and PVC-U



Throttle valve type V251

- PVC-U, PP-H, PVDF
- EPDM, FKM
- DN10 - DN50
- PN10



Water jet suction pump (educto) type P20

- PVC-U, PP-H, PVDF
- EPDM, FKM
- DN10 - DN80
- PN10



Gauge guard type Z500/501

- True plastic design (no metal screws!)
- PVC-U, PP-H, PVDF
- EPDM, EPDM-PTFE-coated
- DN20 or DN 25
- PN10
- With or without pressure gauge

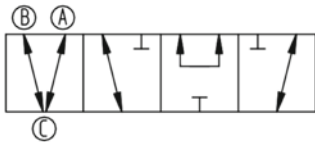
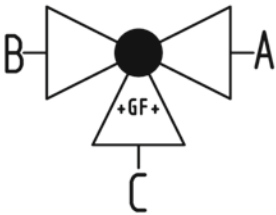
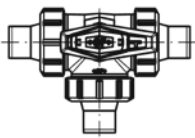
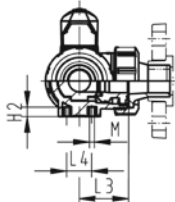
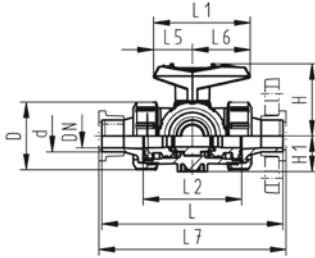
Ball valves type 543



3-Way ball valve type 543 PVC-C Horizontal/T-port With solvent cement spigots metric

Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|---------------|----|----------------|
| 16 | 10 | 3/8 | 10 | 140 | 163543221_old | 1 | 0.264 |
| 20 | 15 | 1/2 | 10 | 200 | 163543222_old | 1 | 0.271 |
| 25 | 20 | 3/4 | 10 | 470 | 163543223_old | 1 | 0.389 |
| 32 | 25 | 1 | 10 | 793 | 163543224_old | 1 | 0.590 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 163543225_old | 1 | 1.007 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 163543226_old | 1 | 1.487 |
| 63 | 50 | 2 | 10 | 3100 | 163543227_old | 1 | 2.889 |

| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|---------------|----|----------------|
| 16 | 163543231_old | 1 | 0.264 |
| 20 | 163543232_old | 1 | 0.271 |
| 25 | 163543233_old | 1 | 0.389 |
| 32 | 163543234_old | 1 | 0.590 |
| 40 | 163543235_old | 1 | 1.007 |
| 50 | 163543236_old | 1 | 1.487 |
| 63 | 163543237_old | 1 | 2.889 |

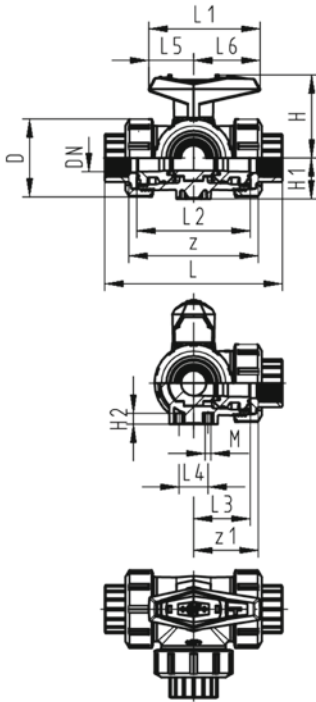
| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | M | closest inch (inch) |
|-----------|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|---|---------------------------|
| 16 | 50 | 57 | 28 | 8 | 131 | 77 | 73 | 36 | 25 | 32 | 45 | 137 | 6 | 3/8 |
| 20 | 50 | 57 | 28 | 8 | 141 | 77 | 73 | 36 | 25 | 32 | 45 | 147 | 6 | 1/2 |
| 25 | 58 | 67 | 32 | 8 | 165 | 97 | 86 | 43 | 25 | 39 | 58 | 171 | 6 | 3/4 |
| 32 | 68 | 73 | 36 | 8 | 182 | 97 | 99 | 50 | 25 | 39 | 58 | 188 | 6 | 1 |
| 40 | 84 | 90 | 45 | 9 | 209 | 128 | 120 | 60 | 45 | 54 | 74 | 215 | 8 | 1 1/4 |
| 50 | 97 | 97 | 51 | 9 | 242 | 128 | 137 | 69 | 45 | 54 | 74 | 248 | 8 | 1 1/2 |
| 63 | 124 | 116 | 65 | 9 | 302 | 152 | 179 | 89 | 45 | 66 | 87 | 308 | 8 | 2 |



3-Way ball valve type 543 PVC-C
Horizontal/T-port
With threaded sockets Rp

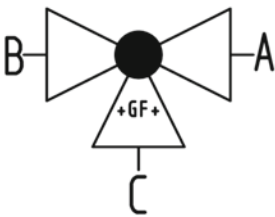
Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme

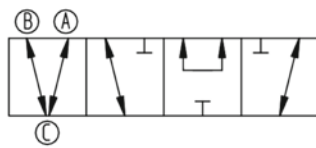


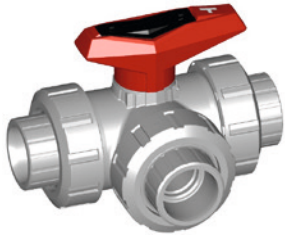
| d (mm) | DN (mm) | Thread Type | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|-------------|----------------|-------------|-----------------------------------|---------------|----|----------------|
| 16 | 10 | Rp | 3/8 | 10 | 140 | 163543241_old | 1 | 0.264 |
| 20 | 15 | Rp | 1/2 | 10 | 200 | 163543242_old | 1 | 0.271 |
| 25 | 20 | Rp | 3/4 | 10 | 470 | 163543243_old | 1 | 0.389 |
| 32 | 25 | Rp | 1 | 10 | 793 | 163543244_old | 1 | 0.590 |
| 40 | 32 | Rp | 1 1/4 | 10 | 1290 | 163543245_old | 1 | 1.007 |
| 50 | 40 | Rp | 1 1/2 | 10 | 1910 | 163543246_old | 1 | 1.487 |
| 63 | 50 | Rp | 2 | 10 | 3100 | 163543247_old | 1 | 2.889 |

| FKM Code | SP | Weight (kg) |
|---------------|----|----------------|
| 163543251_old | 1 | 0.264 |
| 163543252_old | 1 | 0.271 |
| 163543253_old | 1 | 0.389 |
| 163543254_old | 1 | 0.590 |
| 163543255_old | 1 | 1.007 |
| 163543256_old | 1 | 1.487 |
| 163543257_old | 1 | 2.889 |



| D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) | z1 (mm) |
|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|---|-----------|------------|
| 50 | 57 | 28 | 8 | 113 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 87 | 43 |
| 50 | 57 | 28 | 8 | 116 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 85 | 42 |
| 58 | 67 | 32 | 8 | 135 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 100 | 50 |
| 68 | 73 | 36 | 8 | 155 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 113 | 57 |
| 84 | 90 | 45 | 9 | 179 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 134 | 67 |
| 97 | 97 | 51 | 9 | 201 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 155 | 78 |
| 124 | 116 | 65 | 9 | 255 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 199 | 99 |

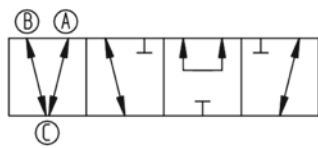
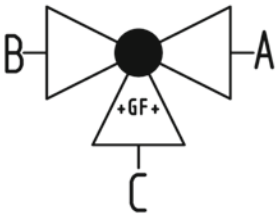
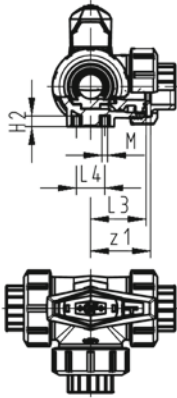
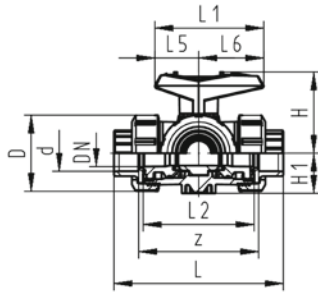




3-Way ball valve type 543 PVC-C
Horizontal/T-port
With solvent cement sockets metric

Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|---------------|----|----------------|
| 16 | 10 | 3/8 | 10 | 140 | 163543201_old | 1 | 0.264 |
| 20 | 15 | 1/2 | 10 | 200 | 163543202_old | 1 | 0.271 |
| 25 | 20 | 3/4 | 10 | 470 | 163543203_old | 1 | 0.389 |
| 32 | 25 | 1 | 10 | 793 | 163543204_old | 1 | 0.561 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 163543205_old | 1 | 1.007 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 163543206_old | 1 | 1.487 |
| 63 | 50 | 2 | 10 | 3100 | 163543207_old | 1 | 2.889 |

| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|---------------|----|----------------|
| 16 | 163543211_old | 1 | 0.264 |
| 20 | 163543212_old | 1 | 0.271 |
| 25 | 163543213_old | 1 | 0.389 |
| 32 | 163543214_old | 1 | 0.590 |
| 40 | 163543215_old | 1 | 1.007 |
| 50 | 163543216_old | 1 | 1.487 |
| 63 | 163543217_old | 1 | 2.889 |

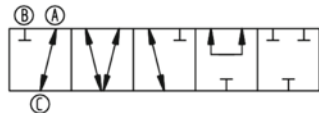
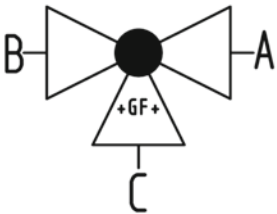
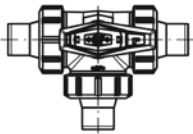
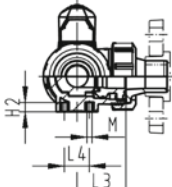
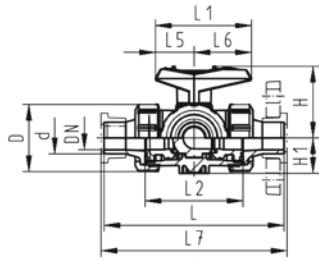
| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) | z1 (mm) | closest inch (inch) |
|-----------|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|---|-----------|------------|---------------------------|
| 16 | 50 | 57 | 28 | 8 | 109 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 81 | 40 | 3/8 |
| 20 | 50 | 57 | 28 | 8 | 112 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 81 | 40 | 1/2 |
| 25 | 58 | 67 | 32 | 8 | 131 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 94 | 47 | 3/4 |
| 32 | 68 | 73 | 36 | 8 | 151 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 107 | 54 | 1 |
| 40 | 84 | 90 | 45 | 9 | 181 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 130 | 65 | 1 1/4 |
| 50 | 97 | 97 | 51 | 9 | 205 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 143 | 72 | 1 1/2 |
| 63 | 124 | 116 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 185 | 92 | 2 |



3-Way ball valve type 543 PVC-C
Horizontal/L-port
With solvent cement spigots metric

Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|---------------|----|----------------|
| 16 | 10 | 3/8 | 10 | 50 | 163543021_old | 1 | 0.272 |
| 20 | 15 | 1/2 | 10 | 75 | 163543022_old | 1 | 0.282 |
| 25 | 20 | 3/4 | 10 | 150 | 163543023_old | 1 | 0.408 |
| 32 | 25 | 1 | 10 | 280 | 163543024_old | 1 | 0.624 |
| 40 | 32 | 1 1/4 | 10 | 480 | 163543025_old | 1 | 1.041 |
| 50 | 40 | 1 1/2 | 10 | 620 | 163543026_old | 1 | 1.578 |
| 63 | 50 | 2 | 10 | 1230 | 163543027_old | 1 | 3.075 |

| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|---------------|----|----------------|
| 16 | 163543031_old | 1 | 0.272 |
| 20 | 163543032_old | 1 | 0.282 |
| 25 | 163543033_old | 1 | 0.408 |
| 32 | 163543034_old | 1 | 0.624 |
| 40 | 163543035_old | 1 | 1.041 |
| 50 | 163543036_old | 1 | 1.578 |
| 63 | 163543037_old | 1 | 3.075 |

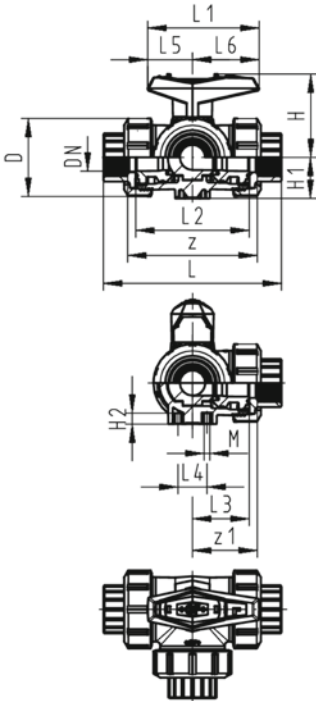
| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | M | closest inch (inch) |
|-----------|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|---|---------------------------|
| 16 | 50 | 57 | 28 | 8 | 131 | 77 | 73 | 36 | 25 | 32 | 45 | 137 | 6 | 3/8 |
| 20 | 50 | 57 | 28 | 8 | 141 | 77 | 73 | 36 | 25 | 32 | 45 | 147 | 6 | 1/2 |
| 25 | 58 | 67 | 32 | 8 | 165 | 97 | 86 | 43 | 25 | 39 | 58 | 171 | 6 | 3/4 |
| 32 | 68 | 73 | 36 | 8 | 182 | 97 | 99 | 50 | 25 | 39 | 58 | 188 | 6 | 1 |
| 40 | 84 | 90 | 45 | 9 | 209 | 128 | 120 | 60 | 45 | 54 | 74 | 215 | 8 | 1 1/4 |
| 50 | 97 | 97 | 51 | 9 | 242 | 128 | 137 | 69 | 45 | 54 | 74 | 248 | 8 | 1 1/2 |
| 63 | 124 | 116 | 65 | 9 | 302 | 152 | 179 | 89 | 45 | 66 | 87 | 308 | 8 | 2 |



3-Way ball valve type 543 PVC-C
Horizontal/L-port
With threaded sockets Rp

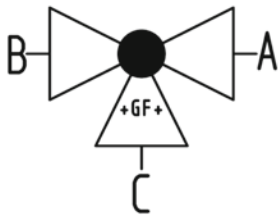
Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme



| d | DN | Thread Type | Size | PN | kv-value | EPDM | SP | Weight |
|------|------|-------------|--------|-------|---------------------|---------------|----|--------|
| (mm) | (mm) | | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| | | | | | (L/min) | | | |
| 16 | 10 | Rp | 3/8 | 10 | 50 | 163543041_old | 1 | 0.265 |
| 20 | 15 | Rp | 1/2 | 10 | 75 | 163543042_old | 1 | 0.272 |
| 25 | 20 | Rp | 3/4 | 10 | 150 | 163543043_old | 1 | 0.391 |
| 32 | 25 | Rp | 1 | 10 | 280 | 163543044_old | 1 | 0.598 |
| 40 | 32 | Rp | 1 1/4 | 10 | 480 | 163543045_old | 1 | 1.018 |
| 50 | 40 | Rp | 1 1/2 | 10 | 620 | 163543046_old | 1 | 1.509 |
| 63 | 50 | Rp | 2 | 10 | 1230 | 163543047_old | 1 | 2.938 |

| FKM Code | SP | Weight |
|---------------|----|--------|
| | | (kg) |
| 163543051_old | 1 | 0.265 |
| 163543052_old | 1 | 0.272 |
| 163543053_old | 1 | 0.391 |
| 163543054_old | 1 | 0.598 |
| 163543055_old | 1 | 1.018 |
| 163543056_old | 1 | 1.509 |
| 163543057_old | 1 | 2.938 |



| D | H | H1 | H2 | L | L1 | L2 | L3 | L4 | L5 | L6 | M | z | z1 |
|------|------|------|------|------|------|------|------|------|------|------|---|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) | (mm) |
| 50 | 57 | 28 | 8 | 113 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 87 | 43 |
| 50 | 57 | 28 | 8 | 116 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 85 | 42 |
| 58 | 67 | 32 | 8 | 135 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 100 | 50 |
| 68 | 73 | 36 | 8 | 155 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 113 | 57 |
| 84 | 90 | 45 | 9 | 179 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 134 | 67 |
| 97 | 97 | 51 | 9 | 201 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 155 | 78 |
| 124 | 116 | 65 | 9 | 255 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 199 | 99 |

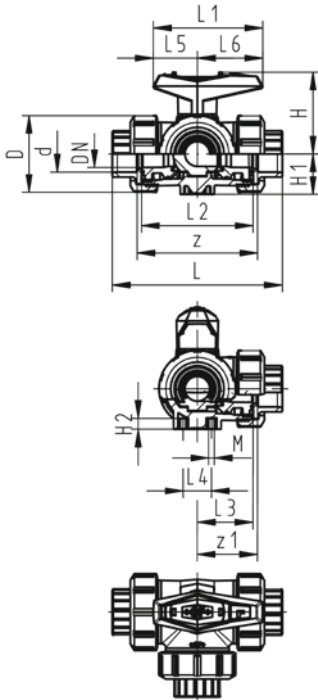




3-Way ball valve type 543 PVC-C
Horizontal/L-port
With solvent cement sockets metric

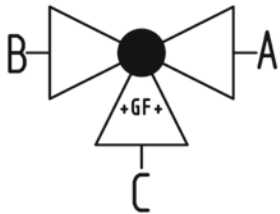
Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme



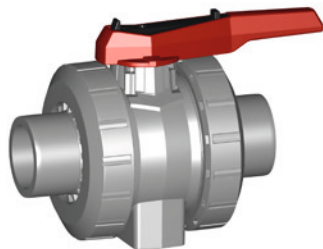
| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|---------------|----|----------------|
| 16 | 10 | 3/8 | 10 | 50 | 163543001_old | 1 | 0.265 |
| 20 | 15 | 1/2 | 10 | 75 | 163543002_old | 1 | 0.272 |
| 25 | 20 | 3/4 | 10 | 150 | 163543003_old | 1 | 0.391 |
| 32 | 25 | 1 | 10 | 280 | 163543004_old | 1 | 0.598 |
| 40 | 32 | 1 1/4 | 10 | 480 | 163543005_old | 1 | 1.018 |
| 50 | 40 | 1 1/2 | 10 | 620 | 163543006_old | 1 | 1.509 |
| 63 | 50 | 2 | 10 | 1230 | 163543007_old | 1 | 2.938 |

| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|---------------|----|----------------|
| 16 | 163543011_old | 1 | 0.265 |
| 20 | 163543012_old | 1 | 0.272 |
| 25 | 163543013_old | 1 | 0.391 |
| 32 | 163543014_old | 1 | 0.598 |
| 40 | 163543015_old | 1 | 1.018 |
| 50 | 163543016_old | 1 | 1.509 |
| 63 | 163543017_old | 1 | 2.938 |



| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M (mm) | z (mm) | z1 (mm) | closest inch (inch) |
|-----------|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|------------|---------------------------|
| 16 | 50 | 57 | 28 | 8 | 109 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 81 | 40 | 3/8 |
| 20 | 50 | 57 | 28 | 8 | 112 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 81 | 40 | 1/2 |
| 25 | 58 | 67 | 32 | 8 | 131 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 94 | 47 | 3/4 |
| 32 | 68 | 73 | 36 | 8 | 151 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 107 | 54 | 1 |
| 40 | 84 | 90 | 45 | 9 | 181 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 130 | 65 | 1 1/4 |
| 50 | 97 | 97 | 51 | 9 | 205 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 143 | 72 | 1 1/2 |
| 63 | 124 | 116 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 185 | 92 | 2 |

Ball valves type 546 Pro



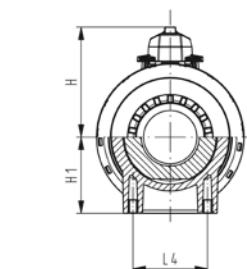
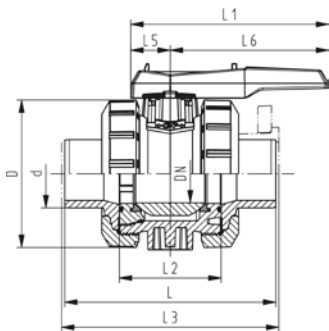
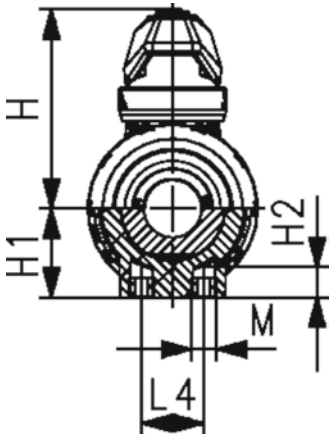
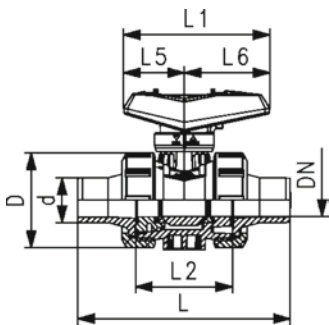
Ball valve type 546 Pro PVC-C With solvent cement spigots metric

Model:

- Lockable lever as standard (DN10-DN50)
- For easy installation and removal
- Ball seat PTFE
- Integrated stainless steel mounting inserts
- Z-dimension, valve end and union nut **are compatible** with type 546 (1st Generation)

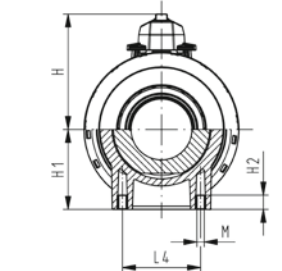
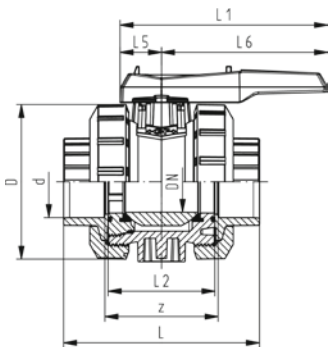
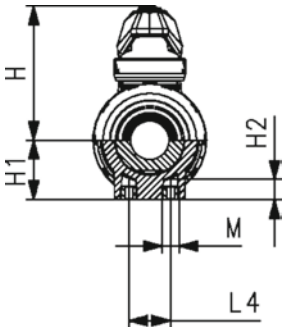
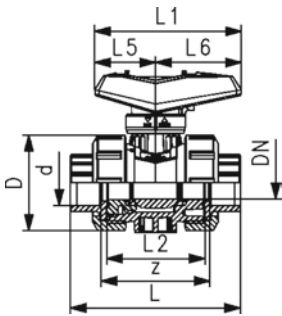
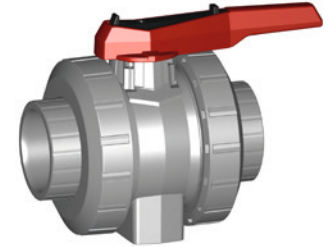
Option:

- Interface-module with position feedback sensor, incl. LED feedback (DN10-50)
- Manual spring return lever ("Dead man") (DN10-25)
- Pneumatic or electric actuators from GF
- Individual configuration of the valve possible
- Multifunctional module with integrated limit switches (DN65-100)



| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|--|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 16 | 71 | 163 546 381 | 1 | 0.162 | 163 546 391 |
| 20 | 15 | 16 | 185 | 163 546 382 | 1 | 0.162 | 163 546 392 |
| 25 | 20 | 16 | 350 | 163 546 383 | 1 | 0.247 | 163 546 393 |
| 32 | 25 | 16 | 700 | 163 546 384 | 1 | 0.367 | 163 546 394 |
| 40 | 32 | 16 | 1000 | 163 546 385 | 1 | 0.665 | 163 546 395 |
| 50 | 40 | 16 | 1600 | 163 546 386 | 1 | 0.895 | 163 546 396 |
| 63 | 50 | 16 | 3100 | 163 546 387 | 1 | 1.655 | 163 546 397 |
| 75 | 65 | 16 | 5000 | 163 546 388 | 1 | 5.500 | 163 546 398 |
| 90 | 80 | 16 | 7000 | 163 546 389 | 1 | 8.200 | 163 546 399 |
| 110 | 100 | 16 | 11000 | 163 546 390 | 1 | 12.900 | 163 546 400 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) |
|-----------|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|-----|-----------|
| 16 | 50 | 61 | 27 | 12 | 114 | 82 | 56 | 25 | 35 | 47 | M6 | 90 |
| 20 | 50 | 61 | 27 | 12 | 124 | 82 | 56 | 25 | 35 | 47 | M6 | 96 |
| 25 | 58 | 74 | 30 | 12 | 143 | 105 | 65 | 25 | 44 | 62 | M6 | 109 |
| 32 | 68 | 80 | 36 | 15 | 154 | 105 | 71 | 45 | 44 | 62 | M8 | 114 |
| 40 | 84 | 95 | 44 | 15 | 174 | 131 | 85 | 45 | 57 | 74 | M8 | 126 |
| 50 | 97 | 102 | 51 | 15 | 193 | 131 | 89 | 45 | 57 | 74 | M8 | 135 |
| 63 | 124 | 117 | 64 | 15 | 223 | 152 | 101 | 70 | 66 | 86 | M8 | 151 |
| 75 | 166 | 150 | 85 | 15 | 284 | 269 | 136 | 70 | 64 | 206 | M8 | 199 |
| 90 | 200 | 161 | 105 | 15 | 301 | 269 | 141 | 70 | 64 | 206 | M8 | 202 |
| 110 | 238 | 178 | 123 | 22 | 340 | 319 | 164 | 120 | 64 | 256 | M12 | 221 |



Ball valve type 546 Pro PVC-C With solvent cement sockets metric

Model:

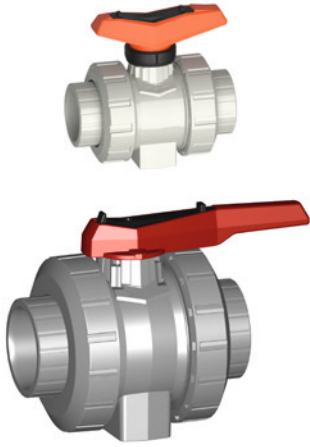
- Lockable lever as standard (DN10-DN50)
- For easy installation and removal
- Ball seat PTFE
- Integrated stainless steel mounting inserts
- Z-dimension, valve end and union nut **are compatible** with type 546 (1st Generation)

Option:

- Interface-module with position feedback sensor, incl. LED feedback (DN10-50)
- Manual spring return lever ("Dead man") (DN10-25)
- Pneumatic or electric actuators from GF
- Individual configuration of the valve possible
- Multifunctional module with integrated limit switches (DN65-100)

| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 16 | 10 | 16 | 71 | 163 546 061 | 1 | 0.160 | 163 546 071 | 1 | 0.160 |
| 20 | 15 | 16 | 185 | 163 546 062 | 1 | 0.169 | 163 546 072 | 1 | 0.160 |
| 25 | 20 | 16 | 350 | 163 546 063 | 1 | 0.255 | 163 546 073 | 1 | 0.245 |
| 32 | 25 | 16 | 700 | 163 546 064 | 1 | 0.370 | 163 546 074 | 1 | 0.373 |
| 40 | 32 | 16 | 1000 | 163 546 065 | 1 | 0.648 | 163 546 075 | 1 | 0.658 |
| 50 | 40 | 16 | 1600 | 163 546 066 | 1 | 0.894 | 163 546 076 | 1 | 0.890 |
| 63 | 50 | 16 | 3100 | 163 546 067 | 1 | 1.653 | 163 546 077 | 1 | 1.662 |
| 75 | 65 | 16 | 5000 | 163 546 068 | 1 | 3.552 | 163 546 078 | 1 | 4.122 |
| 90 | 80 | 16 | 7000 | 163 546 069 | 1 | 6.646 | 163 546 079 | 1 | 6.698 |
| 110 | 100 | 16 | 11000 | 163 546 070 | 1 | 9.697 | 163 546 080 | 1 | 12.700 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) | closest inch (inch) |
|-----------|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|-----|-----------|---------------------------|
| 16 | 50 | 61 | 27 | 12 | 92 | 82 | 56 | 25 | 35 | 47 | M6 | 68 | 3/8 |
| 20 | 50 | 61 | 27 | 12 | 95 | 82 | 56 | 25 | 35 | 47 | M6 | 67 | 1/2 |
| 25 | 58 | 74 | 30 | 12 | 110 | 106 | 65 | 25 | 44 | 62 | M6 | 76 | 3/4 |
| 32 | 68 | 80 | 36 | 12 | 123 | 106 | 71 | 25 | 44 | 62 | M6 | 82 | 1 |
| 40 | 84 | 95 | 44 | 15 | 146 | 131 | 85 | 45 | 57 | 74 | M8 | 98 | 1 1/4 |
| 50 | 97 | 102 | 51 | 15 | 157 | 131 | 89 | 45 | 57 | 74 | M8 | 99 | 1 1/2 |
| 63 | 124 | 117 | 64 | 15 | 183 | 152 | 101 | 45 | 66 | 86 | M8 | 111 | 2 |
| 75 | 166 | 150 | 85 | 15 | 233 | 270 | 136 | 70 | 64 | 206 | M8 | 148 | 2 1/2 |
| 90 | 200 | 161 | 105 | 15 | 255 | 270 | 141 | 70 | 64 | 206 | M8 | 156 | 3 |
| 110 | 238 | 178 | 123 | 22 | 301 | 320 | 164 | 120 | 64 | 256 | M12 | 178 | 4 |



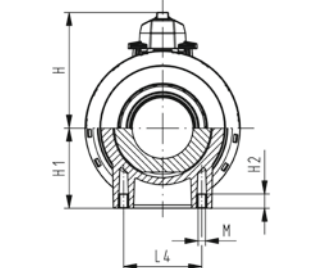
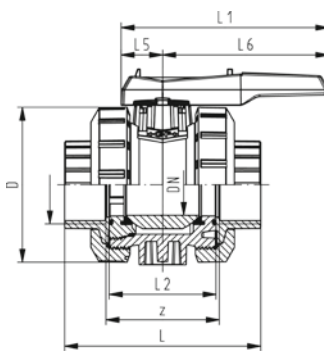
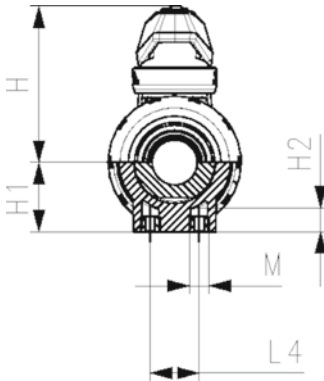
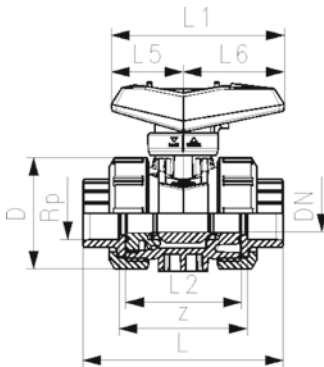
Ball valve type 546 Pro PVC-C With threaded sockets Rp

Model:

- Lockable lever as standard (DN10-DN50)
- For easy installation and removal
- Ball seat PTFE
- Integrated stainless steel mounting inserts
- Z-dimension, valve end and union nut **are compatible** with type 546 (1st Generation)

Option:

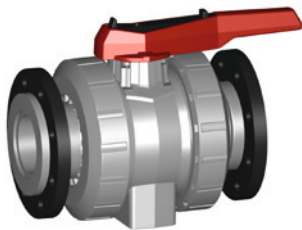
- Interface-module with position feedback sensor, incl. LED feedback (DN10-50)
- Manual spring return lever ("Dead man") (DN10-25)
- Pneumatic or electric actuators from GF
- Individual configuration of the valve possible
- Multifunctional module with integrated limit switches (DN65-100)



| d (mm) | DN (mm) | Thread | Type | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|--------|------|----------------|-------------|-----------------------------------|--------------------|----|----------------|
| 16 | 10 | Rp | | 3/8 | 10 | 71 | 163 546 401 | 1 | 0.162 |
| 20 | 15 | Rp | | 1/2 | 10 | 185 | 163 546 402 | 1 | 0.162 |
| 25 | 20 | Rp | | 3/4 | 10 | 350 | 163 546 403 | 1 | 0.247 |
| 32 | 25 | Rp | | 1 | 10 | 700 | 163 546 404 | 1 | 0.367 |
| 40 | 32 | Rp | | 1 1/4 | 10 | 1000 | 163 546 405 | 1 | 0.665 |
| 50 | 40 | Rp | | 1 1/2 | 10 | 1600 | 163 546 406 | 1 | 0.895 |
| 63 | 50 | Rp | | 2 | 10 | 3100 | 163 546 407 | 1 | 1.655 |
| 75 | 65 | Rp | | 2 1/2 | 10 | 5000 | 163 546 408 | 1 | 5.400 |
| 90 | 80 | Rp | | 3 | 10 | 7000 | 163 546 409 | 1 | 8.100 |
| 110 | 100 | Rp | | 4 | 10 | 11000 | 163 546 410 | 1 | 12.700 |

| FKM Code | SP | Weight (kg) |
|--------------------|----|----------------|
| 163 546 411 | 1 | 0.162 |
| 163 546 412 | 1 | 0.162 |
| 163 546 413 | 1 | 0.247 |
| 163 546 414 | 1 | 0.367 |
| 163 546 415 | 1 | 0.665 |
| 163 546 416 | 1 | 0.895 |
| 163 546 417 | 1 | 1.655 |
| 163 546 418 | 1 | 5.400 |
| 163 546 419 | 1 | 8.100 |
| 163 546 420 | 1 | 12.700 |

| D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) |
|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|-----|-----------|
| 50 | 61 | 27 | 12 | 95 | 82 | 56 | 25 | 35 | 47 | M6 | 73 |
| 50 | 61 | 27 | 12 | 100 | 82 | 56 | 25 | 35 | 47 | M6 | 71 |
| 58 | 74 | 30 | 12 | 114 | 106 | 65 | 25 | 44 | 62 | M6 | 82 |
| 68 | 80 | 36 | 12 | 127 | 106 | 71 | 25 | 44 | 62 | M6 | 89 |
| 84 | 95 | 44 | 15 | 146 | 131 | 85 | 45 | 57 | 74 | M8 | 104 |
| 97 | 102 | 51 | 15 | 152 | 131 | 89 | 45 | 57 | 74 | M8 | 110 |
| 124 | 117 | 64 | 15 | 176 | 152 | 101 | 45 | 66 | 86 | M8 | 125 |
| 166 | 150 | 85 | 15 | 233 | 270 | 136 | 70 | 64 | 206 | M8 | 176 |
| 200 | 161 | 105 | 15 | 254 | 270 | 141 | 70 | 64 | 206 | M8 | 191 |
| 238 | 178 | 123 | 22 | 301 | 320 | 164 | 120 | 64 | 256 | M12 | 226 |



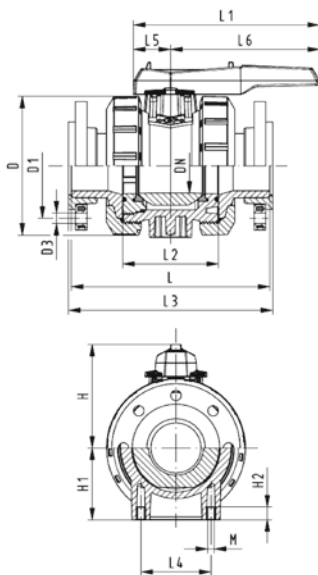
Ball valve type 546 Pro PVC-C With backing flanges PP-st metric

Model:

- For easy installation and removal
- Ball seat PTFE
- Integrated stainless steel mounting inserts
- Z-dimension, valve end and union nut **are compatible** with type 546 (1st Generation)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- Hole circle PN10

Option:

- Pneumatic or electric actuators from GF
- Individual configuration of the valve possible
- Multifunctional module with integrated limit switches (DN65-100)



| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|--|--------------------|-------------------|--------------------|-------------------|
| 75 | 65 | 16 | 5000 | 163 546 108 | 1 6.000 | 163 546 118 | 1 6.546 |
| 90 | 80 | 16 | 7000 | 163 546 109 | 1 9.501 | 163 546 119 | 1 9.320 |
| 110 | 100 | 16 | 11000 | 163 546 110 | 1 14.200 | 163 546 120 | 1 14.200 |

| d (mm) | D (mm) | D1 (mm) | D3 (mm) | H (mm) | H1 (mm) | H2 (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M |
|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|-----|
| 75 | 185 | 145 | 18 | 150 | 85 | 15 | 269 | 136 | 290 | 70 | 64 | 206 | M8 |
| 90 | 200 | 160 | 18 | 161 | 105 | 15 | 269 | 141 | 310 | 70 | 64 | 206 | M8 |
| 110 | 220 | 180 | 18 | 178 | 123 | 22 | 320 | 164 | 350 | 120 | 64 | 256 | M12 |



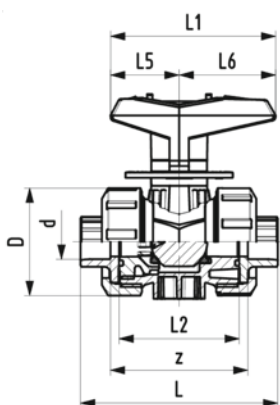
Linear ball valve type 546 PVC-C With mounting inserts/With solvent cement sockets metric

Model:

- Excellent control characteristics
- Designed for easy installation and removal
- Ball seat PTFE
- Angle of operation 90° with scale
- Integrated stainless steel mounting inserts

Option:

- Individual configuration of the valve
- Pneumatic or electric actuators from GF
- Other materials on demand



| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) |
|-----------|------------|-------------|--|--------------------|-------------------|
| 20 | 15 | 10 | 185 | 800 052 612 | 1 0.169 |
| 25 | 20 | 10 | 350 | 800 052 613 | 1 0.255 |
| 32 | 25 | 10 | 700 | 800 052 614 | 1 0.370 |
| 40 | 32 | 10 | 1000 | 800 052 615 | 1 0.648 |
| 50 | 40 | 10 | 1600 | 800 052 616 | 1 0.894 |
| 63 | 50 | 10 | 3100 | 800 052 617 | 1 1.653 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | z (mm) | closest inch (inch) |
|-----------|-----------|-----------|------------|-----------|------------|------------|------------|------------|------------|-----------|---------------------------|
| 20 | 50 | 57 | 27 | 95 | 77 | 56 | 25 | 32 | 45 | 64 | 1/2 |
| 25 | 58 | 67 | 30 | 110 | 97 | 65 | 25 | 39 | 58 | 72 | 3/4 |
| 32 | 68 | 73 | 36 | 123 | 97 | 71 | 25 | 39 | 58 | 79 | 1 |
| 40 | 84 | 90 | 44 | 146 | 128 | 85 | 45 | 54 | 74 | 94 | 1 1/4 |
| 50 | 97 | 97 | 51 | 157 | 128 | 89 | 45 | 54 | 74 | 95 | 1 1/2 |
| 63 | 124 | 116 | 64 | 183 | 152 | 101 | 45 | 66 | 87 | 107 | 2 |

Product Configurator

Create your own ball valve

Electric Actuator

- T01 EA 1124V with Cable Plug
- T02 EA 11 100-230V with Cable Plug
- T07 EA 25 24V with Cable Plug
- T08 EA 25 100-230V with Cable Plug
- T09 EA 120 24V with Cable Plug
- T10 EA 120 100-230V with Cable Plug
- T11 EA 250 24V with Cable Plug
- T12 EA 250 100-230V with Cable Plug



Angle (Open/ Close)

- W45 45°
- W90 90°
- W180 180°

Middle Position

- W17 No
- W18 Yes

Colour Assignment Feedback

- W20 Open = rot
- W21 Open = grün



Position Feedback

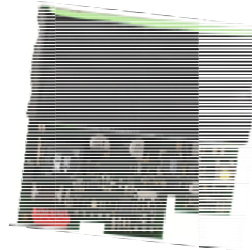
- W23 Open/ Close
- W24 Open/ Close/ Middle
- W25 Middle

Wiring Feedback

- W26 NC
- W28 NO

Heating Threshold

- W29 5°
- ... [5° steps]
- W37 45°

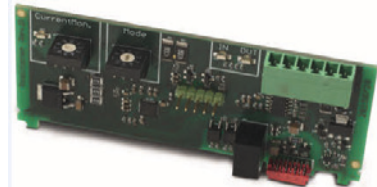


Failsafe Return unit

- W39 Integrated (Battery powered)
- W40 External (no Battery - 24V needed)

Accessory

- W42 Positioner
- W43 Monitoring
- W44 Profibus



Setting Positioner

- W46 BCD = 0
- ...
- W55 BCD = 9

Setting Motor Current

- W56 BCD = 0
- ...
- W65 BCD = 9



Setting Cycle Time Extension

- W66 BCD = 0
- ...
- W75 BCD = 9

Setting Cycle Time Monitoring

- W76 BCD = 0
- ...
- W85 BCD = 9

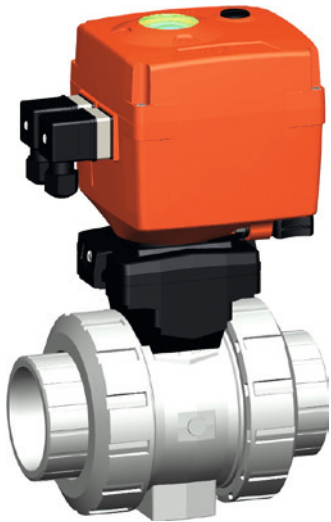
Setting Cycle Counter

- W86 BCD = 0
- ...
- W96 BCD = 9



T08 W90 W17 W20 W23 W26 W29 W39 W42 W46 W65 - - - =

Ball valves electric type 127



Ball valve type 127 PVC-C 100-230V
With manual emergency override
With solvent cement sockets metric

Model:

- Built on with electric actuator EA15
- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Heating element, position feedback (Open/Close)
- Integrated stainless steel mounting inserts

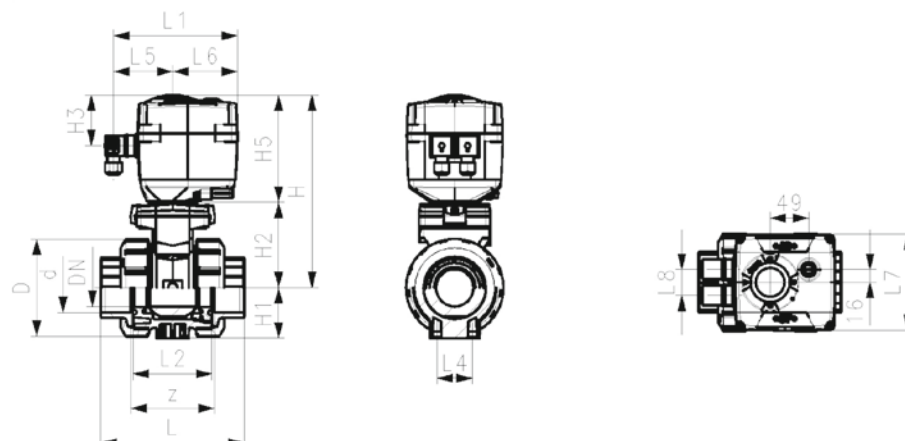
Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit

| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | Weight (kg) | FKM Code | Weight (kg) |
|-----------|------------|-------------|--|--------------|----------------|-------------|----------------|
| 16 | 10 | 10 | 70 | 199 127 102 | 1.770 | 199 127 112 | 1.770 |
| 20 | 15 | 10 | 185 | 199 127 103 | 1.780 | 199 127 113 | 1.780 |
| 25 | 20 | 10 | 350 | 199 127 104 | 1.860 | 199 127 114 | 1.860 |
| 32 | 25 | 10 | 700 | 199 127 105 | 1.950 | 199 127 115 | 1.950 |
| 40 | 32 | 10 | 1000 | 199 127 106 | 2.190 | 199 127 116 | 2.190 |
| 50 | 40 | 10 | 1600 | 199 127 107 | 2.360 | 199 127 117 | 2.360 |
| 63 | 50 | 10 | 3100 | 199 127 108 | 3.140 | 199 127 118 | 3.140 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | L8 (mm) | z (mm) |
|-----------|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|
| 16 | 50 | 200 | 27 | 64 | 64 | 137 | 92 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 64 |
| 20 | 50 | 200 | 27 | 64 | 64 | 137 | 95 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 64 |
| 25 | 58 | 209 | 30 | 73 | 64 | 137 | 110 | 161 | 65 | 25 | 77 | 83 | 122 | 33 | 72 |
| 32 | 68 | 209 | 36 | 73 | 64 | 137 | 123 | 161 | 71 | 25 | 77 | 83 | 122 | 33 | 79 |
| 40 | 84 | 220 | 44 | 64 | 64 | 137 | 146 | 161 | 85 | 45 | 77 | 83 | 122 | 33 | 94 |
| 50 | 97 | 220 | 51 | 84 | 64 | 137 | 157 | 161 | 89 | 45 | 77 | 83 | 122 | 33 | 95 |
| 63 | 124 | 243 | 64 | 106 | 64 | 137 | 183 | 161 | 101 | 45 | 77 | 83 | 122 | 33 | 107 |

| d (mm) | closest inch (inch) |
|-----------|---------------------------|
| 16 | 3/8 |
| 20 | 1/2 |
| 25 | 3/4 |
| 32 | 1 |
| 40 | 1 1/4 |
| 50 | 1 1/2 |
| 63 | 2 |





Ball valve type 127 PVC-C 24V
With manual emergency override
With solvent cement sockets metric

Model:

- Built on with electric actuator EA15
- Voltage 24V AC/DC
- Factory set control range 90°<-)
- Heating element, position feedback (Open/Close)
- Integrated stainless steel mounting inserts

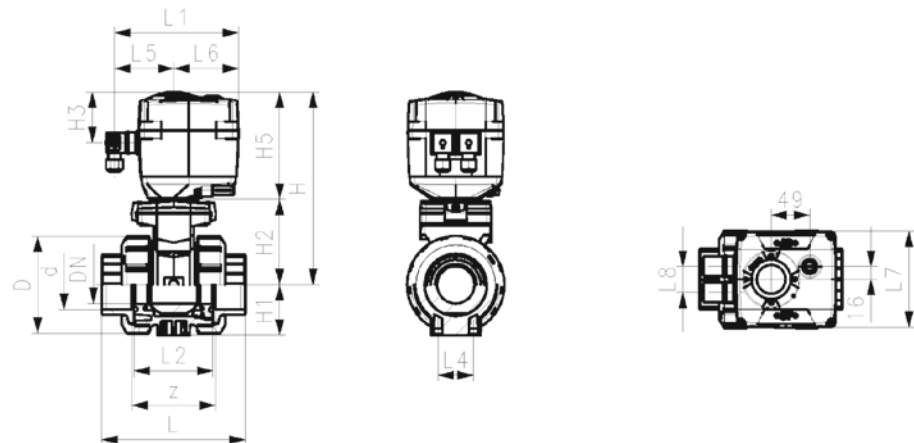
Option:

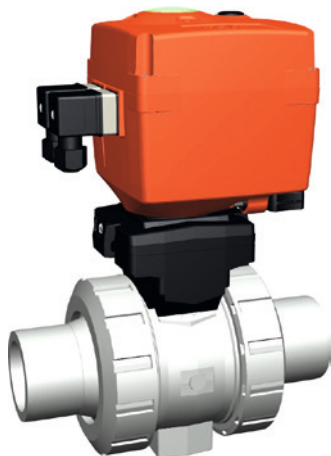
- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit

| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | Weight (kg) | FKM Code | Weight (kg) |
|-----------|------------|-------------|--|--------------|----------------|-------------|----------------|
| 16 | 10 | 10 | 70 | 199 127 142 | 1.770 | 199 127 152 | 1.770 |
| 20 | 15 | 10 | 185 | 199 127 143 | 1.780 | 199 127 153 | 1.780 |
| 25 | 20 | 10 | 350 | 199 127 144 | 2.237 | 199 127 154 | 1.860 |
| 32 | 25 | 10 | 700 | 199 127 145 | 1.950 | 199 127 155 | 1.950 |
| 40 | 32 | 10 | 1000 | 199 127 146 | 2.190 | 199 127 156 | 2.190 |
| 50 | 40 | 10 | 1600 | 199 127 147 | 2.360 | 199 127 157 | 2.360 |
| 63 | 50 | 10 | 3100 | 199 127 148 | 3.665 | 199 127 158 | 3.140 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | L8 (mm) | z (mm) |
|-----------|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|
| 16 | 50 | 200 | 27 | 64 | 64 | 137 | 92 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 64 |
| 20 | 50 | 200 | 27 | 64 | 64 | 137 | 95 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 64 |
| 25 | 58 | 209 | 30 | 73 | 64 | 137 | 110 | 161 | 65 | 25 | 77 | 83 | 122 | 33 | 72 |
| 32 | 68 | 209 | 36 | 73 | 64 | 137 | 123 | 161 | 71 | 25 | 77 | 83 | 122 | 33 | 79 |
| 40 | 84 | 220 | 44 | 84 | 64 | 137 | 146 | 161 | 85 | 45 | 77 | 83 | 122 | 33 | 94 |
| 50 | 97 | 220 | 51 | 84 | 64 | 137 | 157 | 161 | 89 | 45 | 77 | 83 | 122 | 33 | 95 |
| 63 | 124 | 243 | 64 | 106 | 64 | 137 | 183 | 161 | 101 | 45 | 77 | 83 | 122 | 33 | 107 |

| d (mm) | closest inch (inch) |
|-----------|---------------------------|
| 16 | 3/4 |
| 20 | 1/2 |
| 25 | 3/4 |
| 32 | 1 |
| 40 | 1 1/4 |
| 50 | 1 1/2 |
| 63 | 2 |





Ball valve type 127 PVC-C 24V
With manual emergency override
With solvent cement spigots metric

Model:

- Built on with electric actuator EA15
- Voltage 24V AC/DC
- Factory set control range 90°<
- Heating element, position feedback (Open/Close)
- Integrated stainless steel mounting inserts

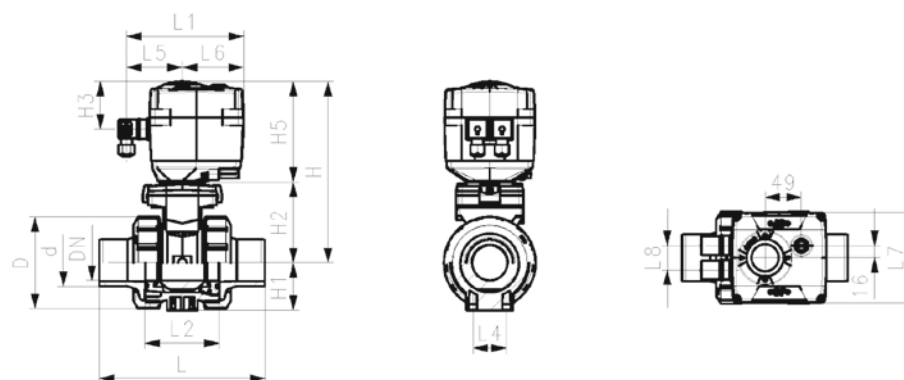
Option:

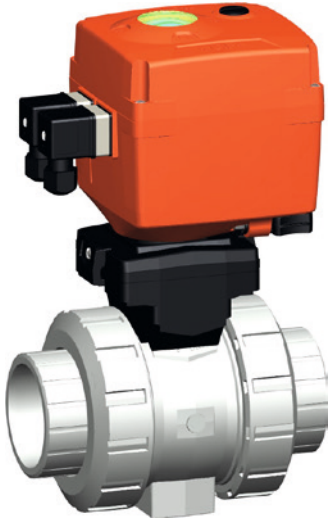
- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit

| d | DN | PN | kv-value | EPDM | Weight | FKM | Weight |
|------|------|-------|---------------------|-------------|--------|-------------|--------|
| (mm) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | (kg) | Code | (kg) |
| | | | (l/min) | | | | |
| 16 | 10 | 10 | 70 | 199 127 162 | 1.770 | 199 127 172 | 1.770 |
| 20 | 15 | 10 | 185 | 199 127 163 | 1.780 | 199 127 173 | 1.780 |
| 25 | 20 | 10 | 350 | 199 127 164 | 1.860 | 199 127 174 | 1.860 |
| 32 | 25 | 10 | 700 | 199 127 165 | 1.950 | 199 127 175 | 1.950 |
| 40 | 32 | 10 | 1000 | 199 127 166 | 2.190 | 199 127 176 | 2.190 |
| 50 | 40 | 10 | 1600 | 199 127 167 | 2.360 | 199 127 177 | 2.360 |
| 63 | 50 | 10 | 3100 | 199 127 168 | 3.140 | 199 127 178 | 3.140 |

| d | D | H | H1 | H2 | H3 | H5 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | 50 | 200 | 27 | 64 | 64 | 137 | 114 | 161 | 56 | 130 | 25 | 77 | 83 | 122 | 33 |
| 20 | 50 | 200 | 27 | 64 | 64 | 137 | 124 | 161 | 56 | 130 | 25 | 77 | 83 | 122 | 33 |
| 25 | 58 | 209 | 30 | 73 | 64 | 137 | 144 | 161 | 65 | 150 | 25 | 77 | 83 | 122 | 33 |
| 32 | 68 | 209 | 36 | 73 | 64 | 137 | 154 | 161 | 71 | 160 | 25 | 77 | 83 | 122 | 33 |
| 40 | 84 | 220 | 44 | 84 | 64 | 137 | 174 | 161 | 85 | 180 | 45 | 77 | 83 | 122 | 33 |
| 50 | 97 | 220 | 51 | 84 | 64 | 137 | 194 | 161 | 89 | 200 | 45 | 77 | 83 | 122 | 33 |
| 63 | 124 | 243 | 64 | 106 | 64 | 137 | 224 | 161 | 101 | 230 | 45 | 77 | 83 | 122 | 33 |

| d | closest |
|------|---------|
| (mm) | inch |
| | (inch) |
| 16 | ¾ |
| 20 | ½ |
| 25 | ¾ |
| 32 | 1 |
| 40 | 1 ¼ |
| 50 | 1 ½ |
| 63 | 2 |





Ball valve type 127 PVC-C 100-230V
With manual emergency override
With threaded sockets Rp

Model:

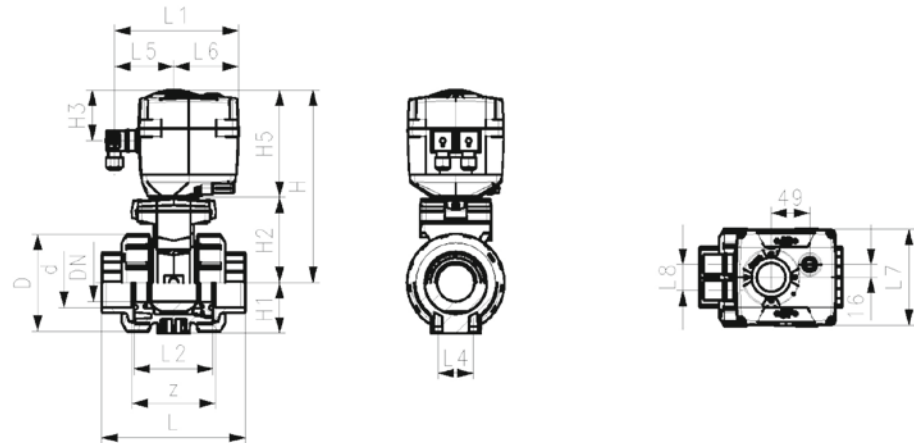
- Built on with electric actuator EA15
- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Heating element, position feedback (Open/Close)
- Integrated stainless steel mounting inserts

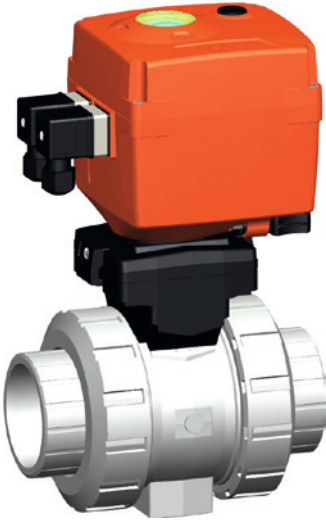
Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit

| Rp (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | Weight (kg) | FKM Code | Weight (kg) |
|--------------|------------|-------------|--|--------------|----------------|-------------|----------------|
| 3/8 | 10 | 10 | 70 | 199 127 702 | 2.100 | 199 127 712 | 2.100 |
| 1/2 | 15 | 10 | 185 | 199 127 703 | 2.100 | 199 127 713 | 2.100 |
| 3/4 | 20 | 10 | 350 | 199 127 704 | 2.200 | 199 127 714 | 2.200 |
| 1 | 25 | 10 | 700 | 199 127 705 | 2.300 | 199 127 715 | 2.300 |
| 1 1/4 | 32 | 10 | 1000 | 199 127 706 | 2.600 | 199 127 716 | 2.600 |
| 1 1/2 | 40 | 10 | 1600 | 199 127 707 | 3.000 | 199 127 717 | 3.000 |
| 2 | 50 | 10 | 3100 | 199 127 708 | 3.800 | 199 127 718 | 3.800 |

| Rp (inch) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | L8 (mm) | z (mm) |
|--------------|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|
| 3/8 | 50 | 200 | 27 | 64 | 64 | 137 | 92 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 64 |
| 1/2 | 50 | 200 | 27 | 64 | 64 | 137 | 95 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 64 |
| 3/4 | 58 | 209 | 30 | 73 | 64 | 137 | 110 | 161 | 65 | 25 | 77 | 83 | 122 | 33 | 72 |
| 1 | 68 | 209 | 36 | 73 | 64 | 137 | 123 | 161 | 71 | 25 | 77 | 83 | 122 | 33 | 79 |
| 1 1/4 | 84 | 220 | 44 | 84 | 64 | 137 | 146 | 161 | 85 | 45 | 77 | 83 | 122 | 33 | 94 |
| 1 1/2 | 97 | 220 | 51 | 84 | 64 | 137 | 157 | 161 | 89 | 45 | 77 | 83 | 122 | 33 | 95 |
| 2 | 124 | 243 | 64 | 106 | 64 | 137 | 183 | 161 | 101 | 45 | 77 | 83 | 122 | 33 | 107 |





Ball valve type 127 PVC-C 24V
With manual emergency override
With threaded sockets Rp

Model:

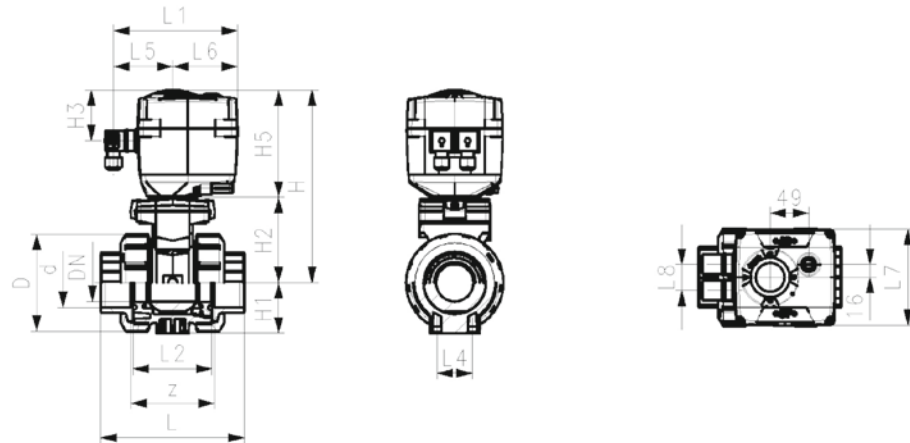
- Built on with electric actuator EA15
- Voltage 24V AC/DC
- Factory set control range 90°<
- Heating element, position feedback (Open/Close)
- Integrated stainless steel mounting inserts

Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit

| Rp (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | Weight (kg) | FKM Code | Weight (kg) |
|--------------|------------|-------------|--|--------------|----------------|-------------|----------------|
| 3/8 | 10 | 10 | 70 | 199 127 742 | 2.100 | 199 127 752 | 2.100 |
| 1/2 | 15 | 10 | 185 | 199 127 743 | 2.100 | 199 127 753 | 2.100 |
| 3/4 | 20 | 10 | 350 | 199 127 744 | 2.200 | 199 127 754 | 2.200 |
| 1 | 25 | 10 | 700 | 199 127 745 | 2.300 | 199 127 755 | 2.300 |
| 1 1/4 | 32 | 10 | 1000 | 199 127 746 | 2.600 | 199 127 756 | 2.600 |
| 1 1/2 | 40 | 10 | 1600 | 199 127 747 | 3.000 | 199 127 757 | 3.000 |
| 2 | 50 | 10 | 3100 | 199 127 748 | 3.800 | 199 127 758 | 3.800 |

| Rp (inch) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | L8 (mm) | z (mm) |
|--------------|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|
| 3/8 | 50 | 200 | 27 | 64 | 64 | 137 | 92 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 64 |
| 1/2 | 50 | 200 | 27 | 64 | 64 | 137 | 95 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 64 |
| 3/4 | 58 | 209 | 30 | 73 | 64 | 137 | 110 | 161 | 65 | 25 | 77 | 83 | 122 | 33 | 72 |
| 1 | 68 | 209 | 36 | 73 | 64 | 137 | 123 | 161 | 71 | 25 | 77 | 83 | 122 | 33 | 79 |
| 1 1/4 | 84 | 220 | 44 | 84 | 64 | 137 | 146 | 161 | 85 | 45 | 77 | 83 | 122 | 33 | 94 |
| 1 1/2 | 97 | 220 | 51 | 84 | 64 | 137 | 157 | 161 | 89 | 45 | 77 | 83 | 122 | 33 | 95 |
| 2 | 124 | 243 | 64 | 106 | 64 | 137 | 183 | 161 | 101 | 45 | 77 | 83 | 122 | 33 | 107 |



Ball valves electric type 167



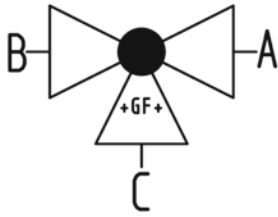
3-Way ball valve type 167 PVC-C
Horizontal/L-port 100-230V
With manual emergency override
With solvent cement sockets metric

Model:

- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Heating element, position feedback (Open/Close/ Middle)
- Integrated stainless steel mounting inserts

Option:

- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

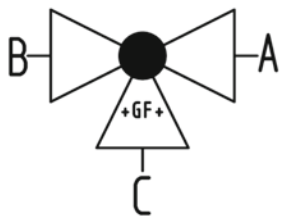


| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EA | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|-----------------------------------|------|----------------------|----|----------------|
| 16 | 10 | 3/8 | 10 | 50 | EA25 | 199167102_old | 1 | 2.143 |
| 20 | 15 | 1/2 | 10 | 75 | EA25 | 199167103_old | 1 | 2.149 |
| 25 | 20 | 3/4 | 10 | 150 | EA25 | 199167104_old | 1 | 2.287 |
| 32 | 25 | 1 | 10 | 280 | EA25 | 199167105_old | 1 | 2.493 |
| 40 | 32 | 1 1/4 | 10 | 480 | EA25 | 199167106_old | 1 | 2.950 |
| 50 | 40 | 1 1/2 | 10 | 620 | EA25 | 199167107_old | 1 | 3.441 |
| 63 | 50 | 2 | 10 | 1230 | EA25 | 199167108_old | 1 | 4.916 |

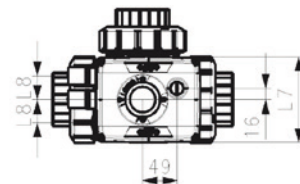
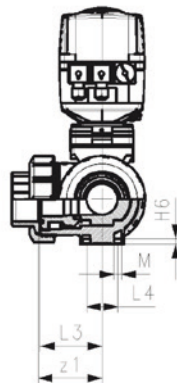
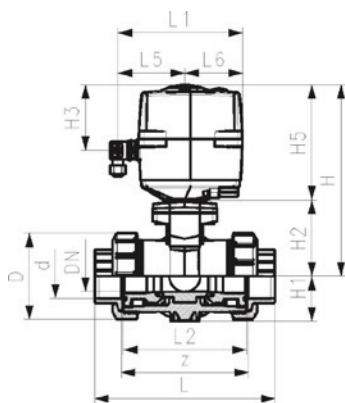
| FKM Code | SP | Weight (kg) |
|----------------------|----|----------------|
| 199167112_old | 1 | 2.143 |
| 199167113_old | 1 | 2.149 |
| 199167114_old | 1 | 2.287 |
| 199167115_old | 1 | 2.493 |
| 199167116_old | 1 | 2.950 |
| 199167117_old | 1 | 3.441 |
| 199167118_old | 1 | 4.916 |

| D | H | H1 | H2 | H3 | H5 | H6 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 231 | 28 | 64 | 94 | 167 | 8 | 109 | 180 | 73 | 36 | 25 | 97 | 83 | 122 | 33 |
| 50 | 231 | 28 | 64 | 94 | 167 | 8 | 112 | 180 | 73 | 36 | 25 | 97 | 83 | 122 | 33 |
| 58 | 240 | 32 | 73 | 94 | 167 | 8 | 131 | 180 | 86 | 43 | 25 | 97 | 83 | 122 | 33 |
| 68 | 240 | 36 | 73 | 94 | 167 | 8 | 151 | 180 | 99 | 50 | 25 | 97 | 83 | 122 | 33 |
| 84 | 251 | 45 | 84 | 94 | 167 | 9 | 181 | 180 | 120 | 60 | 45 | 97 | 83 | 122 | 33 |
| 97 | 251 | 51 | 84 | 94 | 167 | 9 | 205 | 180 | 137 | 69 | 45 | 97 | 83 | 122 | 33 |
| 124 | 273 | 65 | 106 | 94 | 167 | 9 | 261 | 180 | 179 | 89 | 45 | 97 | 83 | 122 | 33 |

| M | z | z1 | closest inch (inch) |
|------|------|------|---------------------------|
| (mm) | (mm) | (mm) | |
| 6 | 81 | 40 | 3/8 |
| 6 | 81 | 40 | 1/2 |
| 6 | 94 | 47 | 3/4 |



| M | z | z1 | closest inch |
|------|------|------|-----------------|
| (mm) | (mm) | (mm) | (inch) |
| 6 | 107 | 54 | 1 |
| 8 | 130 | 65 | 1 ¼ |
| 8 | 143 | 72 | 1 ½ |
| 8 | 185 | 92 | 2 |



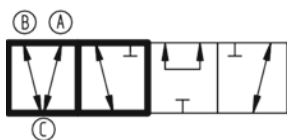
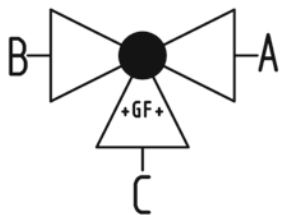
**3-Way ball valve type 167 PVC-C
Horizontal/T-port 100-230V
With manual emergency override
With solvent cement sockets metric**

Model:

- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Heating element, position feedback (Open/Close/ Middle)
- Integrated stainless steel mounting inserts

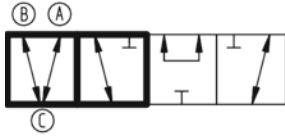
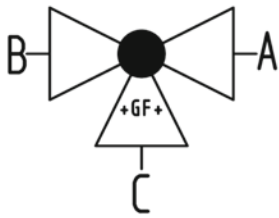
Option:

- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board



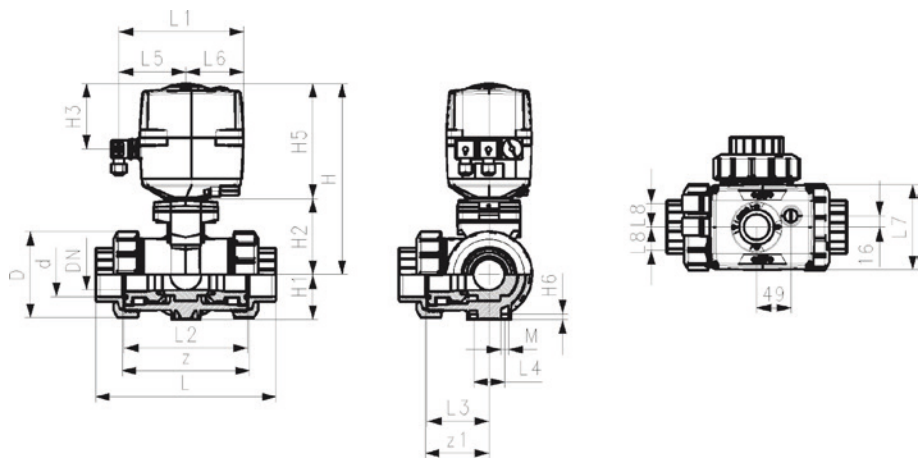
| d | DN | Size | PN | kv-value | EA | EPDM Code | SP | Weight |
|------|------|--------|-------|---------------------|------|---------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | | | | (kg) |
| | | | | (l/min) | | | | |
| 16 | 10 | ¾ | 10 | 140 | EA25 | 199167142_old | 1 | 2.142 |
| 20 | 15 | ½ | 10 | 200 | EA25 | 199167143_old | 1 | 2.148 |
| 25 | 20 | ¾ | 10 | 470 | EA25 | 199167144_old | 1 | 2.285 |
| 32 | 25 | 1 | 10 | 793 | EA25 | 199167145_old | 1 | 2.486 |
| 40 | 32 | 1 ¼ | 10 | 1290 | EA25 | 199167146_old | 1 | 2.939 |
| 50 | 40 | 1 ½ | 10 | 1910 | EA25 | 199167147_old | 1 | 3.419 |
| 63 | 50 | 2 | 10 | 3100 | EA25 | 199167148_old | 1 | 4.867 |

| d | FKM Code | SP | Weight |
|------|---------------|----|--------|
| (mm) | | | (kg) |
| 16 | 199167152_old | 1 | 2.142 |
| 20 | 199167153_old | 1 | 2.148 |
| 25 | 199167154_old | 1 | 2.285 |
| 32 | 199167155_old | 1 | 2.486 |
| 40 | 199167156_old | 1 | 2.939 |
| 50 | 199167157_old | 1 | 3.419 |
| 63 | 199167158_old | 1 | 4.867 |



| d | D | H | H1 | H2 | H3 | H5 | H6 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | 50 | 231 | 28 | 64 | 94 | 167 | 8 | 109 | 180 | 73 | 36 | 25 | 97 | 83 | 122 |
| 20 | 50 | 231 | 28 | 64 | 94 | 167 | 8 | 112 | 180 | 73 | 36 | 25 | 97 | 83 | 122 |
| 25 | 58 | 240 | 32 | 73 | 94 | 167 | 8 | 131 | 180 | 86 | 43 | 25 | 97 | 83 | 122 |
| 32 | 68 | 240 | 36 | 73 | 94 | 167 | 8 | 151 | 180 | 99 | 50 | 25 | 97 | 83 | 122 |
| 40 | 84 | 251 | 45 | 84 | 94 | 167 | 9 | 181 | 180 | 120 | 60 | 45 | 97 | 83 | 122 |
| 50 | 97 | 251 | 51 | 84 | 94 | 167 | 9 | 205 | 180 | 137 | 69 | 45 | 97 | 83 | 122 |
| 63 | 124 | 273 | 65 | 106 | 94 | 167 | 9 | 261 | 180 | 179 | 89 | 45 | 97 | 83 | 122 |

| d | L8 | M | z | z1 | closest inch |
|------|------|---|------|------|--------------|
| (mm) | (mm) | | (mm) | (mm) | (inch) |
| 16 | 33 | 6 | 81 | 40 | 3/8 |
| 20 | 33 | 6 | 81 | 40 | 1/2 |
| 25 | 33 | 6 | 94 | 47 | 3/4 |
| 32 | 33 | 6 | 107 | 54 | 1 |
| 40 | 33 | 8 | 130 | 65 | 1 1/4 |
| 50 | 33 | 8 | 143 | 72 | 1 1/2 |
| 63 | 33 | 8 | 185 | 92 | 2 |



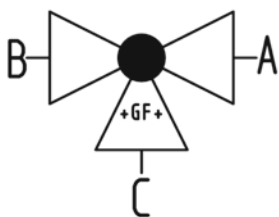
**3-Way ball valve type 167 PVC-C
Horizontal/L-port 24V
With manual emergency override
With solvent cement sockets metric**

Model:

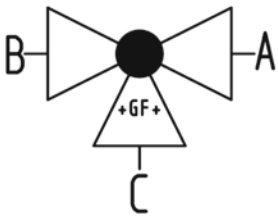
- Voltage 24V AC/DC
- Factory set control range 90°<-)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Heating element, position feedback (Open/Close/ Middle)
- Integrated stainless steel mounting inserts

Option:

- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board



| d | DN | Size | PN | kv-value | EA | EPDM Code | SP | Weight |
|------|------|--------|-------|------------|------|---------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | (Δp=1 bar) | | | | (kg) |
| | | | | (L/min) | | | | |
| 16 | 10 | 3/8 | 10 | 50 | EA25 | 199167262_old | 1 | 2.143 |
| 20 | 15 | 1/2 | 10 | 75 | EA25 | 199167263_old | 1 | 2.149 |
| 25 | 20 | 3/4 | 10 | 150 | EA25 | 199167264_old | 1 | 2.287 |
| 32 | 25 | 1 | 10 | 280 | EA25 | 199167265_old | 1 | 2.493 |
| 40 | 32 | 1 1/4 | 10 | 480 | EA25 | 199167266_old | 1 | 2.950 |
| 50 | 40 | 1 1/2 | 10 | 620 | EA25 | 199167267_old | 1 | 3.766 |
| 63 | 50 | 2 | 10 | 1230 | EA25 | 199167268_old | 1 | 4.916 |

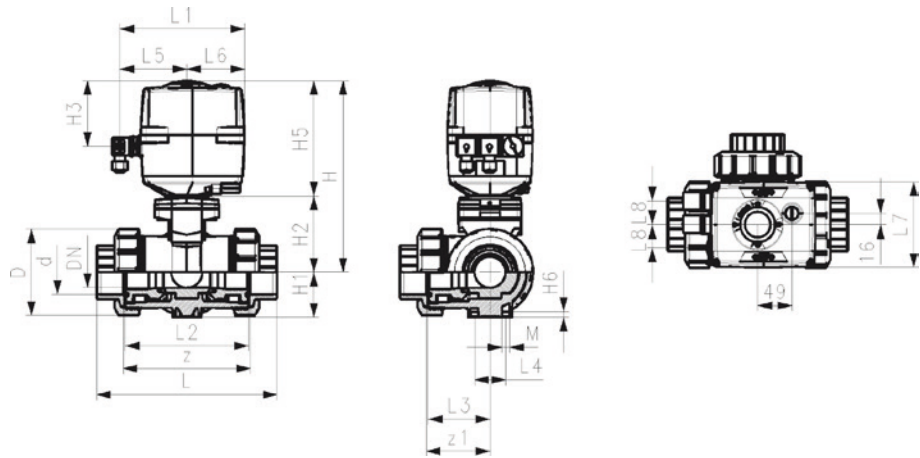


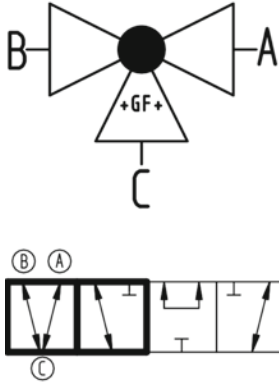
| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|---------------|----|----------------|
| 16 | 199167272_old | 1 | 2.143 |
| 20 | 199167273_old | 1 | 2.149 |
| 25 | 199167274_old | 1 | 2.287 |
| 32 | 199167275_old | 1 | 2.493 |
| 40 | 199167276_old | 1 | 2.950 |
| 50 | 199167277_old | 1 | 3.441 |
| 63 | 199167278_old | 1 | 4.916 |



| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) |
|-----------|-----------|-----------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|
| 16 | 50 | 231 | 28 | 64 | 94 | 167 | 8 | 109 | 180 | 73 | 36 | 25 | 97 | 83 | 122 |
| 20 | 50 | 231 | 28 | 64 | 94 | 167 | 8 | 112 | 180 | 73 | 36 | 25 | 97 | 83 | 122 |
| 25 | 58 | 240 | 32 | 73 | 94 | 167 | 8 | 131 | 180 | 86 | 43 | 25 | 97 | 83 | 122 |
| 32 | 68 | 240 | 36 | 73 | 94 | 167 | 8 | 151 | 180 | 99 | 50 | 25 | 97 | 83 | 122 |
| 40 | 84 | 251 | 45 | 84 | 94 | 167 | 9 | 181 | 180 | 120 | 60 | 45 | 97 | 83 | 122 |
| 50 | 97 | 251 | 51 | 84 | 94 | 167 | 9 | 205 | 180 | 137 | 69 | 45 | 97 | 83 | 122 |
| 63 | 124 | 273 | 65 | 106 | 94 | 167 | 9 | 261 | 180 | 179 | 89 | 45 | 97 | 83 | 122 |

| d (mm) | L8 (mm) | M | z (mm) | z1 (mm) | closest inch (inch) |
|-----------|------------|---|-----------|------------|---------------------------|
| 16 | 33 | 6 | 81 | 40 | 3/8 |
| 20 | 33 | 6 | 81 | 40 | 1/2 |
| 25 | 33 | 6 | 94 | 47 | 3/4 |
| 32 | 33 | 6 | 107 | 54 | 1 |
| 40 | 33 | 8 | 130 | 65 | 1 1/4 |
| 50 | 33 | 8 | 143 | 72 | 1 1/2 |
| 63 | 33 | 8 | 185 | 92 | 2 |





3-Way ball valve type 167 PVC-C
Horizontal/T-port 24V
With manual emergency override
With solvent cement sockets metric

Model:

- Voltage 24V AC/DC
- Factory set control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Heating element, position feedback (Open/Close/ Middle)
- Integrated stainless steel mounting inserts

Option:

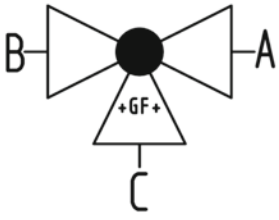
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EA | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|------|---------------|----|----------------|
| 16 | 10 | 3/8 | 10 | 140 | EA25 | 199167322_old | 1 | 2.142 |
| 20 | 15 | 1/2 | 10 | 200 | EA25 | 199167323_old | 1 | 2.148 |
| 25 | 20 | 3/4 | 10 | 470 | EA25 | 199167324_old | 1 | 2.285 |
| 32 | 25 | 1 | 10 | 793 | EA25 | 199167325_old | 1 | 2.486 |
| 40 | 32 | 1 1/4 | 10 | 1290 | EA25 | 199167326_old | 1 | 2.939 |
| 50 | 40 | 1 1/2 | 10 | 1910 | EA25 | 199167327_old | 1 | 3.419 |
| 63 | 50 | 2 | 10 | 3100 | EA25 | 199167328_old | 1 | 4.867 |

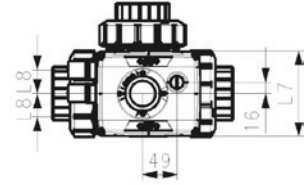
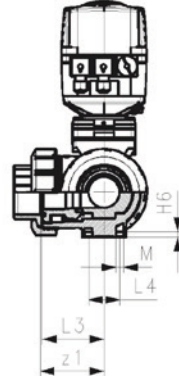
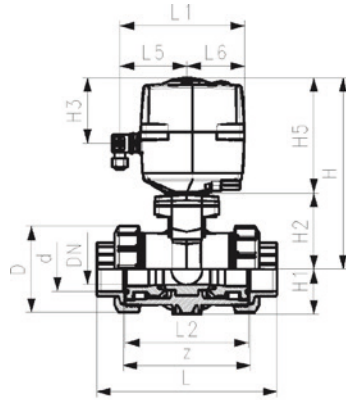
| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|---------------|----|----------------|
| 16 | 199167332_old | 1 | 2.142 |
| 20 | 199167333_old | 1 | 2.148 |
| 25 | 199167334_old | 1 | 2.285 |
| 32 | 199167335_old | 1 | 2.486 |
| 40 | 199167336_old | 1 | 2.939 |
| 50 | 199167337_old | 1 | 3.419 |
| 63 | 199167338_old | 1 | 4.867 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) |
|-----------|-----------|-----------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|
| 16 | 50 | 231 | 28 | 64 | 94 | 167 | 8 | 109 | 180 | 73 | 36 | 25 | 97 | 83 | 122 |
| 20 | 50 | 231 | 28 | 64 | 94 | 167 | 8 | 112 | 180 | 73 | 36 | 25 | 97 | 83 | 122 |
| 25 | 58 | 240 | 32 | 73 | 94 | 167 | 8 | 131 | 180 | 86 | 43 | 25 | 97 | 83 | 122 |
| 32 | 68 | 240 | 36 | 73 | 94 | 167 | 8 | 151 | 180 | 99 | 50 | 25 | 97 | 83 | 122 |
| 40 | 84 | 251 | 45 | 84 | 94 | 167 | 9 | 181 | 180 | 120 | 60 | 45 | 97 | 83 | 122 |
| 50 | 97 | 251 | 51 | 84 | 94 | 167 | 9 | 205 | 180 | 137 | 69 | 45 | 97 | 83 | 122 |
| 63 | 124 | 273 | 65 | 106 | 94 | 167 | 9 | 261 | 180 | 179 | 89 | 45 | 97 | 83 | 122 |

| d (mm) | L8 (mm) | M | z (mm) | z1 (mm) | closest inch (inch) |
|-----------|------------|---|-----------|------------|---------------------------|
| 16 | 33 | 6 | 81 | 40 | 3/8 |
| 20 | 33 | 6 | 81 | 40 | 1/2 |
| 25 | 33 | 6 | 94 | 47 | 3/4 |



| d (mm) | L8 (mm) | M | z (mm) | z1 (mm) | closest inch (inch) |
|-----------|------------|---|-----------|------------|---------------------------|
| 32 | 33 | 6 | 107 | 54 | 1 |
| 40 | 33 | 8 | 130 | 65 | 1 ¼ |
| 50 | 33 | 8 | 143 | 72 | 1 ½ |
| 63 | 33 | 8 | 185 | 92 | 2 |



Ball valves electric type 179



Ball valve type 179 PVC-C 100-230V
With manual emergency override
With solvent cement sockets metric

Model:

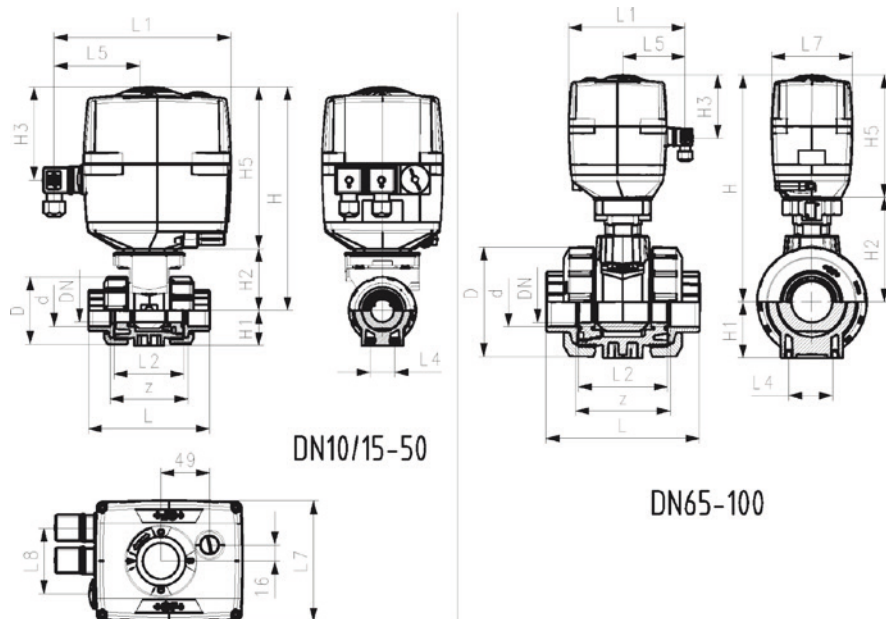
- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Heating element, position feedback (Open/Close/ Middle)
- Integrated stainless steel mounting inserts

Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

| d (mm) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EA | EPDM Code | Weight (kg) | FKM Code | Weight (kg) |
|-----------|------------|-------------|-----------------------------------|-------|--------------------|----------------|--------------------|----------------|
| 16 | 10 | 10 | 70 | EA25 | 199 179 402 | 2.100 | 199 179 412 | 2.100 |
| 20 | 15 | 10 | 185 | EA25 | 199 179 403 | 2.100 | 199 179 413 | 2.100 |
| 25 | 20 | 10 | 350 | EA25 | 199 179 404 | 2.200 | 199 179 414 | 2.200 |
| 32 | 25 | 10 | 700 | EA25 | 199 179 405 | 2.300 | 199 179 415 | 2.695 |
| 40 | 32 | 10 | 1000 | EA25 | 199 179 406 | 2.600 | 199 179 416 | 2.600 |
| 50 | 40 | 10 | 1600 | EA25 | 199 179 407 | 3.000 | 199 179 417 | 3.213 |
| 63 | 50 | 10 | 3100 | EA25 | 199 179 408 | 3.800 | 199 179 418 | 3.800 |
| 75 | 65 | 10 | 5000 | EA45 | 199 179 409 | 7.700 | 199 179 419 | 7.700 |
| 90 | 80 | 10 | 7000 | EA120 | 199 179 410 | 10.400 | 199 179 420 | 10.400 |
| 110 | 100 | 10 | 11000 | EA120 | 199 179 411 | 15.100 | 199 179 421 | 15.100 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L7 (mm) | z (mm) | closest inch (inch) |
|-----------|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|-----------|---------------------------|
| 16 | 50 | 231 | 27 | 64 | 94 | 167 | 92 | 180 | 56 | 25 | 97 | 122 | 64 | 3/8 |
| 20 | 50 | 231 | 27 | 64 | 94 | 167 | 95 | 180 | 56 | 25 | 97 | 122 | 64 | 1/2 |
| 25 | 58 | 240 | 30 | 73 | 94 | 167 | 110 | 180 | 65 | 25 | 97 | 122 | 72 | 3/4 |
| 32 | 68 | 240 | 36 | 73 | 94 | 167 | 123 | 180 | 71 | 25 | 97 | 122 | 79 | 1 |
| 40 | 84 | 251 | 44 | 84 | 94 | 167 | 146 | 180 | 85 | 45 | 97 | 122 | 94 | 1 1/4 |
| 50 | 97 | 251 | 51 | 84 | 94 | 167 | 157 | 180 | 89 | 45 | 97 | 122 | 95 | 1 1/2 |
| 63 | 124 | 273 | 64 | 106 | 94 | 167 | 183 | 180 | 101 | 45 | 97 | 122 | 107 | 2 |
| 75 | 166 | 346 | 85 | 156 | 94 | 190 | 233 | 180 | 136 | 70 | 98 | 122 | 144 | 2 1/2 |
| 90 | 200 | 358 | 105 | 168 | 94 | 190 | 254 | 180 | 141 | 70 | 98 | 122 | 151 | 3 |
| 110 | 238 | 365 | 123 | 175 | 94 | 190 | 301 | 180 | 164 | 120 | 98 | 122 | 174 | 4 |



Product Configurator

Create your own ball valve

Pneumatic Actuator

- P01 PA 11/21 Fail safe to close (FC)
- P02 PA 11/21 Fail safe to open (FO)
- P03 PA 11/21 Double acting (DA)
- P30 PA 30/90 Fail safe to close (FC)
- P31 PA 30/90 Fail safe to open (FO)
- P32 PA 30/90 Double acting (DA)

Stroke Limiter

- without Stroke Limiter
- R02 With Stroke Limiter

Accessories

- S01 Namur Mounting Bracket
- S03 Limit Switch Unit with Switches Ag,Ni
- S04 Limit Switch Unit with Switches Au
- S05 Limit Switch Unit with Inductive Switches Namur Eexi
- S06 Limit Switch Unit with Inductive Switches PNP
- S07 Limit Switch Unit with Inductive Switches NPN
- S08 Limit Switch Unit with Inductive Switches Namur Eexd

P01 S05 =



Ball valves pneumatic type 546 Pro



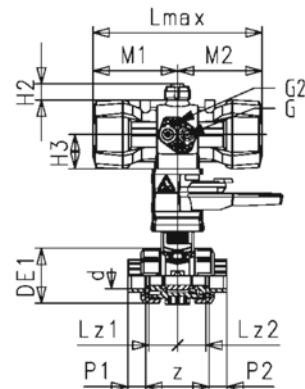
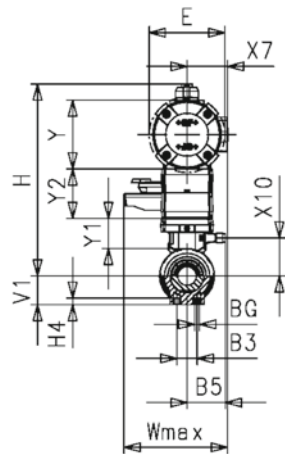
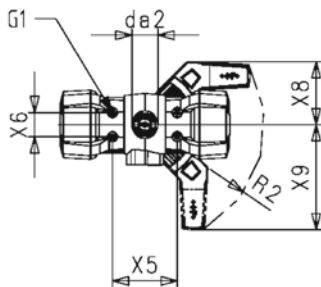
**PVC-C Ball valve type 546 Pro with PPA
FC (fail safe to close)
With manual override
With solvent cement sockets metric**

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d (mm) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|-----------------------------------|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 10 | 70 | 199 250 402 | 1 | 1.459 | 199 250 412 |
| 20 | 15 | 10 | 185 | 199 250 403 | 1 | 1.459 | 199 250 413 |
| 25 | 20 | 10 | 350 | 199 250 404 | 1 | 1.576 | 199 250 414 |
| 32 | 25 | 10 | 700 | 199 250 405 | 1 | 1.700 | 199 250 415 |
| 40 | 32 | 10 | 1000 | 199 250 406 | 1 | 2.477 | 199 250 416 |
| 50 | 40 | 10 | 1600 | 199 250 407 | 1 | 3.073 | 199 250 417 |
| 63 | 50 | 10 | 3100 | 199 250 408 | 1 | 4.471 | 199 250 418 |

| d (mm) | Actuator | DE1 (mm) | V1 (mm) | H4 (mm) | M1 (mm) | M2 (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lz2 (mm) | Lmax (mm) | E (mm) | Y1 (mm) |
|-----------|----------|-------------|------------|------------|------------|------------|------------|-----------|------------|-------------|-------------|--------------|-----------|------------|
| 16 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 20 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 25 | PPA08 | 58 | 30 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 33 | 33 | 159 | 74 | 35 |
| 32 | PPA15 | 68 | 36 | 12 | 106 | 106 | M5 | G 1/4 | 45 | 36 | 36 | 211 | 94 | 35 |
| 40 | PPA15 | 84 | 44 | 15 | 106 | 106 | M5 | G 1/4 | 45 | 43 | 43 | 211 | 94 | 33 |
| 50 | PPA40 | 97 | 51 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 45 | 45 | 246 | 120 | 33 |
| 63 | PPA40 | 124 | 64 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 51 | 51 | 246 | 120 | 36 |

| d (mm) | Y (mm) | Y2 (mm) | H (mm) | X10 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) | X8 (mm) | X9 (mm) | R2 (mm) | X7 (mm) |
|-----------|-----------|------------|-----------|-------------|------------|------------|--------------|------------|-------------|------------|------------|------------|------------|------------|------------|
| 16 | 75 | 60 | 215 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 20 | 75 | 60 | 215 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 25 | 75 | 60 | 219 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 32 | 88 | 60 | 238 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 40 | 88 | 60 | 244 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 50 | 111 | 60 | 273 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 62 |
| 63 | 111 | 60 | 288 | 36 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 62 |

| d (mm) | H2 (mm) | P1 (mm) | P2 (mm) | z (mm) |
|-----------|------------|------------|------------|-----------|
| 16 | 20 | 14 | 14 | 64 |
| 20 | 20 | 16 | 16 | 64 |
| 25 | 20 | 19 | 19 | 72 |
| 32 | 20 | 22 | 22 | 79 |
| 40 | 20 | 26 | 26 | 94 |
| 50 | 20 | 31 | 31 | 95 |
| 63 | 20 | 38 | 38 | 107 |



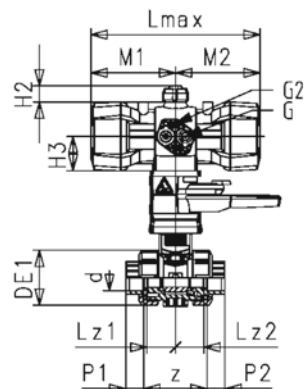
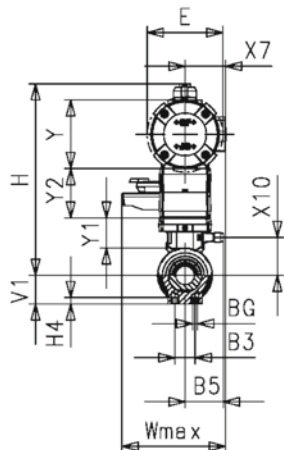
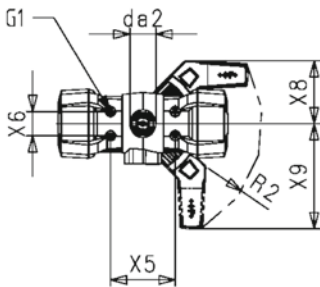
PVC-C Ball valve type 546 Pro with PPA
FC (fail safe to close)
With manual override
With threaded socket Rp

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90°<) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d (mm) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|-----------------------------------|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 10 | 70 | 199 250 752 | 1 | 1.500 | 199 250 772 |
| 20 | 15 | 10 | 185 | 199 250 753 | 1 | 1.500 | 199 250 773 |
| 25 | 20 | 10 | 350 | 199 250 754 | 1 | 1.600 | 199 250 774 |
| 32 | 25 | 10 | 700 | 199 250 755 | 1 | 1.700 | 199 250 775 |
| 40 | 32 | 10 | 1000 | 199 250 756 | 1 | 2.800 | 199 250 776 |
| 50 | 40 | 10 | 1600 | 199 250 757 | 1 | 3.100 | 199 250 777 |
| 63 | 50 | 10 | 3100 | 199 250 758 | 1 | 4.000 | 199 250 778 |

| d (mm) | Actuator | DE1 (mm) | V1 (mm) | H4 (mm) | M1 (mm) | M2 (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lz2 (mm) | Lmax (mm) | E (mm) | Y1 (mm) |
|-----------|----------|-------------|------------|------------|------------|------------|------------|-----------|------------|-------------|-------------|--------------|-----------|------------|
| 16 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 20 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 25 | PPA08 | 58 | 30 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 33 | 33 | 159 | 74 | 35 |
| 32 | PPA15 | 68 | 36 | 12 | 106 | 106 | M5 | G 1/4 | 45 | 36 | 36 | 211 | 94 | 35 |
| 40 | PPA15 | 84 | 44 | 15 | 106 | 106 | M5 | G 1/4 | 45 | 43 | 43 | 211 | 94 | 33 |
| 50 | PPA40 | 97 | 51 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 45 | 45 | 246 | 120 | 33 |
| 63 | PPA40 | 124 | 64 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 51 | 51 | 246 | 120 | 36 |

| d (mm) | Y (mm) | Y2 (mm) | H (mm) | X10 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) | X8 (mm) | X9 (mm) | R2 (mm) | X7 (mm) |
|-----------|-----------|------------|-----------|-------------|------------|------------|--------------|------------|-------------|------------|------------|------------|------------|------------|------------|
| 16 | 75 | 60 | 215 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 20 | 75 | 60 | 215 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 25 | 75 | 60 | 219 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 32 | 88 | 60 | 238 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 40 | 88 | 60 | 244 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 50 | 111 | 60 | 273 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 62 |
| 63 | 111 | 60 | 288 | 36 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 62 |

| d (mm) | H2 (mm) | P1 (mm) | P2 (mm) | z (mm) |
|-----------|------------|------------|------------|-----------|
| 16 | 20 | 14 | 14 | 64 |
| 20 | 20 | 16 | 16 | 64 |
| 25 | 20 | 19 | 19 | 72 |
| 32 | 20 | 22 | 22 | 79 |
| 40 | 20 | 26 | 26 | 94 |
| 50 | 20 | 31 | 31 | 95 |
| 63 | 20 | 38 | 38 | 107 |



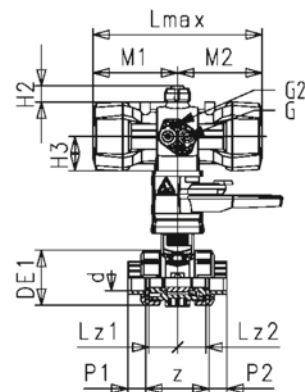
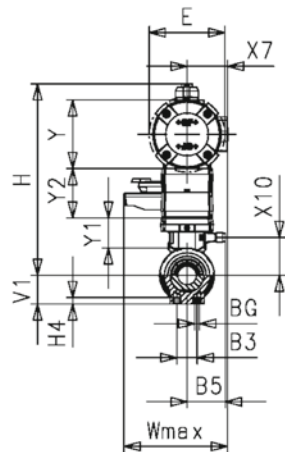
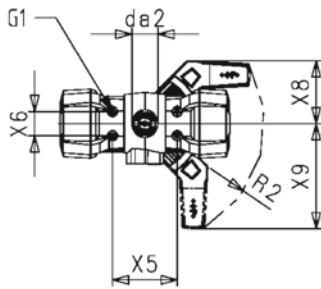
**PVC-C Ball valve type 546 Pro with PPA
FO (fail safe to open)
With manual override
With threaded socket Rp**

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d (mm) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|-----------------------------------|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 10 | 70 | 199 250 792 | 1 | 1.500 | 199 250 812 |
| 20 | 15 | 10 | 185 | 199 250 793 | 1 | 1.500 | 199 250 813 |
| 25 | 20 | 10 | 350 | 199 250 794 | 1 | 1.600 | 199 250 814 |
| 32 | 25 | 10 | 700 | 199 250 795 | 1 | 1.700 | 199 250 815 |
| 40 | 32 | 10 | 1000 | 199 250 796 | 1 | 2.800 | 199 250 816 |
| 50 | 40 | 10 | 1600 | 199 250 797 | 1 | 3.100 | 199 250 817 |
| 63 | 50 | 10 | 3100 | 199 250 798 | 1 | 4.000 | 199 250 818 |

| d (mm) | Thread Type | Actuator | DE1 (mm) | V1 (mm) | H4 (mm) | M1 (mm) | M2 (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lz2 (mm) | Lmax (mm) |
|-----------|-------------|----------|-------------|------------|------------|------------|------------|------------|-----------|------------|-------------|-------------|--------------|
| 16 | Rp | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 |
| 20 | Rp | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 |
| 25 | Rp | PPA08 | 58 | 30 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 33 | 33 | 159 |
| 32 | Rp | PPA15 | 68 | 36 | 12 | 106 | 106 | M5 | G 1/4 | 45 | 36 | 36 | 211 |
| 40 | Rp | PPA15 | 84 | 44 | 15 | 106 | 106 | M5 | G 1/4 | 45 | 43 | 43 | 211 |
| 50 | Rp | PPA40 | 97 | 51 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 45 | 45 | 246 |
| 63 | Rp | PPA40 | 124 | 64 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 51 | 51 | 246 |

| d (mm) | E (mm) | Y1 (mm) | Y (mm) | Y2 (mm) | H (mm) | X10 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) | X8 (mm) | X9 (mm) |
|-----------|-----------|------------|-----------|------------|-----------|-------------|------------|------------|--------------|------------|-------------|------------|------------|------------|------------|
| 16 | 74 | 35 | 75 | 60 | 215 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 |
| 20 | 74 | 35 | 75 | 60 | 215 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 |
| 25 | 74 | 35 | 75 | 60 | 219 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 |
| 32 | 94 | 35 | 88 | 60 | 238 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 |
| 40 | 94 | 33 | 88 | 60 | 244 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 |
| 50 | 120 | 33 | 111 | 60 | 273 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 |
| 63 | 120 | 36 | 111 | 60 | 288 | 36 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 |

| d (mm) | R2 (mm) | X7 (mm) | H2 (mm) | P1 (mm) | P2 (mm) | z (mm) |
|-----------|------------|------------|------------|------------|------------|-----------|
| 16 | R150 | 43 | 20 | 14 | 14 | 64 |
| 20 | R150 | 43 | 20 | 16 | 16 | 64 |
| 25 | R150 | 43 | 20 | 19 | 19 | 72 |
| 32 | R150 | 51 | 20 | 22 | 22 | 79 |
| 40 | R150 | 51 | 20 | 26 | 26 | 94 |
| 50 | R150 | 62 | 20 | 31 | 31 | 95 |
| 63 | R150 | 62 | 20 | 38 | 38 | 107 |



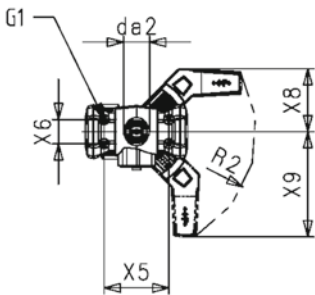
PVC-C Ball valve type 546 Pro P
DA (Double acting)
With manual override
With threaded socket Rp

Model:

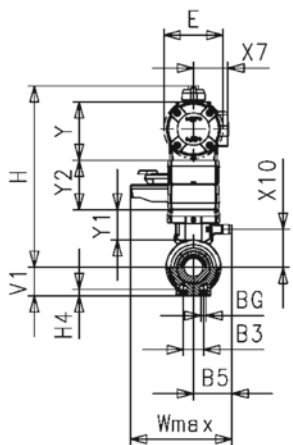
- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90°<) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

Option:

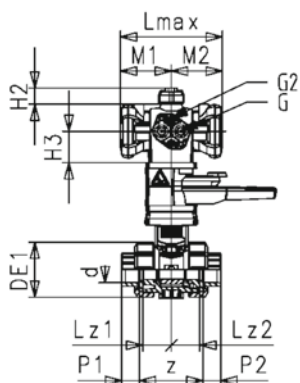
- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d (mm) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|-----------------------------------|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 10 | 70 | 199 250 832 | 1 | 1.500 | 199 250 852 |
| 20 | 15 | 10 | 185 | 199 250 833 | 1 | 1.500 | 199 250 853 |
| 25 | 20 | 10 | 350 | 199 250 834 | 1 | 1.600 | 199 250 854 |
| 32 | 25 | 10 | 700 | 199 250 835 | 1 | 1.700 | 199 250 855 |
| 40 | 32 | 10 | 1000 | 199 250 836 | 1 | 2.800 | 199 250 856 |
| 50 | 40 | 10 | 1600 | 199 250 837 | 1 | 3.100 | 199 250 857 |
| 63 | 50 | 10 | 3100 | 199 250 838 | 1 | 4.000 | 199 250 858 |



| d (mm) | Actuator | DE1 (mm) | V1 (mm) | H4 (mm) | M1 (mm) | M2 (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lz2 (mm) | Lmax (mm) | E (mm) | Y1 (mm) |
|-----------|----------|-------------|------------|------------|------------|------------|------------|-----------|------------|-------------|-------------|--------------|-----------|------------|
| 16 | PPA08 | 50 | 27 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 28 | 28 | 128 | 74 | 35 |
| 20 | PPA08 | 50 | 27 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 28 | 28 | 128 | 74 | 35 |
| 25 | PPA08 | 58 | 30 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 33 | 33 | 128 | 74 | 35 |
| 32 | PPA08 | 68 | 36 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 36 | 36 | 128 | 94 | 35 |
| 40 | PPA15 | 84 | 44 | 15 | 83 | 83 | M5 | G 1/4 | 45 | 43 | 43 | 165 | 94 | 33 |
| 50 | PPA15 | 97 | 51 | 15 | 83 | 83 | M5 | G 1/4 | 45 | 45 | 45 | 165 | 120 | 33 |
| 63 | PPA40 | 124 | 64 | 15 | 92 | 92 | M5 | G 1/4 | 56 | 51 | 51 | 184 | 120 | 36 |



| d (mm) | Y (mm) | Y2 (mm) | H (mm) | X10 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) | X8 (mm) | X9 (mm) | R2 (mm) | X7 (mm) |
|-----------|-----------|------------|-----------|-------------|------------|------------|--------------|------------|-------------|------------|------------|------------|------------|------------|------------|
| 16 | 75 | 60 | 230 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 20 | 75 | 60 | 230 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 25 | 75 | 60 | 239 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 32 | 75 | 60 | 239 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 40 | 88 | 60 | 271 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 50 | 88 | 60 | 271 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 63 | 111 | 60 | 293 | 36 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 62 |

| d (mm) | H2 (mm) | P1 (mm) | P2 (mm) | z (mm) |
|-----------|------------|------------|------------|-----------|
| 16 | 20 | 12 | 12 | 68 |
| 20 | 20 | 14 | 14 | 67 |
| 25 | 20 | 17 | 17 | 76 |
| 32 | 20 | 21 | 21 | 82 |
| 40 | 20 | 24 | 24 | 98 |
| 50 | 20 | 29 | 29 | 99 |
| 63 | 20 | 36 | 36 | 111 |



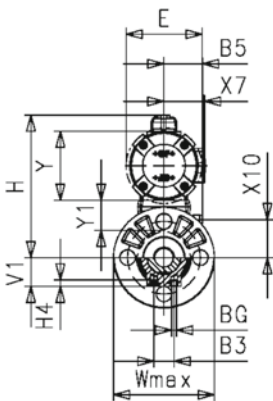
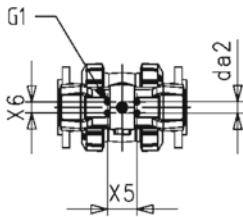
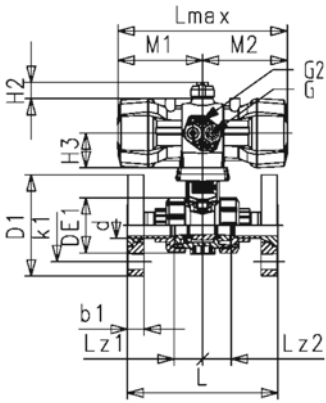
**PVC-C Ball valve type 546 Pro with PPA
FC (Fail safe to close)
Without manual override
With backing flanges PPst metric
4.2 bar control pressure**

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 4.2 bar (60.9 psi)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)
- Overall length according to EN 558 (basic series: row 1)
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| Size (inch) | PN (bar) | DN (mm) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|----------------|-------------|------------|--|--------------------|-------------------|-------------|--------------------|
| | 10 | 65 | | 199 254 609 | 1 | 12.300 | 199 254 619 |
| 3 | 10 | 80 | 7000 | 199 254 610 | 1 | 15.800 | 199 254 620 |
| | 10 | 100 | | 199 254 611 | 1 | 23.200 | 199 254 621 |

| Size (inch) | Actuator | DE1 (mm) | M1 (mm) | M2 (mm) | Lmax (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lz2 (mm) | b1 (mm) | k1 (mm) | D1 (mm) | L (mm) |
|----------------|----------|-------------|------------|------------|--------------|------------|-----------|------------|-------------|-------------|------------|------------|------------|-----------|
| | PPA80 | 166 | 172 | 172 | 343 | M6 | G 1/5 | 66 | 68 | 68 | 29 | 140 | 175 | 290 |
| 3 | PPA80 | 200 | 172 | 172 | 343 | M7 | G 1/6 | 66 | 71 | 71 | 31 | 150 | 185 | 310 |
| | PPA80 | 238 | 172 | 172 | 343 | M8 | G 1/7 | 66 | 82 | 82 | 34 | 175 | 210 | 350 |

| Size (inch) | X7 (mm) | E (mm) | Y (mm) | H (mm) | H2 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | V1 (mm) | H4 (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) |
|----------------|------------|-----------|-----------|-----------|------------|------------|------------|--------------|------------|------------|------------|-------------|------------|------------|
| | 74 | 142 | 111 | 307 | 20 | 70 | M8 | 175 | 85 | 15 | M5 | 33 | 30 | 80 |
| 3 | 74 | 142 | 111 | 319 | 20 | 70 | M8 | 185 | 105 | 15 | M5 | 33 | 30 | 80 |
| | 74 | 142 | 111 | 326 | 20 | 120 | M12 | 210 | 123 | 22 | M5 | 33 | 30 | 80 |



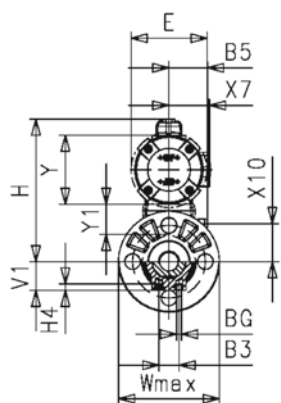
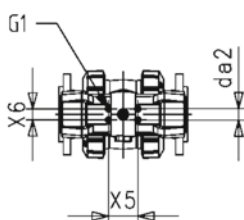
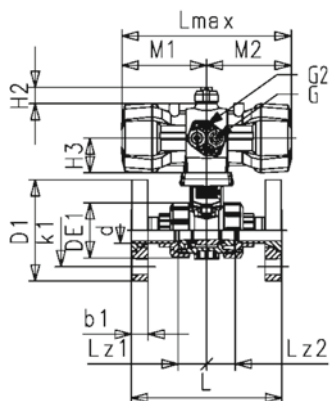
PVC-C Ball valve type 546 Pro with PPA
FO (Fail safe to open)
Without manual override
With backing flanges PPst metric
4.2 bar control pressure

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 4.2 bar (60.9 psi)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)
- Overall length according to EN 558 (basic series: row 1)
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| Size (inch) | PN (bar) | DN (mm) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|----------------|-------------|------------|--|--------------------|-------------------|-------------|--------------------|
| | 10 | 65 | | 199 254 629 | 1 | 12.300 | 199 254 639 |
| 3 | 10 | 80 | 7000 | 199 254 630 | 1 | 15.800 | 199 254 640 |
| | 10 | 100 | | 199 254 631 | 1 | 23.200 | 199 254 641 |

| Size (inch) | Actuator | DE1 (mm) | M1 (mm) | M2 (mm) | Lmax (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lz2 (mm) | b1 (mm) | k1 (mm) | D1 (mm) | L (mm) |
|----------------|----------|-------------|------------|------------|--------------|------------|-----------|------------|-------------|-------------|------------|------------|------------|-----------|
| | PPA80 | 166 | 172 | 172 | 343 | M6 | G 1/5 | 66 | 68 | 68 | 29 | 140 | 175 | 290 |
| 3 | PPA80 | 200 | 172 | 172 | 343 | M7 | G 1/6 | 66 | 71 | 71 | 31 | 150 | 185 | 310 |
| | PPA80 | 238 | 172 | 172 | 343 | M8 | G 1/7 | 66 | 82 | 82 | 34 | 175 | 210 | 350 |

| Size (inch) | X7 (mm) | E (mm) | Y (mm) | H (mm) | H2 (mm) | B3 (mm) | BG | Wmax (mm) | V1 (mm) | H4 (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) |
|----------------|------------|-----------|-----------|-----------|------------|------------|-----|--------------|------------|------------|------------|-------------|------------|------------|
| | 74 | 142 | 111 | 307 | 20 | 70 | M8 | 175 | 85 | 15 | M5 | 33 | 30 | 80 |
| 3 | 74 | 142 | 111 | 319 | 20 | 70 | M8 | 185 | 105 | 15 | M5 | 33 | 30 | 80 |
| | 74 | 142 | 111 | 326 | 20 | 120 | M12 | 210 | 123 | 22 | M5 | 33 | 30 | 80 |



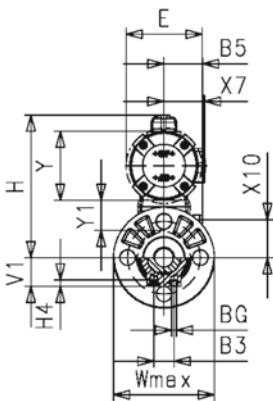
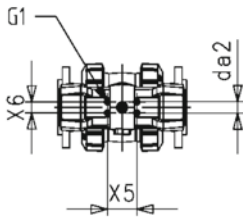
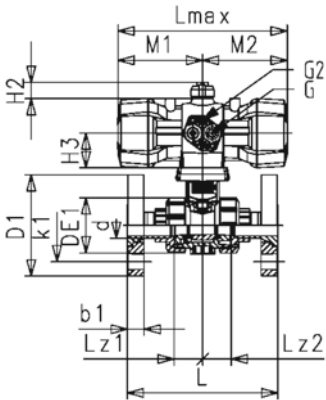
**PVC-C Ball valve type 546 Pro with PPA
DA (Double acting)
Without manual override
With backing flanges PPst metric
4.2 bar control pressure**

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 4.2 bar (60.9 psi)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)
- Overall length according to EN 558 (basic series: row 1)
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| Size (inch) | PN (bar) | DN (mm) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|----------------|-------------|------------|--|--------------------|-------------------|--------------------|-------------------|
| | 10 | 65 | | 199 254 649 | 1 11.100 | 199 254 659 | 1 11.100 |
| 3 | 10 | 80 | 7000 | 199 254 650 | 1 15.100 | 199 254 660 | 1 15.100 |
| | 10 | 100 | | 199 254 651 | 1 21.500 | 199 254 661 | 1 21.500 |

| Size (inch) | Actuator | DE1 (mm) | M1 (mm) | M2 (mm) | Lmax (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lz2 (mm) | b1 (mm) | k1 (mm) | D1 (mm) | L (mm) |
|----------------|----------|-------------|------------|------------|--------------|------------|-----------|------------|-------------|-------------|------------|------------|------------|-----------|
| | PPA80 | 166 | 92 | 92 | 184 | M6 | G 1/5 | 66 | 68 | 68 | 29 | 140 | 175 | 290 |
| 3 | PPA80 | 200 | 92 | 92 | 184 | M7 | G 1/6 | 66 | 71 | 71 | 31 | 150 | 185 | 310 |
| | PPA80 | 238 | 131 | 131 | 261 | M8 | G 1/7 | 66 | 82 | 82 | 34 | 175 | 210 | 350 |

| Size (inch) | X7 (mm) | E (mm) | Y (mm) | H (mm) | H2 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | V1 (mm) | H4 (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) |
|----------------|------------|-----------|-----------|-----------|------------|------------|------------|--------------|------------|------------|------------|-------------|------------|------------|
| | 74 | 142 | 111 | 307 | 20 | 70 | M8 | 175 | 85 | 15 | M5 | 33 | 30 | 80 |
| 3 | 74 | 142 | 111 | 319 | 20 | 70 | M8 | 185 | 105 | 15 | M5 | 33 | 30 | 80 |
| | 74 | 142 | 111 | 326 | 20 | 120 | M12 | 210 | 123 | 22 | M5 | 33 | 30 | 80 |



**PVC-C Ball valve type 546 Pro with PPA
DA (Double acting)
With threaded socket Rp**

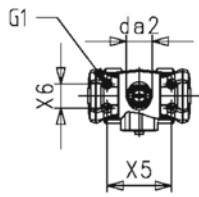
Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90°<) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

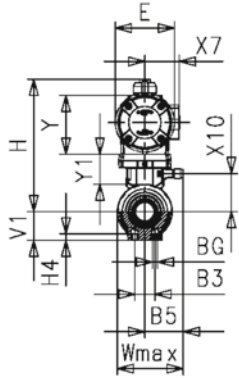
Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve

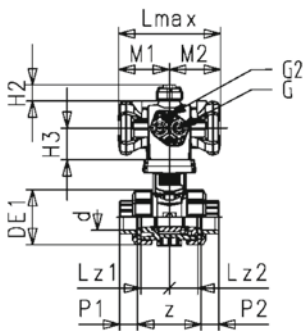




| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|--|--------------|-------------------|-------------|-------------------|
| 16 | 10 | 10 | 70 | 199 250 942 | 1 | 1.200 | 199 250 952 |
| 20 | 15 | 10 | 185 | 199 250 943 | 1 | 1.200 | 199 250 953 |
| 25 | 20 | 10 | 350 | 199 250 944 | 1 | 1.300 | 199 250 954 |
| 32 | 25 | 10 | 700 | 199 250 945 | 1 | 1.400 | 199 250 955 |
| 40 | 32 | 10 | 1000 | 199 250 946 | 1 | 2.500 | 199 250 956 |
| 50 | 40 | 10 | 1600 | 199 250 947 | 1 | 2.800 | 199 250 957 |
| 63 | 50 | 10 | 3100 | 199 250 948 | 1 | 3.700 | 199 250 958 |
| 75 | 65 | 10 | 5000 | 199 250 949 | 1 | 7.100 | 199 250 959 |
| 90 | 80 | 10 | 7000 | 199 250 950 | 1 | 10.300 | 199 250 960 |
| 110 | 100 | 10 | 11000 | 199 250 951 | 1 | 14.800 | 199 250 961 |



| d (mm) | Thread Type | Actuator | DE1 (mm) | V1 (mm) | H4 (mm) | M1 (mm) | M2 (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lz2 (mm) | Lmax (mm) |
|-----------|-------------|----------|-------------|------------|------------|------------|------------|------------|-----------|------------|-------------|-------------|--------------|
| 16 | Rp | PPA08 | 50 | 27 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 28 | 28 | 128 |
| 20 | Rp | PPA08 | 50 | 27 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 28 | 28 | 128 |
| 25 | Rp | PPA08 | 58 | 30 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 33 | 33 | 128 |
| 32 | Rp | PPA08 | 68 | 36 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 36 | 36 | 128 |
| 40 | Rp | PPA15 | 84 | 44 | 15 | 83 | 83 | M5 | G 1/4 | 45 | 43 | 43 | 165 |
| 50 | Rp | PPA15 | 97 | 51 | 15 | 83 | 83 | M5 | G 1/4 | 45 | 45 | 45 | 165 |
| 63 | Rp | PPA40 | 124 | 64 | 15 | 92 | 92 | M5 | G 1/4 | 56 | 51 | 51 | 184 |
| 75 | Rp | PPA40 | 166 | 85 | 15 | 92 | 92 | M5 | G 1/4 | 66 | 68 | 68 | 184 |
| 90 | Rp | PPA40 | 200 | 105 | 15 | 92 | 92 | M5 | G 1/4 | 66 | 71 | 71 | 184 |
| 110 | Rp | PPA80 | 238 | 123 | 22 | 131 | 131 | M5 | G 1/4 | 66 | 82 | 82 | 261 |



| d (mm) | E (mm) | Y1 (mm) | Y (mm) | H (mm) | X10 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) | X7 (mm) | H2 (mm) | P1 (mm) |
|-----------|-----------|------------|-----------|-----------|-------------|------------|------------|--------------|------------|-------------|------------|------------|------------|------------|------------|
| 16 | 74 | 35 | 75 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 12 |
| 20 | 74 | 35 | 75 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 14 |
| 25 | 74 | 35 | 75 | 159 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 17 |
| 32 | 74 | 35 | 75 | 165 | 35 | 25 | M6 | 93 | M5 | 33 | 30 | 80 | 43 | 20 | 21 |
| 40 | 94 | 33 | 88 | 184 | 33 | 45 | M8 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 24 |
| 50 | 94 | 33 | 88 | 190 | 33 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 51 | 20 | 29 |
| 63 | 120 | 36 | 111 | 228 | 36 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 36 |
| 75 | 142 | | 111 | 287 | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 62 | 20 | 45 |
| 90 | 142 | | 111 | 299 | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 62 | 20 | 52 |
| 110 | 142 | | 131 | 326 | | 120 | M12 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 64 |

| d (mm) | P2 (mm) | z (mm) |
|-----------|------------|-----------|
| 16 | 12 | 68 |
| 20 | 14 | 67 |
| 25 | 17 | 76 |
| 32 | 21 | 82 |
| 40 | 24 | 98 |
| 50 | 29 | 99 |
| 63 | 36 | 111 |
| 75 | 45 | 144 |
| 90 | 52 | 151 |
| 110 | 64 | 174 |



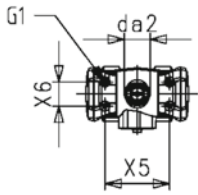
PVC-C Ball valve type 546 Pro P
DA (Double acting)
With solvent cement sockets metric

Model:

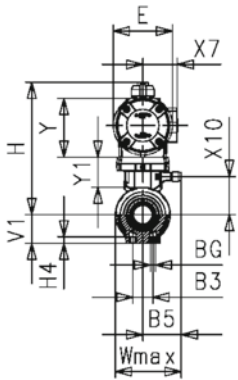
- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

Option:

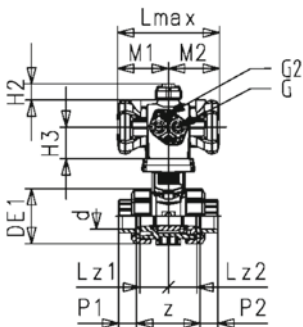
- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d (mm) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|-----------------------------------|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 10 | 70 | 199 250 602 | 1 | 1.159 | 199 250 612 |
| 20 | 15 | 10 | 185 | 199 250 603 | 1 | 1.159 | 199 250 613 |
| 25 | 20 | 10 | 350 | 199 250 604 | 1 | 1.276 | 199 250 614 |
| 32 | 25 | 10 | 700 | 199 250 605 | 1 | 1.400 | 199 250 615 |
| 40 | 32 | 10 | 1000 | 199 250 606 | 1 | 2.451 | 199 250 616 |
| 50 | 40 | 10 | 1600 | 199 250 607 | 1 | 2.773 | 199 250 617 |
| 63 | 50 | 10 | 3100 | 199 250 608 | 1 | 3.631 | 199 250 618 |



| d (mm) | Actuator | DE1 (mm) | V1 (mm) | H4 (mm) | M1 (mm) | M2 (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lz2 (mm) | Lmax (mm) | E (mm) | Y1 (mm) |
|-----------|----------|-------------|------------|------------|------------|------------|------------|-----------|------------|-------------|-------------|--------------|-----------|------------|
| 16 | PPA08 | 50 | 27 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 28 | 28 | 128 | 74 | 35 |
| 20 | PPA08 | 50 | 27 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 28 | 28 | 128 | 74 | 35 |
| 25 | PPA08 | 58 | 30 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 33 | 33 | 128 | 74 | 35 |
| 32 | PPA08 | 68 | 36 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 36 | 36 | 128 | 74 | 35 |
| 40 | PPA15 | 84 | 44 | 15 | 83 | 83 | M5 | G 1/4 | 45 | 43 | 43 | 165 | 94 | 33 |
| 50 | PPA15 | 97 | 51 | 15 | 83 | 83 | M5 | G 1/4 | 45 | 45 | 45 | 165 | 94 | 33 |
| 63 | PPA40 | 124 | 64 | 15 | 92 | 92 | M5 | G 1/4 | 56 | 51 | 51 | 184 | 120 | 36 |



| d (mm) | Y (mm) | H (mm) | X10 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) | X7 (mm) | H2 (mm) | P1 (mm) | P2 (mm) | z (mm) |
|-----------|-----------|-----------|-------------|------------|------------|--------------|------------|-------------|------------|------------|------------|------------|------------|------------|-----------|
| 16 | 75 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 12 | 12 | 68 |
| 20 | 75 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 14 | 14 | 67 |
| 25 | 75 | 159 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 17 | 17 | 76 |
| 32 | 75 | 165 | 35 | 25 | M6 | 93 | M5 | 33 | 30 | 80 | 43 | 20 | 21 | 21 | 82 |
| 40 | 88 | 184 | 33 | 45 | M8 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 24 | 24 | 98 |
| 50 | 88 | 190 | 33 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 51 | 20 | 29 | 29 | 99 |
| 63 | 111 | 228 | 36 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 36 | 36 | 111 |



**PVC-C Ball valve type 546 Pro with PPA
FO (Fail safe to open)
With threaded socket Rp**

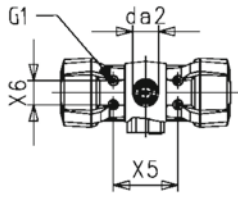
Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90°<) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

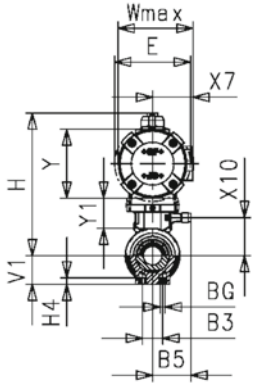
Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve

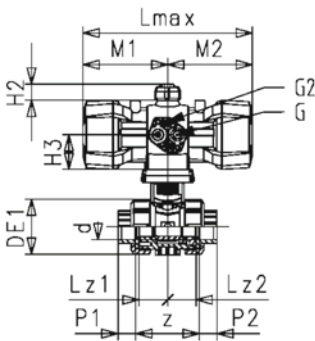




| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|--|--------------|-------------------|-------------|-------------------|
| 16 | 10 | 10 | 70 | 199 250 912 | 1 | 1.200 | 199 250 932 |
| 20 | 15 | 10 | 185 | 199 250 913 | 1 | 1.200 | 199 250 933 |
| 25 | 20 | 10 | 350 | 199 250 914 | 1 | 1.300 | 199 250 934 |
| 32 | 25 | 10 | 700 | 199 250 915 | 1 | 1.400 | 199 250 935 |
| 40 | 32 | 10 | 1000 | 199 250 916 | 1 | 2.500 | 199 250 936 |
| 50 | 40 | 10 | 1600 | 199 250 917 | 1 | 2.800 | 199 250 937 |
| 63 | 50 | 10 | 3100 | 199 250 918 | 1 | 3.700 | 199 250 938 |
| 75 | 65 | 10 | 5000 | 199 250 919 | 1 | 8.200 | 199 250 939 |
| 90 | 80 | 10 | 7000 | 199 250 920 | 1 | 11.000 | 199 250 940 |
| 110 | 100 | 10 | 11000 | 199 250 921 | 1 | 16.500 | 199 250 941 |



| d (mm) | Thread Type | Actuator | DE1 (mm) | V1 (mm) | H4 (mm) | M1 (mm) | M2 (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lmax (mm) | E (mm) |
|-----------|-------------|----------|-------------|------------|------------|------------|------------|------------|-----------|------------|-------------|--------------|-----------|
| 16 | Rp | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 159 | 74 |
| 20 | Rp | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 159 | 74 |
| 25 | Rp | PPA08 | 58 | 30 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 33 | 159 | 74 |
| 32 | Rp | PPA15 | 68 | 36 | 12 | 106 | 106 | M5 | G 1/4 | 45 | 36 | 211 | 94 |
| 40 | Rp | PPA15 | 84 | 44 | 15 | 106 | 106 | M5 | G 1/4 | 45 | 43 | 211 | 94 |
| 50 | Rp | PPA40 | 97 | 51 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 45 | 246 | 120 |
| 63 | Rp | PPA40 | 124 | 64 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 51 | 246 | 120 |
| 75 | Rp | PPA80 | 166 | 85 | 15 | 172 | 172 | M5 | G 1/4 | 66 | 68 | 343 | 142 |
| 90 | Rp | PPA80 | 200 | 105 | 15 | 172 | 172 | M5 | G 1/4 | 66 | 71 | 343 | 142 |
| 110 | Rp | PPA80 | 238 | 123 | 22 | 172 | 172 | M5 | G 1/4 | 66 | 82 | 343 | 142 |



| d (mm) | Y1 (mm) | Y (mm) | H (mm) | X10 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) | X7 (mm) | H2 (mm) | P1 (mm) | P2 (mm) |
|-----------|------------|-----------|-----------|-------------|------------|------------|--------------|------------|-------------|------------|------------|------------|------------|------------|------------|
| 16 | 35 | 75 | 155 | 335 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 2 | 12 | 12 |
| 20 | 35 | 75 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 14 | 14 |
| 25 | 35 | 75 | 159 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 17 | 17 |
| 32 | 35 | 88 | 178 | 35 | 25 | M6 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 21 | 21 |
| 40 | 33 | 88 | 184 | 33 | 45 | M8 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 24 | 24 |
| 50 | 33 | 111 | 213 | 33 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 29 | 29 |
| 63 | 36 | 111 | 228 | 36 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 36 | 36 |
| 75 | 131 | 307 | | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 43 | 43 |
| 90 | 131 | 319 | | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 50 | 50 |
| 110 | 131 | 326 | | | 120 | M12 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 62 | 62 |

| d (mm) | z (mm) |
|-----------|-----------|
| 16 | 68 |
| 20 | 67 |
| 25 | 76 |
| 32 | 82 |
| 40 | 98 |
| 50 | 99 |
| 63 | 111 |
| 75 | 148 |
| 90 | 156 |
| 110 | 178 |



**PVC-C Ball valve type 546 Pro with PPA
FO (Fail safe to open)
With solvent cement spigots**

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

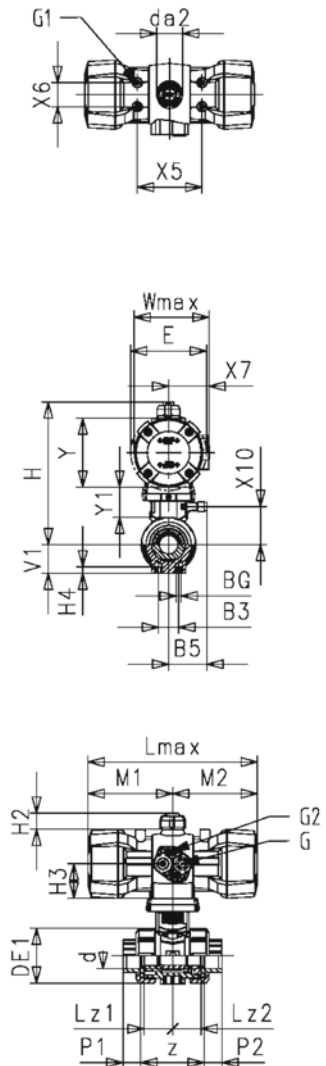
Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve

| d | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|-------|---------------------|-------------|------|--------|-------------|------|--------|
| (mm) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | (kg) | (kg) | Code | (kg) | (kg) |
| | | | (l/min) | | | | | | |
| 16 | 10 | 10 | 70 | 199 250 582 | 1 | 1.159 | 199 250 592 | 1 | 1.159 |
| 20 | 15 | 10 | 350 | 199 250 583 | 1 | 1.159 | 199 250 593 | 1 | 1.159 |
| 25 | 20 | 10 | 185 | 199 250 584 | 1 | 1.276 | 199 250 594 | 1 | 1.276 |
| 32 | 25 | 10 | 700 | 199 250 585 | 1 | 1.400 | 199 250 595 | 1 | 1.400 |
| 40 | 32 | 10 | 1000 | 199 250 586 | 1 | 2.451 | 199 250 596 | 1 | 2.451 |
| 50 | 40 | 10 | 1600 | 199 250 587 | 1 | 2.773 | 199 250 597 | 1 | 2.773 |
| 63 | 50 | 10 | 3100 | 199 250 588 | 1 | 3.631 | 199 250 598 | 1 | 3.631 |
| 75 | 65 | 10 | 5000 | 199 250 589 | 1 | 8.300 | 199 250 599 | 1 | 8.300 |
| 90 | 80 | 10 | 7000 | 199 250 590 | 1 | 11.000 | 199 250 600 | 1 | 11.000 |
| 110 | 100 | 10 | 11000 | 199 250 591 | 1 | 16.700 | 199 250 601 | 1 | 16.700 |

| d | Actuator | DE1 | V1 | H4 | M1 | M2 | G2 | G | H3 | Lz1 | Lz2 | Lmax | E | Y1 |
|------|----------|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 20 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 25 | PPA08 | 58 | 30 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 33 | 33 | 159 | 74 | 35 |
| 32 | PPA15 | 68 | 36 | 12 | 106 | 106 | M5 | G 1/4 | 45 | 36 | 36 | 211 | 94 | 35 |
| 40 | PPA15 | 84 | 44 | 15 | 106 | 106 | M5 | G 1/4 | 45 | 43 | 43 | 211 | 94 | 33 |
| 50 | PPA40 | 97 | 51 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 45 | 45 | 246 | 120 | 33 |
| 63 | PPA40 | 124 | 64 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 51 | 51 | 246 | 120 | 36 |
| 75 | PPA80 | 166 | 85 | 15 | 172 | 172 | M5 | G 1/5 | 66 | 68 | 68 | 343 | 142 | |
| 90 | PPA80 | 200 | 105 | 15 | 172 | 172 | M5 | G 1/6 | 66 | 71 | 71 | 343 | 142 | |
| 110 | PPA80 | 238 | 123 | 22 | 172 | 172 | M5 | G 1/7 | 66 | 82 | 82 | 343 | 142 | |

| d | Y | H | X10 | B3 | BG | Wmax | G1 | da2 | X6 | X5 | X7 | H2 | P1 | P2 | z |
|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | 75 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 12 | 12 | 68 |
| 20 | 75 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 14 | 14 | 67 |
| 25 | 75 | 159 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 17 | 17 | 76 |
| 32 | 88 | 178 | 35 | 25 | M6 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 21 | 21 | 82 |
| 40 | 88 | 184 | 33 | 45 | M8 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 24 | 24 | 98 |
| 50 | 111 | 213 | 33 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 29 | 29 | 99 |
| 63 | 111 | 228 | 36 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 36 | 36 | 111 |
| 75 | 131 | 307 | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 45 | 45 | 144 |
| 90 | 131 | 319 | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 52 | 52 | 151 |
| 110 | 131 | 326 | | 120 | M12 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 64 | 64 | 174 |





PVC-C Ball valve type 546 Pro with PPA
FO (Fail safe to open)
With solvent cement sockets metric

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

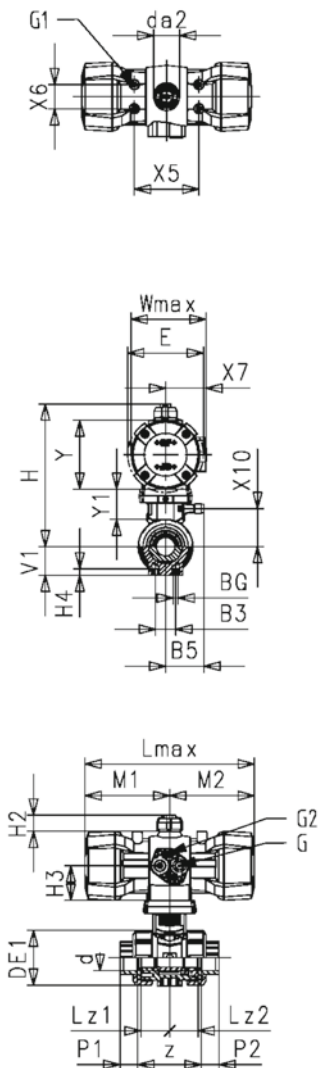
Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve

| d | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|-------|---------------------|-------------|----|--------|-------------|----|--------|
| (mm) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| | | | (l/min) | | | | | | |
| 16 | 10 | 10 | 70 | 199 250 562 | 1 | 1.159 | 199 250 572 | 1 | 1.159 |
| 20 | 15 | 10 | 185 | 199 250 563 | 1 | 1.159 | 199 250 573 | 1 | 1.159 |
| 25 | 20 | 10 | 350 | 199 250 564 | 1 | 1.276 | 199 250 574 | 1 | 1.276 |
| 32 | 25 | 10 | 700 | 199 250 565 | 1 | 1.400 | 199 250 575 | 1 | 1.400 |
| 40 | 32 | 10 | 1000 | 199 250 566 | 1 | 2.451 | 199 250 576 | 1 | 2.451 |
| 50 | 40 | 10 | 1600 | 199 250 567 | 1 | 2.773 | 199 250 577 | 1 | 2.773 |
| 63 | 50 | 10 | 3100 | 199 250 568 | 1 | 3.631 | 199 250 578 | 1 | 3.631 |
| 75 | 65 | 10 | 5000 | 199 250 569 | 1 | 8.100 | 199 250 579 | 1 | 8.100 |
| 90 | 80 | 10 | 7000 | 199 250 570 | 1 | 10.800 | 199 250 580 | 1 | 10.800 |
| 110 | 100 | 10 | 11000 | 199 250 571 | 1 | 16.500 | 199 250 581 | 1 | 16.500 |

| d | Actuator | DE1 | V1 | H4 | M1 | M2 | G2 | G | H3 | Lz1 | Lmax | E | Y1 | Y |
|------|----------|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 159 | 74 | 35 | 75 |
| 20 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 159 | 74 | 35 | 75 |
| 25 | PPA08 | 58 | 30 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 33 | 159 | 74 | 35 | 75 |
| 32 | PPA15 | 68 | 36 | 12 | 106 | 106 | M5 | G 1/4 | 45 | 36 | 211 | 94 | 35 | 88 |
| 40 | PPA15 | 84 | 44 | 15 | 106 | 106 | M5 | G 1/4 | 45 | 43 | 211 | 94 | 33 | 88 |
| 50 | PPA40 | 97 | 51 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 45 | 246 | 120 | 33 | 111 |
| 63 | PPA40 | 124 | 64 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 51 | 246 | 120 | 36 | 111 |
| 75 | PPA80 | 166 | 85 | 15 | 172 | 172 | M5 | G 1/4 | 66 | 68 | 343 | 142 | | 131 |
| 90 | PPA80 | 200 | 105 | 15 | 172 | 172 | M5 | G 1/4 | 66 | 71 | 343 | 142 | | 131 |
| 110 | PPA80 | 238 | 123 | 22 | 172 | 172 | M5 | G 1/4 | 66 | 82 | 343 | 142 | | 131 |

| d | H | X10 | B3 | BG | Wmax | G1 | da2 | X6 | X5 | X7 | H2 | P1 | P2 | z |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | 155 | 335 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 2 | 12 | 12 | 68 |
| 20 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 14 | 14 | 67 |
| 25 | 159 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 17 | 17 | 76 |
| 32 | 178 | 35 | 25 | M6 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 21 | 21 | 82 |
| 40 | 184 | 33 | 45 | M8 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 24 | 24 | 98 |
| 50 | 213 | 33 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 29 | 29 | 99 |
| 63 | 228 | 36 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 36 | 36 | 111 |
| 75 | 307 | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 43 | 43 | 148 |
| 90 | 319 | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 50 | 50 | 156 |
| 110 | 326 | | 120 | M12 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 62 | 62 | 178 |





**PVC-C Ball valve type 546 Pro with PPA
FC (Fail safe to close)
With threaded socket Rp**

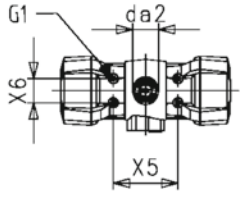
Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90°<) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

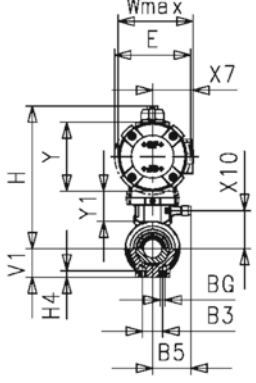
Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve

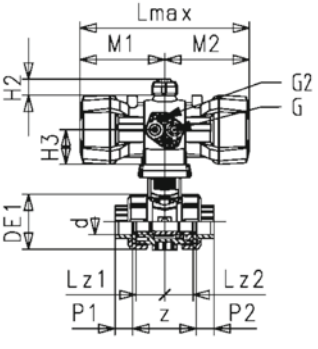




| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|--|--------------|-------------------|-------------|-------------------|
| 16 | 10 | 10 | 70 | 199 250 872 | 1 | 1.200 | 199 250 892 |
| 20 | 15 | 10 | 185 | 199 250 873 | 1 | 1.200 | 199 250 893 |
| 25 | 20 | 10 | 350 | 199 250 874 | 1 | 1.300 | 199 250 894 |
| 32 | 25 | 10 | 700 | 199 250 875 | 1 | 1.400 | 199 250 895 |
| 40 | 32 | 10 | 1000 | 199 250 876 | 1 | 2.500 | 199 250 896 |
| 50 | 40 | 10 | 1600 | 199 250 877 | 1 | 2.800 | 199 250 897 |
| 63 | 50 | 10 | 3100 | 199 250 878 | 1 | 3.700 | 199 250 898 |
| 75 | 65 | 10 | 5000 | 199 250 879 | 1 | 8.200 | 199 250 899 |
| 90 | 80 | 10 | 7000 | 199 250 880 | 1 | 11.000 | 199 250 900 |
| 110 | 100 | 10 | 11000 | 199 250 881 | 1 | 16.500 | 199 250 901 |



| d (mm) | Thread Type | Actuator | DE1 (mm) | V1 (mm) | H4 (mm) | M1 (mm) | M2 (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lmax (mm) | E (mm) |
|-----------|-------------|----------|-------------|------------|------------|------------|------------|------------|-----------|------------|-------------|--------------|-----------|
| 16 | Rp | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 159 | 74 |
| 20 | Rp | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 159 | 74 |
| 25 | Rp | PPA08 | 58 | 30 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 33 | 159 | 74 |
| 32 | Rp | PPA15 | 68 | 36 | 12 | 106 | 106 | M5 | G 1/4 | 45 | 36 | 211 | 94 |
| 40 | Rp | PPA15 | 84 | 44 | 15 | 106 | 106 | M5 | G 1/4 | 45 | 43 | 211 | 94 |
| 50 | Rp | PPA40 | 97 | 51 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 45 | 246 | 120 |
| 63 | Rp | PPA40 | 124 | 64 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 51 | 246 | 120 |
| 75 | Rp | PPA80 | 166 | 85 | 15 | 172 | 172 | M5 | G 1/4 | 66 | 68 | 343 | 142 |
| 90 | Rp | PPA80 | 200 | 105 | 15 | 172 | 172 | M5 | G 1/4 | 66 | 71 | 343 | 142 |
| 110 | Rp | PPA80 | 238 | 123 | 22 | 172 | 172 | M5 | G 1/4 | 66 | 82 | 343 | 142 |



| d (mm) | Y1 (mm) | Y (mm) | H (mm) | X10 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) | X7 (mm) | H2 (mm) | P1 (mm) | P2 (mm) |
|-----------|------------|-----------|-----------|-------------|------------|------------|--------------|------------|-------------|------------|------------|------------|------------|------------|------------|
| 16 | 35 | 75 | 155 | 335 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 2 | 12 | 12 |
| 20 | 35 | 75 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 14 | 14 |
| 25 | 35 | 75 | 159 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 17 | 17 |
| 32 | 35 | 88 | 178 | 35 | 25 | M6 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 21 | 21 |
| 40 | 33 | 88 | 184 | 33 | 45 | M8 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 24 | 24 |
| 50 | 33 | 111 | 213 | 33 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 29 | 29 |
| 63 | 36 | 111 | 228 | 36 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 36 | 36 |
| 75 | 131 | 307 | | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 43 | 43 |
| 90 | 131 | 319 | | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 50 | 50 |
| 110 | 131 | 326 | | | 120 | M12 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 62 | 62 |

| d (mm) | z (mm) |
|-----------|-----------|
| 16 | 68 |
| 20 | 67 |
| 25 | 76 |
| 32 | 82 |
| 40 | 98 |
| 50 | 99 |
| 63 | 111 |
| 75 | 148 |
| 90 | 156 |
| 110 | 178 |



**PVC-C Ball valve type 546 Pro with PPA
FC (Fail safe to close)
With solvent cement spigots**

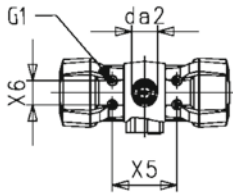
Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

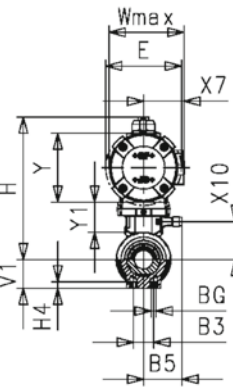
Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve

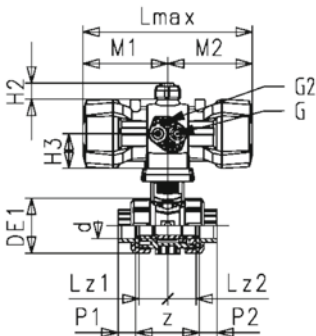
| d | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|-------|---------------------|-------------|----|--------|-------------|----|--------|
| (mm) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| | | | (l/min) | | | | | | |
| 16 | 10 | 10 | 70 | 199 250 542 | 1 | 1.159 | 199 250 552 | 1 | 1.159 |
| 20 | 15 | 10 | 350 | 199 250 543 | 1 | 1.159 | 199 250 553 | 1 | 1.159 |
| 25 | 20 | 10 | 185 | 199 250 544 | 1 | 1.276 | 199 250 554 | 1 | 1.276 |
| 32 | 25 | 10 | 700 | 199 250 545 | 1 | 1.400 | 199 250 555 | 1 | 1.400 |
| 40 | 32 | 10 | 1000 | 199 250 546 | 1 | 2.451 | 199 250 556 | 1 | 2.451 |
| 50 | 40 | 10 | 1600 | 199 250 547 | 1 | 2.773 | 199 250 557 | 1 | 2.773 |
| 63 | 50 | 10 | 3100 | 199 250 548 | 1 | 3.314 | 199 250 558 | 1 | 3.631 |
| 75 | 65 | 10 | 5000 | 199 250 549 | 1 | 8.300 | 199 250 559 | 1 | 8.300 |
| 90 | 80 | 10 | 7000 | 199 250 550 | 1 | 11.000 | 199 250 560 | 1 | 11.000 |
| 110 | 100 | 10 | 11000 | 199 250 551 | 1 | 16.700 | 199 250 561 | 1 | 16.700 |



| d | Actuator | DE1 | V1 | H4 | M1 | M2 | G2 | G | H3 | Lz1 | Lz2 | Lmax | E | Y1 |
|------|----------|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 20 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 25 | PPA08 | 58 | 30 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 33 | 33 | 159 | 74 | 35 |
| 32 | PPA15 | 68 | 36 | 12 | 106 | 106 | M5 | G 1/4 | 45 | 36 | 36 | 211 | 94 | 35 |
| 40 | PPA15 | 84 | 44 | 15 | 106 | 106 | M5 | G 1/4 | 45 | 43 | 43 | 211 | 94 | 33 |
| 50 | PPA40 | 97 | 51 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 45 | 45 | 246 | 120 | 33 |
| 63 | PPA40 | 124 | 64 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 51 | 51 | 246 | 120 | 36 |
| 75 | PPA80 | 166 | 85 | 15 | 172 | 172 | M5 | G 1/5 | 66 | 68 | 68 | 343 | 142 | |
| 90 | PPA80 | 200 | 105 | 15 | 172 | 172 | M5 | G 1/6 | 66 | 71 | 71 | 343 | 142 | |
| 110 | PPA80 | 238 | 123 | 22 | 172 | 172 | M5 | G 1/7 | 66 | 82 | 82 | 343 | 142 | |



| d | Y | H | X10 | B3 | BG | Wmax | G1 | da2 | X6 | X5 | X7 | H2 | P1 | P2 | z |
|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | 75 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 12 | 12 | 68 |
| 20 | 75 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 14 | 14 | 67 |
| 25 | 75 | 159 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 17 | 17 | 76 |
| 32 | 88 | 178 | 35 | 25 | M6 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 21 | 21 | 82 |
| 40 | 88 | 184 | 33 | 45 | M8 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 24 | 24 | 98 |
| 50 | 111 | 213 | 33 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 29 | 29 | 99 |
| 63 | 111 | 228 | 36 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 36 | 36 | 111 |
| 75 | 131 | 307 | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 45 | 45 | 144 |
| 90 | 131 | 319 | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 52 | 52 | 151 |
| 110 | 131 | 326 | | 120 | M12 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 64 | 64 | 174 |





**PVC-C Ball valve type 546 Pro with PPA
FC (Fail safe to close)
With solvent cement sockets metric**

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

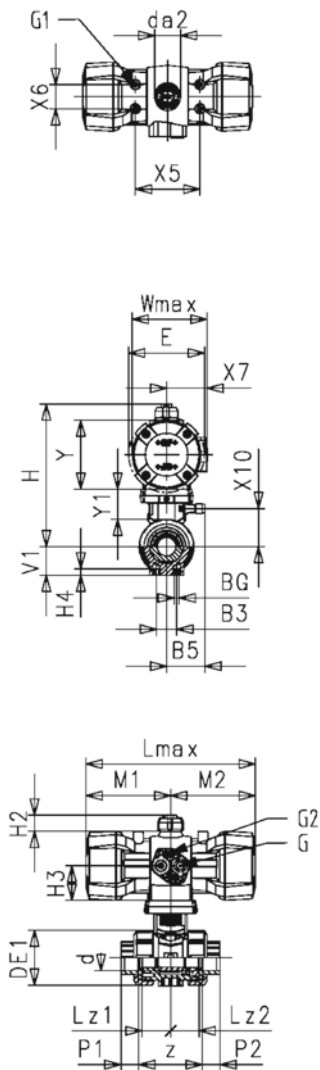
Option:

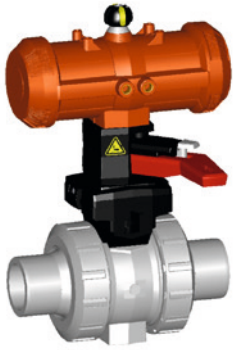
- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve

| d (mm) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|-------------|-----------------------------------|--------------|----|----------------|-------------|----|----------------|
| 16 | 10 | 10 | 70 | 199 250 522 | 1 | 1.159 | 199 250 532 | 1 | 1.159 |
| 20 | 15 | 10 | 185 | 199 250 523 | 1 | 1.553 | 199 250 533 | 1 | 1.159 |
| 25 | 20 | 10 | 350 | 199 250 524 | 1 | 1.276 | 199 250 534 | 1 | 1.276 |
| 32 | 25 | 10 | 700 | 199 250 525 | 1 | 1.400 | 199 250 535 | 1 | 1.262 |
| 40 | 32 | 10 | 1000 | 199 250 526 | 1 | 2.451 | 199 250 536 | 1 | 2.226 |
| 50 | 40 | 10 | 1600 | 199 250 527 | 1 | 2.773 | 199 250 537 | 1 | 2.773 |
| 63 | 50 | 10 | 3100 | 199 250 528 | 1 | 3.250 | 199 250 538 | 1 | 3.631 |
| 75 | 65 | 10 | 5000 | 199 250 529 | 1 | 8.100 | 199 250 539 | 1 | 8.100 |
| 90 | 80 | 10 | 7000 | 199 250 530 | 1 | 10.800 | 199 250 540 | 1 | 10.800 |
| 110 | 100 | 10 | 11000 | 199 250 531 | 1 | 16.500 | 199 250 541 | 1 | 16.500 |

| d (mm) | Actuator | DE1 (mm) | V1 (mm) | H4 (mm) | M1 (mm) | M2 (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lmax (mm) | E (mm) | Y1 (mm) | Y (mm) |
|-----------|----------|-------------|------------|------------|------------|------------|------------|-----------|------------|-------------|--------------|-----------|------------|-----------|
| 16 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 159 | 74 | 35 | 75 |
| 20 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 159 | 74 | 35 | 75 |
| 25 | PPA08 | 58 | 30 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 33 | 159 | 74 | 35 | 75 |
| 32 | PPA15 | 68 | 36 | 12 | 106 | 106 | M5 | G 1/4 | 45 | 36 | 211 | 94 | 35 | 88 |
| 40 | PPA15 | 84 | 44 | 15 | 106 | 106 | M5 | G 1/4 | 45 | 43 | 211 | 94 | 33 | 88 |
| 50 | PPA40 | 97 | 51 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 45 | 246 | 120 | 33 | 111 |
| 63 | PPA40 | 124 | 64 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 51 | 246 | 120 | 36 | 111 |
| 75 | PPA80 | 166 | 85 | 15 | 172 | 172 | M5 | G 1/4 | 66 | 68 | 343 | 142 | | 131 |
| 90 | PPA80 | 200 | 105 | 15 | 172 | 172 | M5 | G 1/4 | 66 | 71 | 343 | 142 | | 131 |
| 110 | PPA80 | 238 | 123 | 22 | 172 | 172 | M5 | G 1/4 | 66 | 82 | 343 | 142 | | 131 |

| d (mm) | H (mm) | X10 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) | X7 (mm) | H2 (mm) | P1 (mm) | P2 (mm) | z (mm) |
|-----------|-----------|-------------|------------|------------|--------------|------------|-------------|------------|------------|------------|------------|------------|------------|-----------|
| 16 | 155 | 335 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 2 | 12 | 12 | 68 |
| 20 | 155 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 14 | 14 | 67 |
| 25 | 159 | 35 | 25 | M6 | 77 | M5 | 33 | 30 | 80 | 43 | 20 | 17 | 17 | 76 |
| 32 | 178 | 35 | 25 | M6 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 21 | 21 | 82 |
| 40 | 184 | 33 | 45 | M8 | 93 | M5 | 33 | 30 | 80 | 51 | 20 | 24 | 24 | 98 |
| 50 | 213 | 33 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 29 | 29 | 99 |
| 63 | 228 | 36 | 45 | M8 | 117 | M5 | 33 | 30 | 80 | 62 | 20 | 36 | 36 | 111 |
| 75 | 307 | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 43 | 43 | 148 |
| 90 | 319 | | 70 | M8 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 50 | 50 | 156 |
| 110 | 326 | | 120 | M12 | 139 | M5 | 33 | 30 | 80 | 74 | 20 | 62 | 62 | 178 |





DN10/15 - 50

PVC-C Ball valve type 546 Pro P
DA (Double acting)
With manual override
With solvent cement spigots metric

Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts

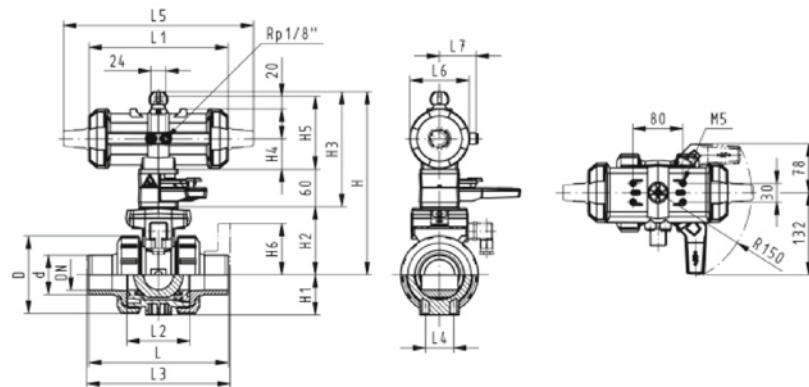
Option:

- Individual configuration of the valve

| d | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|-------|------------|-------------|----|--------|-------------|----|--------|
| (mm) | (mm) | (bar) | (Δp=1 bar) | Code | | (kg) | Code | | (kg) |
| | | | (l/min) | | | | | | |
| 16 | 10 | 10 | 70 | 199 250 502 | 1 | 1.459 | 199 250 512 | 1 | 1.459 |
| 20 | 15 | 10 | 185 | 199 250 503 | 1 | 1.459 | 199 250 513 | 1 | 1.459 |
| 25 | 20 | 10 | 350 | 199 250 504 | 1 | 1.576 | 199 250 514 | 1 | 1.576 |
| 32 | 25 | 10 | 700 | 199 250 505 | 1 | 1.700 | 199 250 515 | 1 | 1.700 |
| 40 | 32 | 10 | 1000 | 199 250 506 | 1 | 2.751 | 199 250 516 | 1 | 2.751 |
| 50 | 40 | 10 | 1600 | 199 250 507 | 1 | 3.073 | 199 250 517 | 1 | 3.073 |
| 63 | 50 | 10 | 3100 | 199 250 508 | 1 | 3.931 | 199 250 518 | 1 | 3.931 |

| d | D | H | H1 | H2 | H3 | H4 | H5 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | 50 | 159 | 27 | 62 | 168 | 40 | 77 | 114 | 194 | 56 | 130 | 25 | 261 | 76 | 48 |
| 20 | 50 | 159 | 27 | 62 | 168 | 40 | 77 | 124 | 194 | 56 | 130 | 25 | 261 | 76 | 48 |
| 25 | 58 | 168 | 30 | 71 | 168 | 40 | 77 | 144 | 194 | 65 | 150 | 25 | 261 | 76 | 48 |
| 32 | 68 | 168 | 36 | 71 | 168 | 40 | 77 | 154 | 194 | 71 | 160 | 25 | 261 | 76 | 48 |
| 40 | 84 | 202 | 44 | 84 | 187 | 51 | 99 | 174 | 224 | 85 | 180 | 45 | 305 | 95 | 59 |
| 50 | 97 | 202 | 51 | 84 | 187 | 51 | 99 | 194 | 224 | 89 | 200 | 45 | 305 | 95 | 59 |
| 63 | 124 | 225 | 64 | 106 | 187 | 51 | 99 | 224 | 224 | 101 | 230 | 45 | 305 | 95 | 59 |

| d | closest |
|--------|---------|
| (mm) | inch |
| (inch) | |
| 16 | ¾ |
| 20 | ½ |
| 25 | ¾ |
| 32 | 1 |
| 40 | 1 ¼ |
| 50 | 1 ½ |
| 63 | 2 |





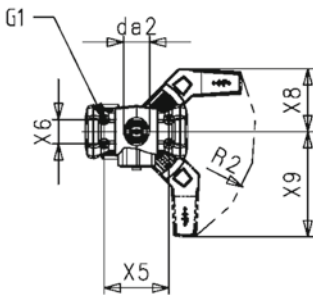
PVC-C Ball valve type 546 Pro P
DA (Double acting)
With manual override
With solvent cement sockets metric

Model:

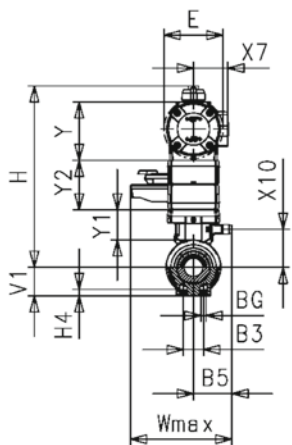
- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90°<) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

Option:

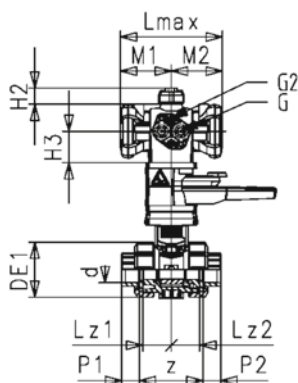
- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|-------|---------------------|-------------|------|--------|-------------|------|--------|
| (mm) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | (kg) | (kg) | Code | (kg) | (kg) |
| | | | (L/min) | | | | | | |
| 16 | 10 | 10 | 70 | 199 250 482 | 1 | 1.459 | 199 250 492 | 1 | 1.459 |
| 20 | 15 | 10 | 185 | 199 250 483 | 1 | 1.459 | 199 250 493 | 1 | 1.459 |
| 25 | 20 | 10 | 350 | 199 250 484 | 1 | 1.576 | 199 250 494 | 1 | 1.576 |
| 32 | 25 | 10 | 700 | 199 250 485 | 1 | 1.269 | 199 250 495 | 1 | 1.700 |
| 40 | 32 | 10 | 1000 | 199 250 486 | 1 | 2.751 | 199 250 496 | 1 | 2.751 |
| 50 | 40 | 10 | 1600 | 199 250 487 | 1 | 3.073 | 199 250 497 | 1 | 3.073 |
| 63 | 50 | 10 | 3100 | 199 250 488 | 1 | 3.931 | 199 250 498 | 1 | 3.931 |



| d | Actuator | DE1 | V1 | H4 | M1 | M2 | G2 | G | H3 | Lz1 | Lz2 | Lmax | E | Y1 |
|------|----------|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | PPA08 | 50 | 27 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 28 | 28 | 128 | 74 | 35 |
| 20 | PPA08 | 50 | 27 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 28 | 28 | 128 | 74 | 35 |
| 25 | PPA08 | 58 | 30 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 33 | 33 | 128 | 74 | 35 |
| 32 | PPA08 | 68 | 36 | 12 | 64 | 64 | M5 | G 1/4 | 41 | 36 | 36 | 128 | 94 | 35 |
| 40 | PPA15 | 84 | 44 | 15 | 83 | 83 | M5 | G 1/4 | 45 | 43 | 43 | 165 | 94 | 33 |
| 50 | PPA15 | 97 | 51 | 15 | 83 | 83 | M5 | G 1/4 | 45 | 45 | 45 | 165 | 120 | 33 |
| 63 | PPA40 | 124 | 64 | 15 | 92 | 92 | M5 | G 1/4 | 56 | 51 | 51 | 184 | 120 | 36 |



| d | Y | Y2 | H | X10 | B3 | BG | Wmax | G1 | da2 | X6 | X5 | X8 | X9 | R2 | X7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | 75 | 60 | 230 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 20 | 75 | 60 | 230 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 25 | 75 | 60 | 239 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 32 | 75 | 60 | 239 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 40 | 88 | 60 | 271 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 50 | 88 | 60 | 271 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 63 | 111 | 60 | 293 | 36 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 62 |

| d | H2 | P1 | P2 | z |
|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | 20 | 12 | 12 | 68 |
| 20 | 20 | 14 | 14 | 67 |
| 25 | 20 | 17 | 17 | 76 |
| 32 | 20 | 21 | 21 | 82 |
| 40 | 20 | 24 | 24 | 98 |
| 50 | 20 | 29 | 29 | 99 |
| 63 | 20 | 36 | 36 | 111 |



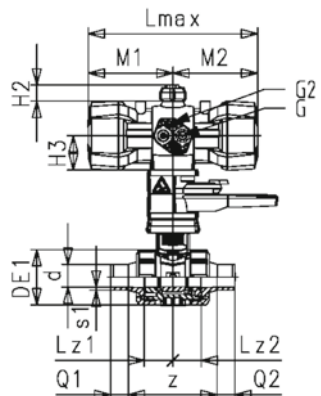
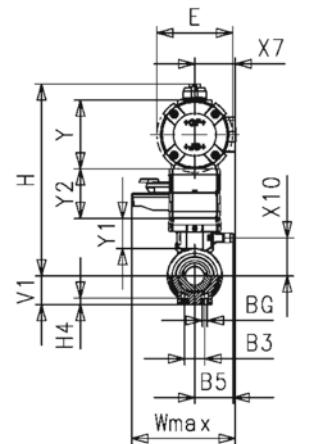
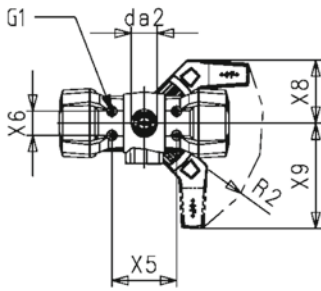
**PVC-C Ball valve type 546 Pro with PPA
FO (Fail safe to open)
With manual override
With solvent cement spigots metric**

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d (mm) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|-----------------------------------|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 10 | 70 | 199 250 462 | 1 | 1.459 | 199 250 472 |
| 20 | 15 | 10 | 185 | 199 250 463 | 1 | 1.459 | 199 250 473 |
| 25 | 20 | 10 | 350 | 199 250 464 | 1 | 1.576 | 199 250 474 |
| 32 | 25 | 10 | 700 | 199 250 465 | 1 | 1.700 | 199 250 475 |
| 40 | 32 | 10 | 1000 | 199 250 466 | 1 | 2.751 | 199 250 476 |
| 50 | 40 | 10 | 1600 | 199 250 467 | 1 | 3.073 | 199 250 477 |
| 63 | 50 | 10 | 3100 | 199 250 468 | 1 | 3.931 | 199 250 478 |

| d (mm) | Actuator | DE1 (mm) | V1 (mm) | H4 (mm) | M1 (mm) | M2 (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lz2 (mm) | Lmax (mm) | E (mm) | Y1 (mm) |
|-----------|----------|-------------|------------|------------|------------|------------|------------|-----------|------------|-------------|-------------|--------------|-----------|------------|
| 16 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 20 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 25 | PPA08 | 58 | 30 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 33 | 33 | 159 | 74 | 35 |
| 32 | PPA15 | 68 | 36 | 12 | 106 | 106 | M5 | G 1/4 | 45 | 36 | 36 | 211 | 94 | 35 |
| 40 | PPA15 | 84 | 44 | 15 | 106 | 106 | M5 | G 1/4 | 45 | 43 | 43 | 211 | 94 | 33 |
| 50 | PPA40 | 97 | 51 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 45 | 45 | 246 | 120 | 33 |
| 63 | PPA40 | 124 | 64 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 51 | 51 | 246 | 120 | 36 |

| d (mm) | Y (mm) | Y2 (mm) | H (mm) | X10 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) | X8 (mm) | X9 (mm) | R2 (mm) | X7 (mm) |
|-----------|-----------|------------|-----------|-------------|------------|------------|--------------|------------|-------------|------------|------------|------------|------------|------------|------------|
| 16 | 75 | 60 | 215 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 20 | 75 | 60 | 215 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 25 | 75 | 60 | 219 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 32 | 88 | 60 | 238 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 40 | 88 | 60 | 244 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 50 | 111 | 60 | 273 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 62 |
| 63 | 111 | 60 | 288 | 36 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 62 |

| d (mm) | H2 (mm) | P1 (mm) | P2 (mm) | z (mm) |
|-----------|------------|------------|------------|-----------|
| 16 | 20 | 13 | 13 | 67 |
| 20 | 20 | 14 | 14 | 67 |
| 25 | 20 | 16 | 16 | 76 |
| 32 | 20 | 18 | 18 | 82 |
| 40 | 20 | 20 | 20 | 96 |
| 50 | 20 | 23 | 23 | 101 |
| 63 | 20 | 27 | 27 | 114 |



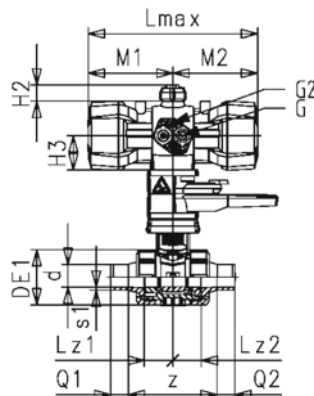
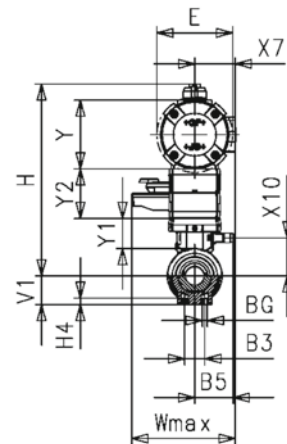
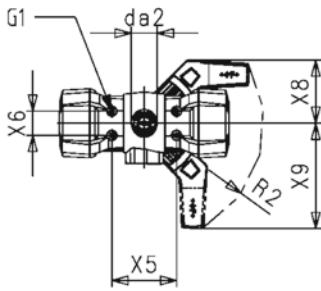
**PVC-C Ball valve type 546 Pro with PPA
FC (Fail safe to close)
With manual override
With solvent cement spigots metric**

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Control time 90°< 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with type 230 – 235 and 546 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d (mm) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|-----------------------------------|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 10 | 70 | 199 250 422 | 1 | 1.459 | 199 250 432 |
| 20 | 15 | 10 | 185 | 199 250 423 | 1 | 1.459 | 199 250 433 |
| 25 | 20 | 10 | 350 | 199 250 424 | 1 | 1.576 | 199 250 434 |
| 32 | 25 | 10 | 700 | 199 250 425 | 1 | 1.700 | 199 250 435 |
| 40 | 32 | 10 | 1000 | 199 250 426 | 1 | 2.751 | 199 250 436 |
| 50 | 40 | 10 | 1600 | 199 250 427 | 1 | 3.073 | 199 250 437 |
| 63 | 50 | 10 | 3100 | 199 250 428 | 1 | 3.931 | 199 250 438 |

| d (mm) | Actuator | DE1 (mm) | V1 (mm) | H4 (mm) | M1 (mm) | M2 (mm) | G2 (mm) | G (mm) | H3 (mm) | Lz1 (mm) | Lz2 (mm) | Lmax (mm) | E (mm) | Y1 (mm) |
|-----------|----------|-------------|------------|------------|------------|------------|------------|-----------|------------|-------------|-------------|--------------|-----------|------------|
| 16 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 20 | PPA08 | 50 | 27 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 28 | 28 | 159 | 74 | 35 |
| 25 | PPA08 | 58 | 30 | 12 | 80 | 80 | M5 | G 1/4 | 41 | 33 | 33 | 159 | 74 | 35 |
| 32 | PPA15 | 68 | 36 | 12 | 106 | 106 | M5 | G 1/4 | 45 | 36 | 36 | 211 | 94 | 35 |
| 40 | PPA15 | 84 | 44 | 15 | 106 | 106 | M5 | G 1/4 | 45 | 43 | 43 | 211 | 94 | 33 |
| 50 | PPA40 | 97 | 51 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 45 | 45 | 246 | 120 | 33 |
| 63 | PPA40 | 124 | 64 | 15 | 123 | 123 | M5 | G 1/4 | 56 | 51 | 51 | 246 | 120 | 36 |

| d (mm) | Y (mm) | Y2 (mm) | H (mm) | X10 (mm) | B3 (mm) | BG (mm) | Wmax (mm) | G1 (mm) | da2 (mm) | X6 (mm) | X5 (mm) | X8 (mm) | X9 (mm) | R2 (mm) | X7 (mm) |
|-----------|-----------|------------|-----------|-------------|------------|------------|--------------|------------|-------------|------------|------------|------------|------------|------------|------------|
| 16 | 75 | 60 | 215 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 20 | 75 | 60 | 215 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 25 | 75 | 60 | 219 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 43 |
| 32 | 88 | 60 | 238 | 35 | 25 | M6 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 40 | 88 | 60 | 244 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 51 |
| 50 | 111 | 60 | 273 | 33 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 62 |
| 63 | 111 | 60 | 288 | 36 | 45 | M8 | 210 | M5 | 33 | 30 | 80 | 78 | 132 | R150 | 62 |

| d (mm) | H2 (mm) | P1 (mm) | P2 (mm) | z (mm) |
|-----------|------------|------------|------------|-----------|
| 16 | 20 | 13 | 13 | 67 |
| 20 | 20 | 14 | 14 | 67 |
| 25 | 20 | 16 | 16 | 76 |
| 32 | 20 | 18 | 18 | 82 |
| 40 | 20 | 20 | 20 | 96 |
| 50 | 20 | 23 | 23 | 101 |
| 63 | 20 | 27 | 27 | 114 |

Ball valves pneumatic type 543



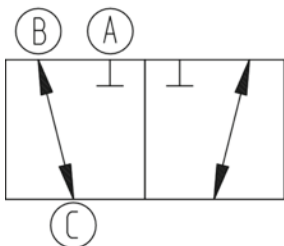
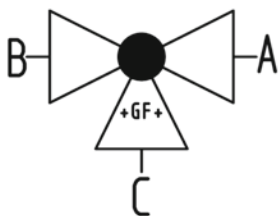
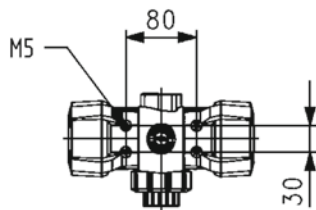
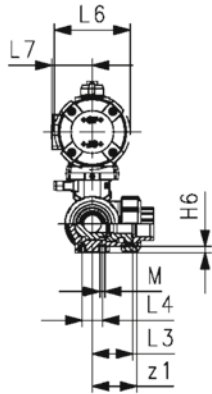
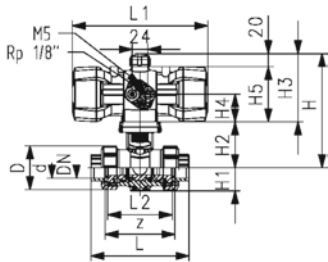
3-Way ball valve type 543 Pro P PVC-C
Horizontal/L-port
FC (Fail safe to close)
Without manual override
With solvent cement sockets metric

Model:

- Actuator fails safe to the closed position FC
- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 90° <) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with types 285 – 288 and 543 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|-----------------------------------|--------------|----|----------------|-------------|----|----------------|
| 16 | 10 | 3/8 | 10 | 50 | 199 295 102 | 1 | 1.136 | 199 295 112 | 1 | 1.136 |
| 20 | 15 | 1/2 | 10 | 75 | 199 295 103 | 1 | 1.142 | 199 295 113 | 1 | 1.142 |
| 25 | 20 | 3/4 | 10 | 150 | 199 295 104 | 1 | 1.280 | 199 295 114 | 1 | 1.280 |
| 32 | 25 | 1 | 10 | 280 | 199 295 105 | 1 | 1.486 | 199 295 115 | 1 | 1.486 |
| 40 | 32 | 1 1/4 | 10 | 480 | 199 295 106 | 1 | 2.619 | 199 295 116 | 1 | 2.619 |
| 50 | 40 | 1 1/2 | 10 | 620 | 199 295 107 | 1 | 3.110 | 199 295 117 | 1 | 3.110 |
| 63 | 50 | 2 | 10 | 1230 | 199 295 108 | 1 | 4.585 | 199 295 118 | 1 | 4.585 |

| d (mm) | Actuator | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L6 (mm) |
|-----------|----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|
| 16 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 109 | 159 | 73 | 36 | 25 | 74 |
| 20 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 112 | 159 | 73 | 36 | 25 | 74 |
| 25 | PPA15 | 58 | 179 | 32 | 71 | 108 | 45 | 88 | 8 | 131 | 211 | 86 | 43 | 25 | 94 |
| 32 | PPA15 | 68 | 179 | 36 | 71 | 108 | 45 | 88 | 8 | 151 | 211 | 99 | 50 | 25 | 94 |
| 40 | PPA40 | 84 | 215 | 45 | 84 | 131 | 56 | 111 | 9 | 181 | 246 | 120 | 60 | 45 | 120 |
| 50 | PPA40 | 97 | 215 | 51 | 84 | 131 | 56 | 111 | 9 | 205 | 246 | 137 | 69 | 45 | 120 |
| 63 | PPA40 | 124 | 237 | 65 | 106 | 131 | 56 | 111 | 9 | 261 | 246 | 179 | 89 | 45 | 120 |

| d (mm) | L7 (mm) | M (mm) | z (mm) | z1 (mm) | closest inch (inch) |
|-----------|------------|-----------|-----------|------------|---------------------------|
| 16 | 32 | 6 | 81 | 40 | 3/8 |
| 20 | 32 | 6 | 81 | 40 | 1/2 |
| 25 | 38 | 6 | 94 | 47 | 3/4 |
| 32 | 38 | 6 | 107 | 54 | 1 |
| 40 | 47 | 8 | 130 | 65 | 1 1/4 |
| 50 | 47 | 8 | 143 | 72 | 1 1/2 |
| 63 | 47 | 8 | 185 | 92 | 2 |



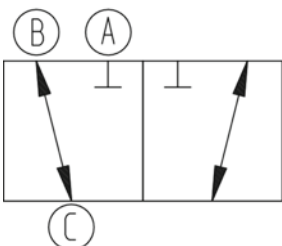
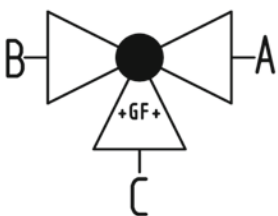
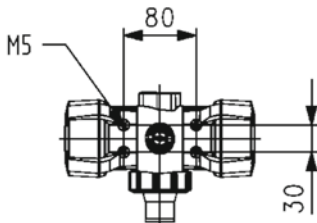
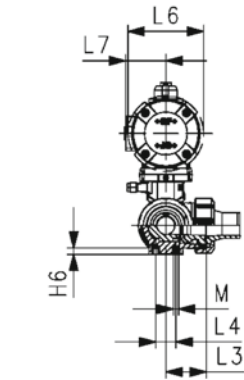
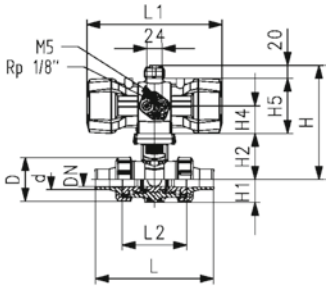
3-Way ball valve type 543 Pro P PVC-C
Horizontal/L-port
Without manual override
With solvent cement spigots metric

Model:

- Actuator fails safe to the closed position FC
- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 90° <) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with types 285 – 288 and 543 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|-----------------------------------|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 3/8 | 10 | 50 | 199 295 082 | 1 | 1.142 | 199 295 092 |
| 20 | 15 | 1/2 | 10 | 75 | 199 295 083 | 1 | 1.152 | 199 295 093 |
| 25 | 20 | 3/4 | 10 | 150 | 199 295 084 | 1 | 1.296 | 199 295 094 |
| 32 | 25 | 1 | 10 | 280 | 199 295 085 | 1 | 1.512 | 199 295 095 |
| 40 | 32 | 1 1/4 | 10 | 480 | 199 295 086 | 1 | 2.642 | 199 295 096 |
| 50 | 40 | 1 1/2 | 10 | 620 | 199 295 087 | 1 | 3.179 | 199 295 097 |
| 63 | 50 | 2 | 10 | 1230 | 199 295 088 | 1 | 4.722 | 199 295 098 |

| d (mm) | Actuator | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L6 (mm) |
|-----------|----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|
| 16 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 131 | 159 | 73 | 36 | 25 | 74 |
| 20 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 141 | 159 | 73 | 36 | 25 | 74 |
| 25 | PPA15 | 58 | 179 | 32 | 71 | 108 | 45 | 88 | 8 | 165 | 211 | 86 | 43 | 25 | 94 |
| 32 | PPA15 | 68 | 179 | 36 | 71 | 108 | 45 | 88 | 8 | 182 | 211 | 99 | 50 | 25 | 94 |
| 40 | PPA40 | 84 | 215 | 45 | 84 | 131 | 56 | 111 | 9 | 209 | 246 | 120 | 60 | 45 | 120 |
| 50 | PPA40 | 97 | 215 | 51 | 84 | 131 | 56 | 111 | 9 | 242 | 246 | 137 | 69 | 45 | 120 |
| 63 | PPA40 | 124 | 237 | 65 | 106 | 131 | 56 | 111 | 9 | 302 | 246 | 179 | 89 | 45 | 120 |

| d (mm) | L7 (mm) | M | closest inch (inch) |
|-----------|------------|---|---------------------------|
| 16 | 32 | 6 | 3/8 |
| 20 | 32 | 6 | 1/2 |
| 25 | 38 | 6 | 3/4 |
| 32 | 38 | 6 | 1 |
| 40 | 47 | 8 | 1 1/4 |
| 50 | 47 | 8 | 1 1/2 |
| 63 | 47 | 8 | 2 |



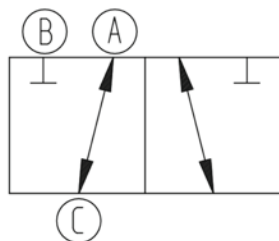
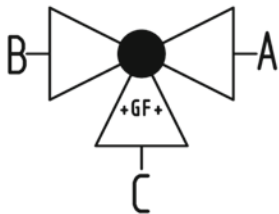
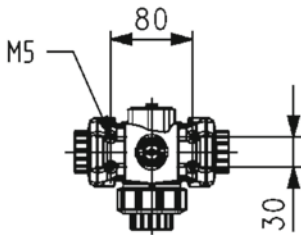
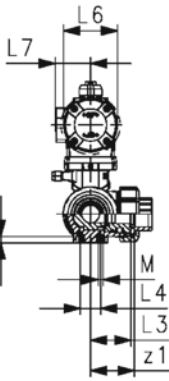
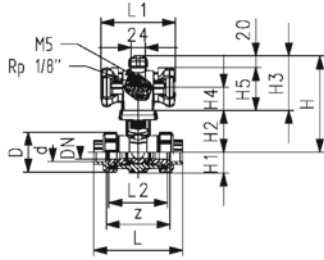
3-Way ball valve type 543 Pro PVC-C
Horizontal/L-port
DA (Double acting)
Without manual override
With solvent cement sockets metric

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with types 285 – 288 and 543 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d | DN | Size | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|--------|-------|---------------------|--------------------|----|--------|--------------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| 16 | 10 | 3/8 | 10 | 50 | 199 295 282 | 1 | 0.945 | 199 295 292 | 1 | 0.945 |
| 20 | 15 | 1/2 | 10 | 75 | 199 295 283 | 1 | 0.952 | 199 295 293 | 1 | 0.952 |
| 25 | 20 | 3/4 | 10 | 150 | 199 295 284 | 1 | 1.090 | 199 295 294 | 1 | 1.090 |
| 32 | 25 | 1 | 10 | 280 | 199 295 285 | 1 | 1.296 | 199 295 295 | 1 | 1.296 |
| 40 | 32 | 1 1/4 | 10 | 480 | 199 295 286 | 1 | 2.195 | 199 295 296 | 1 | 2.195 |
| 50 | 40 | 1 1/2 | 10 | 620 | 199 295 287 | 1 | 2.686 | 199 295 297 | 1 | 2.686 |
| 63 | 50 | 2 | 10 | 1230 | 199 295 288 | 1 | 4.161 | 199 295 298 | 1 | 4.161 |

| d | Actuator | D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L6 |
|------|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 109 | 128 | 73 | 36 | 25 | 74 |
| 20 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 112 | 128 | 73 | 36 | 25 | 74 |
| 25 | PPA08 | 58 | 166 | 32 | 71 | 95 | 41 | 75 | 8 | 131 | 128 | 86 | 43 | 25 | 74 |
| 32 | PPA08 | 68 | 166 | 36 | 71 | 95 | 41 | 75 | 8 | 151 | 128 | 99 | 50 | 25 | 74 |
| 40 | PPA15 | 84 | 192 | 45 | 84 | 108 | 45 | 88 | 9 | 181 | 165 | 120 | 60 | 45 | 94 |
| 50 | PPA15 | 97 | 192 | 51 | 84 | 108 | 45 | 88 | 9 | 205 | 165 | 137 | 69 | 45 | 94 |
| 63 | PPA40 | 124 | 237 | 65 | 106 | 131 | 56 | 111 | 9 | 261 | 184 | 179 | 89 | 45 | 120 |

| d | L7 | M | z | z1 | closest |
|------|------|---|------|------|---------|
| (mm) | (mm) | | (mm) | (mm) | inch |
| 16 | 32 | 6 | 81 | 40 | 3/8 |
| 20 | 32 | 6 | 81 | 40 | 1/2 |
| 25 | 32 | 6 | 94 | 47 | 3/4 |
| 32 | 32 | 6 | 107 | 54 | 1 |
| 40 | 38 | 8 | 130 | 65 | 1 1/4 |
| 50 | 38 | 8 | 143 | 72 | 1 1/2 |
| 63 | 47 | 8 | 185 | 92 | 2 |



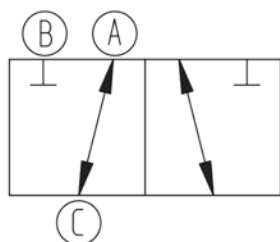
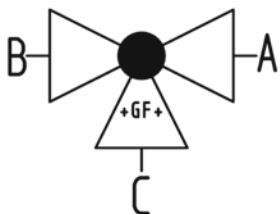
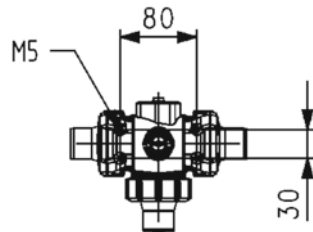
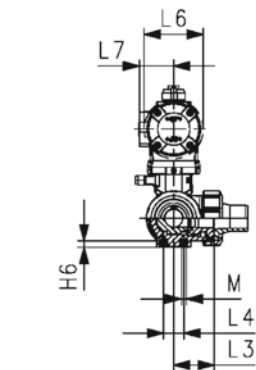
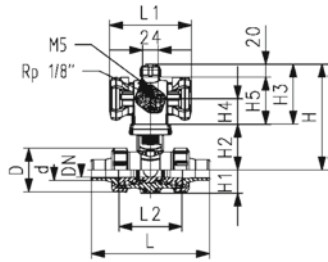
3-Way ball valve type 543 Pro P PVC-C
Horizontal/L-port
DA (Double acting)
Without manual override
With solvent cement spigots metric

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90° <) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with types 285 – 288 and 543 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve possible



| d | DN | Size | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|--------|-------|------------|-------------|----|--------|-------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | (Δp=1 bar) | Code | | (kg) | Code | | (kg) |
| 16 | 10 | 3/8 | 10 | 50 | 199 295 262 | 1 | 0.952 | 199 295 272 | 1 | 0.952 |
| 20 | 15 | 1/2 | 10 | 75 | 199 295 263 | 1 | 0.962 | 199 295 273 | 1 | 0.962 |
| 25 | 20 | 3/4 | 10 | 150 | 199 295 264 | 1 | 1.106 | 199 295 274 | 1 | 1.106 |
| 32 | 25 | 1 | 10 | 280 | 199 295 265 | 1 | 1.322 | 199 295 275 | 1 | 1.322 |
| 40 | 32 | 1 1/4 | 10 | 480 | 199 295 266 | 1 | 2.218 | 199 295 276 | 1 | 2.218 |
| 50 | 40 | 1 1/2 | 10 | 620 | 199 295 267 | 1 | 2.755 | 199 295 277 | 1 | 2.755 |
| 63 | 50 | 2 | 10 | 1230 | 199 295 268 | 1 | 4.298 | 199 295 278 | 1 | 4.298 |

| d | Actuator | D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L6 |
|------|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 131 | 128 | 73 | 36 | 25 | 74 |
| 20 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 141 | 128 | 73 | 36 | 25 | 74 |
| 25 | PPA08 | 58 | 166 | 32 | 71 | 95 | 41 | 75 | 8 | 165 | 128 | 86 | 43 | 25 | 74 |
| 32 | PPA08 | 68 | 166 | 36 | 71 | 95 | 41 | 75 | 8 | 182 | 128 | 99 | 50 | 25 | 74 |
| 40 | PPA15 | 84 | 192 | 45 | 84 | 108 | 45 | 88 | 9 | 209 | 165 | 120 | 60 | 45 | 94 |
| 50 | PPA15 | 97 | 192 | 51 | 84 | 108 | 45 | 88 | 9 | 242 | 165 | 137 | 69 | 45 | 94 |
| 63 | PPA40 | 124 | 237 | 65 | 106 | 131 | 56 | 111 | 9 | 302 | 184 | 179 | 89 | 45 | 120 |

| d | L7 | M | closest |
|------|------|---|---------|
| (mm) | (mm) | | inch |
| 16 | 32 | 6 | 3/8 |
| 20 | 32 | 6 | 1/2 |
| 25 | 32 | 6 | 3/4 |
| 32 | 32 | 6 | 1 |
| 40 | 38 | 8 | 1 1/4 |
| 50 | 38 | 8 | 1 1/2 |
| 63 | 47 | 8 | 2 |



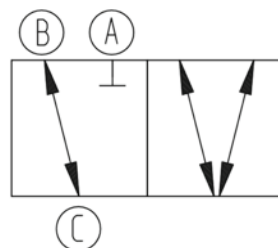
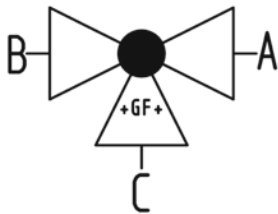
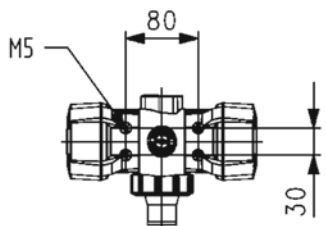
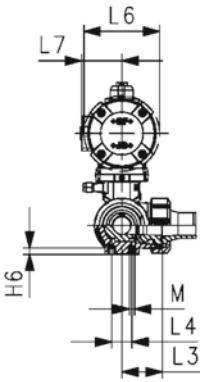
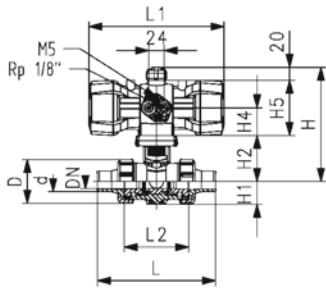
3-Way ball valve type 543 Pro P PVC-C
Horizontal/T-port
Without manual override
With solvent cement spigots metric

Model:

- Actuator fails safe to the closed position FC
- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with types 285 – 288 and 543 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d | DN | Size | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|--------|-------|---------------------|--------------------|----|--------|--------------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| 16 | 10 | 3/8 | 10 | 140 | 199 295 122 | 1 | 1.141 | 199 295 132 | 1 | 1.141 |
| 20 | 15 | 1/2 | 10 | 200 | 199 295 123 | 1 | 1.151 | 199 295 133 | 1 | 1.151 |
| 25 | 20 | 3/4 | 10 | 470 | 199 295 124 | 1 | 1.294 | 199 295 134 | 1 | 1.294 |
| 32 | 25 | 1 | 10 | 793 | 199 295 125 | 1 | 1.505 | 199 295 135 | 1 | 1.505 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 199 295 126 | 1 | 2.630 | 199 295 136 | 1 | 2.630 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 199 295 127 | 1 | 3.156 | 199 295 137 | 1 | 3.156 |
| 63 | 50 | 2 | 10 | 3100 | 199 295 128 | 1 | 4.673 | 199 295 138 | 1 | 4.673 |

| d | Actuator | D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L6 |
|------|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 131 | 159 | 73 | 36 | 25 | 74 |
| 20 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 141 | 159 | 73 | 36 | 25 | 74 |
| 25 | PPA15 | 58 | 179 | 32 | 71 | 108 | 45 | 88 | 8 | 165 | 211 | 86 | 43 | 25 | 94 |
| 32 | PPA15 | 68 | 179 | 36 | 71 | 108 | 45 | 88 | 8 | 182 | 211 | 99 | 50 | 25 | 94 |
| 40 | PPA40 | 84 | 215 | 45 | 84 | 131 | 56 | 111 | 9 | 209 | 246 | 120 | 60 | 45 | 120 |
| 50 | PPA40 | 97 | 215 | 51 | 84 | 131 | 56 | 111 | 9 | 242 | 246 | 137 | 69 | 45 | 120 |
| 63 | PPA40 | 124 | 237 | 65 | 106 | 131 | 56 | 111 | 9 | 302 | 246 | 179 | 89 | 45 | 120 |

| d | L7 | M | closest |
|------|------|---|---------|
| (mm) | (mm) | | inch |
| 16 | 32 | 6 | 3/8 |
| 20 | 32 | 6 | 1/2 |
| 25 | 38 | 6 | 3/4 |
| 32 | 38 | 6 | 1 |
| 40 | 47 | 8 | 1 1/4 |
| 50 | 47 | 8 | 1 1/2 |
| 63 | 47 | 8 | 2 |



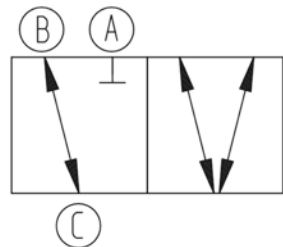
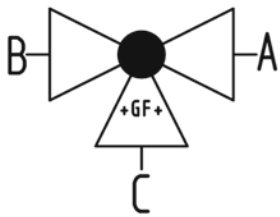
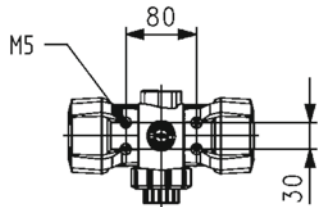
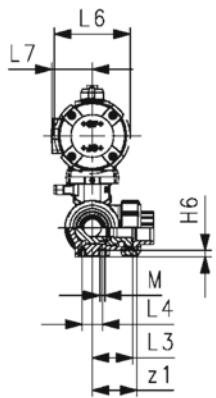
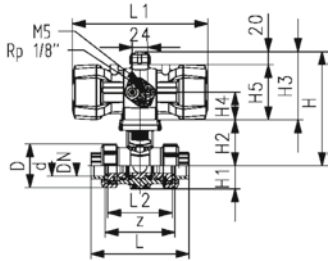
3-Way ball valve type 543 Pro P PVC-C
Horizontal/T-port
FC (Fail safe to close)
Without manual override
With solvent cement sockets metric

Model:

- Actuator fails safe to the closed position FC
- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90° <) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with types 285 – 288 and 543 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



| d | DN | Size | PN | kv-value | EPDM | SP Weight | FKM | SP Weight |
|------|------|--------|-------|---------------------|-------------|-----------|-------------|-----------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | (kg) | Code | (kg) |
| | | | | (L/min) | | | | |
| 16 | 10 | 3/8 | 10 | 140 | 199 295 142 | 1 1.135 | 199 295 152 | 1 1.135 |
| 20 | 15 | 1/2 | 10 | 200 | 199 295 143 | 1 1.141 | 199 295 153 | 1 1.141 |
| 25 | 20 | 3/4 | 10 | 470 | 199 295 144 | 1 1.278 | 199 295 154 | 1 1.278 |
| 32 | 25 | 1 | 10 | 793 | 199 295 145 | 1 1.479 | 199 295 155 | 1 1.479 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 199 295 146 | 1 2.608 | 199 295 156 | 1 2.608 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 199 295 147 | 1 3.088 | 199 295 157 | 1 3.088 |
| 63 | 50 | 2 | 10 | 3100 | 199 295 148 | 1 4.536 | 199 295 158 | 1 4.536 |

| d | Actuator | D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L6 |
|------|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 109 | 159 | 73 | 36 | 25 | 74 |
| 20 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 112 | 159 | 73 | 36 | 25 | 74 |
| 25 | PPA15 | 58 | 179 | 32 | 71 | 108 | 45 | 88 | 8 | 131 | 211 | 86 | 43 | 25 | 94 |
| 32 | PPA15 | 68 | 179 | 36 | 71 | 108 | 45 | 88 | 8 | 151 | 211 | 99 | 50 | 25 | 94 |
| 40 | PPA40 | 84 | 215 | 45 | 84 | 131 | 56 | 111 | 9 | 181 | 246 | 120 | 60 | 45 | 120 |
| 50 | PPA40 | 97 | 215 | 51 | 84 | 131 | 56 | 111 | 9 | 205 | 246 | 137 | 69 | 45 | 120 |
| 63 | PPA40 | 124 | 237 | 65 | 106 | 131 | 56 | 111 | 9 | 261 | 246 | 179 | 89 | 45 | 120 |

| d | L7 | M | z | z1 | closest |
|------|------|---|------|------|---------|
| (mm) | (mm) | | (mm) | (mm) | inch |
| | | | | | (inch) |
| 16 | 32 | 6 | 81 | 40 | 3/8 |
| 20 | 32 | 6 | 81 | 40 | 1/2 |
| 25 | 38 | 6 | 94 | 47 | 3/4 |
| 32 | 38 | 6 | 107 | 54 | 1 |
| 40 | 47 | 8 | 130 | 65 | 1 1/4 |
| 50 | 47 | 8 | 143 | 72 | 1 1/2 |
| 63 | 47 | 8 | 185 | 92 | 2 |



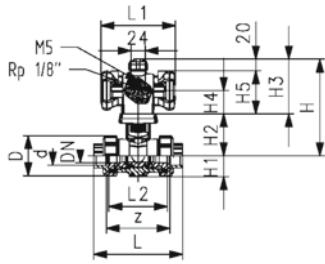
3-Way ball valve type 543 Pro P PVC-C
Horizontal/T-port
DA (Double acting)
Without manual override
With solvent cement sockets metric

Model:

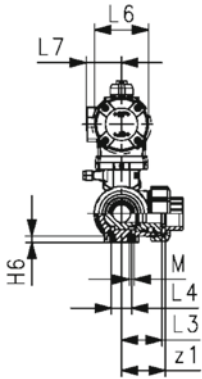
- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90° <) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with types 285 – 288 and 543 (1st Generation)

Option:

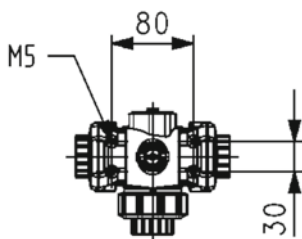
- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve



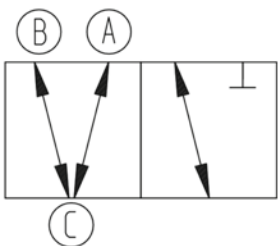
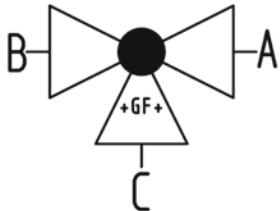
| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) | | |
|-----------|------------|----------------|-------------|--|--------------------|-------------------|-------------|--------------------|---|-------|
| 16 | 10 | 3/8 | 10 | 140 | 199 295 322 | 1 | 0.944 | 199 295 332 | 1 | 0.944 |
| 20 | 15 | 1/2 | 10 | 200 | 199 295 323 | 1 | 0.951 | 199 295 333 | 1 | 0.951 |
| 25 | 20 | 3/4 | 10 | 470 | 199 295 324 | 1 | 1.088 | 199 295 334 | 1 | 1.088 |
| 32 | 25 | 1 | 10 | 793 | 199 295 325 | 1 | 1.289 | 199 295 335 | 1 | 1.289 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 199 295 326 | 1 | 2.184 | 199 295 336 | 1 | 2.184 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 199 295 327 | 1 | 2.664 | 199 295 337 | 1 | 2.664 |
| 63 | 50 | 2 | 10 | 3100 | 199 295 328 | 1 | 4.112 | 199 295 338 | 1 | 4.112 |



| d Actuator (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L6 (mm) | |
|--------------------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|-----|
| 16 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 109 | 128 | 73 | 36 | 25 | 74 |
| 20 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 112 | 128 | 73 | 36 | 25 | 74 |
| 25 | PPA08 | 58 | 166 | 32 | 71 | 95 | 41 | 75 | 8 | 131 | 128 | 86 | 43 | 25 | 74 |
| 32 | PPA08 | 68 | 166 | 36 | 71 | 95 | 41 | 75 | 8 | 151 | 128 | 99 | 50 | 25 | 74 |
| 40 | PPA15 | 84 | 192 | 45 | 84 | 108 | 45 | 88 | 9 | 181 | 165 | 120 | 60 | 45 | 94 |
| 50 | PPA15 | 97 | 192 | 51 | 84 | 108 | 45 | 88 | 9 | 205 | 165 | 137 | 69 | 45 | 94 |
| 63 | PPA40 | 124 | 237 | 65 | 106 | 131 | 56 | 111 | 9 | 261 | 184 | 179 | 89 | 45 | 120 |



| d (mm) | L7 (mm) | M (mm) | z (mm) | z1 (mm) | closest inch (inch) |
|-----------|------------|-----------|-----------|------------|---------------------------|
| 16 | 32 | 6 | 81 | 40 | 3/8 |
| 20 | 32 | 6 | 81 | 40 | 1/2 |
| 25 | 32 | 6 | 94 | 47 | 3/4 |
| 32 | 32 | 6 | 107 | 54 | 1 |
| 40 | 38 | 8 | 130 | 65 | 1 1/4 |
| 50 | 38 | 8 | 143 | 72 | 1 1/2 |
| 63 | 47 | 8 | 185 | 92 | 2 |





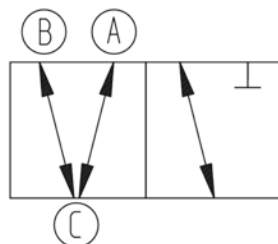
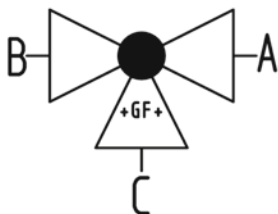
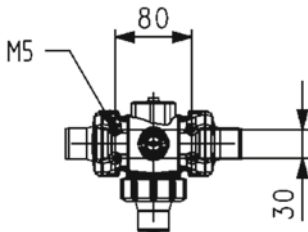
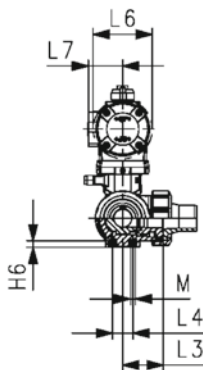
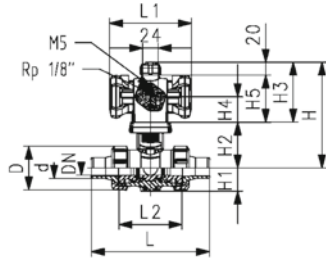
3-Way ball valve type 543 Pro P PVC-C
Horizontal/T-port
DA (Double acting)
Without manual override
With solvent cement spigots metric

Model:

- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Full plastic solution (actuator housing made of PP-GF)
- Visual position indicator
- Z-dimension, valve end and union nut are compatible with types 285 – 288 and 543 (1st Generation)

Option:

- Position feedback sensor, incl. LED feedback (DN10-50) - PNP, NPN and NAMUR
- Positioner RPC, RPC D, RPC PID
- Individual configuration of the valve

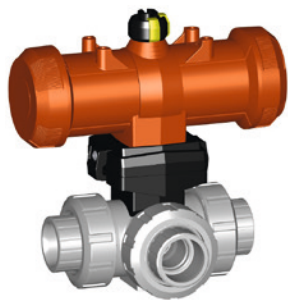


| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 3/8 | 10 | 140 | 199 295 302 | 1 0.951 | 199 295 312 | 1 0.951 |
| 20 | 15 | 1/2 | 10 | 200 | 199 295 303 | 1 0.961 | 199 295 313 | 1 0.961 |
| 25 | 20 | 3/4 | 10 | 470 | 199 295 304 | 1 1.104 | 199 295 314 | 1 1.104 |
| 32 | 25 | 1 | 10 | 793 | 199 295 305 | 1 1.315 | 199 295 315 | 1 1.315 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 199 295 306 | 1 2.206 | 199 295 316 | 1 2.206 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 199 295 307 | 1 2.732 | 199 295 317 | 1 2.732 |
| 63 | 50 | 2 | 10 | 3100 | 199 295 308 | 1 4.249 | 199 295 318 | 1 4.249 |

| d (mm) | Actuator | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L6 (mm) |
|-----------|----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|
| 16 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 131 | 128 | 73 | 36 | 25 | 74 |
| 20 | PPA08 | 50 | 157 | 28 | 62 | 95 | 41 | 75 | 8 | 141 | 128 | 73 | 36 | 25 | 74 |
| 25 | PPA08 | 58 | 166 | 32 | 71 | 95 | 41 | 75 | 8 | 165 | 128 | 86 | 43 | 25 | 74 |
| 32 | PPA08 | 68 | 166 | 36 | 71 | 95 | 41 | 75 | 8 | 182 | 128 | 99 | 50 | 25 | 74 |
| 40 | PPA15 | 84 | 192 | 45 | 84 | 108 | 45 | 88 | 9 | 209 | 165 | 120 | 60 | 45 | 94 |
| 50 | PPA15 | 97 | 192 | 51 | 84 | 108 | 45 | 88 | 9 | 242 | 165 | 137 | 69 | 45 | 94 |
| 63 | PPA40 | 124 | 237 | 65 | 106 | 131 | 56 | 111 | 9 | 302 | 184 | 179 | 89 | 45 | 120 |

| d (mm) | L7 (mm) | M (mm) | closest inch (inch) |
|-----------|------------|-----------|---------------------------|
| 16 | 32 | 6 | 3/8 |
| 20 | 32 | 6 | 1/2 |
| 25 | 32 | 6 | 3/4 |
| 32 | 32 | 6 | 1 |
| 40 | 38 | 8 | 1 1/4 |
| 50 | 38 | 8 | 1 1/2 |
| 63 | 47 | 8 | 2 |

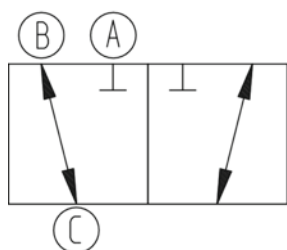
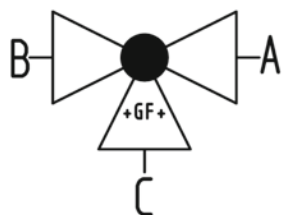
Ball valves pneumatic type 285



3-Way ball valve type 285 PVC-C
Horizontal/L-port FC (Fail safe to close)
Without manual override
With solvent cement sockets metric

Model:

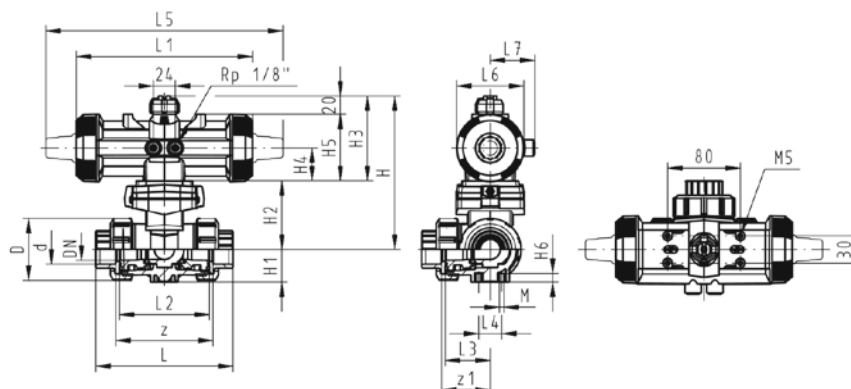
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

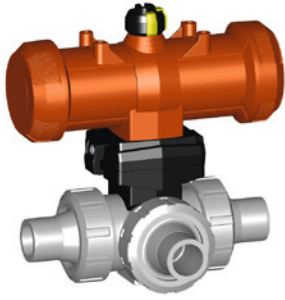


| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (L/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|-----------------------------------|--------------|-------------------|-------------|-------------------|
| 16 | 10 | 3/8 | 10 | 50 | 199 285 102 | 1 1.136 | 199 285 112 | 1 1.136 |
| 20 | 15 | 1/2 | 10 | 75 | 199 285 103 | 1 1.142 | 199 285 113 | 1 1.142 |
| 25 | 20 | 3/4 | 10 | 150 | 199 285 104 | 1 1.280 | 199 285 114 | 1 1.280 |
| 32 | 25 | 1 | 10 | 280 | 199 285 105 | 1 1.486 | 199 285 115 | 1 1.486 |
| 40 | 32 | 1 1/4 | 10 | 480 | 199 285 106 | 1 2.619 | 199 285 116 | 1 2.619 |
| 50 | 40 | 1 1/2 | 10 | 620 | 199 285 107 | 1 3.110 | 199 285 117 | 1 3.110 |
| 63 | 50 | 2 | 10 | 1230 | 199 285 108 | 1 4.585 | 199 285 118 | 1 4.585 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) |
|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|
| 16 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 109 | 194 | 73 | 36 | 25 | 261 | 76 |
| 20 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 112 | 194 | 73 | 36 | 25 | 261 | 76 |
| 25 | 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 131 | 194 | 86 | 43 | 25 | 261 | 76 |
| 32 | 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 151 | 194 | 99 | 50 | 25 | 261 | 76 |
| 40 | 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 181 | 224 | 120 | 60 | 45 | 305 | 95 |
| 50 | 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 205 | 224 | 137 | 69 | 45 | 305 | 95 |
| 63 | 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 |

| d (mm) | L7 (mm) | M | z (mm) | z1 (mm) | closest inch (inch) |
|-----------|------------|---|-----------|------------|---------------------------|
| 16 | 48 | 6 | 81 | 40 | 3/8 |
| 20 | 48 | 6 | 81 | 40 | 1/2 |
| 25 | 48 | 6 | 94 | 47 | 3/4 |
| 32 | 48 | 6 | 107 | 54 | 1 |
| 40 | 59 | 8 | 130 | 65 | 1 1/4 |
| 50 | 59 | 8 | 143 | 72 | 1 1/2 |
| 63 | 59 | 8 | 185 | 92 | 2 |

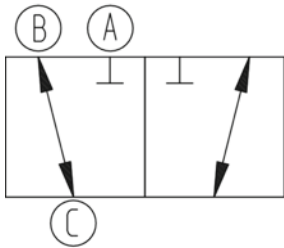
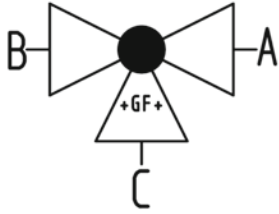




3-Way ball valve type 285 PVC-C
Horizontal/L-port
Without manual override
With solvent cement spigots metric

Model:

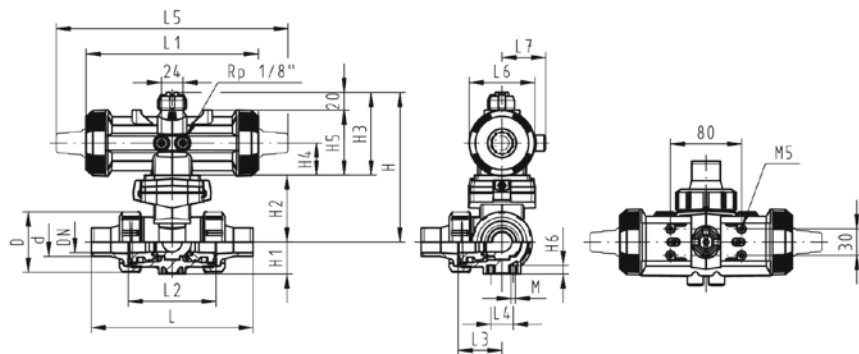
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

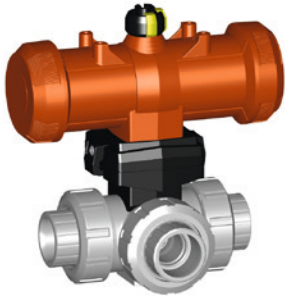


| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) | | |
|-----------|------------|----------------|-------------|-----------------------------------|--------------------|----------------------|-------------|----------------------|---|-------|
| 16 | 10 | 3/8 | 10 | 50 | 199 285 082 | 1 | 1.142 | 199 285 092 | 1 | 1.142 |
| 20 | 15 | 1/2 | 10 | 75 | 199 285 083 | 1 | 1.152 | 199 285 093 | 1 | 1.152 |
| 25 | 20 | 3/4 | 10 | 150 | 199 285 084 | 1 | 1.296 | 199 285 094 | 1 | 1.296 |
| 32 | 25 | 1 | 10 | 280 | 199 285 085 | 1 | 1.512 | 199 285 095 | 1 | 1.512 |
| 40 | 32 | 1 1/4 | 10 | 480 | 199 285 086 | 1 | 2.642 | 199 285 096 | 1 | 2.642 |
| 50 | 40 | 1 1/2 | 10 | 620 | 199 285 087 | 1 | 3.179 | 199 285 097 | 1 | 3.179 |
| 63 | 50 | 2 | 10 | 1230 | 199 285 088 | 1 | 4.722 | 199 285 098 | 1 | 4.722 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) |
|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|
| 16 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 131 | 194 | 73 | 36 | 25 | 261 | 76 |
| 20 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 141 | 194 | 73 | 36 | 25 | 261 | 76 |
| 25 | 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 165 | 194 | 86 | 43 | 25 | 261 | 76 |
| 32 | 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 182 | 194 | 99 | 50 | 25 | 261 | 76 |
| 40 | 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 209 | 224 | 120 | 60 | 45 | 305 | 95 |
| 50 | 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 242 | 224 | 137 | 69 | 45 | 305 | 95 |
| 63 | 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 302 | 224 | 179 | 89 | 45 | 305 | 95 |

| d (mm) | L7 (mm) | M | closest inch (inch) |
|-----------|------------|---|---------------------------|
| 16 | 48 | 6 | 3/8 |
| 20 | 48 | 6 | 1/2 |
| 25 | 48 | 6 | 3/4 |
| 32 | 48 | 6 | 1 |
| 40 | 59 | 8 | 1 1/4 |
| 50 | 59 | 8 | 1 1/2 |
| 63 | 59 | 8 | 2 |

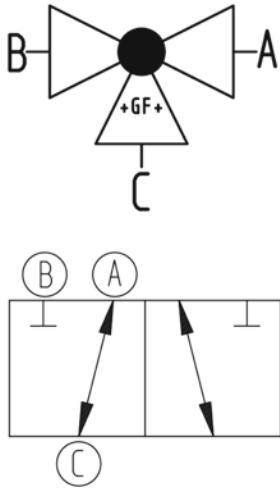




3-Way ball valve type 285 PVC-C
Horizontal/L-port DA (Double acting)
Without manual override
With solvent cement sockets metric

Model:

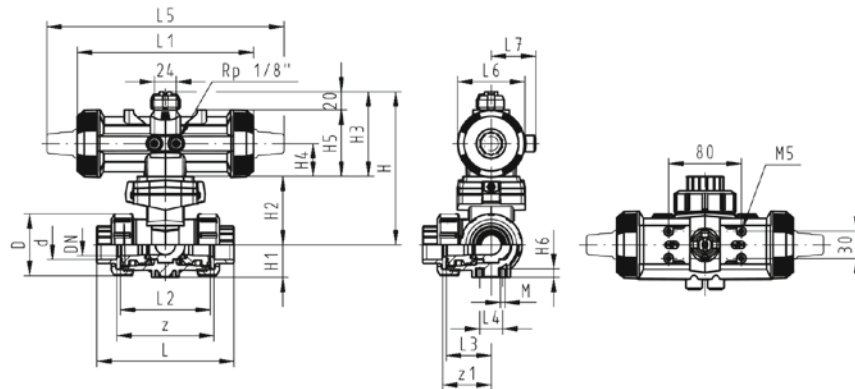
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°< 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

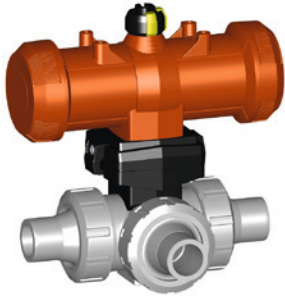


| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 16 | 10 | 3/8 | 10 | 50 | 199 285 282 | 1 | 0.945 | 199 285 292 | 1 | 0.945 |
| 20 | 15 | 1/2 | 10 | 75 | 199 285 283 | 1 | 0.952 | 199 285 293 | 1 | 0.952 |
| 25 | 20 | 3/4 | 10 | 150 | 199 285 284 | 1 | 1.090 | 199 285 294 | 1 | 1.090 |
| 32 | 25 | 1 | 10 | 280 | 199 285 285 | 1 | 1.296 | 199 285 295 | 1 | 1.296 |
| 40 | 32 | 1 1/4 | 10 | 480 | 199 285 286 | 1 | 2.195 | 199 285 296 | 1 | 2.195 |
| 50 | 40 | 1 1/2 | 10 | 620 | 199 285 287 | 1 | 2.686 | 199 285 297 | 1 | 2.686 |
| 63 | 50 | 2 | 10 | 1230 | 199 285 288 | 1 | 4.161 | 199 285 298 | 1 | 4.161 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) |
|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|
| 16 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 109 | 194 | 73 | 36 | 25 | 261 | 76 |
| 20 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 112 | 194 | 73 | 36 | 25 | 261 | 76 |
| 25 | 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 131 | 194 | 86 | 43 | 25 | 261 | 76 |
| 32 | 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 151 | 194 | 99 | 50 | 25 | 261 | 76 |
| 40 | 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 181 | 224 | 120 | 60 | 45 | 305 | 95 |
| 50 | 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 205 | 224 | 137 | 69 | 45 | 305 | 95 |
| 63 | 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 |

| d (mm) | L7 (mm) | M | z (mm) | z1 (mm) | closest inch (inch) |
|-----------|------------|---|-----------|------------|---------------------------|
| 16 | 48 | 6 | 81 | 40 | 3/8 |
| 20 | 48 | 6 | 81 | 40 | 1/2 |
| 25 | 48 | 6 | 94 | 47 | 3/4 |
| 32 | 48 | 6 | 107 | 54 | 1 |
| 40 | 59 | 8 | 130 | 65 | 1 1/4 |
| 50 | 59 | 8 | 143 | 72 | 1 1/2 |
| 63 | 59 | 8 | 185 | 92 | 2 |

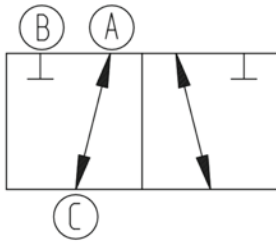
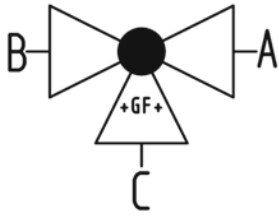




3-Way ball valve type 285 PVC-C
Horizontal/L-port DA (Double acting)
Without manual override
With solvent cement spigots metric

Model:

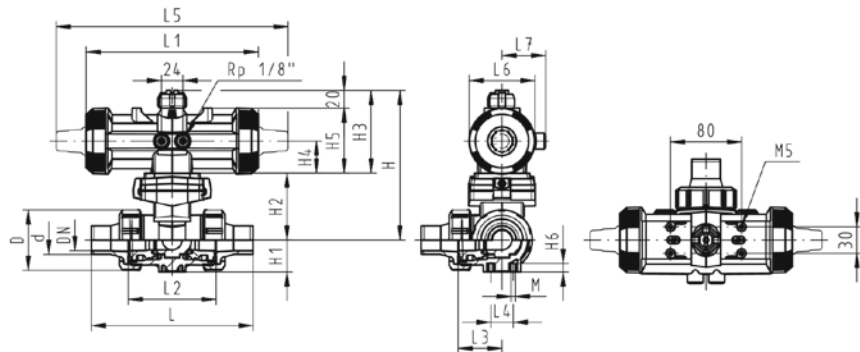
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

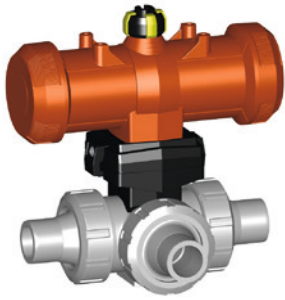


| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|-----------------------------------|--------------|----|----------------|-------------|----|----------------|
| 16 | 10 | 3/8 | 10 | 50 | 199 285 262 | 1 | 0.952 | 199 285 272 | 1 | 0.952 |
| 20 | 15 | 1/2 | 10 | 75 | 199 285 263 | 1 | 0.962 | 199 285 273 | 1 | 0.962 |
| 25 | 20 | 3/4 | 10 | 150 | 199 285 264 | 1 | 1.106 | 199 285 274 | 1 | 1.106 |
| 32 | 25 | 1 | 10 | 280 | 199 285 265 | 1 | 1.322 | 199 285 275 | 1 | 1.322 |
| 40 | 32 | 1 1/4 | 10 | 480 | 199 285 266 | 1 | 2.218 | 199 285 276 | 1 | 2.218 |
| 50 | 40 | 1 1/2 | 10 | 620 | 199 285 267 | 1 | 2.755 | 199 285 277 | 1 | 2.755 |
| 63 | 50 | 2 | 10 | 1230 | 199 285 268 | 1 | 4.298 | 199 285 278 | 1 | 4.298 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) |
|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|
| 16 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 131 | 194 | 73 | 36 | 25 | 261 | 76 |
| 20 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 141 | 194 | 73 | 36 | 25 | 261 | 76 |
| 25 | 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 165 | 194 | 86 | 43 | 25 | 261 | 76 |
| 32 | 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 182 | 194 | 99 | 50 | 25 | 261 | 76 |
| 40 | 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 209 | 224 | 120 | 60 | 45 | 305 | 95 |
| 50 | 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 242 | 224 | 137 | 69 | 45 | 305 | 95 |
| 63 | 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 302 | 224 | 179 | 89 | 45 | 305 | 95 |

| d (mm) | L7 (mm) | M | closest inch (inch) |
|-----------|------------|---|---------------------------|
| 16 | 48 | 6 | 3/8 |
| 20 | 48 | 6 | 1/2 |
| 25 | 48 | 6 | 3/4 |
| 32 | 48 | 6 | 1 |
| 40 | 59 | 8 | 1 1/4 |
| 50 | 59 | 8 | 1 1/2 |
| 63 | 59 | 8 | 2 |

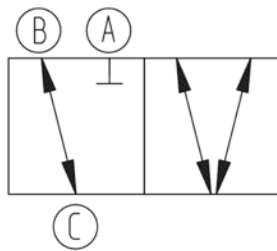
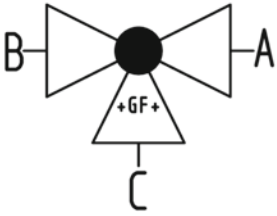




3-Way ball valve type 285 PVC-C
Horizontal/T-port
Without manual override
With solvent cement spigots metric

Model:

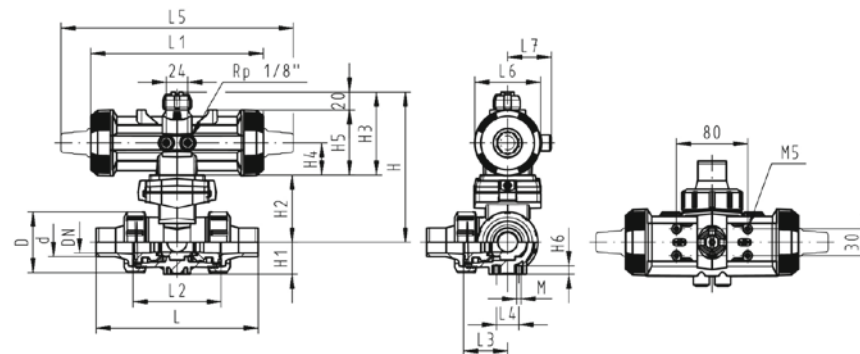
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90° < 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

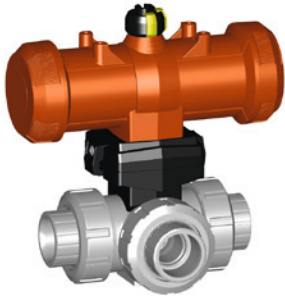


| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 3/8 | 10 | 140 | 199 285 122 | 1 | 1.141 | 199 285 132 |
| 20 | 15 | 1/2 | 10 | 200 | 199 285 123 | 1 | 1.151 | 199 285 133 |
| 25 | 20 | 3/4 | 10 | 470 | 199 285 124 | 1 | 1.294 | 199 285 134 |
| 32 | 25 | 1 | 10 | 793 | 199 285 125 | 1 | 1.505 | 199 285 135 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 199 285 126 | 1 | 2.630 | 199 285 136 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 199 285 127 | 1 | 3.156 | 199 285 137 |
| 63 | 50 | 2 | 10 | 3100 | 199 285 128 | 1 | 4.673 | 199 285 138 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) |
|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|
| 16 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 131 | 194 | 73 | 36 | 25 | 261 | 76 |
| 20 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 141 | 194 | 73 | 36 | 25 | 261 | 76 |
| 25 | 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 165 | 194 | 86 | 43 | 25 | 261 | 76 |
| 32 | 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 182 | 194 | 99 | 50 | 25 | 261 | 76 |
| 40 | 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 209 | 224 | 120 | 60 | 45 | 305 | 95 |
| 50 | 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 242 | 224 | 137 | 69 | 45 | 305 | 95 |
| 63 | 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 302 | 224 | 179 | 89 | 45 | 305 | 95 |

| d (mm) | L7 (mm) | M | closest inch (inch) |
|-----------|------------|---|---------------------------|
| 16 | 48 | 6 | 3/8 |
| 20 | 48 | 6 | 1/2 |
| 25 | 48 | 6 | 3/4 |
| 32 | 48 | 6 | 1 |
| 40 | 59 | 8 | 1 1/4 |
| 50 | 59 | 8 | 1 1/2 |
| 63 | 59 | 8 | 2 |

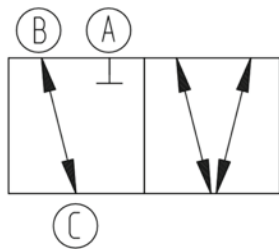
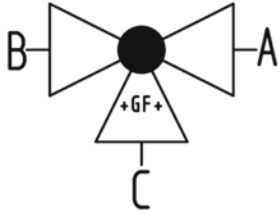




3-Way ball valve type 285 PVC-C
Horizontal/T-port FC (Fail safe to close)
Without manual override
With solvent cement sockets metric

Model:

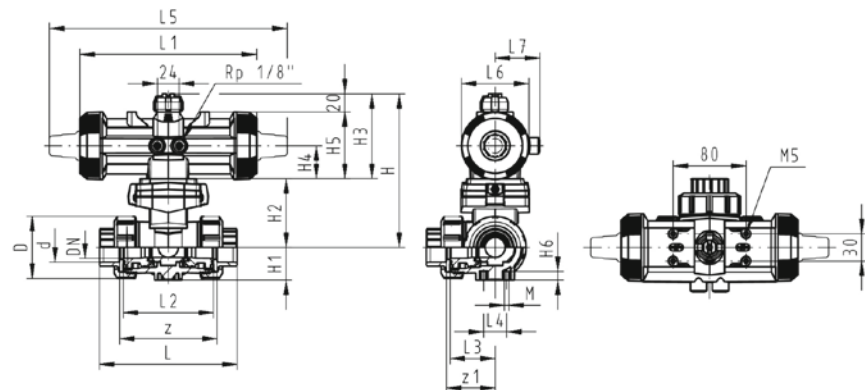
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

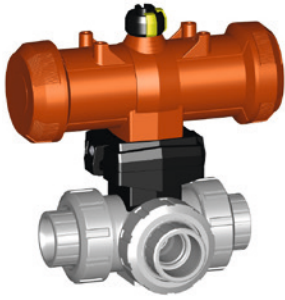


| d | DN | Size | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|--------|-------|---------------------|-------------|----|--------|-------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| 16 | 10 | 3/8 | 10 | 140 | 199 285 142 | 1 | 1.135 | 199 285 152 | 1 | 1.135 |
| 20 | 15 | 1/2 | 10 | 200 | 199 285 143 | 1 | 1.141 | 199 285 153 | 1 | 1.141 |
| 25 | 20 | 3/4 | 10 | 470 | 199 285 144 | 1 | 1.278 | 199 285 154 | 1 | 1.278 |
| 32 | 25 | 1 | 10 | 793 | 199 285 145 | 1 | 1.479 | 199 285 155 | 1 | 1.479 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 199 285 146 | 1 | 2.608 | 199 285 156 | 1 | 2.608 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 199 285 147 | 1 | 3.088 | 199 285 157 | 1 | 3.088 |
| 63 | 50 | 2 | 10 | 3100 | 199 285 148 | 1 | 4.536 | 199 285 158 | 1 | 4.536 |

| d | D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L5 | L6 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 16 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 109 | 194 | 73 | 36 | 25 | 261 | 76 |
| 20 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 112 | 194 | 73 | 36 | 25 | 261 | 76 |
| 25 | 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 131 | 194 | 86 | 43 | 25 | 261 | 76 |
| 32 | 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 151 | 194 | 99 | 50 | 25 | 261 | 76 |
| 40 | 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 181 | 224 | 120 | 60 | 45 | 305 | 95 |
| 50 | 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 205 | 224 | 137 | 69 | 45 | 305 | 95 |
| 63 | 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 |

| d | L7 | M | z | z1 | closest |
|------|------|---|------|------|---------|
| (mm) | (mm) | | (mm) | (mm) | inch |
| 16 | 48 | 6 | 81 | 40 | 3/8 |
| 20 | 48 | 6 | 81 | 40 | 1/2 |
| 25 | 48 | 6 | 94 | 47 | 3/4 |
| 32 | 48 | 6 | 107 | 54 | 1 |
| 40 | 59 | 8 | 130 | 65 | 1 1/4 |
| 50 | 59 | 8 | 143 | 72 | 1 1/2 |
| 63 | 59 | 8 | 185 | 92 | 2 |

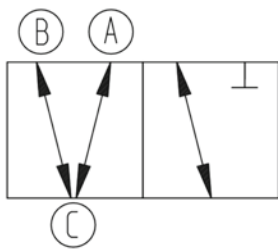
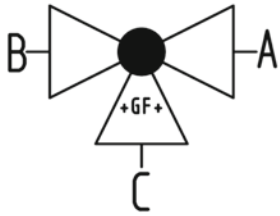




3-Way ball valve type 285 PVC-C
Horizontal/T-port DA (Double acting)
Without manual override
With solvent cement sockets metric

Model:

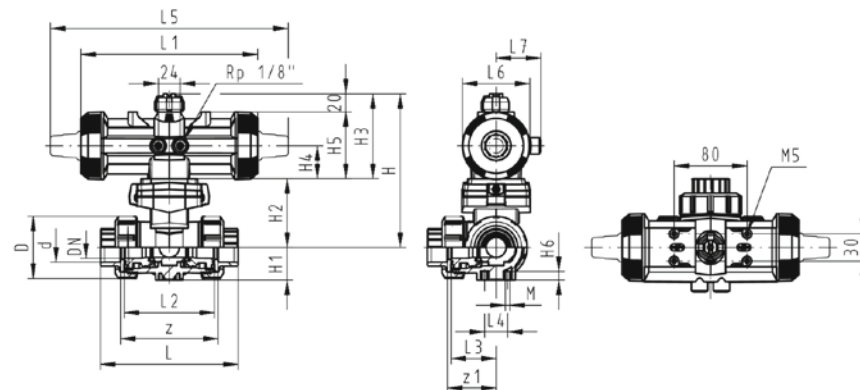
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

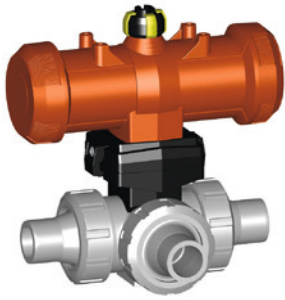


| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|-----------------------------------|--------------|----|----------------|-------------|----|----------------|
| 16 | 10 | 3/8 | 10 | 140 | 199 285 322 | 1 | 0.944 | 199 285 332 | 1 | 0.944 |
| 20 | 15 | 1/2 | 10 | 200 | 199 285 323 | 1 | 0.951 | 199 285 333 | 1 | 0.951 |
| 25 | 20 | 3/4 | 10 | 470 | 199 285 324 | 1 | 1.088 | 199 285 334 | 1 | 1.088 |
| 32 | 25 | 1 | 10 | 793 | 199 285 325 | 1 | 1.289 | 199 285 335 | 1 | 1.289 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 199 285 326 | 1 | 2.184 | 199 285 336 | 1 | 2.184 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 199 285 327 | 1 | 2.664 | 199 285 337 | 1 | 2.664 |
| 63 | 50 | 2 | 10 | 3100 | 199 285 328 | 1 | 4.112 | 199 285 338 | 1 | 4.112 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) |
|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|
| 16 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 109 | 194 | 73 | 36 | 25 | 261 | 76 |
| 20 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 112 | 194 | 73 | 36 | 25 | 261 | 76 |
| 25 | 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 131 | 194 | 86 | 43 | 25 | 261 | 76 |
| 32 | 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 151 | 194 | 99 | 50 | 25 | 261 | 76 |
| 40 | 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 181 | 224 | 120 | 60 | 45 | 305 | 95 |
| 50 | 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 205 | 224 | 137 | 69 | 45 | 305 | 95 |
| 63 | 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 |

| d (mm) | L7 (mm) | M | z (mm) | z1 (mm) | closest inch (inch) |
|-----------|------------|---|-----------|------------|---------------------------|
| 16 | 48 | 6 | 81 | 40 | 3/8 |
| 20 | 48 | 6 | 81 | 40 | 1/2 |
| 25 | 48 | 6 | 94 | 47 | 3/4 |
| 32 | 48 | 6 | 107 | 54 | 1 |
| 40 | 59 | 8 | 130 | 65 | 1 1/4 |
| 50 | 59 | 8 | 143 | 72 | 1 1/2 |
| 63 | 59 | 8 | 185 | 92 | 2 |

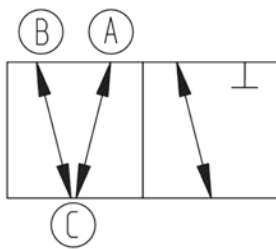
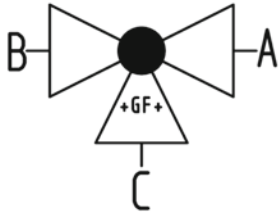




3-Way ball valve type 285 PVC-C
Horizontal/T-port DA (Double acting)
Without manual override
With solvent cement spigots metric

Model:

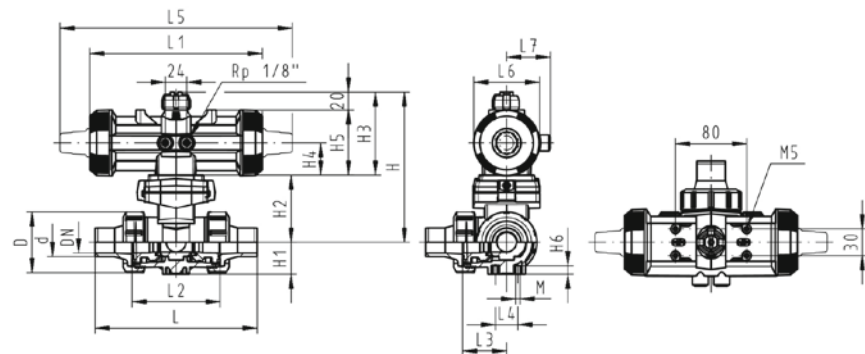
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90°(<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|-----------------------------------|--------------|----|----------------|-------------|----|----------------|
| 16 | 10 | 3/8 | 10 | 140 | 199 285 302 | 1 | 0.951 | 199 285 312 | 1 | 0.951 |
| 20 | 15 | 1/2 | 10 | 200 | 199 285 303 | 1 | 0.961 | 199 285 313 | 1 | 0.961 |
| 25 | 20 | 3/4 | 10 | 470 | 199 285 304 | 1 | 1.104 | 199 285 314 | 1 | 1.104 |
| 32 | 25 | 1 | 10 | 793 | 199 285 305 | 1 | 1.315 | 199 285 315 | 1 | 1.315 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 199 285 306 | 1 | 2.206 | 199 285 316 | 1 | 2.206 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 199 285 307 | 1 | 2.732 | 199 285 317 | 1 | 2.732 |
| 63 | 50 | 2 | 10 | 3100 | 199 285 308 | 1 | 4.249 | 199 285 318 | 1 | 4.249 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) |
|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|
| 16 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 131 | 194 | 73 | 36 | 25 | 261 | 76 |
| 20 | 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 141 | 194 | 73 | 36 | 25 | 261 | 76 |
| 25 | 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 165 | 194 | 86 | 43 | 25 | 261 | 76 |
| 32 | 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 182 | 194 | 99 | 50 | 25 | 261 | 76 |
| 40 | 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 209 | 224 | 120 | 60 | 45 | 305 | 95 |
| 50 | 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 242 | 224 | 137 | 69 | 45 | 305 | 95 |
| 63 | 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 302 | 224 | 179 | 89 | 45 | 305 | 95 |

| d (mm) | L7 (mm) | M | closest inch (inch) |
|-----------|------------|---|---------------------------|
| 16 | 48 | 6 | 3/8 |
| 20 | 48 | 6 | 1/2 |
| 25 | 48 | 6 | 3/4 |
| 32 | 48 | 6 | 1 |
| 40 | 59 | 8 | 1 1/4 |
| 50 | 59 | 8 | 1 1/2 |
| 63 | 59 | 8 | 2 |



Butterfly valves type 567



Wafer-style intermediate installation butterfly valve type 567 PVC-C

Bare shaft

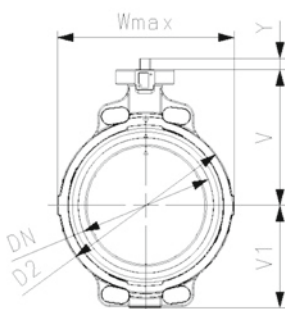
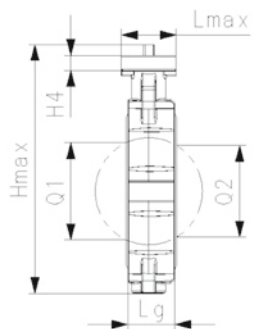
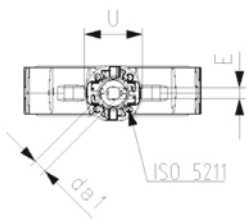
Flange standard metric/ANSI/BS/JIS

Model:

- Overall length according to EN 558, ISO 5752
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Interface F07 according to DIN/ISO 5211

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d | Size | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|--------|------|-------|---------------------|--------------------|----|--------|--------------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| 63 | 2 | 50 | 10 | 740 | 163 567 802 | 1 | 0.831 | 163 567 822 | 1 | 0.835 |
| 75 | 2 ½ | 65 | 10 | 1500 | 163 567 803 | 1 | 0.947 | 163 567 823 | 1 | 0.952 |
| 90 | 3 | 80 | 10 | 2400 | 163 567 804 | 1 | 1.079 | 163 567 824 | 1 | 1.097 |
| 110 | 4 | 100 | 10 | 3800 | 163 567 805 | 1 | 1.759 | 163 567 825 | 1 | 1.737 |
| 140 | 5 | 125 | 10 | 8600 | 163 567 806 | 1 | 2.361 | 163 567 826 | 1 | 2.379 |
| 160 | 6 | 150 | 10 | 11400 | 163 567 807 | 1 | 3.289 | 163 567 827 | 1 | 3.364 |
| 225 | 8 | 200 | 10 | 19900 | 163 567 808 | 1 | 5.269 | 163 567 828 | 1 | 5.094 |
| 280 | 10 | 250 | 10 | 34000 | 163 567 809 | 1 | 12.700 | 163 567 829 | 1 | 11.700 |
| 315 | 12 | 300 | 10 | 50000 | 163 567 810 | 1 | 16.100 | 163 567 830 | 1 | 16.050 |

| d | PTFE | Weight |
|------|--------------------|--------|
| (mm) | Code | (kg) |
| 63 | 163 567 832 | 0.947 |
| 75 | 163 567 833 | 0.947 |
| 90 | 163 567 834 | 1.079 |
| 110 | 163 567 835 | 1.759 |
| 140 | 163 567 836 | 2.361 |
| 160 | 163 567 837 | 3.289 |
| 225 | 163 567 838 | 5.269 |
| 280 | | |
| 315 | | |

| d | Hmax | Lmax | Wmax | U | V | H4 | V1 | Lg | D2 | Q1 | Q2 | k | Y | E |
|------|-------|-------|-------|------|-------|------|-------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 238.3 | 84.8 | 118.4 | 90 | 133.3 | 23 | 78.8 | 45 | 104 | 40 | | 125 | 26.2 | 11 |
| 75 | 251.2 | 84.8 | 132.5 | 90 | 139.9 | 23 | 85.1 | 46 | 115 | 54 | 35 | 145 | 26.2 | 11 |
| 90 | 263.0 | 84.8 | 136.8 | 90 | 145.6 | 23 | 91.2 | 49 | 131 | 67 | 50 | 160 | 26.2 | 11 |
| 110 | 287.5 | 84.8 | 161.0 | 90 | 166.4 | 23 | 105.7 | 56 | 161 | 88 | 74 | 180 | 15.4 | 14 |
| 140 | 314.2 | 84.8 | 187.0 | 90 | 180.0 | 23 | 118.8 | 64 | 187 | 113 | 97 | 210 | 15.4 | 14 |
| 160 | 338.3 | 84.8 | 215.0 | 90 | 189.0 | 23 | 130.9 | 72 | 215 | 139 | 123 | 240 | 18.4 | 17 |
| 225 | 387.2 | 84.8 | 267.0 | 90 | 210.5 | 23 | 158.3 | 73 | 267 | 178 | 169 | 295 | 18.4 | 17 |
| 280 | 508.9 | 125.0 | 329.0 | 125 | 262.6 | 23 | 206.1 | 113 | 329 | 210 | 207 | 350 | 40.2 | 22 |
| 315 | 553.3 | 125.0 | 380.4 | 125 | 284.3 | 23 | 228.8 | 113 | 379 | 256 | 253 | 400 | 40.2 | 22 |

| d | da1 |
|------|------|
| (mm) | (mm) |
| 63 | 13.5 |
| 75 | 13.5 |
| 90 | 13.5 |
| 110 | 17.3 |
| 140 | 17.3 |
| 160 | 21.1 |
| 225 | 21.1 |
| 280 | 27.0 |
| 315 | 27.0 |



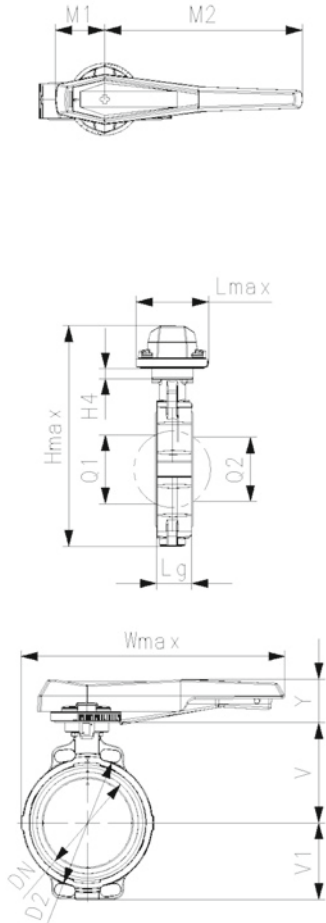
**Wafer-style intermediate installation butterfly valve type 567 PVC-C
With hand lever
Flange standard metric/ANSI/BS/JIS**

Model:

- Overall length according to EN 558, ISO 5752
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|----------------|------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 63 | 2 | 50 | 10 | 740 | 163 567 002 | 1 | 1.257 | 163 567 022 | 1 | 1.268 |
| 75 | 2 ½ | 65 | 10 | 1500 | 163 567 003 | 1 | 1.366 | 163 567 023 | 1 | 1.174 |
| 90 | 3 | 80 | 10 | 2400 | 163 567 004 | 1 | 1.542 | 163 567 024 | 1 | 1.997 |
| 110 | 4 | 100 | 10 | 3800 | 163 567 005 | 1 | 2.231 | 163 567 025 | 1 | 2.715 |
| 140 | 5 | 125 | 10 | 8600 | 163 567 006 | 1 | 2.820 | 163 567 026 | 1 | 2.536 |
| 160 | 6 | 150 | 10 | 11400 | 163 567 007 | 1 | 4.000 | 163 567 027 | 1 | 3.361 |
| 225 | 8 | 200 | 10 | 19900 | 163 567 008 | 1 | 5.873 | 163 567 028 | 1 | 6.803 |
| 280 | 10 | 250 | 10 | 34000 | 163 567 009 | 1 | 14.328 | 163 567 029 | 1 | 12.998 |
| 315 | 12 | 300 | 10 | 50000 | 163 567 010 | 1 | 18.899 | 163 567 030 | 1 | 19.139 |

| d (mm) | PTFE Code | Weight (kg) |
|-----------|--------------|----------------|
| 63 | 163 567 202 | 1.257 |
| 75 | 163 567 203 | 1.366 |
| 90 | 163 567 204 | 1.542 |
| 110 | 163 567 205 | 2.231 |
| 140 | 163 567 206 | 2.820 |
| 160 | 163 567 207 | 6.719 |
| 225 | 163 567 208 | 5.873 |
| 280 | | |
| 315 | | |

| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | k (mm) | Y (mm) | M1 (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|------------|
| 63 | 278.9 | 115.2 | 269.0 | 90 | 133.3 | 23 | 78.8 | 45 | 104 | 40 | | 125 | 66.8 | 64.7 |
| 75 | 291.8 | 115.2 | 271.8 | 90 | 139.9 | 23 | 85.1 | 46 | 115 | 54 | 35 | 145 | 66.8 | 64.7 |
| 90 | 303.6 | 115.2 | 273.9 | 90 | 145.6 | 23 | 91.2 | 49 | 131 | 67 | 50 | 160 | 66.8 | 64.7 |
| 110 | 342.2 | 115.2 | 336.0 | 90 | 166.4 | 23 | 105.7 | 56 | 161 | 88 | 74 | 180 | 70.1 | 64.9 |
| 140 | 368.9 | 115.2 | 349.0 | 90 | 180.0 | 23 | 118.8 | 64 | 187 | 113 | 97 | 210 | 70.1 | 64.9 |
| 160 | 390.0 | 115.2 | 363.0 | 90 | 189.0 | 23 | 130.9 | 72 | 215 | 139 | 123 | 240 | 70.1 | 64.9 |
| 225 | 455.1 | 115.2 | 543.0 | 90 | 210.5 | 23 | 158.3 | 73 | 267 | 178 | 169 | 295 | 86.3 | 103.6 |
| 280 | 555.0 | 149.4 | 574.0 | 125 | 262.6 | 23 | 206.1 | 113 | 329 | 210 | 207 | 350 | 86.3 | 103.6 |
| 315 | 599.4 | 149.4 | 599.7 | 125 | 284.3 | 23 | 228.8 | 113 | 379 | 256 | 253 | 400 | 86.3 | 103.6 |

| d (mm) | M2 (mm) |
|-----------|------------|
| 63 | 205.5 |
| 75 | 205.5 |
| 90 | 205.5 |
| 110 | 255.5 |
| 140 | 255.5 |
| 160 | 255.5 |
| 225 | 409.5 |
| 280 | 409.5 |
| 315 | 409.5 |



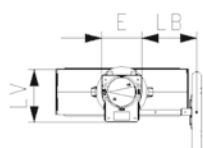
**Wafer-style intermediate installation butterfly valve type 567 PVC-C
With gear box
Flange standard metric/ANSI/BS/JIS**

Model:

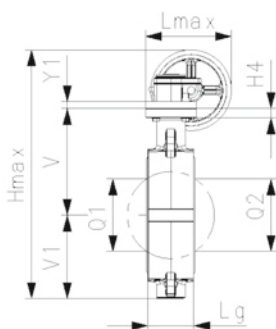
- Overall length according to EN 558, ISO 5752
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220

Note:

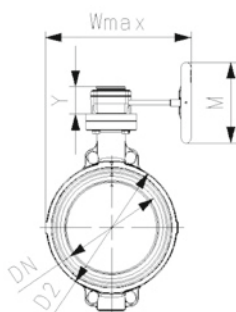
For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|----------------|------------|-------------|--|--------------------|----|----------------|--------------------|----|----------------|
| 63 | 2 | 50 | 10 | 740 | 163 567 042 | 1 | 3.078 | 163 567 062 | 1 | 3.078 |
| 75 | 2 ½ | 65 | 10 | 1500 | 163 567 043 | 1 | 3.201 | 163 567 063 | 1 | 3.212 |
| 90 | 3 | 80 | 10 | 2400 | 163 567 044 | 1 | 3.384 | 163 567 064 | 1 | 3.391 |
| 110 | 4 | 100 | 10 | 3800 | 163 567 045 | 1 | 4.019 | 163 567 065 | 1 | 4.033 |
| 140 | 5 | 125 | 10 | 8600 | 163 567 046 | 1 | 4.526 | 163 567 066 | 1 | 4.526 |
| 160 | 6 | 150 | 10 | 11400 | 163 567 047 | 1 | 5.601 | 163 567 067 | 1 | 5.624 |
| 225 | 8 | 200 | 10 | 19900 | 163 567 048 | 1 | 7.326 | 163 567 068 | 1 | 7.354 |
| 280 | 10 | 250 | 10 | 34000 | 163 567 049 | 1 | 14.741 | 163 567 069 | 1 | 15.115 |
| 315 | 12 | 300 | 10 | 50000 | 163 567 050 | 1 | 19.254 | 163 567 070 | 1 | 35.000 |



| d (mm) | PTFE Code | Weight (kg) |
|-----------|--------------------|----------------|
| 63 | 163 567 242 | 3.078 |
| 75 | 163 567 243 | 3.201 |
| 90 | 163 567 244 | 3.384 |
| 110 | 163 567 245 | 4.019 |
| 140 | 163 567 246 | 4.526 |
| 160 | 163 567 247 | 5.601 |
| 225 | 163 567 248 | 7.326 |
| 280 | | |
| 315 | | |



| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | k (mm) | Y (mm) | E (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|
| 63 | 319.4 | 169.1 | 240.2 | 90 | 133.3 | 23 | 78.8 | 45 | 104 | 40 | | 125 | 61.2 | 80 |
| 75 | 332.3 | 169.1 | 247.3 | 90 | 139.9 | 23 | 85.1 | 46 | 115 | 54 | 35 | 145 | 61.2 | 80 |
| 90 | 344.1 | 169.1 | 249.4 | 90 | 145.6 | 23 | 91.2 | 49 | 131 | 67 | 50 | 160 | 61.2 | 80 |
| 110 | 379.4 | 169.1 | 261.5 | 90 | 166.4 | 23 | 105.7 | 56 | 161 | 88 | 74 | 180 | 61.2 | 80 |
| 140 | 406.1 | 169.1 | 274.5 | 90 | 180.0 | 23 | 118.8 | 64 | 187 | 113 | 97 | 210 | 61.2 | 80 |
| 160 | 427.2 | 169.1 | 288.5 | 90 | 189.0 | 23 | 130.9 | 72 | 215 | 139 | 123 | 240 | 61.2 | 80 |
| 225 | 476.1 | 169.1 | 267.0 | 90 | 210.5 | 23 | 158.3 | 73 | 267 | 178 | 169 | 295 | 61.2 | 80 |
| 280 | 613.0 | 212.6 | 329.0 | 125 | 262.6 | 23 | 206.1 | 113 | 329 | 210 | 207 | 350 | 68.4 | 100 |
| 315 | 657.4 | 212.6 | 380.4 | 125 | 284.3 | 23 | 228.8 | 113 | 379 | 256 | 253 | 400 | 68.4 | 100 |

| d (mm) | Y1 (mm) | M (mm) | LV (mm) | LB (mm) |
|-----------|------------|-----------|------------|------------|
| 63 | | 160 | 112.3 | 129.5 |
| 75 | | 160 | 112.3 | 129.5 |
| 90 | | 160 | 112.3 | 129.5 |
| 110 | | 160 | 112.3 | 129.5 |
| 140 | | 160 | 112.3 | 129.5 |
| 160 | | 160 | 112.3 | 129.5 |
| 225 | | 160 | 112.3 | 129.5 |
| 280 | 17 | 200 | 130.0 | 134.0 |
| 315 | 17 | 200 | 130.0 | 134.0 |

Butterfly valves type 578



Lug-style end installation butterfly valve type 578 PVC-C Bare shaft Flange standard metric

Model:

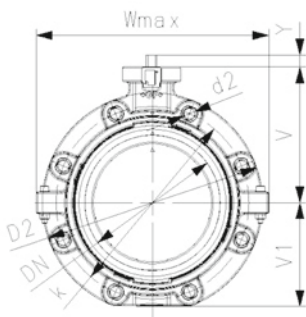
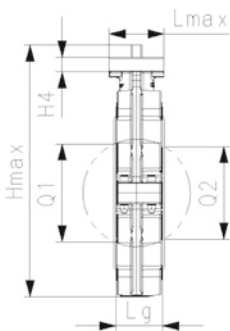
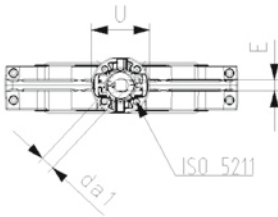
- Housing material: PP-GF30 with SS316 lug-inserts
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Interface F07 according to DIN/ISO 5211
- Interface F10 for the dimensions DN250-300 according to DIN/ISO 5211

Option:

- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|----------------|------------|-------------|--|--------------|----------------------|-------------|----------------------|
| 63 | 2 | 50 | 10 | 740 | 163 578 802 | 1 | 1.299 | 163 578 822 |
| 75 | 2 ½ | 65 | 10 | 1500 | 163 578 803 | 1 | 1.456 | 163 578 823 |
| 90 | 3 | 80 | 10 | 2400 | 163 578 804 | 1 | 1.701 | 163 578 824 |
| 110 | 4 | 100 | 10 | 3800 | 163 578 805 | 1 | 2.606 | 163 578 825 |
| 140 | 5 | 125 | 10 | 8600 | 163 578 806 | 1 | 4.120 | 163 578 826 |
| 160 | 6 | 150 | 10 | 11400 | 163 578 807 | 1 | 5.881 | 163 578 827 |
| 225 | 8 | 200 | 10 | 19900 | 163 578 808 | 1 | 7.125 | 163 578 828 |
| 280 | 10 | 250 | 10 | 34000 | 163 578 809 | 1 | 17.880 | 163 578 829 |
| 315 | 12 | 300 | 10 | 50000 | 163 578 810 | 1 | 24.416 | 163 578 830 |

| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | d2 (mm) | k (mm) | da1 (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|-------------|
| 63 | 238.3 | 84.8 | 159.5 | 90 | 133.3 | 23 | 78.8 | 160 | 160 | 40 | | M16 | 125 | 13.5 |
| 75 | 251.2 | 84.8 | 166.1 | 90 | 139.9 | 23 | 85.1 | 180 | 180 | 54 | 35 | M16 | 145 | 13.5 |
| 90 | 263.0 | 84.8 | 171.8 | 90 | 145.6 | 23 | 91.2 | 195 | 195 | 67 | 50 | M16 | 160 | 13.5 |
| 110 | 288.9 | 84.8 | 181.4 | 90 | 166.0 | 23 | 107.5 | 226 | 226 | 88 | 74 | M16 | 180 | 17.3 |
| 140 | 318.1 | 84.8 | 195.4 | 90 | 180.0 | 23 | 122.7 | 258 | 258 | 113 | 97 | M16 | 210 | 17.3 |
| 160 | 341.9 | 84.8 | 207.4 | 90 | 189.0 | 23 | 134.5 | 284 | 284 | 139 | 123 | M20 | 240 | 21.1 |
| 225 | 390.4 | 84.8 | 228.9 | 90 | 210.5 | 23 | 161.5 | 341 | 341 | 178 | 169 | M20 | 295 | 21.1 |
| 280 | 511.5 | 125.0 | 304.6 | 125 | 264.4 | 23 | 206.9 | 412 | 412 | 210 | 207 | M20 | 350 | 27.0 |
| 315 | 560.9 | 125.0 | 325.4 | 125 | 285.2 | 23 | 235.5 | 482 | 482 | 256 | 253 | M20 | 400 | 27.0 |



Lug-style end installation butterfly valve type 578 PVC-C
With hand lever
Flange standard metric

Model:

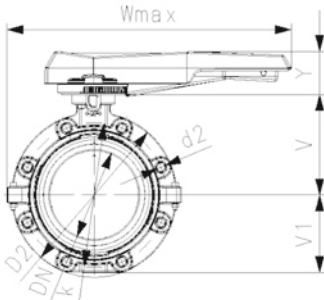
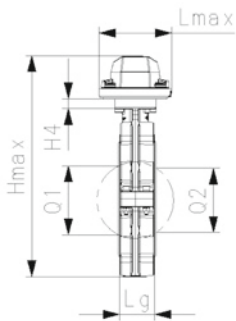
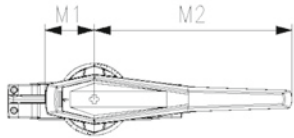
- Housing material: PP-GF30 with SS316 lug-inserts
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- We recommend for the dimensions DN250 and DN300 only 6 bar maximum system pressure for the hand lever version

Option:

- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d | Size | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|--------|------|-------|---------------------|-------------|----|--------|-------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| | | | | (l/min) | | | | | | |
| 63 | 2 | 50 | 10 | 740 | 163 578 002 | 1 | 1.800 | 163 578 022 | 1 | 1.800 |
| 75 | 2 ½ | 65 | 10 | 1500 | 163 578 003 | 1 | 1.895 | 163 578 023 | 1 | 1.895 |
| 90 | 3 | 80 | 10 | 2400 | 163 578 004 | 1 | 2.251 | 163 578 024 | 1 | 2.251 |
| 110 | 4 | 100 | 10 | 3800 | 163 578 005 | 1 | 3.146 | 163 578 025 | 1 | 3.146 |
| 140 | 5 | 125 | 10 | 8600 | 163 578 006 | 1 | 4.660 | 163 578 026 | 1 | 4.660 |
| 160 | 6 | 150 | 10 | 11400 | 163 578 007 | 1 | 6.430 | 163 578 027 | 1 | 6.430 |
| 225 | 8 | 200 | 10 | 19900 | 163 578 008 | 1 | 8.625 | 163 578 028 | 1 | 8.625 |
| 280 | 10 | 250 | 6 | 34000 | 163 578 009 | 1 | 19.528 | 163 578 029 | 1 | 19.528 |
| 315 | 12 | 300 | 6 | 50000 | 163 578 010 | 1 | 26.106 | 163 578 030 | 1 | 26.106 |

| d | Hmax | Lmax | Wmax | U | V | H4 | V1 | Lg | D2 | Q1 | Q2 | d2 | k | Y |
|------|-------|-------|-------|------|-------|------|-------|-------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 278.9 | 115.2 | 287.8 | 90 | 133.3 | 23 | 78.8 | 44.7 | 160 | 40 | | M16 | 125 | 66.8 |
| 75 | 291.8 | 115.2 | 296.3 | 90 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | M16 | 145 | 66.8 |
| 90 | 303.6 | 115.2 | 310.3 | 90 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | M16 | 160 | 66.8 |
| 110 | 343.6 | 115.2 | 375.2 | 90 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | M16 | 180 | 70.1 |
| 140 | 372.8 | 115.2 | 391.2 | 90 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | M16 | 210 | 70.1 |
| 160 | 393.6 | 115.2 | 395.2 | 90 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | M20 | 240 | 70.1 |
| 225 | 458.1 | 149.4 | 588.1 | 90 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | M20 | 295 | 86.1 |
| 280 | 557.6 | 149.4 | 628.1 | 125 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | M20 | 350 | 86.3 |
| 315 | 607.0 | 149.4 | 663.1 | 125 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | M20 | 400 | 86.3 |

| d | M1 | M2 |
|------|-------|-------|
| (mm) | (mm) | (mm) |
| 63 | 63.7 | 205.3 |
| 75 | 63.7 | 205.3 |
| 90 | 63.7 | 205.3 |
| 110 | 63.7 | 255.2 |
| 140 | 63.7 | 255.2 |
| 160 | 63.7 | 255.2 |
| 225 | 101.7 | 408.1 |
| 280 | 101.7 | 408.1 |
| 315 | 101.7 | 408.1 |



Lug-style end installation butterfly valve type 578 PVC-C
With gear box
Flange standard metric

Model:

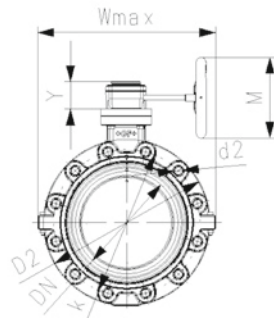
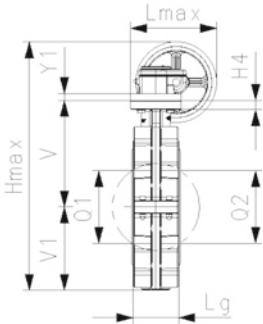
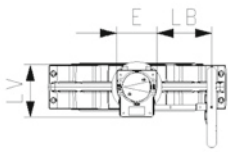
- Housing material: PP-GF30 with SS316 lug-inserts
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

Option:

- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) | | |
|-----------|----------------|------------|-------------|-----------------------------------|--------------------|----------------------|-------------|----------------------|---|--------|
| 63 | 2 | 50 | 10 | 740 | 163 578 042 | 1 | 3.535 | 163 578 062 | 1 | 3.535 |
| 75 | 2 ½ | 65 | 10 | 1500 | 163 578 043 | 1 | 3.698 | 163 578 063 | 1 | 3.698 |
| 90 | 3 | 80 | 10 | 2400 | 163 578 044 | 1 | 3.929 | 163 578 064 | 1 | 3.929 |
| 110 | 4 | 100 | 10 | 3800 | 163 578 045 | 1 | 4.834 | 163 578 065 | 1 | 4.834 |
| 140 | 5 | 125 | 10 | 8600 | 163 578 046 | 1 | 6.348 | 163 578 066 | 1 | 6.348 |
| 160 | 6 | 150 | 10 | 11400 | 163 578 047 | 1 | 8.109 | 163 578 067 | 1 | 8.109 |
| 225 | 8 | 200 | 10 | 19900 | 163 578 048 | 1 | 9.353 | 163 578 068 | 1 | 9.353 |
| 280 | 10 | 250 | 10 | 34000 | 163 578 049 | 1 | 21.210 | 163 578 069 | 1 | 21.210 |
| 315 | 12 | 300 | 10 | 50000 | 163 578 050 | 1 | 27.746 | 163 578 070 | 1 | 27.746 |

| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | d2 (mm) | k (mm) | Y (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|
| 63 | 319.4 | 169.1 | 263.5 | 90 | 133.3 | 23 | 78.8 | 44.7 | 160 | 40 | | M16 | 125 | 61.2 |
| 75 | 332.3 | 169.1 | 272.0 | 90 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | M16 | 145 | 61.2 |
| 90 | 344.1 | 169.1 | 286.0 | 90 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | M16 | 160 | 61.2 |
| 110 | 380.8 | 169.1 | 301.0 | 90 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | M16 | 180 | 61.2 |
| 140 | 410.0 | 169.1 | 317.0 | 90 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | M16 | 210 | 61.2 |
| 160 | 430.8 | 169.1 | 321.0 | 90 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | M20 | 240 | 61.2 |
| 225 | 479.3 | 169.1 | 360.0 | 90 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | M20 | 295 | 61.2 |
| 280 | 615.6 | 212.6 | 440.0 | 125 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | M20 | 350 | 68.4 |
| 315 | 665.0 | 212.6 | 510.0 | 125 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | M20 | 400 | 68.4 |

| d (mm) | E (mm) | Y1 (mm) | M (mm) | LV (mm) | LB (mm) |
|-----------|-----------|------------|-----------|------------|------------|
| 63 | 80 | | 160 | 112.3 | 129.5 |
| 75 | 80 | | 160 | 112.3 | 129.5 |
| 90 | 80 | | 160 | 112.3 | 129.5 |
| 110 | 80 | | 160 | 112.3 | 129.5 |
| 140 | 80 | | 160 | 112.3 | 129.5 |
| 160 | 80 | | 160 | 112.3 | 129.5 |
| 225 | 80 | | 160 | 112.3 | 129.5 |
| 280 | 100 | 17.0 | 200 | 130.0 | 134.0 |
| 315 | 100 | 17.0 | 200 | 130.0 | 134.0 |

Butterfly valves electric type 145



Wafer-style intermediate installation butterfly valve type 145 PVC-C
With electric actuator 230V
With manual override
Flange standard metric/ANSI/BS/JIS

Model:

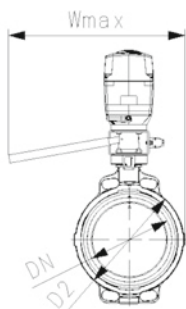
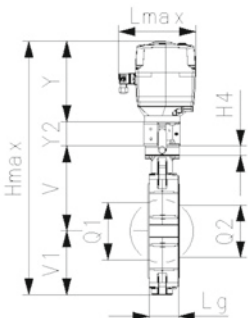
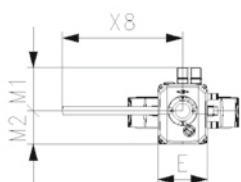
- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Heating element, position feedback (Open/Close/ Middle)
- Overall length according to EN 558, ISO 5752 (DN50-200 line 25, DN250-300 line 16)
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220

Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | Weight (kg) | PTFE Code |
|-----------|----------------|------------|-------------|-----------------------------------|--------------|----------------|--------------|
| 63 | 2 | 50 | 10 | 740 | 199 145 162 | 5.678 | 199 145 762 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 145 163 | 5.801 | 199 145 763 |
| 90 | 3 | 80 | 10 | 2400 | 199 145 164 | 5.984 | 199 145 764 |
| 110 | 4 | 100 | 10 | 3800 | 199 145 165 | 6.619 | 199 145 765 |
| 140 | 5 | 125 | 10 | 8600 | 199 145 166 | 5.732 | 199 145 766 |
| 160 | 6 | 150 | 10 | 11400 | 199 145 167 | 8.201 | 199 145 767 |
| 225 | 8 | 200 | 10 | 19900 | 199 145 168 | 14.466 | 199 145 768 |

| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | k (mm) | Y (mm) | E (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|
| 63 | 461.4 | 190 | 356.7 | 90 | 133.3 | 23 | 78.8 | 45 | 104 | 40 | | 125 | 189.3 | 122.3 |
| 75 | 474.3 | 190 | 363.8 | 90 | 139.9 | 23 | 85.1 | 46 | 115 | 54 | 35 | 145 | 189.3 | 122.3 |
| 90 | 486.1 | 190 | 365.9 | 90 | 145.6 | 23 | 91.2 | 49 | 131 | 67 | 50 | 160 | 189.3 | 122.3 |
| 110 | 521.4 | 190 | 378.0 | 90 | 166.4 | 23 | 105.7 | 56 | 161 | 88 | 74 | 180 | 189.3 | 122.3 |
| 140 | 548.1 | 190 | 391.0 | 90 | 180.0 | 23 | 118.8 | 64 | 187 | 113 | 97 | 210 | 189.3 | 122.3 |
| 160 | 569.2 | 190 | 405.0 | 90 | 189.0 | 23 | 130.9 | 72 | 215 | 139 | 123 | 240 | 189.3 | 122.3 |
| 225 | 628.1 | 190 | 431.0 | 90 | 210.5 | 23 | 158.3 | 73 | 267 | 178 | 169 | 295 | 189.3 | 122.3 |

| d (mm) | X8 (mm) | Y2 (mm) | M1 (mm) | M2 (mm) |
|-----------|------------|------------|------------|------------|
| 63 | 297.5 | 60 | 107.3 | 82.7 |
| 75 | 297.5 | 60 | 107.3 | 82.7 |
| 90 | 297.5 | 60 | 107.3 | 82.7 |
| 110 | 297.5 | 60 | 107.3 | 82.7 |
| 140 | 297.5 | 60 | 107.3 | 82.7 |
| 160 | 297.5 | 60 | 107.3 | 82.7 |
| 225 | 297.5 | 60 | 107.3 | 82.7 |



Wafer-style intermediate installation butterfly valve type 145 PVC-C
With electric actuator 230V
Without manual override
Flange standard metric/ANSI/BS/JIS

Model:

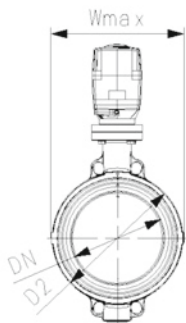
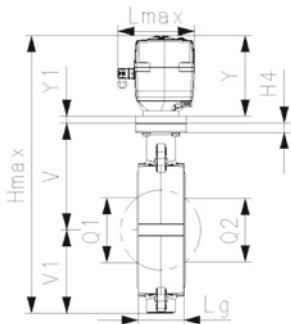
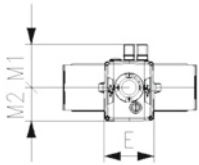
- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Heating element, position feedback (Open/Close/ Middle)
- Overall length according to EN 558, ISO 5752 (DN50-200 line 25, DN250-300 line 16)
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220

Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | Weight (kg) | FKM Code | Weight (kg) | PTFE Code |
|-----------|----------------|------------|-------------|-----------------------------------|--------------|----------------|-------------|----------------|--------------|
| 63 | 2 | 50 | 10 | 740 | 199 145 202 | 3.189 | 199 145 222 | 3.193 | 199 145 722 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 145 203 | 3.189 | 199 145 223 | 4.312 | 199 145 723 |
| 90 | 3 | 80 | 10 | 2400 | 199 145 204 | 4.484 | 199 145 224 | 4.491 | 199 145 724 |
| 110 | 4 | 100 | 10 | 3800 | 199 145 205 | 5.119 | 199 145 225 | 5.133 | 199 145 725 |
| 140 | 5 | 125 | 10 | 8600 | 199 145 206 | 4.719 | 199 145 226 | 4.737 | 199 145 726 |
| 160 | 6 | 150 | 10 | 11400 | 199 145 207 | 6.701 | 199 145 227 | 6.724 | 199 145 727 |
| 225 | 8 | 200 | 10 | 19900 | 199 145 208 | 12.966 | 199 145 228 | 12.994 | 199 145 728 |
| 280 | 10 | 250 | 6 | 34000 | 199 145 209 | 14.334 | 199 145 229 | 14.481 | |
| 315 | 12 | 300 | 4 | 50000 | 199 145 210 | 19.546 | 199 145 230 | 19.546 | |

| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | k (mm) | Y (mm) | E (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|
| 63 | 393.3 | 190 | 118.4 | 90 | 133.3 | 23 | 78.8 | 45 | 104 | 40 | | 125 | 166.2 | 122.3 |
| 75 | 406.2 | 190 | 132.5 | 90 | 139.9 | 23 | 85.1 | 46 | 115 | 54 | 35 | 145 | 166.2 | 122.3 |
| 90 | 426.1 | 190 | 136.8 | 90 | 145.6 | 23 | 91.2 | 49 | 131 | 67 | 50 | 160 | 189.3 | 122.3 |
| 110 | 461.4 | 190 | 161.0 | 90 | 166.4 | 23 | 105.7 | 56 | 161 | 88 | 74 | 180 | 189.3 | 122.3 |
| 140 | 488.1 | 190 | 187.0 | 90 | 180.0 | 23 | 118.8 | 64 | 187 | 113 | 97 | 210 | 189.3 | 122.3 |
| 160 | 509.2 | 190 | 215.0 | 90 | 189.0 | 23 | 130.9 | 72 | 215 | 139 | 123 | 240 | 189.3 | 122.3 |
| 225 | 568.1 | 190 | 267.0 | 90 | 210.5 | 23 | 158.3 | 73 | 267 | 178 | 169 | 295 | 199.3 | 122.3 |
| 280 | 685.0 | 190 | 329.0 | 125 | 262.6 | 23 | 206.1 | 113 | 329 | 210 | 207 | 350 | 199.3 | 122.3 |
| 315 | 729.4 | 190 | 380.4 | 125 | 284.3 | 23 | 228.8 | 113 | 379 | 256 | 253 | 400 | 199.3 | 122.3 |

| d (mm) | Y1 (mm) | M1 (mm) | M2 (mm) |
|-----------|------------|------------|------------|
| 63 | 15 | 107.3 | 82.7 |
| 75 | 15 | 107.3 | 82.7 |
| 90 | | 107.3 | 82.7 |
| 110 | | 107.3 | 82.7 |
| 140 | | 107.3 | 82.7 |
| 160 | | 107.3 | 82.7 |
| 225 | | 107.3 | 82.7 |
| 280 | 17 | 107.3 | 82.7 |
| 315 | 17 | 107.3 | 82.7 |



Wafer-style intermediate installation butterfly valve type 145 PVC-C
With electric actuator 24V
With manual override
Flange standard metric/ANSI/BS/JIS

Model:

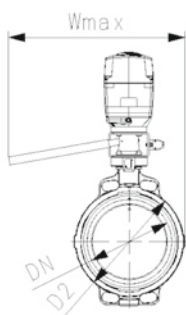
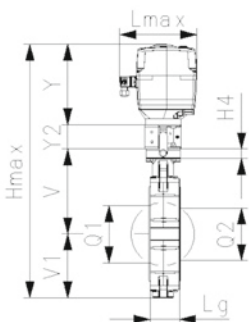
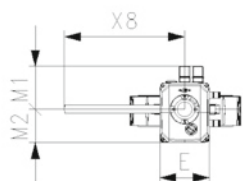
- Voltage 24V AC/DC
- Factory set control range 90°<
- Heating element, position feedback (Open/Close/ Middle)
- Overall length according to EN 558, ISO 5752 (DN50-200 line 25, DN250-300 line 16)
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220

Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | Weight (kg) | PTFE Code |
|-----------|----------------|------------|-------------|--|--------------|----------------|--------------|
| 63 | 2 | 50 | 10 | 740 | 199 145 242 | 5.678 | 199 145 782 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 145 243 | 5.801 | 199 145 783 |
| 90 | 3 | 80 | 10 | 2400 | 199 145 244 | 5.984 | 199 145 784 |
| 110 | 4 | 100 | 10 | 3800 | 199 145 245 | 6.619 | 199 145 785 |
| 140 | 5 | 125 | 10 | 8600 | 199 145 246 | 5.732 | 199 145 786 |
| 160 | 6 | 150 | 10 | 11400 | 199 145 247 | 8.201 | 199 145 787 |
| 225 | 8 | 200 | 10 | 19900 | 199 145 248 | 14.466 | 199 145 788 |

| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | k (mm) | Y (mm) | E (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|
| 63 | 461.4 | 190 | 356.7 | 90 | 133.3 | 75 | 78.8 | 45 | 104 | 40 | | 125 | 189.3 | 122.3 |
| 75 | 474.3 | 190 | 363.8 | 90 | 139.9 | 75 | 85.1 | 46 | 115 | 54 | 35 | 145 | 189.3 | 122.3 |
| 90 | 486.1 | 190 | 365.9 | 90 | 145.6 | 60 | 91.2 | 49 | 131 | 67 | 50 | 160 | 189.3 | 122.3 |
| 110 | 521.4 | 190 | 378.0 | 90 | 166.4 | 60 | 105.7 | 56 | 161 | 88 | 74 | 180 | 189.3 | 122.3 |
| 140 | 548.1 | 190 | 391.0 | 90 | 180.0 | 60 | 118.8 | 64 | 187 | 113 | 97 | 210 | 189.3 | 122.3 |
| 160 | 569.2 | 190 | 405.0 | 90 | 189.0 | 60 | 130.9 | 72 | 215 | 139 | 123 | 240 | 189.3 | 122.3 |
| 225 | 628.1 | 190 | 431.0 | 90 | 210.5 | 60 | 158.3 | 73 | 267 | 178 | 169 | 295 | 189.3 | 122.3 |

| d (mm) | X8 (mm) | Y2 (mm) | M1 (mm) | M2 (mm) |
|-----------|------------|------------|------------|------------|
| 63 | 297.5 | 60 | 107.3 | 82.7 |
| 75 | 297.5 | 60 | 107.3 | 82.7 |
| 90 | 297.5 | 60 | 107.3 | 82.7 |
| 110 | 297.5 | 60 | 107.3 | 82.7 |
| 140 | 297.5 | 60 | 107.3 | 82.7 |
| 160 | 297.5 | 60 | 107.3 | 82.7 |
| 225 | 297.5 | 60 | 107.3 | 82.7 |



Wafer-style intermediate installation butterfly valve type 145 PVC-C
With electric actuator 24V
Without manual override
Flange standard metric/ANSI/BS/JIS

Model:

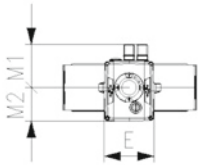
- Voltage 24V AC/DC
- Factory set control range 90°<
- Heating element, position feedback (Open/Close/ Middle)
- Overall length according to EN 558, ISO 5752 (DN50-200 line 25, DN250-300 line 16)
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220

Option:

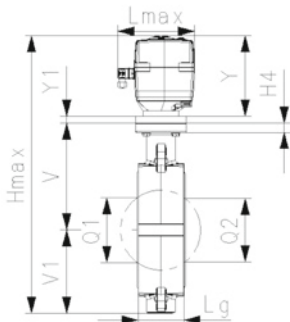
- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

Note:

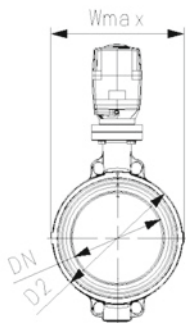
For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | Weight (kg) | PTFE Code |
|-----------|----------------|------------|-------------|--|--------------|----------------|--------------|
| 63 | 2 | 50 | 10 | 740 | 199 145 282 | 3.189 | 199 145 742 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 145 283 | 4.301 | 199 145 743 |
| 90 | 3 | 80 | 10 | 2400 | 199 145 284 | 4.484 | 199 145 744 |
| 110 | 4 | 100 | 10 | 3800 | 199 145 285 | 5.119 | 199 145 745 |
| 140 | 5 | 125 | 10 | 8600 | 199 145 286 | 4.719 | 199 145 746 |
| 160 | 6 | 150 | 10 | 11400 | 199 145 287 | 6.701 | 199 145 747 |
| 225 | 8 | 200 | 10 | 19900 | 199 145 288 | 12.966 | 199 145 748 |
| 280 | 10 | 250 | 6 | 34000 | 199 145 289 | 14.334 | |
| 315 | 12 | 300 | 4 | 50000 | 199 145 290 | 19.546 | |



| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | k (mm) | Y (mm) | E (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|
| 63 | 393.3 | 190 | 118.4 | 90 | 133.3 | 23 | 78.8 | 45 | 104 | 40 | | 125 | 166.2 | 122.3 |
| 75 | 406.2 | 190 | 132.5 | 90 | 139.9 | 23 | 85.1 | 46 | 115 | 54 | 35 | 145 | 166.2 | 122.3 |
| 90 | 426.1 | 190 | 136.8 | 90 | 145.6 | 23 | 91.2 | 49 | 131 | 67 | 50 | 160 | 189.3 | 122.3 |
| 110 | 461.4 | 190 | 161.0 | 90 | 166.4 | 23 | 105.7 | 56 | 161 | 88 | 74 | 180 | 189.3 | 122.3 |
| 140 | 488.1 | 190 | 187.0 | 90 | 180.0 | 23 | 118.8 | 64 | 187 | 113 | 97 | 210 | 189.3 | 122.3 |
| 160 | 509.2 | 190 | 215.0 | 90 | 189.0 | 23 | 130.9 | 72 | 215 | 139 | 123 | 240 | 189.3 | 122.3 |
| 225 | 568.1 | 190 | 267.0 | 90 | 210.5 | 23 | 158.3 | 73 | 267 | 178 | 169 | 295 | 199.3 | 122.3 |
| 280 | 685.0 | 190 | 329.0 | 125 | 262.6 | 23 | 206.1 | 113 | 329 | 210 | 207 | 350 | 199.3 | 122.3 |
| 315 | 729.4 | 190 | 380.4 | 125 | 284.3 | 23 | 228.8 | 113 | 379 | 256 | 253 | 400 | 199.3 | 122.3 |



| d (mm) | Y1 (mm) | M1 (mm) | M2 (mm) |
|-----------|------------|------------|------------|
| 63 | 15 | 107.3 | 82.7 |
| 75 | 15 | 107.3 | 82.7 |
| 90 | | 107.3 | 82.7 |
| 110 | | 107.3 | 82.7 |
| 140 | | 107.3 | 82.7 |
| 160 | | 107.3 | 82.7 |
| 225 | | 107.3 | 82.7 |
| 280 | 17 | 107.3 | 82.7 |
| 315 | 17 | 107.3 | 82.7 |

Butterfly valves electric type 146



Lug-Style end installation butterfly valve type 146 PVC-C
With electric actuator 230V
Without manual override
Flange standard metric

Model:

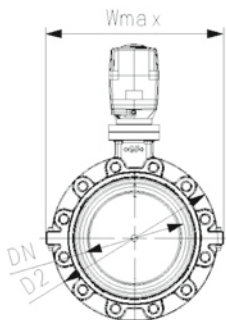
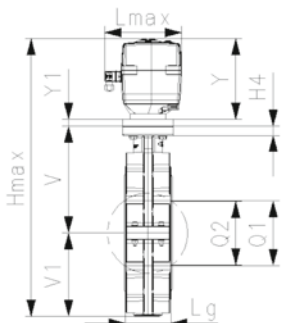
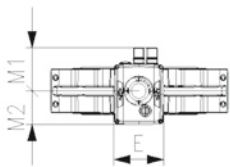
- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Heating element, position feedback (Open/Close/ Middle)
- Overall length according to EN 558, ISO 5752 (DN50-200 line 25, DN250-300 line 16)
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | Weight (kg) | PTFE Code |
|-----------|----------------|------------|-------------|-----------------------------------|--------------|----------------|--------------|
| 63 | 2 | 50 | 10 | 740 | 199 146 202 | 4.299 | 199 146 722 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 146 203 | 4.456 | 199 146 723 |
| 90 | 3 | 80 | 10 | 2400 | 199 146 204 | 4.701 | 199 146 724 |
| 110 | 4 | 100 | 10 | 3800 | 199 146 205 | 5.606 | 199 146 725 |
| 140 | 5 | 125 | 10 | 8600 | 199 146 206 | 7.120 | 199 146 726 |
| 160 | 6 | 150 | 10 | 11400 | 199 146 207 | 8.881 | 199 146 727 |
| 225 | 8 | 200 | 10 | 19900 | 199 146 208 | 13.625 | 199 146 728 |
| 280 | 10 | 250 | 6 | 34000 | 199 146 209 | 24.385 | |
| 315 | 12 | 300 | 4 | 50000 | 199 146 210 | 30.916 | |

| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | d2 (mm) | k (mm) | Y (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|
| 63 | 378.3 | 190.0 | 165.0 | 90.0 | 133.3 | 23 | 78.8 | 44.7 | 160 | 40 | | M16 | 125 | 166.2 |
| 75 | 391.2 | 190.0 | 182.0 | 90.0 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | M16 | 145 | 166.2 |
| 90 | 426.1 | 190.0 | 210.0 | 90.0 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | M16 | 160 | 189.3 |
| 110 | 462.8 | 190.0 | 240.0 | 90.0 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | M16 | 180 | 189.3 |
| 140 | 492.0 | 190.0 | 272.0 | 90.0 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | M16 | 210 | 189.3 |
| 160 | 522.8 | 190.0 | 300.0 | 90.0 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | M20 | 240 | 199.3 |
| 225 | 571.3 | 190.0 | 360.0 | 90.0 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | M20 | 295 | 199.3 |
| 280 | 670.6 | 190.0 | 440.0 | 125.0 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | M20 | 350 | 199.3 |
| 315 | 720.0 | 190.0 | 510.0 | 125.0 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | M20 | 400 | 199.3 |

| d (mm) | E (mm) | Y1 (mm) | M1 (mm) | M2 (mm) |
|-----------|-----------|------------|------------|------------|
| 63 | 122.3 | | 107.3 | 82.7 |
| 75 | 122.3 | | 107.3 | 82.7 |
| 90 | 122.3 | | 107.3 | 82.7 |
| 110 | 122.3 | | 107.3 | 82.7 |
| 140 | 122.3 | | 107.3 | 82.7 |
| 160 | 122.3 | | 107.3 | 82.7 |
| 225 | 122.3 | | 107.3 | 82.7 |
| 280 | 122.3 | 17.0 | 107.3 | 82.7 |
| 315 | 122.3 | 17.0 | 107.3 | 82.7 |

Butterfly valves pneumatic type 240



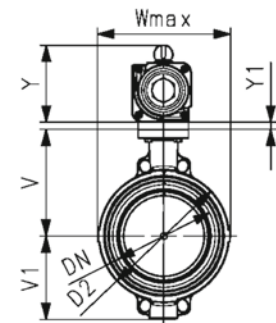
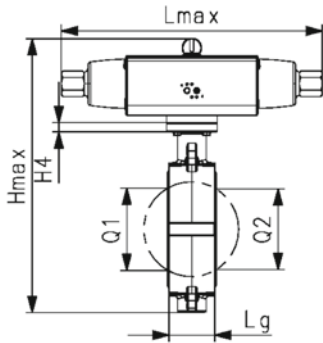
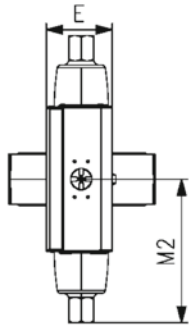
Wafer-style intermediate installation butterfly valve type 240 PVC-C
With pneumatic actuator - fail safe to close (FC)
Without manual override
Flange standard metric/ANSI/BS/JIS

Model:

- Control range 90°<
- Overall length according to EN 558, ISO 5752
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|----------------|------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 63 | 2 | 50 | 10 | 740 | 199 240 162 | 1 | 3.218 | 199 240 182 | 1 | 3.218 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 240 163 | 1 | 3.341 | 199 240 183 | 1 | 3.352 |
| 90 | 3 | 80 | 10 | 2400 | 199 240 164 | 1 | 3.524 | 199 240 184 | 1 | 3.531 |
| 110 | 4 | 100 | 10 | 3800 | 199 240 165 | 1 | 5.271 | 199 240 185 | 1 | 5.371 |
| 140 | 5 | 125 | 10 | 8600 | 199 240 166 | 1 | 7.169 | 199 240 186 | 1 | 5.943 |
| 160 | 6 | 150 | 10 | 11400 | 199 240 167 | 1 | 10.184 | 199 240 187 | 1 | 10.285 |
| 225 | 8 | 200 | 10 | 19900 | 199 240 168 | 1 | 14.466 | 199 240 188 | 1 | 14.494 |

| d (mm) | PTFE Code |
|-----------|--------------|
| 63 | 199 240 642 |
| 75 | 199 240 643 |
| 90 | 199 240 644 |
| 110 | 199 240 645 |
| 140 | 199 240 646 |
| 160 | 199 240 647 |
| 225 | 199 240 648 |

| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | d2 (mm) | Q1 (mm) | Q2 (mm) | k (mm) | Y (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|
| 63 | 325.3 | 274.4 | 118.4 | 90 | 133.3 | 23 | 78.8 | 45 | 104 | 104 | 40 | | 125 | 98.2 |
| 75 | 338.2 | 274.4 | 132.5 | 90 | 139.9 | 23 | 85.1 | 46 | 115 | 115 | 54 | 35 | 145 | 98.2 |
| 90 | 362.9 | 325.2 | 136.8 | 90 | 145.6 | 23 | 91.2 | 49 | 131 | 131 | 67 | 50 | 160 | 111.1 |
| 110 | 386.9 | 359.6 | 161.0 | 90 | 166.4 | 23 | 105.7 | 56 | 161 | 161 | 88 | 74 | 180 | 114.8 |
| 140 | 448.3 | 418.0 | 187.0 | 90 | 180.0 | 23 | 118.8 | 64 | 187 | 187 | 113 | 97 | 210 | 149.5 |
| 160 | 473.0 | 434.0 | 215.0 | 90 | 189.0 | 23 | 130.9 | 72 | 215 | 215 | 139 | 123 | 240 | 153.1 |
| 225 | 528.8 | 498.4 | 267.0 | 90 | 210.5 | 23 | 158.3 | 73 | 267 | 267 | 178 | 169 | 295 | 160.0 |

| d (mm) | E (mm) | Y1 (mm) | M2 (mm) |
|-----------|-----------|------------|------------|
| 63 | 70.4 | 15 | 137.2 |
| 75 | 70.4 | 15 | 137.2 |
| 90 | 83.3 | 15 | 162.6 |
| 110 | 87.0 | | 179.8 |
| 140 | 107.5 | | 209.0 |
| 160 | 111.1 | | 217.0 |
| 225 | 118.0 | | 249.2 |



Wafer-style intermediate installation butterfly valve type 240 PVC-C
With pneumatic actuator - fail safe to open (FO)
Without manual override
Flange standard metric/ANSI/BS/JIS

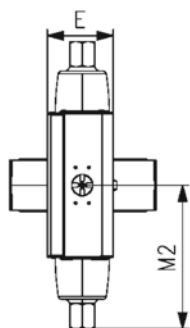
Model:

- Control range 90°<
- Overall length according to EN 558, ISO 5752
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5
 Class 150, BS 1560: 1989, BS 4504, JIS B 2220

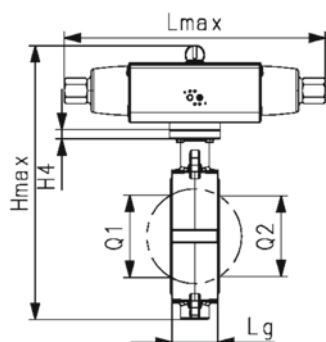
Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com

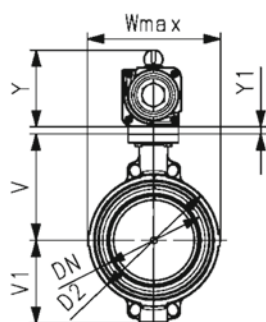
| d | Size | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|--------|------|-------|---------------------|--------------------|----|--------|--------------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| 63 | 2 | 50 | 10 | 740 | 199 240 202 | 1 | 3.439 | 199 240 222 | 1 | 3.443 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 240 203 | 1 | 3.341 | 199 240 223 | 1 | 3.352 |
| 90 | 3 | 80 | 10 | 2400 | 199 240 204 | 1 | 3.524 | 199 240 224 | 1 | 3.531 |
| 110 | 4 | 100 | 10 | 3800 | 199 240 205 | 1 | 5.357 | 199 240 225 | 1 | 5.371 |
| 140 | 5 | 125 | 10 | 8600 | 199 240 206 | 1 | 7.169 | 199 240 226 | 1 | 7.187 |
| 160 | 6 | 150 | 10 | 11400 | 199 240 207 | 1 | 10.262 | 199 240 227 | 1 | 10.285 |
| 225 | 8 | 200 | 10 | 19900 | 199 240 208 | 1 | 14.466 | 199 240 228 | 1 | 14.494 |



| d | PTFE | Weight |
|------|--------------------|--------|
| (mm) | Code | (kg) |
| 63 | 199 240 662 | 2.072 |
| 75 | 199 240 663 | 2.176 |
| 90 | 199 240 664 | 2.824 |
| 110 | 199 240 665 | 3.563 |
| 140 | 199 240 666 | 4.384 |
| 160 | 199 240 667 | 10.262 |
| 225 | 199 240 668 | 14.466 |



| d | Hmax | Lmax | Wmax | U | V | H4 | V1 | Lg | D2 | Q1 | Q2 | k | Y | E |
|------|-------|-------|-------|------|-------|------|-------|------|------|------|------|------|-------|-------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 325.3 | 274.4 | 118.4 | 90 | 133.3 | 23 | 78.8 | 45 | 104 | 40 | | 125 | 98.2 | 70.4 |
| 75 | 338.2 | 274.4 | 132.5 | 90 | 139.9 | 23 | 85.1 | 46 | 115 | 54 | 35 | 145 | 98.2 | 70.4 |
| 90 | 362.9 | 325.2 | 136.8 | 90 | 145.6 | 23 | 91.2 | 49 | 131 | 67 | 50 | 160 | 111.1 | 83.3 |
| 110 | 386.9 | 359.6 | 161.0 | 90 | 166.4 | 23 | 105.7 | 56 | 161 | 88 | 74 | 180 | 114.8 | 87.0 |
| 140 | 448.3 | 418.0 | 187.0 | 90 | 180.0 | 23 | 118.8 | 64 | 187 | 113 | 97 | 210 | 149.5 | 107.5 |
| 160 | 473.0 | 434.0 | 215.0 | 90 | 189.0 | 23 | 130.9 | 72 | 215 | 139 | 123 | 240 | 153.1 | 111.1 |
| 225 | 528.8 | 498.4 | 267.0 | 90 | 210.5 | 23 | 158.3 | 73 | 267 | 178 | 169 | 295 | 160.0 | 118.0 |



| d | Y1 | M2 |
|------|------|-------|
| (mm) | (mm) | (mm) |
| 63 | 15 | 137.2 |
| 75 | 15 | 137.2 |
| 90 | 15 | 162.6 |
| 110 | | 179.8 |
| 140 | | 209.0 |
| 160 | | 217.0 |
| 225 | | 249.2 |



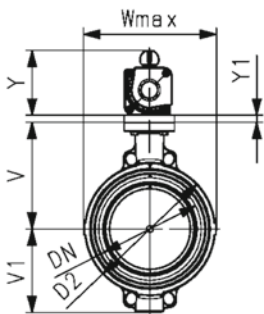
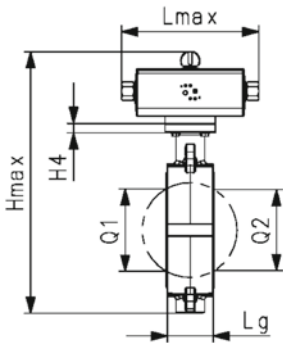
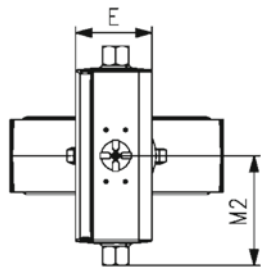
Wafer-style intermediate installation butterfly valve type 240 PVC-C
With pneumatic actuator - double acting (DA)
Without manual override
Flange standard metric/ANSI/BS/JIS

Model:

- Control range 90°<
- Overall length according to EN 558, ISO 5752
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5
 Class 150, BS 1560: 1989, BS 4504, JIS B 2220

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d | Size | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|--------|------|-------|---------------------|-------------|----|--------|-------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| | | | | (l/min) | | | | | | |
| 63 | 2 | 50 | 10 | 740 | 199 240 242 | 1 | 5.184 | 199 240 262 | 1 | 2.293 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 240 243 | 1 | 2.191 | 199 240 263 | 1 | 2.202 |
| 90 | 3 | 80 | 10 | 2400 | 199 240 244 | 1 | 2.884 | 199 240 264 | 1 | 2.862 |
| 110 | 4 | 100 | 10 | 3800 | 199 240 245 | 1 | 3.609 | 199 240 265 | 1 | 3.623 |
| 140 | 5 | 125 | 10 | 8600 | 199 240 246 | 1 | 4.419 | 199 240 266 | 1 | 4.500 |
| 160 | 6 | 150 | 10 | 11400 | 199 240 247 | 1 | 6.741 | 199 240 267 | 1 | 6.764 |
| 225 | 8 | 200 | 10 | 19900 | 199 240 248 | 1 | 9.114 | 199 240 268 | 1 | 8.494 |

| d | PTFE | Weight |
|------|-------------|--------|
| (mm) | Code | (kg) |
| 63 | 199 240 682 | 5.184 |
| 75 | 199 240 683 | 2.191 |
| 90 | 199 240 684 | 2.884 |
| 110 | 199 240 685 | 3.609 |
| 140 | 199 240 686 | 4.419 |
| 160 | 199 240 687 | 6.741 |
| 225 | 199 240 688 | 8.466 |

| d | Hmax | Lmax | Wmax | U | V | H4 | V1 | Lg | D2 | Q1 | Q2 | k | Y | E |
|------|-------|-------|-------|------|-------|------|-------|------|------|------|------|------|-------|-------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 319.4 | 196.2 | 118.4 | 90 | 133.3 | 60 | 78.8 | 45 | 104 | 40 | | 125 | 92.3 | 64.5 |
| 75 | 332.3 | 196.2 | 132.5 | 90 | 139.9 | 60 | 85.1 | 46 | 115 | 54 | 35 | 145 | 92.3 | 64.5 |
| 90 | 350.0 | 205.6 | 136.8 | 90 | 145.6 | 66 | 91.2 | 49 | 131 | 67 | 50 | 160 | 98.2 | 70.4 |
| 110 | 383.3 | 242.0 | 161.0 | 90 | 166.4 | 71 | 105.7 | 56 | 161 | 88 | 74 | 180 | 111.2 | 83.3 |
| 140 | 410.0 | 242.0 | 187.0 | 90 | 180.0 | 78 | 118.8 | 64 | 187 | 113 | 97 | 210 | 111.2 | 83.3 |
| 160 | 469.4 | 290.0 | 215.0 | 90 | 189.0 | 86 | 130.9 | 72 | 215 | 139 | 123 | 240 | 149.5 | 107.5 |
| 225 | 518.3 | 290.0 | 267.0 | 90 | | 96 | 158.3 | 73 | 267 | 178 | 169 | 295 | 149.5 | 107.5 |

| d | Y1 | M2 |
|------|------|-------|
| (mm) | (mm) | (mm) |
| 63 | 15 | 98.1 |
| 75 | 15 | 98.1 |
| 90 | 15 | 102.8 |
| 110 | | 121.0 |
| 140 | | 121.0 |
| 160 | | 145.0 |
| 225 | | 145.0 |

Butterfly valves pneumatic type 243



Lug-style end installation butterfly valve type 243 PVC-C
With pneumatic actuator - fail safe to close(FC)
Without manual override
Flange standard metric

Model:

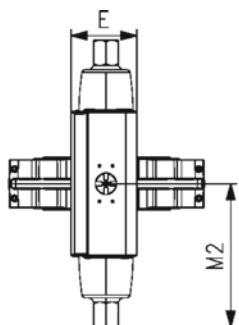
- Housing material: PP-GF30 with SS316 lug-inserts
- Control range 90°<
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

Option:

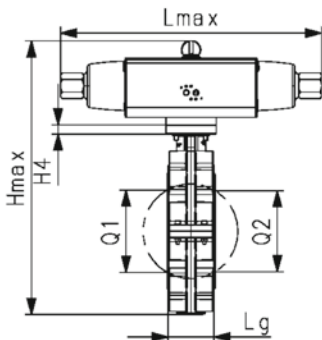
- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)

Note:

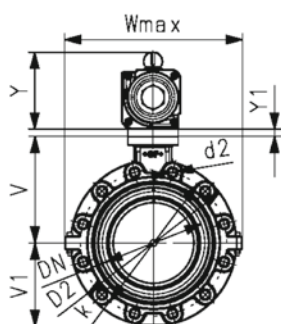
For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d | Size | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|--------|------|-------|---------------------|-------------|----|--------|-------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| 63 | 2 | 50 | 10 | 740 | 199 243 162 | 1 | 3.499 | 199 243 182 | 1 | 3.499 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 243 163 | 1 | 3.656 | 199 243 183 | 1 | 3.656 |
| 90 | 3 | 80 | 10 | 2400 | 199 243 164 | 1 | 4.692 | 199 243 184 | 1 | 4.692 |
| 110 | 4 | 100 | 10 | 3800 | 199 243 165 | 1 | 6.406 | 199 243 185 | 1 | 6.406 |
| 140 | 5 | 125 | 10 | 8600 | 199 243 166 | 1 | 9.222 | 199 243 186 | 1 | 9.222 |
| 160 | 6 | 150 | 10 | 11400 | 199 243 167 | 1 | 12.902 | 199 243 187 | 1 | 12.902 |
| 225 | 8 | 200 | 10 | 19900 | 199 243 168 | 1 | 16.691 | 199 243 188 | 1 | 16.691 |
| 280 | 10 | 250 | 10 | 34000 | 199 243 169 | 1 | 33.880 | 199 243 189 | 1 | 33.880 |
| 315 | 12 | 300 | 5 | 50000 | 199 243 170 | 1 | 43.985 | 199 243 190 | 1 | 43.985 |



| d | Hmax | Lmax | Wmax | U | V | H4 | V1 | Lg | D2 | Q1 | Q2 | d2 | k | Y |
|------|-------|-------|------|------|-------|------|-------|-------|------|------|------|------|------|-------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 328.1 | 274.4 | 165 | 90 | 133.3 | 23 | 78.8 | 44.7 | 160 | 40 | | M16 | 125 | 98.2 |
| 75 | 341.0 | 274.4 | 182 | 90 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | M16 | 145 | 98.2 |
| 90 | 365.7 | 325.2 | 210 | 90 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | M16 | 160 | 111.1 |
| 110 | 388.3 | 359.6 | 240 | 90 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | M16 | 180 | 114.8 |
| 140 | 452.2 | 418.0 | 272 | 90 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | M16 | 210 | 149.5 |
| 160 | 476.6 | 434.0 | 280 | 90 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | M20 | 240 | 153.1 |
| 225 | 532.0 | 498.4 | 360 | 90 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | M20 | 295 | 160.0 |
| 280 | 679.5 | 646.0 | 440 | 125 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | M20 | 350 | 190.0 |
| 315 | 749.0 | 681.0 | 510 | 125 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | M20 | 400 | 210.1 |



| d | E | Y1 | M2 |
|------|-------|------|-------|
| (mm) | (mm) | (mm) | (mm) |
| 63 | 70.4 | 15.0 | 137.2 |
| 75 | 70.4 | 15.0 | 137.2 |
| 90 | 83.3 | 15.0 | 162.6 |
| 110 | 87.0 | | 179.8 |
| 140 | 107.5 | | 209.0 |
| 160 | 111.1 | | 217.0 |
| 225 | 118.0 | | 249.2 |
| 280 | 148.0 | 18.2 | 323.0 |
| 315 | 168.0 | 18.2 | 340.5 |



Lug-style end installation butterfly valve type 243 PVC-C
With pneumatic actuator- fail safe to open (FO)
Without manual override
Flange standard metric

Model:

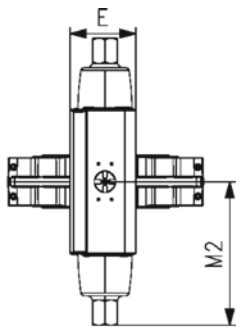
- Housing material: PP-GF30 with SS316 lug-inserts
- Control range 90°<
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

Option:

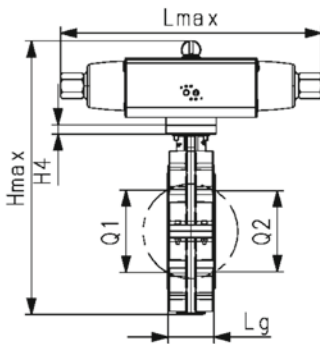
- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)

Note:

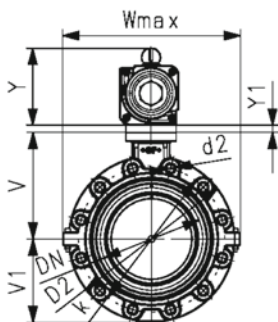
For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



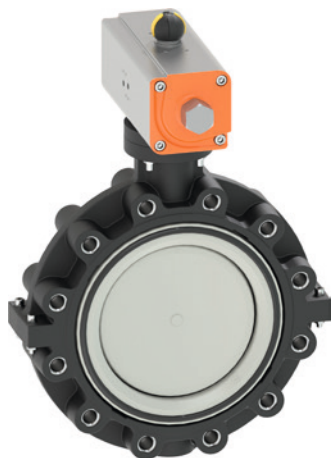
| d | Size | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|--------|------|-------|---------------------|-------------|----|--------|-------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| | | | | (l/min) | | | | | | |
| 63 | 2 | 50 | 10 | 740 | 199 243 202 | 1 | 3.499 | 199 243 222 | 1 | 3.499 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 243 203 | 1 | 3.656 | 199 243 223 | 1 | 3.656 |
| 90 | 3 | 80 | 10 | 2400 | 199 243 204 | 1 | 4.692 | 199 243 224 | 1 | 4.692 |
| 110 | 4 | 100 | 10 | 3800 | 199 243 205 | 1 | 6.406 | 199 243 225 | 1 | 6.406 |
| 140 | 5 | 125 | 10 | 8600 | 199 243 206 | 1 | 9.222 | 199 243 226 | 1 | 9.222 |
| 160 | 6 | 150 | 10 | 11400 | 199 243 207 | 1 | 12.902 | 199 243 227 | 1 | 12.902 |
| 225 | 8 | 200 | 10 | 19900 | 199 243 208 | 1 | 16.691 | 199 243 228 | 1 | 16.691 |
| 280 | 10 | 250 | 10 | 34000 | 199 243 209 | 1 | 33.880 | 199 243 229 | 1 | 33.880 |
| 315 | 12 | 300 | 5 | 50000 | 199 243 210 | 1 | 43.985 | 199 243 230 | 1 | 43.985 |



| d | Hmax | Lmax | Wmax | U | V | H4 | V1 | Lg | D2 | Q1 | Q2 | d2 | k | Y |
|------|-------|-------|------|------|-------|------|-------|-------|------|------|------|------|------|-------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 328.1 | 274.4 | 165 | 90 | 133.3 | 23 | 78.8 | 44.7 | 160 | 40 | | M16 | 125 | 98.2 |
| 75 | 341.0 | 274.4 | 182 | 90 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | M16 | 145 | 98.2 |
| 90 | 365.7 | 325.2 | 210 | 90 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | M16 | 160 | 111.1 |
| 110 | 388.3 | 359.6 | 240 | 90 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | M16 | 180 | 114.8 |
| 140 | 452.2 | 418.0 | 272 | 90 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | M16 | 210 | 149.5 |
| 160 | 476.6 | 434.0 | 280 | 90 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | M20 | 240 | 153.1 |
| 225 | 532.0 | 498.4 | 360 | 90 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | M20 | 295 | 160.0 |
| 280 | 679.5 | 646.0 | 440 | 125 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | M20 | 350 | 190.0 |
| 315 | 749.0 | 681.0 | 510 | 125 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | M20 | 400 | 210.1 |



| d | E | Y1 | M2 |
|------|-------|------|-------|
| (mm) | (mm) | (mm) | (mm) |
| 63 | 70.4 | 15.0 | 137.2 |
| 75 | 70.4 | 15.0 | 137.2 |
| 90 | 83.3 | 15.0 | 162.6 |
| 110 | 87.0 | | 179.8 |
| 140 | 107.5 | | 209.0 |
| 160 | 111.1 | | 217.0 |
| 225 | 118.0 | | 249.2 |
| 280 | 148.0 | 18.2 | 323.0 |
| 315 | 168.0 | 18.2 | 340.5 |



Lug-style end installation butterfly valve type 243 PVC-C
With pneumatic actuator - double acting (DA)
Without manual override
Flange standard metric

Model:

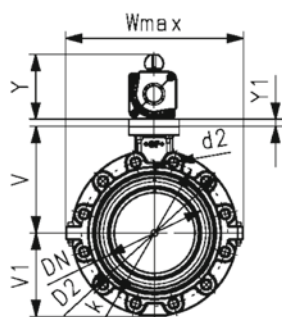
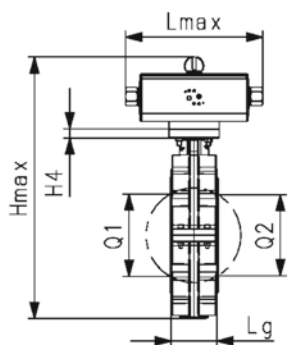
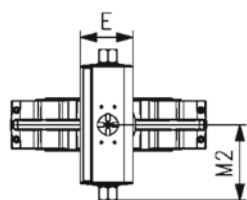
- Housing material: PP-GF30 with SS316 lug-inserts
- Control range 90°<
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

Option:

- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d | Size | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|--------|------|-------|---------------------|-------------|----|--------|-------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| 63 | 2 | 50 | 10 | 740 | 199 243 242 | 1 | 3.499 | 199 243 262 | 1 | 3.499 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 243 243 | 1 | 3.656 | 199 243 263 | 1 | 3.656 |
| 90 | 3 | 80 | 10 | 2400 | 199 243 244 | 1 | 4.692 | 199 243 264 | 1 | 4.692 |
| 110 | 4 | 100 | 10 | 3800 | 199 243 245 | 1 | 6.406 | 199 243 265 | 1 | 6.406 |
| 140 | 5 | 125 | 10 | 8600 | 199 243 246 | 1 | 9.222 | 199 243 266 | 1 | 9.222 |
| 160 | 6 | 150 | 10 | 11400 | 199 243 247 | 1 | 12.902 | 199 243 267 | 1 | 12.902 |
| 225 | 8 | 200 | 10 | 19900 | 199 243 248 | 1 | 16.691 | 199 243 268 | 1 | 16.691 |
| 280 | 10 | 250 | 10 | 34000 | 199 243 249 | 1 | 33.880 | 199 243 269 | 1 | 33.880 |
| 315 | 12 | 300 | 5 | 50000 | 199 243 250 | 1 | 43.985 | 199 243 270 | 1 | 43.985 |

| d | Hmax | Lmax | Wmax | U | V | H4 | V1 | Lg | D2 | Q1 | Q2 | d2 | k | Y |
|------|-------|-------|------|------|-------|------|-------|-------|------|------|------|------|------|-------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 319.4 | 196.2 | 165 | 90 | 133.3 | 23 | 78.8 | 44.7 | 160 | 40 | | M16 | 125 | 92.3 |
| 75 | 332.3 | 196.2 | 182 | 90 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | M16 | 145 | 92.3 |
| 90 | 352.8 | 205.6 | 210 | 90 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | M16 | 160 | 98.2 |
| 110 | 384.7 | 242.0 | 240 | 90 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | M16 | 180 | 111.2 |
| 140 | 413.9 | 242.0 | 272 | 90 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | M16 | 210 | 111.2 |
| 160 | 473.0 | 290.0 | 280 | 90 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | M20 | 240 | 149.5 |
| 225 | 521.5 | 290.0 | 360 | 90 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | M20 | 295 | 149.5 |
| 280 | 649.5 | 339.6 | 440 | 125 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | M20 | 350 | 160.0 |
| 315 | 698.9 | 339.6 | 510 | 125 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | M20 | 400 | 160.0 |

| d | E | Y1 | M2 |
|------|-------|------|-------|
| (mm) | (mm) | (mm) | (mm) |
| 63 | 64.5 | 15.0 | 98.1 |
| 75 | 64.5 | 15.0 | 98.1 |
| 90 | 70.4 | 15.0 | 102.8 |
| 110 | 83.3 | | 121.0 |
| 140 | 83.3 | | 121.0 |
| 160 | 107.5 | | 145.0 |
| 225 | 107.5 | | 145.0 |
| 280 | 118.0 | 18.2 | 169.8 |
| 315 | 118.0 | 18.2 | 169.8 |



Wafer-style, intermediate installation butterfly valve type 565 PVDF/PA-GF

Bare shaft

Flange standard metric/ANSI/BS/JIS Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

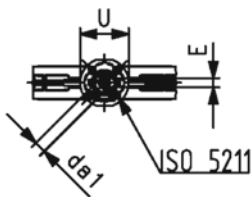
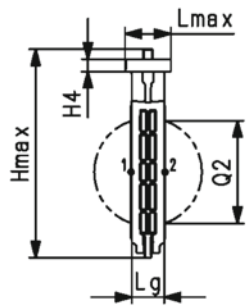
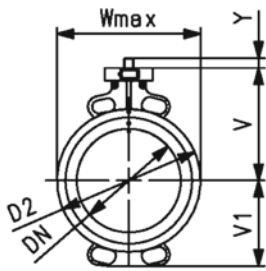
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)

Option:

- Individual configuration of the valve possible
- Hand (lockable), pneumatic or electric actuators from GF
- Double sensor for electrical position feedback incl. LED feedback

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | Acc.to ISO 5211 | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------------|--------------------|----|----------------|
| 63 | 50 | 2 | 16 | 1445 | F07 | 199 565 100 | 1 | 0.9 |
| 75 | 65 | 2 ½ | 16 | 2530 | F07 | 199 565 101 | 1 | 1.1 |
| 90 | 80 | 3 | 16 | 4020 | F07 | 199 565 102 | 1 | 1.3 |
| 110 | 100 | 4 | 16 | 5850 | F07 | 199 565 103 | 1 | 2.0 |
| 140 | 125 | 5 | 16 | 11900 | F07 | 199 565 104 | 1 | 2.6 |
| 160 | 150 | 6 | 16 | 18050 | F07 | 199 565 105 | 1 | 3.7 |
| 225 | 200 | 8 | 10 | 43667 | F07 | 199 565 106 | 1 | 4.7 |
| 280 | 250 | 10 | 10 | 62333 | F10 | 199 565 107 | 1 | 8.8 |
| 315 | 300 | 12 | 6 | 94500 | F10 | 199 565 108 | 1 | 12.6 |

| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|--------------------|----|----------------|
| 63 | 199 565 120 | 1 | 1.0 |
| 75 | 199 565 121 | 1 | 1.2 |
| 90 | 199 565 122 | 1 | 1.4 |
| 110 | 199 565 123 | 1 | 2.2 |
| 140 | 199 565 124 | 1 | 2.9 |
| 160 | 199 565 125 | 1 | 3.8 |
| 225 | 199 565 126 | 1 | 5.2 |
| 280 | 199 565 127 | 1 | 9.5 |
| 315 | 199 565 128 | 1 | 13.7 |

| d (mm) | D2 (mm) | Wmax (mm) | Lmax (mm) | Hmax (mm) | H4 (mm) | V (mm) | V1 (mm) | Lg (mm) | da1 (mm) | E (mm) | U (mm) | Y (mm) | Q2 (mm) |
|-----------|------------|--------------|--------------|--------------|------------|-----------|------------|------------|-------------|-----------|-----------|-----------|------------|
| 63 | 100.0 | 118.5 | 85.5 | 222.5 | 23.0 | 133.5 | 63.0 | 43.0 | 14.1 | 11.0 | 90.0 | 27.0 | 28.5 |
| 75 | 121.0 | 132.5 | 85.5 | 248.5 | 23.0 | 140.0 | 82.0 | 46.0 | 14.1 | 11.0 | 90.0 | 27.0 | 44.0 |
| 90 | 138.0 | 138.0 | 85.5 | 261.0 | 23.0 | 146.0 | 89.0 | 46.0 | 14.1 | 11.0 | 90.0 | 27.0 | 63.5 |
| 110 | 158.5 | 158.5 | 85.5 | 286.0 | 23.0 | 166.5 | 104.0 | 52.0 | 18.1 | 14.0 | 90.0 | 16.0 | 84.0 |
| 140 | 187.0 | 187.0 | 85.5 | 313.5 | 23.0 | 180.0 | 118.0 | 56.0 | 18.1 | 14.0 | 90.0 | 16.0 | 110.5 |
| 160 | 213.0 | 213.0 | 85.5 | 337.5 | 23.0 | 189.0 | 130.5 | 56.0 | 22.2 | 17.0 | 90.0 | 19.0 | 137.5 |
| 225 | 267.0 | 267.0 | 85.5 | 387.0 | 23.0 | 209.5 | 159.0 | 60.0 | 22.2 | 17.0 | 90.0 | 18.5 | 190.5 |
| 280 | 325.5 | 325.5 | 125.0 | 498.5 | 23.0 | 262.5 | 195.5 | 68.0 | 28.2 | 22.0 | 125.0 | 40.5 | 239.0 |
| 315 | 380.0 | 380.0 | 125.0 | 555.0 | 23.0 | 284.5 | 230.5 | 78.0 | 28.2 | 22.0 | 125.0 | 40.5 | 285.5 |



Wafer-style, intermediate installation butterfly valve type 565 PVDF/PA-GF
With hand lever
Flange standard metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

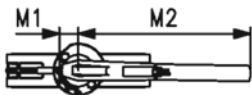
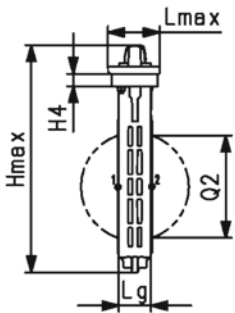
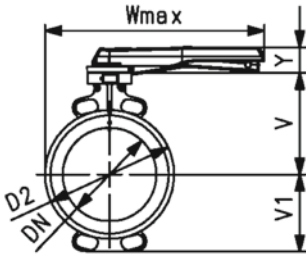
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Lockable ergonomic lever
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)

Option:

- Individual configuration of the valve possible
- Pneumatic or electric actuators from GF
- Double sensor for electrical position feedback incl. LED feedback

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d | Size | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|--------|------|-------|---------------------|--------------------|----|--------|--------------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| | | | | (L/min) | | | | | | |
| 63 | 2 | 50 | 16 | 1445 | 199 565 000 | 1 | 1.3 | 199 565 020 | 1 | 1.4 |
| 75 | 2 ½ | 65 | 16 | 2530 | 199 565 001 | 1 | 1.5 | 199 565 021 | 1 | 1.6 |
| 90 | 3 | 80 | 16 | 4020 | 199 565 002 | 1 | 1.7 | 199 565 022 | 1 | 1.8 |
| 110 | 4 | 100 | 16 | 5850 | 199 565 003 | 1 | 2.5 | 199 565 023 | 1 | 2.7 |
| 140 | 5 | 125 | 16 | 11900 | 199 565 004 | 1 | 3.1 | 199 565 024 | 1 | 3.3 |
| 160 | 6 | 150 | 16 | 18050 | 199 565 005 | 1 | 4.0 | 199 565 025 | 1 | 4.3 |
| 225 | 8 | 200 | 10 | 43667 | 199 565 006 | 1 | 5.3 | 199 565 026 | 1 | 5.7 |

| d | D2 | Wmax | Hmax | Lmax | H4 | V | V1 | Lg | M1 | M2 | Y | Q2 |
|------|-------|-------|-------|------|------|-------|-------|------|------|-------|------|-------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 100.0 | 264.0 | 249.5 | 96.0 | 23.0 | 133.5 | 63.0 | 43.0 | 35.5 | 204.5 | 53.0 | 28.5 |
| 75 | 121.0 | 271.0 | 275.5 | 96.0 | 23.0 | 140.0 | 82.0 | 46.0 | 35.5 | 204.5 | 53.0 | 44.0 |
| 90 | 138.0 | 273.5 | 288.0 | 96.0 | 23.0 | 146.0 | 89.0 | 46.0 | 35.5 | 204.5 | 53.0 | 63.5 |
| 110 | 158.5 | 334.0 | 324.0 | 96.0 | 23.0 | 166.5 | 104.0 | 52.0 | 35.5 | 254.5 | 53.0 | 84.0 |
| 140 | 187.0 | 348.0 | 351.0 | 96.0 | 23.0 | 180.0 | 118.0 | 56.0 | 35.5 | 254.5 | 53.0 | 110.5 |
| 160 | 213.0 | 426.0 | 372.5 | 96.0 | 23.0 | 189.0 | 130.5 | 56.0 | 35.5 | 319.5 | 53.0 | 137.5 |
| 225 | 267.0 | 453.0 | 422.0 | 96.0 | 23.0 | 209.5 | 159.0 | 60.0 | 35.5 | 319.5 | 53.0 | 190.5 |



Wafer-style intermediate installation butterfly valve type 565 manual PVDF/PA-GF

With gear box

Wafer style metric/ANSI/BS/JIS

Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

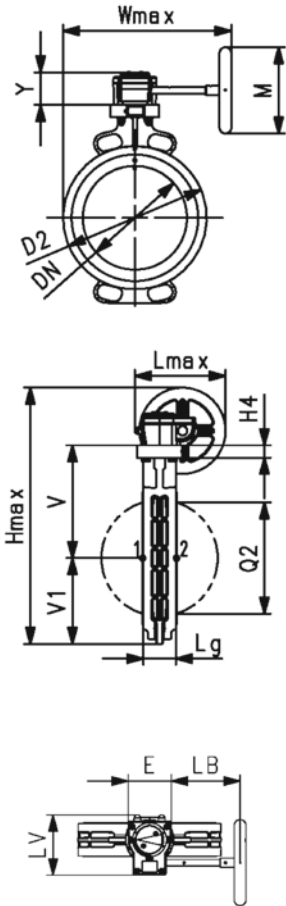
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand (lockable hand lever), pneumatic or electric actuators from GF
- Double sensor for electrical position feedback incl. LED feedback

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) | | |
|-----------|------------|----------------|-------------|--|--------------|----------------------|-------------|----------------------|---|------|
| 63 | 50 | 2 | 16 | 1445 | 199 565 200 | 1 | 3.0 | 199 565 220 | 1 | 3.1 |
| 75 | 65 | 2 1/2 | 16 | 2530 | 199 565 201 | 1 | 3.2 | 199 565 221 | 1 | 3.3 |
| 90 | 80 | 3 | 16 | 4020 | 199 565 202 | 1 | 3.4 | 199 565 222 | 1 | 3.5 |
| 110 | 100 | 4 | 16 | 5850 | 199 565 203 | 1 | 4.2 | 199 565 223 | 1 | 4.3 |
| 140 | 125 | 5 | 16 | 11900 | 199 565 204 | 1 | 4.7 | 199 565 224 | 1 | 5.0 |
| 160 | 150 | 6 | 16 | 18050 | 199 565 205 | 1 | 5.5 | 199 565 225 | 1 | 5.8 |
| 225 | 200 | 8 | 10 | 43667 | 199 565 206 | 1 | 6.7 | 199 565 226 | 1 | 7.2 |
| 280 | 250 | 10 | 10 | 62333 | 199 565 207 | 1 | 12.7 | 199 565 227 | 1 | 13.4 |
| 315 | 300 | 12 | 6 | 94500 | 199 565 208 | 1 | 16.5 | 199 565 228 | 1 | 17.6 |

| d (mm) | D2 (mm) | Wmax (mm) | Hmax (mm) | Lmax (mm) | H4 (mm) | V (mm) | V1 (mm) | Lg (mm) | E (mm) | LB (mm) | LV (mm) | M (mm) | Y (mm) |
|-----------|------------|--------------|--------------|--------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|-----------|
| 63 | 100.0 | 238.5 | 303.0 | 169.0 | 23 | 133.5 | 63.0 | 43 | 80 | 128.0 | 112.5 | 160 | 61.5 |
| 75 | 121.0 | 246.0 | 329.0 | 169.0 | 23 | 140.0 | 82.0 | 46 | 80 | 128.0 | 112.5 | 160 | 61.5 |
| 90 | 138.0 | 248.5 | 341.5 | 169.0 | 23 | 146.0 | 89.0 | 46 | 80 | 128.0 | 112.5 | 160 | 61.5 |
| 110 | 158.5 | 258.5 | 377.5 | 169.0 | 23 | 166.5 | 104.0 | 52 | 80 | 128.0 | 112.5 | 160 | 61.5 |
| 140 | 187.0 | 272.0 | 405.0 | 169.0 | 23 | 180.0 | 118.0 | 56 | 80 | 128.0 | 112.5 | 160 | 61.5 |
| 160 | 213.0 | 285.5 | 426.5 | 169.0 | 23 | 189.0 | 130.5 | 56 | 80 | 128.0 | 112.5 | 160 | 61.5 |
| 225 | 267.0 | 312.5 | 475.5 | 169.0 | 23 | 209.5 | 159.0 | 60 | 80 | 128.0 | 112.5 | 160 | 61.5 |
| 280 | 325.5 | 360.5 | 603.0 | 212.5 | 23 | 262.5 | 195.5 | 68 | 100 | 135.5 | 130.0 | 200 | 68.5 |
| 315 | 380.0 | 387.5 | 659.5 | 212.5 | 23 | 284.5 | 230.5 | 78 | 100 | 135.5 | 130.0 | 200 | 68.5 |

| d (mm) | Q2 (mm) |
|-----------|------------|
| 63 | 28.5 |
| 75 | 44.0 |
| 90 | 63.5 |
| 110 | 84.0 |
| 140 | 110.5 |
| 160 | 137.5 |
| 225 | 190.5 |
| 280 | 239.0 |
| 315 | 285.5 |



Wafer-style intermediate installation butterfly valve type 565 PVDF/PA-GF
With electric actuator 230V
Without manual override
Flange standard metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

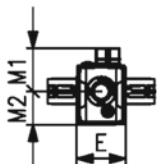
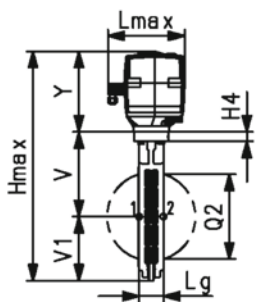
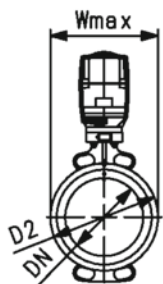
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Voltage 100-230V, 50-60Hz
- Factory set control range 0-90°
- Heating element, position feedback (Open/Close/ Middle)
- Manual override integrated in electric actuator
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or pneumatic actuators from GF
- Double sensor for electrical position feedback incl. LED feedback
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board
- Additional manual override between valve and actuator

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | Actuator | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|----------|--------------------|----|----------------|
| 63 | 50 | 2 | 10 | 1445 | EA45 | 199 565 300 | 1 | 3.3 |
| 75 | 65 | 2 ½ | 10 | 2530 | EA120 | 199 565 301 | 1 | 4.6 |
| 90 | 80 | 3 | 10 | 4020 | EA120 | 199 565 302 | 1 | 4.7 |
| 110 | 100 | 4 | 10 | 5850 | EA120 | 199 565 303 | 1 | 5.6 |
| 140 | 125 | 5 | 10 | 11900 | EA120 | 199 565 304 | 1 | 6.1 |
| 160 | 150 | 6 | 10 | 18050 | EA250 | 199 565 305 | 1 | 8.7 |
| 225 | 200 | 8 | 10 | 43667 | EA250 | 199 565 306 | 1 | 10.0 |
| 280 | 250 | 10 | 6 | 62333 | EA250 | 199 565 307 | 1 | 14.5 |
| 315 | 300 | 12 | 4 | 94500 | EA250 | 199 565 308 | 1 | 18.2 |

| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|--------------------|----|----------------|
| 63 | 199 565 320 | 1 | 3.4 |
| 75 | 199 565 321 | 1 | 4.7 |
| 90 | 199 565 322 | 1 | 4.8 |
| 110 | 199 565 323 | 1 | 5.8 |
| 140 | 199 565 324 | 1 | 6.4 |
| 160 | 199 565 325 | 1 | 9.0 |
| 225 | 199 565 326 | 1 | 10.5 |
| 280 | 199 565 327 | 1 | 15.2 |
| 315 | 199 565 328 | 1 | 19.4 |

| d (mm) | D2 (mm) | Wmax (mm) | Hmax (mm) | Lmax (mm) | H4 (mm) | V (mm) | V1 (mm) | Lg (mm) | E (mm) | M1 (mm) | M2 (mm) | Y (mm) | Q2 (mm) |
|-----------|------------|--------------|--------------|--------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|
| 63 | 100.0 | 122.5 | 377.5 | 190.0 | 23 | 133.5 | 63.0 | 43 | 122.5 | 107.5 | 83 | 166.5 | 28.5 |
| 75 | 121.0 | 132.5 | 411.5 | 190.0 | 23 | 140.0 | 82.0 | 46 | 122.5 | 107.5 | 83 | 189.5 | 44.0 |
| 90 | 138.0 | 137.5 | 424.0 | 190.0 | 23 | 146.0 | 89.0 | 46 | 122.5 | 107.5 | 83 | 189.5 | 63.5 |
| 110 | 158.5 | 158.5 | 459.5 | 190.0 | 23 | 166.5 | 104.0 | 52 | 122.5 | 107.5 | 83 | 189.5 | 84.0 |
| 140 | 187.0 | 187.0 | 487.5 | 190.0 | 23 | 180.0 | 118.0 | 56 | 122.5 | 107.5 | 83 | 189.5 | 110.5 |
| 160 | 213.0 | 213.0 | 518.5 | 190.0 | 23 | 189.0 | 130.5 | 56 | 122.5 | 107.5 | 83 | 199.5 | 137.5 |
| 225 | 267.0 | 267.0 | 568.0 | 190.0 | 23 | 209.5 | 159.0 | 60 | 122.5 | 107.5 | 83 | 199.5 | 190.5 |
| 280 | 325.5 | 325.5 | 674.5 | 190.0 | 23 | 262.5 | 195.5 | 68 | 122.5 | 107.5 | 83 | 216.5 | 239.0 |
| 315 | 380.0 | 380.0 | 731.0 | 190.0 | 23 | 284.5 | 230.5 | 78 | 122.5 | 107.5 | 83 | 216.5 | 285.5 |



Wafer-style intermediate installation butterfly valve type 565 PVDF/PA-GF
With electric actuator 24V
Without manual override
Wafer style metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

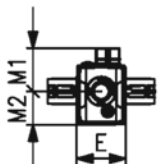
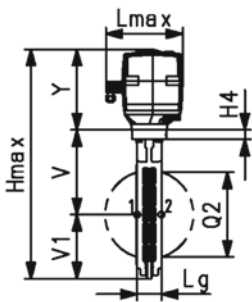
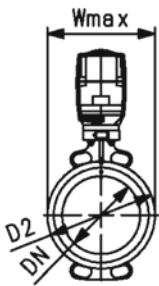
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Voltage 24V AC/DC
- Factory set control range 0-90°
- Heating element, position feedback (Open/Close/ Middle)
- Manual override integrated in electric actuator
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or pneumatic actuators from GF
- Double sensor for electrical position feedback incl. LED feedback
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board
- Additional manual override between valve and actuator

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | Actuator | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|----------|--------------------|----|----------------|
| 63 | 50 | 2 | 10 | 1445 | EA45 | 199 565 400 | 1 | 3.3 |
| 75 | 65 | 2 ½ | 10 | 2530 | EA120 | 199 565 401 | 1 | 4.6 |
| 90 | 80 | 3 | 10 | 4020 | EA120 | 199 565 402 | 1 | 4.7 |
| 110 | 100 | 4 | 10 | 5850 | EA120 | 199 565 403 | 1 | 5.6 |
| 140 | 125 | 5 | 10 | 11900 | EA120 | 199 565 404 | 1 | 6.1 |
| 160 | 150 | 6 | 10 | 18050 | EA250 | 199 565 405 | 1 | 8.7 |
| 225 | 200 | 8 | 10 | 43667 | EA250 | 199 565 406 | 1 | 10.0 |
| 280 | 250 | 10 | 6 | 62333 | EA250 | 199 565 407 | 1 | 14.5 |
| 315 | 300 | 12 | 4 | 94500 | EA250 | 199 565 408 | 1 | 18.2 |

| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|--------------------|----|----------------|
| 63 | 199 565 420 | 1 | 3.4 |
| 75 | 199 565 421 | 1 | 4.7 |
| 90 | 199 565 422 | 1 | 4.8 |
| 110 | 199 565 423 | 1 | 5.8 |
| 140 | 199 565 424 | 1 | 6.4 |
| 160 | 199 565 425 | 1 | 9.0 |
| 225 | 199 565 426 | 1 | 10.5 |
| 280 | 199 565 427 | 1 | 15.2 |
| 315 | 199 565 428 | 1 | 19.4 |

| d (mm) | D2 (mm) | Wmax (mm) | Hmax (mm) | Lmax (mm) | H4 (mm) | V (mm) | V1 (mm) | Lg (mm) | E (mm) | M1 (mm) | M2 (mm) | Y (mm) | Q2 (mm) |
|-----------|------------|--------------|--------------|--------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|
| 63 | 100.0 | 122.5 | 377.5 | 190 | 23 | 133.5 | 63.0 | 43 | 122.5 | 107.5 | 83 | 166.5 | 28.5 |
| 75 | 121.0 | 132.5 | 411.5 | 190 | 23 | 140.0 | 82.0 | 46 | 122.5 | 107.5 | 83 | 189.5 | 44.0 |
| 90 | 138.0 | 137.5 | 424.0 | 190 | 23 | 146.0 | 89.0 | 46 | 122.5 | 107.5 | 83 | 189.5 | 63.5 |
| 110 | 158.5 | 158.5 | 459.5 | 190 | 23 | 166.5 | 104.0 | 52 | 122.5 | 107.5 | 83 | 189.5 | 84.0 |
| 140 | 187.0 | 187.0 | 487.5 | 190 | 23 | 180.0 | 118.0 | 56 | 122.5 | 107.5 | 83 | 189.5 | 110.5 |
| 160 | 213.0 | 213.0 | 518.5 | 190 | 23 | 189.0 | 130.5 | 56 | 122.5 | 107.5 | 83 | 199.5 | 137.5 |
| 225 | 267.0 | 267.0 | 568.0 | 190 | 23 | 209.5 | 159.0 | 60 | 122.5 | 107.5 | 83 | 199.5 | 190.5 |
| 280 | 325.5 | 325.5 | 674.5 | 190 | 23 | 262.5 | 195.5 | 68 | 122.5 | 107.5 | 83 | 216.5 | 239.0 |
| 315 | 380.0 | 380.0 | 731.0 | 190 | 23 | 284.5 | 230.5 | 78 | 122.5 | 107.5 | 83 | 216.5 | 285.5 |



Wafer-style intermediate installation butterfly valve type 565 PVDF/PA-GF
Smart electric actuator 230V
Without manual override
Wafer style metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

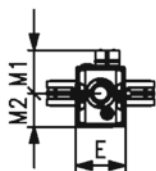
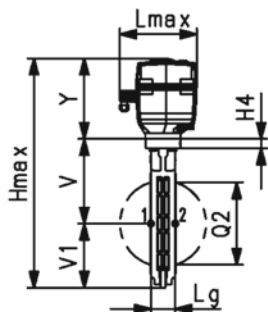
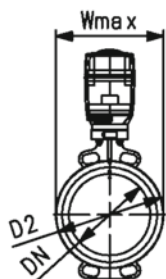
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Voltage 100-230V, 50-60Hz
- Factory set control range 0-90°
- Heating element, position feedback (Open/Close/ Middle)
- Connectivity via NFC and Wi-Fi Direct ensuring control, identification and visibility without opening the case
- Most relevant asset data visualized in the app
- Connection and control via app possible
- LED stripe for visual open/close 360° feedback
- Manual override integrated in electric actuator
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or pneumatic actuators from GF
- Double sensor for electrical position feedback incl. LED feedback
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board
- Additional manual override between valve and actuator

Note:

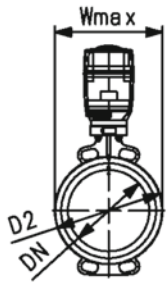
For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



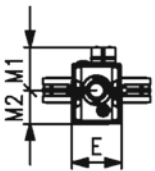
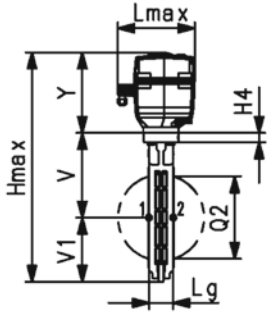
| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | Actuator | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|----------|--------------------|----|----------------|
| 63 | 50 | 2 | 10 | 1445 | dEA45 | 199 565 700 | 1 | 4.3 |
| 75 | 65 | 2 ½ | 10 | 2530 | dEA120 | 199 565 701 | 1 | 4.6 |
| 90 | 80 | 3 | 10 | 4020 | dEA120 | 199 565 702 | 1 | 4.7 |
| 110 | 100 | 4 | 10 | 5850 | dEA120 | 199 565 703 | 1 | 5.6 |
| 140 | 125 | 5 | 10 | 11900 | dEA120 | 199 565 704 | 1 | 6.1 |
| 160 | 150 | 6 | 10 | 18050 | dEA250 | 199 565 705 | 1 | 8.7 |
| 225 | 200 | 8 | 10 | 43667 | dEA250 | 199 565 706 | 1 | 10.0 |
| 280 | 250 | 10 | 6 | 62333 | dEA250 | 199 565 707 | 1 | 14.5 |
| 315 | 300 | 12 | 4 | 94500 | dEA250 | 199 565 708 | 1 | 18.2 |

| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|--------------------|----|----------------|
| 63 | 199 565 709 | 1 | 4.4 |
| 75 | 199 565 710 | 1 | 4.7 |
| 90 | 199 565 711 | 1 | 4.8 |
| 110 | 199 565 712 | 1 | 5.8 |
| 140 | 199 565 713 | 1 | 6.4 |
| 160 | 199 565 714 | 1 | 9.0 |
| 225 | 199 565 715 | 1 | 10.5 |
| 280 | 199 565 716 | 1 | 15.2 |
| 315 | 199 565 717 | 1 | 19.4 |

| d (mm) | D2 (mm) | Wmax (mm) | Hmax (mm) | Lmax (mm) | H4 (mm) | V (mm) | V1 (mm) | Lg (mm) | E (mm) | M1 (mm) | M2 (mm) | Y (mm) | Q2 (mm) |
|-----------|------------|--------------|--------------|--------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|------------|
| 63 | 100.0 | 122.5 | 377.5 | 190 | 23 | 133.5 | 63.0 | 43 | 122.5 | 107.5 | 83 | 166.5 | 28.5 |
| 75 | 121.0 | 132.5 | 411.5 | 190 | 23 | 140.0 | 82.0 | 46 | 122.5 | 107.5 | 83 | 189.5 | 44.0 |
| 90 | 138.0 | 137.5 | 424.0 | 190 | 23 | 146.0 | 89.0 | 46 | 122.5 | 107.5 | 83 | 189.5 | 63.5 |
| 110 | 158.5 | 158.5 | 459.5 | 190 | 23 | 166.5 | 104.0 | 52 | 122.5 | 107.5 | 83 | 189.5 | 84.0 |
| 140 | 187.0 | 187.0 | 487.5 | 190 | 23 | 180.0 | 118.0 | 56 | 122.5 | 107.5 | 83 | 189.5 | 110.5 |



| d (mm) | D2 (mm) | Wmax (mm) | Hmax (mm) | Lmax (mm) | H4 (mm) | V (mm) | V1 (mm) | Lg (mm) | E (mm) | M1 (mm) | M2 (mm) | Y (mm) | Q2 (mm) |
|------------------|-------------------|---------------------|---------------------|---------------------|-------------------|------------------|-------------------|-------------------|------------------|-------------------|-------------------|------------------|-------------------|
| 160 | 213.0 | 213.0 | 518.5 | 190 | 23 | 189.0 | 130.5 | 56 | 122.5 | 107.5 | 83 | 199.5 | 137.5 |
| 225 | 267.0 | 267.0 | 568.0 | 190 | 23 | 209.5 | 159.0 | 60 | 122.5 | 107.5 | 83 | 199.5 | 190.5 |
| 280 | 325.5 | 325.5 | 674.5 | 190 | 23 | 262.5 | 195.5 | 68 | 122.5 | 107.5 | 83 | 216.5 | 239.0 |
| 315 | 380.0 | 380.0 | 731.0 | 190 | 23 | 284.5 | 230.5 | 78 | 122.5 | 107.5 | 83 | 216.5 | 285.5 |





Wafer-style intermediate installation butterfly valve type 565 electric PVDF/PA-GF
Smart electric actuator 24V without manual override
Wafer style metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

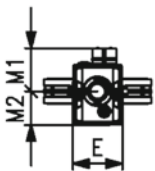
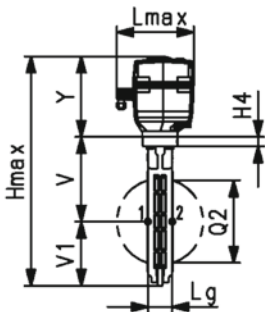
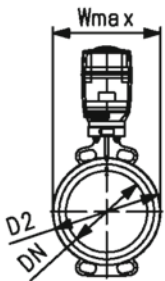
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Voltage 24V AC/DC
- Factory set control range 0-90°
- Heating element, position feedback (Open/Close/ Middle)
- Connectivity via NFC and Wi-Fi Direct ensuring control, identification and visibility without opening the case
- Most relevant asset data visualized in the app
- Connection and control via app possible
- LED stripe for visual open/close 360° feedback
- Manual override integrated in electric actuator
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or pneumatic actuators from GF
- Double sensor for electrical position feedback incl. LED feedback
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board
- Additional manual override between valve and actuator

Note:

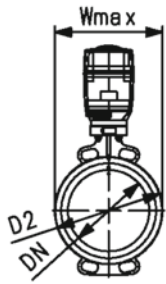
For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



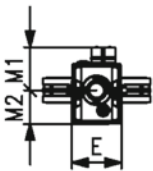
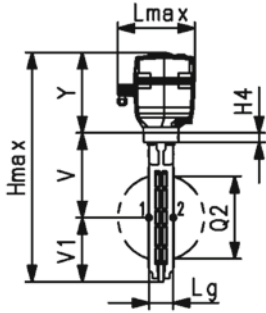
| d | Size | DN | PN | kv-value | Actuator | EPDM | SP | Weight |
|------|--------|------|-------|---------------------|----------|--------------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | | Code | | (kg) |
| | | | | (L/min) | | | | |
| 63 | 2 | 50 | 10 | 1445 | dEA45 | 199 565 718 | 1 | 4.3 |
| 75 | 2 ½ | 65 | 10 | 2530 | dEA120 | 199 565 719 | 1 | 4.6 |
| 90 | 3 | 80 | 10 | 4020 | dEA120 | 199 565 720 | 1 | 4.7 |
| 110 | 4 | 100 | 10 | 5850 | dEA120 | 199 565 721 | 1 | 5.6 |
| 140 | 5 | 125 | 10 | 11900 | dEA120 | 199 565 722 | 1 | 6.1 |
| 160 | 6 | 150 | 10 | 18050 | dEA250 | 199 565 723 | 1 | 8.7 |
| 225 | 8 | 200 | 10 | 43667 | dEA250 | 199 565 724 | 1 | 10.0 |
| 280 | 10 | 250 | 6 | 62333 | dEA250 | 199 565 725 | 1 | 14.5 |
| 315 | 12 | 300 | 4 | 94500 | dEA250 | 199 565 726 | 1 | 18.2 |

| d | FKM | SP | Weight |
|------|--------------------|----|--------|
| (mm) | Code | | (kg) |
| 63 | 199 565 727 | 1 | 4.4 |
| 75 | 199 565 728 | 1 | 4.7 |
| 90 | 199 565 729 | 1 | 4.8 |
| 110 | 199 565 730 | 1 | 5.8 |
| 140 | 199 565 731 | 1 | 6.4 |
| 160 | 199 565 732 | 1 | 9.0 |
| 225 | 199 565 733 | 1 | 10.5 |
| 280 | 199 565 734 | 1 | 15.2 |
| 315 | 199 565 735 | 1 | 19.4 |

| d | D2 | Wmax | Hmax | Lmax | H4 | V | V1 | Lg | E | M1 | M2 | Y | Q2 |
|------|-------|-------|-------|------|------|-------|-------|------|-------|-------|------|-------|-------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 100.0 | 122.5 | 377.5 | 190 | 23 | 133.5 | 63.0 | 43 | 122.5 | 107.5 | 83 | 166.5 | 28.5 |
| 75 | 121.0 | 132.5 | 411.5 | 190 | 23 | 140.0 | 82.0 | 46 | 122.5 | 107.5 | 83 | 189.5 | 44.0 |
| 90 | 138.0 | 137.5 | 424.0 | 190 | 23 | 146.0 | 89.0 | 46 | 122.5 | 107.5 | 83 | 189.5 | 63.5 |
| 110 | 158.5 | 158.5 | 459.5 | 190 | 23 | 166.5 | 104.0 | 52 | 122.5 | 107.5 | 83 | 189.5 | 84.0 |
| 140 | 187.0 | 187.0 | 487.5 | 190 | 23 | 180.0 | 118.0 | 56 | 122.5 | 107.5 | 83 | 189.5 | 110.5 |



| d | D2 | Wmax | Hmax | Lmax | H4 | V | V1 | Lg | E | M1 | M2 | Y | Q2 |
|----------|-----------|-------------|-------------|-------------|-----------|----------|-----------|-----------|----------|-----------|-----------|----------|-----------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 160 | 213.0 | 213.0 | 518.5 | 190 | 23 | 189.0 | 130.5 | 56 | 122.5 | 107.5 | 83 | 199.5 | 137.5 |
| 225 | 267.0 | 267.0 | 568.0 | 190 | 23 | 209.5 | 159.0 | 60 | 122.5 | 107.5 | 83 | 199.5 | 190.5 |
| 280 | 325.5 | 325.5 | 674.5 | 190 | 23 | 262.5 | 195.5 | 68 | 122.5 | 107.5 | 83 | 216.5 | 239.0 |
| 315 | 380.0 | 380.0 | 731.0 | 190 | 23 | 284.5 | 230.5 | 78 | 122.5 | 107.5 | 83 | 216.5 | 285.5 |





Wafer-style intermediate installation butterfly valve type 565 PVDF/PA-GF
With electric actuator 230V
With manual override
Flange standard metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

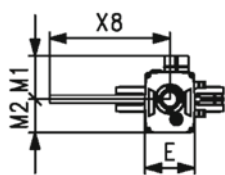
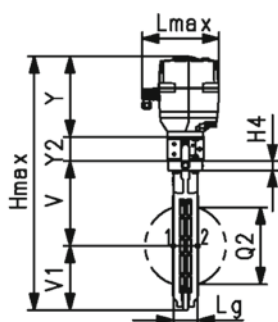
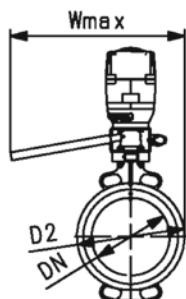
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Voltage 100-230V, 50-60Hz
- Factory set control range 0-90°
- Heating element, position feedback (Open/Close/ Middle)
- With additional manual override between valve and actuator
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or pneumatic actuators from GF
- Double sensor for electrical position feedback incl. LED feedback
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com

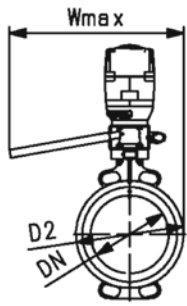


| d | Size | DN | PN | kv-value | Actuator | EPDM | SP | Weight |
|------|--------|------|-------|---------------------|----------|--------------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | | Code | | (kg) |
| | | | | (L/min) | | | | |
| 63 | 2 | 50 | 10 | 1445 | EA120 | 199 565 340 | 1 | 5.5 |
| 75 | 2 ½ | 65 | 10 | 2530 | EA120 | 199 565 341 | 1 | 5.8 |
| 90 | 3 | 80 | 10 | 4020 | EA120 | 199 565 342 | 1 | 5.9 |
| 110 | 4 | 100 | 10 | 5850 | EA120 | 199 565 343 | 1 | 6.6 |
| 140 | 5 | 125 | 10 | 11900 | EA120 | 199 565 344 | 1 | 7.1 |
| 160 | 6 | 150 | 10 | 18050 | EA250 | 199 565 345 | 1 | 9.7 |
| 225 | 8 | 200 | 10 | 43667 | EA250 | 199 565 346 | 1 | 11.0 |

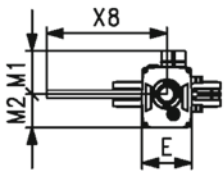
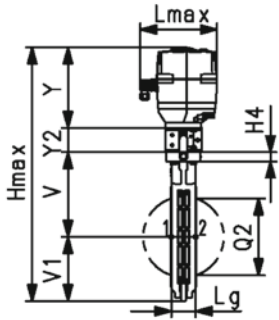
| d | Size | FKM | SP | Weight |
|------|--------|--------------------|----|--------|
| (mm) | (inch) | Code | | (kg) |
| 63 | 2 | 199 565 360 | 1 | 5.6 |
| 75 | 2 ½ | 199 565 361 | 1 | 5.9 |
| 90 | 3 | 199 565 362 | 1 | 6.0 |
| 110 | 4 | 199 565 363 | 1 | 6.8 |
| 140 | 5 | 199 565 364 | 1 | 7.4 |
| 160 | 6 | 199 565 365 | 1 | 10.0 |
| 225 | 8 | 199 565 366 | 1 | 11.5 |

| d | Size | D2 | Wmax | Hmax | Lmax | H4 | V | V1 | Lg | E | M1 | M2 | X8 |
|------|--------|-------|-------|-------|------|------|-------|-------|------|-------|-------|------|-------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 2 | 100.0 | 385.5 | 96.0 | 190 | 23 | 133.5 | 63.0 | 43 | 122.5 | 107.5 | 83 | 297.5 |
| 75 | 2 ½ | 121.0 | 385.5 | 96.0 | 190 | 23 | 140.0 | 82.0 | 46 | 122.5 | 107.5 | 83 | 297.5 |
| 90 | 3 | 138.0 | 385.5 | 96.0 | 190 | 23 | 146.0 | 89.0 | 46 | 122.5 | 107.5 | 83 | 297.5 |
| 110 | 4 | 158.5 | 385.5 | 96.0 | 190 | 23 | 166.5 | 104.0 | 52 | 122.5 | 107.5 | 83 | 297.5 |
| 140 | 5 | 187.0 | 385.5 | 189.5 | 190 | 23 | 180.0 | 118.0 | 56 | 122.5 | 107.5 | 83 | 297.5 |
| 160 | 6 | 213.0 | 385.5 | 106.0 | 190 | 23 | 189.0 | 130.5 | 56 | 122.5 | 107.5 | 83 | 297.5 |
| 225 | 8 | 267.0 | 385.5 | 106.0 | 190 | 23 | 209.5 | 159.0 | 60 | 122.5 | 107.5 | 83 | 297.5 |

| d | Size | Y | Y2 | Q2 |
|------|--------|-------|------|------|
| (mm) | (inch) | (mm) | (mm) | (mm) |
| 63 | 2 | 189.5 | 60 | 28.5 |
| 75 | 2 ½ | 189.5 | 60 | 44.0 |
| 90 | 3 | 189.5 | 60 | 63.5 |



| d | Size | Y | Y2 | Q2 |
|----------|-------------|----------|-----------|-----------|
| (mm) | (inch) | (mm) | (mm) | (mm) |
| 110 | 4 | 189.5 | 60 | 84.0 |
| 140 | 5 | 189.5 | 60 | 110.5 |
| 160 | 6 | 199.5 | 60 | 137.5 |
| 225 | 8 | 199.5 | 60 | 190.5 |





Wafer-style intermediate installation butterfly valve type 565 PVDF/PA-GF
With electric actuator 24V
With manual override
Wafer style metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

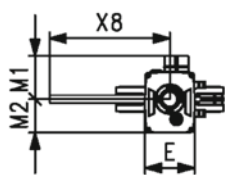
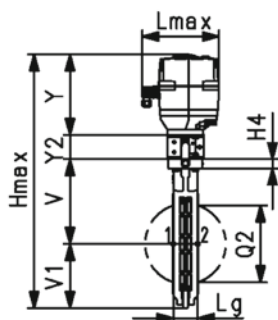
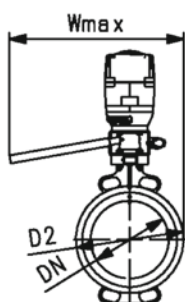
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Voltage 24V AC/DC
- Factory set control range 0-90°
- Heating element, position feedback (Open/Close/ Middle)
- Manual override integrated in electric actuator
- With additional manual override between valve and actuator
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or pneumatic actuators from GF
- Double sensor for electrical position feedback incl. LED feedback
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com

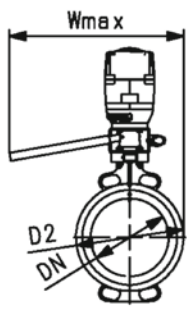


| d | Size | DN | PN | kv-value | Actuator | EPDM | SP | Weight |
|------|--------|------|-------|---------------------|----------|-------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | | Code | | (kg) |
| | | | | (L/min) | | | | |
| 63 | 2 | 50 | 10 | 1445 | EA120 | 199 565 440 | 1 | 5.5 |
| 75 | 2 ½ | 65 | 10 | 2530 | EA120 | 199 565 441 | 1 | 5.8 |
| 90 | 3 | 80 | 10 | 4020 | EA120 | 199 565 442 | 1 | 5.9 |
| 110 | 4 | 100 | 10 | 5850 | EA120 | 199 565 443 | 1 | 6.6 |
| 140 | 5 | 125 | 10 | 11900 | EA120 | 199 565 444 | 1 | 7.1 |
| 160 | 6 | 150 | 10 | 18050 | EA250 | 199 565 445 | 1 | 9.7 |
| 225 | 8 | 200 | 10 | 43667 | EA250 | 199 565 446 | 1 | 11.0 |

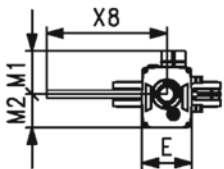
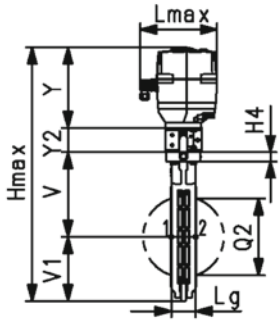
| d | Size | FKM | SP | Weight |
|------|--------|-------------|----|--------|
| (mm) | (inch) | Code | | (kg) |
| 63 | 2 | 199 565 460 | 1 | 5.6 |
| 75 | 2 ½ | 199 565 461 | 1 | 5.9 |
| 90 | 3 | 199 565 462 | 1 | 6.0 |
| 110 | 4 | 199 565 463 | 1 | 6.8 |
| 140 | 5 | 199 565 464 | 1 | 7.4 |
| 160 | 6 | 199 565 465 | 1 | 10.0 |
| 225 | 8 | 199 565 466 | 1 | 11.5 |

| d | Size | D2 | Wmax | Hmax | Lmax | H4 | V | V1 | Lg | E | M1 | M2 | X8 |
|------|--------|-------|-------|-------|------|------|-------|-------|------|-------|-------|------|-------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 2 | 100.0 | 385.5 | 96.0 | 190 | 23 | 133.5 | 63.0 | 43 | 122.5 | 107.5 | 83 | 297.5 |
| 75 | 2 ½ | 121.0 | 385.5 | 96.0 | 190 | 23 | 140.0 | 82.0 | 46 | 122.5 | 107.5 | 83 | 297.5 |
| 90 | 3 | 138.0 | 385.5 | 96.0 | 190 | 23 | 146.0 | 89.0 | 46 | 122.5 | 107.5 | 83 | 297.5 |
| 110 | 4 | 158.5 | 385.5 | 96.0 | 190 | 23 | 166.5 | 104.0 | 52 | 122.5 | 107.5 | 83 | 297.5 |
| 140 | 5 | 187.0 | 385.5 | 189.5 | 190 | 23 | 180.0 | 118.0 | 56 | 122.5 | 107.5 | 83 | 297.5 |
| 160 | 6 | 213.0 | 385.5 | 106.0 | 190 | 23 | 189.0 | 130.5 | 56 | 122.5 | 107.5 | 83 | 297.5 |
| 225 | 8 | 267.0 | 385.5 | 106.0 | 190 | 23 | 209.5 | 159.0 | 60 | 122.5 | 107.5 | 83 | 297.5 |

| d | Size | Y | Y2 | Q2 |
|------|--------|-------|------|------|
| (mm) | (inch) | (mm) | (mm) | (mm) |
| 63 | 2 | 189.5 | 60 | 28.5 |
| 75 | 2 ½ | 189.5 | 60 | 44.0 |
| 90 | 3 | 189.5 | 60 | 63.5 |



| d | Size | Y | Y2 | Q2 |
|----------|-------------|----------|-----------|-----------|
| (mm) | (inch) | (mm) | (mm) | (mm) |
| 110 | 4 | 189.5 | 60 | 84.0 |
| 140 | 5 | 189.5 | 60 | 110.5 |
| 160 | 6 | 199.5 | 60 | 137.5 |
| 225 | 8 | 199.5 | 60 | 190.5 |





Wafer-style intermediate installation butterfly valve type 565 PVDF/PA-GF
With pneumatic actuator - fail safe to close (FC)
Wafer style metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

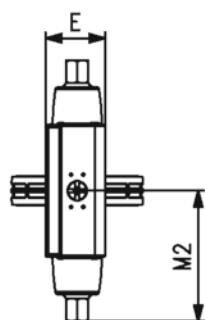
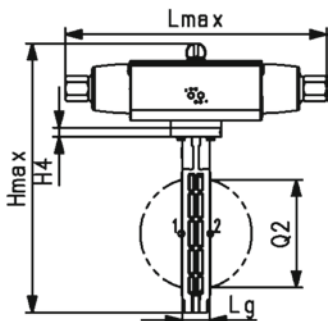
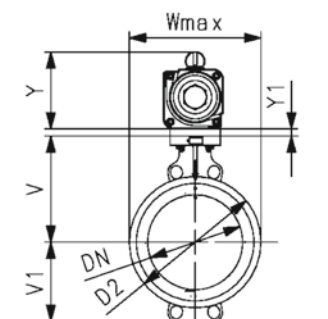
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Control time 0-90° 1-2s
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or electric actuators from GF
- Double sensor for electrical position feedback incl. LED feedback

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | Actuator | EPDM Code | SP | Weight (kg) |
|-----------|----------------|------------|-------------|--|----------|--------------------|----|----------------|
| 63 | 2 | 50 | 10 | 1445 | PA30 | 199 565 500 | 1 | 3.2 |
| 75 | 2 ½ | 65 | 10 | 2530 | PA30 | 199 565 501 | 1 | 3.5 |
| 90 | 3 | 80 | 10 | 4020 | PA35 | 199 565 502 | 1 | 4.3 |
| 110 | 4 | 100 | 10 | 5850 | PA40 | 199 565 503 | 1 | 5.9 |
| 140 | 5 | 125 | 10 | 11900 | PA45 | 199 565 504 | 1 | 7.9 |
| 160 | 6 | 150 | 10 | 18050 | PA50 | 199 565 505 | 1 | 10.7 |
| 225 | 8 | 200 | 10 | 43667 | PA60 | 199 565 506 | 1 | 16.4 |
| 280 | 10 | 250 | 10 | 62333 | PA65 | 199 565 507 | 1 | 25.5 |
| 315 | 12 | 300 | 6 | 94500 | PA70 | 199 565 508 | 1 | 32.1 |

| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|--------------------|----|----------------|
| 63 | 199 565 520 | 1 | 3.3 |
| 75 | 199 565 521 | 1 | 3.6 |
| 90 | 199 565 522 | 1 | 4.4 |
| 110 | 199 565 523 | 1 | 6.1 |
| 140 | 199 565 524 | 1 | 8.2 |
| 160 | 199 565 525 | 1 | 11.0 |
| 225 | 199 565 526 | 1 | 16.9 |
| 280 | 199 565 527 | 1 | 26.2 |
| 315 | 199 565 528 | 1 | 33.3 |

| d (mm) | D2 (mm) | Wmax (mm) | Hmax (mm) | Lmax (mm) | H4 (mm) | V (mm) | V1 (mm) | Lg (mm) | E (mm) | M2 (mm) | Y (mm) | Y1 (mm) | Q2 (mm) |
|-----------|------------|--------------|--------------|--------------|------------|-----------|------------|------------|-----------|------------|-----------|------------|------------|
| 63 | 100.0 | 118.5 | 309.5 | 274.5 | 23 | 133.5 | 63.0 | 43 | 70.5 | 137.2 | 98.5 | 15 | 28.5 |
| 75 | 121.0 | 132.5 | 335.5 | 275.5 | 23 | 140.0 | 82.0 | 46 | 70.5 | 137.2 | 98.5 | 15 | 44.0 |
| 90 | 138.0 | 138.0 | 361.0 | 325.5 | 23 | 146.0 | 89.0 | 46 | 83.5 | 162.6 | 111.5 | 15 | 63.5 |
| 110 | 158.5 | 158.5 | 385.5 | 359.5 | 23 | 166.5 | 104.0 | 52 | 87.0 | 179.8 | 115.0 | 0 | 84.0 |
| 140 | 187.0 | 187.0 | 447.5 | 418.0 | 23 | 180.0 | 118.0 | 56 | 107.5 | 209.0 | 149.5 | 0 | 110.5 |
| 160 | 213.0 | 213.0 | 472.5 | 434.0 | 23 | 189.0 | 130.5 | 56 | 111.5 | 217.0 | 153.5 | 0 | 137.5 |
| 225 | 267.0 | 267.0 | 545.5 | 547.5 | 23 | 209.5 | 159.0 | 60 | 135.0 | 273.6 | 177.0 | 0 | 190.5 |
| 280 | 325.5 | 325.5 | 666.0 | 681.0 | 23 | 262.5 | 195.5 | 68 | 148.0 | 323.0 | 190.0 | 18 | 239.0 |
| 315 | 380.0 | 380.0 | 743.0 | 681.0 | 23 | 284.5 | 230.5 | 78 | 168.0 | 340.5 | 210.5 | 18 | 285.5 |



Wafer-style intermediate installation butterfly valve type 565 PVDF/PA-GF
With pneumatic actuator - fail safe to open (FO)
Wafer style metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

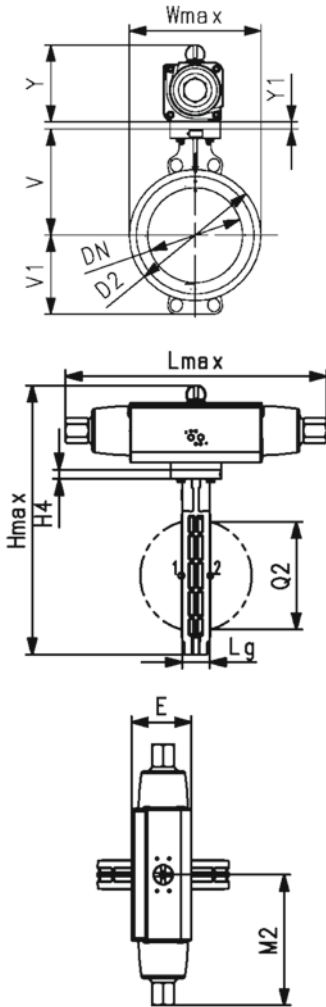
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Control time 0-90° 1-2s
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or electric actuators from GF
- Double sensor for electrical position feedback incl. LED feedback

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com

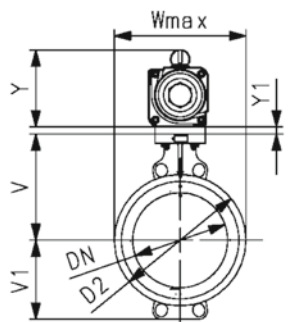


| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (L/min) | Actuator | EPDM Code | SP | Weight (kg) |
|--------|-------------|---------|----------|-----------------------------|----------|--------------------|----|-------------|
| 63 | 2 | 50 | 10 | 1445 | PA30 | 199 565 540 | 1 | 3.2 |
| 75 | 2 ½ | 65 | 10 | 2530 | PA30 | 199 565 541 | 1 | 3.5 |
| 90 | 3 | 80 | 10 | 4020 | PA35 | 199 565 542 | 1 | 4.3 |
| 110 | 4 | 100 | 10 | 5850 | PA40 | 199 565 543 | 1 | 5.9 |
| 140 | 5 | 125 | 10 | 11900 | PA45 | 199 565 544 | 1 | 7.9 |
| 160 | 6 | 150 | 10 | 18050 | PA50 | 199 565 545 | 1 | 10.7 |
| 225 | 8 | 200 | 10 | 43667 | PA60 | 199 565 546 | 1 | 14.8 |
| 280 | 10 | 250 | 10 | 62333 | PA65 | 199 565 547 | 1 | 28.4 |
| 315 | 12 | 300 | 6 | 94500 | PA70 | 199 565 548 | 1 | 32.1 |

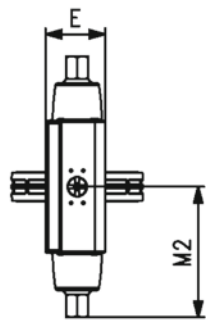
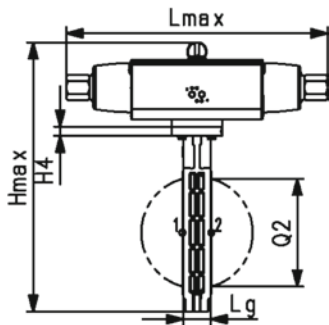
| d (mm) | Size (inch) | FKM Code | SP | Weight (kg) |
|--------|-------------|--------------------|----|-------------|
| 63 | 2 | 199 565 560 | 1 | 3.3 |
| 75 | 2 ½ | 199 565 561 | 1 | 3.6 |
| 90 | 3 | 199 565 562 | 1 | 4.4 |
| 110 | 4 | 199 565 563 | 1 | 6.1 |
| 140 | 5 | 199 565 564 | 1 | 8.2 |
| 160 | 6 | 199 565 565 | 1 | 11.0 |
| 225 | 8 | 199 565 566 | 1 | 15.3 |
| 280 | 10 | 199 565 567 | 1 | 29.1 |
| 315 | 12 | 199 565 568 | 1 | 33.3 |

| d (mm) | Size (inch) | D2 (mm) | Wmax (mm) | Hmax (mm) | Lmax (mm) | H4 (mm) | V (mm) | V1 (mm) | Lg (mm) | E (mm) | M2 (mm) | Y (mm) | Y1 (mm) |
|--------|-------------|---------|-----------|-----------|-----------|---------|--------|---------|---------|--------|---------|--------|---------|
| 63 | 2 | 100.0 | 118.5 | 309.5 | 274.5 | 23 | 133.5 | 63.0 | 43 | 70.5 | 137.5 | 98.5 | 15 |
| 75 | 2 ½ | 121.0 | 132.5 | 335.5 | 275.5 | 23 | 140.0 | 82.0 | 46 | 70.5 | 137.5 | 98.5 | 15 |
| 90 | 3 | 138.0 | 138.0 | 361.0 | 325.5 | 23 | 146.0 | 89.0 | 46 | 83.5 | 163.0 | 111.5 | 15 |
| 110 | 4 | 158.5 | 158.5 | 385.5 | 359.5 | 23 | 166.5 | 104.0 | 52 | 87.0 | 180.0 | 115.0 | 0 |
| 140 | 5 | 187.0 | 187.0 | 447.5 | 418.0 | 23 | 180.0 | 118.0 | 56 | 107.5 | 209.0 | 149.5 | 0 |
| 160 | 6 | 213.0 | 213.0 | 472.5 | 434.0 | 23 | 189.0 | 130.5 | 56 | 111.5 | 217.0 | 153.5 | 0 |
| 225 | 8 | 267.0 | 267.0 | 545.5 | 547.5 | 23 | 209.5 | 159.0 | 60 | 135.0 | 274.0 | 177.0 | 0 |
| 280 | 10 | 325.5 | 325.5 | 666.0 | 681.0 | 23 | 262.5 | 195.5 | 68 | 148.0 | 323.0 | 190.0 | 18 |
| 315 | 12 | 380.0 | 380.0 | 743.0 | 681.0 | 23 | 284.5 | 230.5 | 78 | 168.0 | 340.5 | 210.5 | 18 |

| d (mm) | Size (inch) | Q2 (mm) |
|--------|-------------|---------|
| 63 | 2 | 28.5 |
| 75 | 2 ½ | 44.0 |
| 90 | 3 | 63.5 |
| 110 | 4 | 84.0 |



| d | Size | Q2 |
|----------|-------------|-----------|
| (mm) | (inch) | (mm) |
| 140 | 5 | 110.5 |
| 160 | 6 | 137.5 |
| 225 | 8 | 190.5 |
| 280 | 10 | 239.0 |
| 315 | 12 | 285.5 |





Wafer-style intermediate installation butterfly valve type 565 PVDF/PA-GF
With pneumatic actuator - double acting (DA)
Wafer style metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

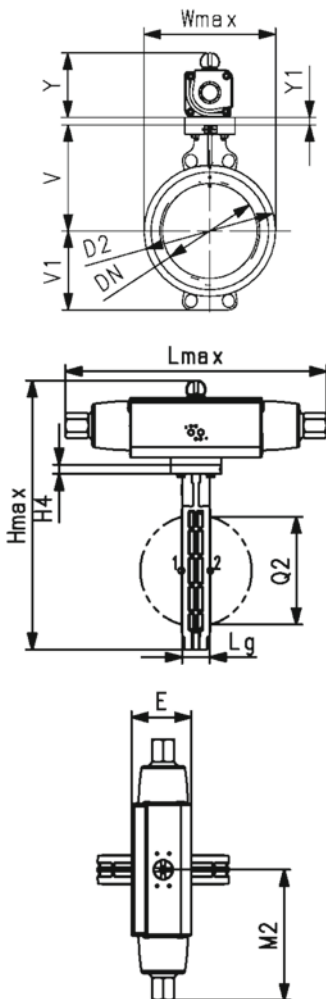
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Control time 0-90° 1-2s
- Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or electric actuators from GF
- Double sensor for electrical position feedback incl. LED feedback

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | Actuator | EPDM Code | SP | Weight (kg) |
|-----------|----------------|------------|-------------|--|----------|--------------------|----|----------------|
| 63 | 2 | 50 | 10 | 1445 | PA35 | 199 565 600 | 1 | 2.6 |
| 75 | 2 ½ | 65 | 10 | 2530 | PA35 | 199 565 601 | 1 | 2.9 |
| 90 | 3 | 80 | 10 | 4020 | PA40 | 199 565 602 | 1 | 3.4 |
| 110 | 4 | 100 | 10 | 5850 | PA45 | 199 565 603 | 1 | 4.5 |
| 140 | 5 | 125 | 10 | 11900 | PA45 | 199 565 604 | 1 | 5.1 |
| 160 | 6 | 150 | 10 | 18050 | PA55 | 199 565 605 | 1 | 7.7 |
| 225 | 8 | 200 | 10 | 43667 | PA60 | 199 565 606 | 1 | 10.7 |
| 280 | 10 | 250 | 10 | 62333 | PA65 | 199 565 607 | 1 | 16.9 |
| 315 | 12 | 300 | 6 | 94500 | PA70 | 199 565 608 | 1 | 22.4 |

| d (mm) | FKM Code | SP | Weight (kg) |
|-----------|--------------------|----|----------------|
| 63 | 199 565 620 | 1 | 2.7 |
| 75 | 199 565 621 | 1 | 3.0 |
| 90 | 199 565 622 | 1 | 3.5 |
| 110 | 199 565 623 | 1 | 4.7 |
| 140 | 199 565 624 | 1 | 5.4 |
| 160 | 199 565 625 | 1 | 8.0 |
| 225 | 199 565 626 | 1 | 11.2 |
| 280 | 199 565 627 | 1 | 17.6 |
| 315 | 199 565 628 | 1 | 23.6 |

| d (mm) | D2 (mm) | Wmax (mm) | Hmax (mm) | Lmax (mm) | H4 (mm) | V (mm) | V1 (mm) | Lg (mm) | E (mm) | M2 (mm) | Y (mm) | Y1 (mm) | Q2 (mm) |
|-----------|------------|--------------|--------------|--------------|------------|-----------|------------|------------|-----------|------------|-----------|------------|------------|
| 63 | 100.0 | 118.5 | 303.5 | 196.5 | 23 | 133.5 | 63.0 | 43 | 64.5 | 98.5 | 92.5 | 15 | 28.5 |
| 75 | 121.0 | 132.5 | 329.5 | 196.5 | 23 | 140.0 | 82.0 | 46 | 64.5 | 98.5 | 92.5 | 15 | 44.0 |
| 90 | 138.0 | 138.0 | 348.0 | 206.0 | 23 | 146.0 | 89.0 | 46 | 70.5 | 103.0 | 98.5 | 15 | 63.5 |
| 110 | 158.5 | 158.5 | 381.5 | 242.0 | 23 | 166.5 | 104.0 | 52 | 83.5 | 121.0 | 111.5 | 0 | 84.0 |
| 140 | 187.0 | 187.0 | 409.0 | 242.0 | 23 | 180.0 | 118.0 | 56 | 83.5 | 121.0 | 111.5 | 0 | 110.5 |
| 160 | 213.0 | 213.0 | 468.5 | 290.5 | 23 | 189.0 | 130.5 | 56 | 107.5 | 145.5 | 149.5 | 0 | 137.5 |
| 225 | 267.0 | 267.0 | 522.0 | 314.0 | 23 | 209.5 | 159.0 | 60 | 111.5 | 157.0 | 153.5 | 0 | 190.5 |
| 280 | 325.5 | 325.5 | 636.0 | 340.0 | 23 | 262.5 | 195.5 | 68 | 118.0 | 170.0 | 160.0 | 18 | 239.0 |
| 315 | 380.0 | 380.0 | 709.5 | 382.5 | 23 | 284.5 | 230.5 | 78 | 135.0 | 191.5 | 177.0 | 18 | 285.5 |



Wafer-style intermediate installation butterfly valve type 565 PVDF/PA-GF
With plastic pneumatic actuator - fail safe to close (FC)
Wafer style metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

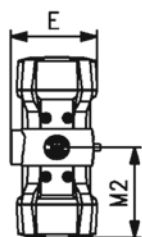
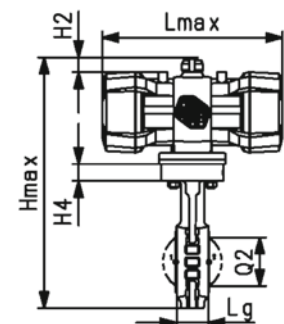
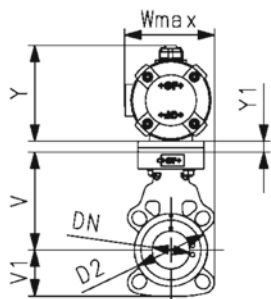
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Control time 0-90° 1-2s
- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Full plastic solution (actuator housing made of PP-GF)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double-sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or electric actuators from GF
- Double sensor for electrical position feedback incl. LED feedback

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | Actuator | EPDM Code | SP Weight (kg) |
|-----------|----------------|------------|-------------|--|----------|--------------------|-------------------|
| 63 | 2 | 50 | PN10 | 1445 | PPA40 | 199 565 650 | 1 2.922 |
| 75 | 2 ½ | 65 | PN10 | 2530 | PPA80 | 199 565 651 | 1 4.905 |
| 90 | 3 | 80 | PN10 | 4020 | PPA80 | 199 565 652 | 1 5.075 |

| d (mm) | FKM Code | SP Weight (kg) |
|-----------|--------------------|-------------------|
| 63 | 199 565 660 | 1 2.922 |
| 75 | 199 565 661 | 1 4.905 |
| 90 | 199 565 662 | 1 5.075 |

| d (mm) | D2 (mm) | Wmax (mm) | Hmax (mm) | Lmax (mm) | H2 (mm) | H4 (mm) | V (mm) | V1 (mm) | Lg (mm) | E (mm) | M2 (mm) | Y (mm) | Y1 (mm) | Q2 (mm) |
|-----------|------------|--------------|--------------|--------------|------------|------------|-----------|------------|------------|-----------|------------|-----------|------------|------------|
| 63 | 100 | 121.2 | 341.2 | 245.5 | 20 | 23 | 133.5 | 63 | 43 | 119.5 | 122.8 | 111 | 15 | 28.5 |
| 75 | 121 | 140.0 | 372.2 | 343.0 | 20 | 23 | 140.0 | 82 | 46 | 141.5 | 171.5 | 131 | 0 | 44.0 |
| 90 | 138 | 142.4 | 384.9 | 343.0 | 20 | 23 | 146.0 | 89 | 46 | 141.5 | 171.5 | 131 | 0 | 63.5 |



Wafer-style intermediate installation butterfly valve type 565 PVDF/PA-GF
With plastic pneumatic actuator - fail safe to open (FO)
Wafer style metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

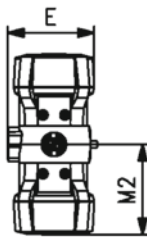
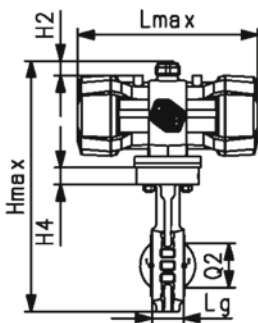
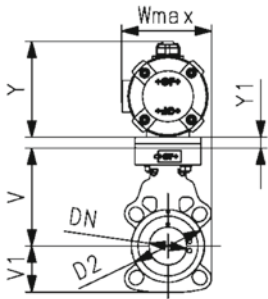
- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Control time 0-90° 1-2s
- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Full plastic solution (actuator housing made of PP-GF)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double-sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or electric actuators from GF
- Double sensor for electrical position feedback incl. LED feedback

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | Actuator | EPDM Code | SP Weight (kg) |
|-----------|----------------|------------|-------------|--|----------|--------------------|----------------------|
| 63 | 2 | 50 | PN10 | 1445 | PPA40 | 199 565 670 | 1 2.922 |
| 75 | 2 ½ | 65 | PN10 | 2530 | PPA80 | 199 565 671 | 1 4.905 |
| 90 | 3 | 80 | PN10 | 4020 | PPA80 | 199 565 672 | 1 5.075 |

| d (mm) | FKM Code | SP Weight (kg) |
|-----------|--------------------|----------------------|
| 63 | 199 565 680 | 1 2.922 |
| 75 | 199 565 681 | 1 4.905 |
| 90 | 199 565 682 | 1 5.075 |

| d (mm) | D2 (mm) | Wmax (mm) | Hmax (mm) | Lmax (mm) | H2 (mm) | H4 (mm) | V (mm) | V1 (mm) | Lg (mm) | E (mm) | M2 (mm) | Y (mm) | Y1 (mm) | Q2 (mm) |
|-----------|------------|--------------|--------------|--------------|------------|------------|-----------|------------|------------|-----------|------------|-----------|------------|------------|
| 63 | 100 | 121.2 | 341.2 | 245.5 | 20 | 23 | 133.5 | 63 | 43 | 119.5 | 122.8 | 111 | 15 | 28.5 |
| 75 | 121 | 140.0 | 372.2 | 343.0 | 20 | 23 | 140.0 | 82 | 46 | 141.5 | 171.5 | 131 | 0 | 44.0 |
| 90 | 138 | 142.4 | 384.9 | 343.0 | 20 | 23 | 146.0 | 89 | 46 | 141.5 | 171.5 | 131 | 0 | 63.5 |



Wafer-style intermediate installation butterfly valve type 565 PVDF/PA-GF
With plastic pneumatic actuator - double acting (DA)
Wafer style metric/ANSI/BS/JIS
Suitable for ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT and PROGEF Systems

Model:

- Installation length: EN558 row 20, ISO 5752 row 20, API 609 table 2
- Flange standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- For easy installation and removal
- Control time 0-90° 1-2s
- Control pressure supply through integrated NAMUR interface according VDI/VDE 3845 with 5.6 bar (81.2 psi)
- Full plastic solution (actuator housing made of PP-GF)
- Switching Ring for the double sensor for electrical position feedback is pre-assembled. Double-sensor can be ordered as accessory

Option:

- Individual configuration of the valve possible
- Hand or electric actuators from GF
- Double sensor for electrical position feedback incl. LED feedback

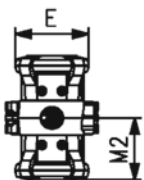
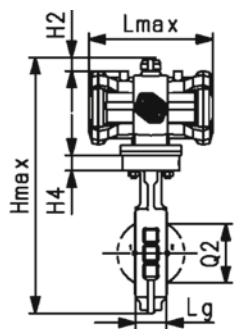
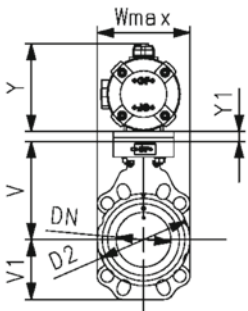
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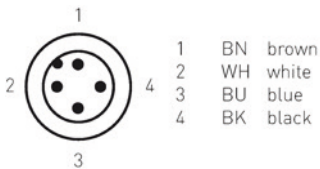
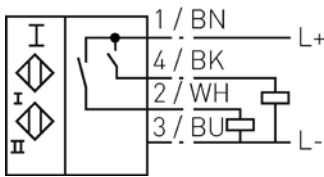
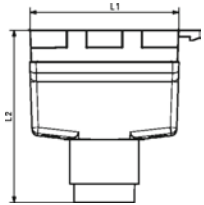
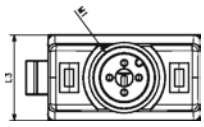
For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com

| d | Size | DN | PN | kv-value | Actuator | EPDM | SP | Weight |
|------|--------|------|-------|---------------------|----------|--------------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | | Code | | (kg) |
| | | | | (L/min) | | | | |
| 63 | 2 | 50 | PN10 | 1445 | PPA40 | 199 565 630 | 1 | 2.396 |
| 75 | 2 ½ | 65 | PN10 | 2530 | PPA40 | 199 565 631 | 1 | 2.664 |
| 90 | 3 | 80 | PN10 | 4020 | PPA40 | 199 565 632 | 1 | 2.854 |

| d | FKM | SP | Weight |
|------|--------------------|----|--------|
| (mm) | Code | | (kg) |
| 63 | 199 565 690 | 1 | 2.396 |
| 75 | 199 565 691 | 1 | 2.664 |
| 90 | 199 565 692 | 1 | 2.854 |

| d | D2 | Wmax | Hmax | Lmax | H2 | H4 | V | V1 | Lg | E | M2 | Y | Y1 | Q2 |
|------|------|-------|-------|-------|------|------|-------|------|------|-------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 100 | 121.2 | 341.2 | 183.5 | 20 | 23 | 133.5 | 63 | 43.0 | 119.5 | 91.8 | 111 | 15 | 28.5 |
| 75 | 121 | 132.5 | 367.1 | 183.5 | 20 | 23 | 140.0 | 82 | 46.0 | 119.5 | 91.8 | 111 | 15 | 44.0 |
| 90 | 138 | 138.0 | 379.8 | 183.5 | 20 | 23 | 146.0 | 89 | 46.0 | 119.5 | 91.8 | 111 | 15 | 63.5 |





Double sensor for electrical position feedback For double sensor (Ball valve 546 Pro, 543 Pro and Butterfly Valve 565)

Model:

- Accessory for Ball Valve type 546 Pro, 543 Pro and Butterfly Valve 565
- Enables electrical position feedback, incl. LED, in combination with GF interface module
- IP67 rating
- Female connector and cables available – see 198546150 – 154
- NAMUR version has ATEX and IECEx certification
- Dimensions: Ball Valves 546 Pro and 543 Pro DN10-50, Butterfly Valve 565 DN50-300

Specifications:

- Housing material: PBTGF20
- Switching function: 2x normally open (NO)
- Output type: PNP
- Output polarity: DC
- Output type: 3-wire
- Operating voltage (U_B): 10... 30V DC
- Reverse polarity protection: all connections
- Voltage drop (U_d): $\leq 3V$
- Operating current (I_L): 0... 150mA
- Off-state current (I_r): 0... 0.5mA typ. 0.1 μA at 25°C
- No-load supply current (I_0): $\leq 25mA$
- Ambient temperature: -25...70°C (-13...158°F)
- Connection (system side): 4-pin, M12 x 1 connector
- Standards: EN 60947-5-2:2007, EN 60947-5-2/A1:2012 IEC 60947-5-2:2007, IEC 60947-5-2 AMD 1:2012
- MTTF_d 948 a

Note:

*NAMUR sensor does not work with 565

For manually operated valves an additional switching ring (article number 199565900-199565003) is required. For electric or pneumatic operated valves, the switching ring is already pre-assembled.

| LED Signal Colour | PNP Code | SP | Weight (kg) | NPN Code | *Namur (Atex) Code | L1 (mm) | L2 (mm) | L3 (mm) | M1 |
|---------------------------|--------------------|----|-------------|--------------------|--------------------|---------|---------|---------|-----|
| Closed: green / open: red | 198 546 001 | 1 | 0.050 | 198 546 005 | 198 546 003 | 26 | 30 | 15 | M12 |
| Closed: red / open: green | 198 546 002 | 1 | 0.050 | 198 546 006 | 198 546 004 | 26 | 30 | 15 | M12 |

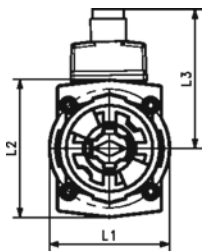
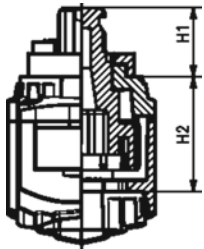


Manual Interface module For Ball Valve Type 543 Pro & 546 Pro

Model:

- Accessory for manual ball valve type 546 Pro
- Possibility of electrical feedback, incl. LED in combination with double sensor (accessory DN10-50)
- Inclusive labelling clip

Ball Valve 543 Pro requires an additional spacer ring (DN10-15: 198543000, DN20-25: 198543001, DN32-40: 198543002, DN50: 198543003)



| DN (mm) | Manual Code | SP | Weight (kg) | H1 (mm) | H2 (mm) | L1 (mm) | L2 (mm) | L3 (mm) |
|------------|--------------------|----|----------------|------------|------------|------------|------------|------------|
| 10 - 15 | 198 546 102 | 1 | 0.042 | 15 | 32 | 37 | 44 | 46 |
| 20 - 25 | 198 546 103 | 1 | 0.052 | 20 | 32 | 41 | 47 | 48 |
| 32 - 40 | 198 546 105 | 1 | 0.097 | 23 | 33 | 53 | 60 | 54 |
| 50 | 198 546 107 | 1 | 0.111 | 26 | 36 | 56 | 62 | 55 |



Interface module for GF actuators For Ball Valve Type 546 Pro and 543 Pro

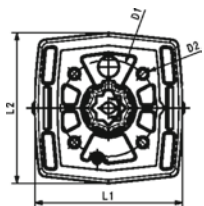
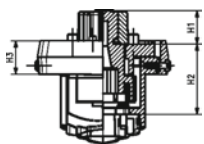
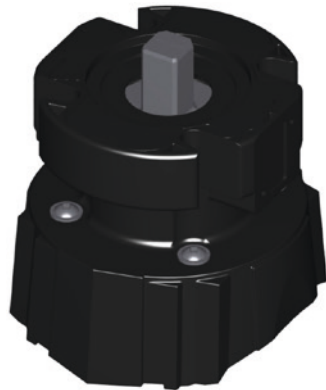
Model:

- Accessory for ball valve type 546 Pro
- Interface module acts as interface for GF actuators
- Possibility of electrical feedback, incl. LED in combination with double sensor (accessory DN10-50)
- Inclusive labelling clip

PPA DN65-100 requires an interface module as well as adaption kit (see below) to assemble the PPA onto the ball valve

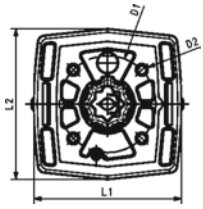
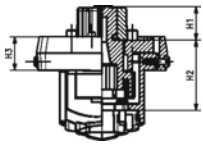
*DN32-DN50 can also be used for PA11 and PA21

Ball Valve 543 Pro requires an additional spacer ring (DN10-15: 198543000, DN20-25: 198543001, DN32-40: 198543002, DN50: 198543003)



| DN (mm) | PPA04-80 Code | SP | Weight (kg) | PA11, PA21 Code | SP | Weight (kg) |
|------------|--------------------|--------------------|----------------|--------------------|----|----------------|
| 10 - 15 | 198 546 162 | 1 | 0.130 | 198 546 132 | 1 | 0.130 |
| 20 | 198 546 163 | 1 | 0.105 | 198 546 133 | 1 | 0.105 |
| 25 | 198 546 164 | 1 | 0.105 | 198 546 134 | 1 | 0.105 |
| * | 32 | 198 546 135 | 1 | 0.001 | | |
| * | 40 | 198 546 136 | 1 | 0.001 | | |
| * | 50 | 198 546 137 | 1 | 0.001 | | |
| 65 - 80 | 167 482 684 | 1 | 0.379 | | | |
| 100 | 167 482 685 | 1 | 0.607 | | | |

| DN (mm) | EA15, EA25 Code | SP | Weight (kg) | |
|------------|--------------------|--------------------|----------------|-------|
| 10 - 15 | 198 546 142 | 1 | 0.100 | |
| 20 | 198 546 143 | 1 | 0.100 | |
| 25 | 198 546 144 | 1 | 0.105 | |
| * | 32 | 198 546 145 | 1 | 0.140 |



| DN (mm) | EA15, EA25 Code | SP | Weight (kg) |
|------------|--------------------|----|----------------|
| * 40 | 198 546 146 | 1 | 0.140 |
| * 50 | 198 546 147 | 1 | 0.140 |
| 65 - 80 | | | |
| 100 | | | |

| DN (mm) | Adaption kit Code PPA (FC/FO) | Adaption kit Code PPA (DA) | H1 (mm) | H2 (mm) | H3 (mm) | L1 (mm) | L2 (mm) | D1 (mm) | D3 (mm) | D4 (mm) |
|------------|-------------------------------------|----------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 10 - 15 | | | 16 | 35 | 17 | 65 | 65 | 42 | | M5 |
| 20 | | | 16 | 35 | 17 | 65 | 65 | 42 | | M5 |
| 25 | | | 16 | 35 | 17 | 65 | 65 | 42 | | M5 |
| * 32 | | | 18 | 33 | 15 | 72 | 79 | 50 | M6 | |
| * 40 | | | 18 | 33 | 15 | 72 | 79 | 50 | M6 | |
| * 50 | | | 18 | 36 | 15 | 72 | 79 | 50 | M6 | |
| 65 - 80 | 198546138 | 198546139 | 85 | | | 270 | | | | |
| 100 | 198546140 | 198546140 | 123 | | | 320 | | | | |



Manual spring return unit for ball valves 546 Pro and 543 Pro Retrofit kit

Model:

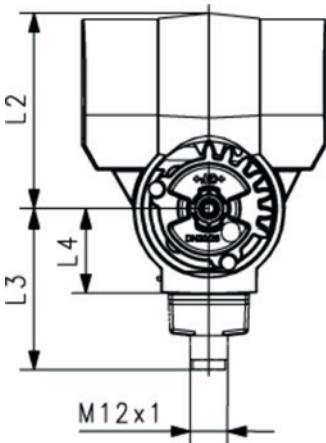
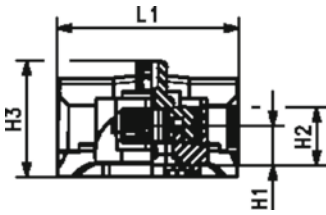
- Manual spring return unit ("Dead-man lever") ensures that the valve closes after operation
- For safe sampling, dosing, cleaning or draining
- Retrofit possible with ball valve 546 (Pro)
- Includes transparent clip for valve labelling

Option:

- Double sensor for position feedback

Note:

*optional accessory to use a bigger lever for higher operating torque



| d (mm) | DN (mm) | Code |
|-----------|------------|--------------------|
| 16 - 20 | 10 - 15 | 198 546 082 |
| 25 - 32 | 20 - 25 | 198 546 083 |

| Adapter for bigger lever* | Bigger size lever* | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | H1 (mm) | H2 (mm) | H3 (mm) |
|------------------------------|-----------------------|------------|------------|------------|------------|------------|------------|------------|
| 198546088 | 167484549 (DN20) | 74 | 42.5 | 46.0 | 22 | 11.0 | 20.0 | 42.5 |
| 198546089 | 167484551 (DN32) | 79 | 63.0 | 51.5 | 27 | 17.5 | 25.5 | 50.5 |



**Female connector
For double sensor (Ball valve 546 Pro and Butterfly Valve 565)**

Model:

- Accessory for Ball Valve type 546 Pro and Butterfly Valve 565
- Connects double sensor to PLC
- Cable is flame-resistant
- Degree of protection IP67 / IP68 / IP69K

Note:

Degree of protection: EN60529:2000

Standards: IEC 61076-2-101:2008

Ambient temperature:

- Body: -40 ... 90 °C (-40 ... 194 °F)

- cable, fixed: -25 ... 70 °C (-13 ... 158 °F)

- cable, flexing: -5 ... 70 °C (23 ... 158 °F)

Pollution degree: 3

| DN (mm) | Code | Model |
|------------|--------------------|--------------------------------|
| 10-50 | 198 546 150 | Connector without cable |
| 10-50 | 198 546 151 | Connector with cable (5m PVC) |
| 10-50 | 198 546 152 | Connector with cable (10m PVC) |
| 10-50 | 198 546 153 | Connector with cable (5m PUR) |
| 10-50 | 198 546 154 | Connector with cable (10m PUR) |

Diaphragm valves type 317



Diaphragm valve type 317 PVC-C With flanges PP-V metric

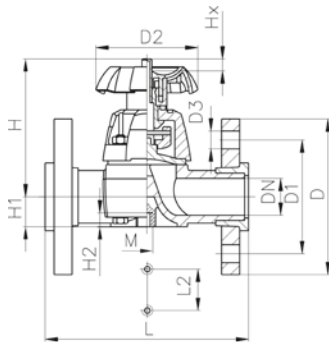
Model:

- Flat sealing faces
- DN65 with backing flange
- DN 80-150 with fixed flange
- Overall length according to EN 558

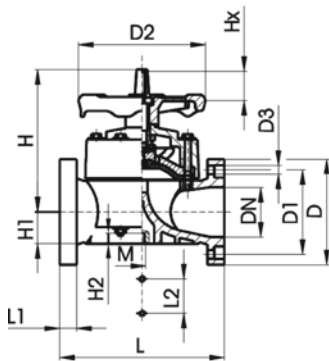
Option:

- Handwheel lockable DN15-65 (basic version not lockable)

* **DN80, DN100 and DN150 fixed flanges metric and inch ANSI B16.5**



DN 15-65

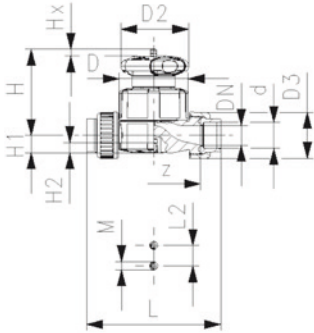
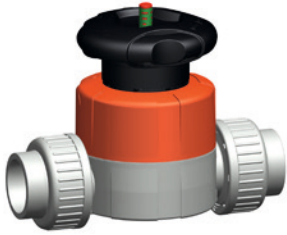


DN 80-100

| | d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | PTFE/EPDM Code | SP | Weight (kg) |
|---|-----------|----------------|------------|-------------|--|--------------|-------------------|----|----------------|
| | 75 | 2 1/2 | 65 | 10 | 992 | 163 317 523 | 163 317 538 | 1 | 4.425 |
| * | 90 | 3 | 80 | 10 | 1700 | 163 317 024 | 163 317 039 | 1 | 9.822 |
| * | 110 | 4 | 100 | 6 | 2700 | 163 317 025 | 163 317 040 | 1 | 13.799 |

| | d (mm) | D (mm) | D1 (mm) | D2 (mm) | D3 (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | M | Lift = Hx (mm) | AL |
|---|-----------|-----------|------------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----|----------------------|----|
| | 75 | 185 | 145 | 152 | 18 | 201 | 46 | 15 | 290 | | 70 | M8 | 30 | 4 |
| * | 90 | 200 | 160 | 270 | 18 | 265 | 57 | 23 | 310 | 35 | 120 | M12 | 40 | 8 |
| * | 110 | 225 | 180 | 270 | 18 | 304 | 69 | 23 | 350 | 35 | 120 | M12 | 50 | 8 |

Diaphragm valves type 514



Diaphragm valve type 514 PVC-C With solvent cement sockets metric

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

Option:

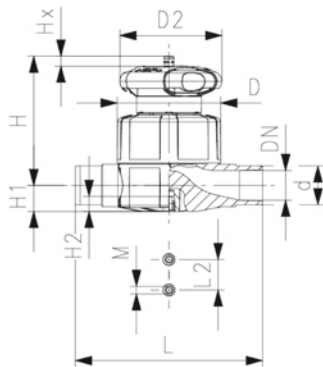
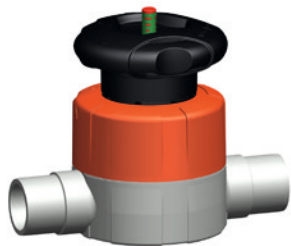
- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches

* O-Ring material: FKM

| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | PTFE/ EPDM* Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------------|----|----------------|------------------------|----|----------------|
| 20 | 15 | ½ | 10 | 125 | 163 514 012 | 1 | 0.409 | 163 514 032 | 1 | 0.312 |
| 25 | 20 | ¾ | 10 | 271 | 163 514 013 | 1 | 0.448 | 163 514 033 | 1 | 0.558 |
| 32 | 25 | 1 | 10 | 481 | 163 514 014 | 1 | 0.707 | 163 514 034 | 1 | 1.207 |
| 40 | 32 | 1 ¼ | 10 | 759 | 163 514 015 | 1 | 1.516 | 163 514 035 | 1 | 1.536 |
| 50 | 40 | 1 ½ | 10 | 1263 | 163 514 016 | 1 | 1.674 | 163 514 036 | 1 | 1.541 |
| 63 | 50 | 2 | 10 | 1728 | 163 514 017 | 1 | 2.568 | 163 514 037 | 1 | 3.622 |

| d (mm) | D (mm) | D2 (mm) | D3 (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L2 (mm) | M | z (mm) | Lift = Hx (mm) | closest inch (inch) |
|-----------|-----------|------------|------------|-----------|------------|------------|-----------|------------|----|-----------|----------------------|---------------------------|
| 20 | 65 | 65 | 43 | 73 | 14 | 12 | 128 | 25 | M6 | 96 | 7 | ½ |
| 25 | 80 | 65 | 51 | 81 | 18 | 12 | 152 | 25 | M6 | 114 | 10 | ¾ |
| 32 | 88 | 87 | 58 | 107 | 22 | 12 | 166 | 25 | M6 | 122 | 13 | 1 |
| 40 | 101 | 87 | 72 | 115 | 26 | 15 | 192 | 45 | M8 | 140 | 15 | 1 ¼ |
| 50 | 117 | 135 | 83 | 148 | 32 | 15 | 222 | 45 | M8 | 160 | 19 | 1 ½ |
| 63 | 144 | 135 | 100 | 166 | 39 | 15 | 266 | 45 | M8 | 190 | 25 | 2 |

Diaphragm valves type 515



Diaphragm valve type 515 PVC-C With solvent cement spigots metric

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Overall length EN 558

Option:

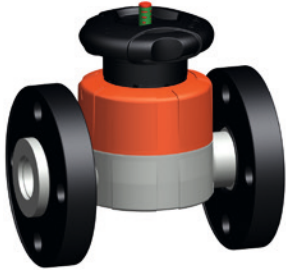
- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches

* O-Ring material: FKM

| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) | PTFE/ EPDM* Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------------|----|----------------|------------------------|----|----------------|
| 20 | 15 | ½ | 10 | 125 | 163 515 012 | 1 | 0.344 | 163 515 032 | 1 | 0.344 |
| 25 | 20 | ¾ | 10 | 271 | 163 515 013 | 1 | 0.361 | 163 515 033 | 1 | 0.364 |
| 32 | 25 | 1 | 10 | 481 | 163 515 014 | 1 | 0.589 | 163 515 034 | 1 | 1.073 |
| 40 | 32 | 1 ¼ | 10 | 759 | 163 515 015 | 1 | 1.269 | 163 515 035 | 1 | 1.290 |
| 50 | 40 | 1 ½ | 10 | 1263 | 163 515 016 | 1 | 2.314 | 163 515 036 | 1 | 2.343 |
| 63 | 50 | 2 | 10 | 1728 | 163 515 017 | 1 | 3.054 | 163 515 037 | 1 | 3.082 |

| d (mm) | D (mm) | D2 (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L2 (mm) | M | Lift = Hx (mm) | closest inch (inch) |
|-----------|-----------|------------|-----------|------------|------------|-----------|------------|----|----------------------|---------------------------|
| 20 | 65 | 65 | 73 | 14 | 12 | 124 | 25 | M6 | 7 | ½ |
| 25 | 80 | 65 | 81 | 18 | 12 | 144 | 25 | M6 | 10 | ¾ |
| 32 | 88 | 87 | 107 | 22 | 12 | 154 | 25 | M6 | 13 | 1 |
| 40 | 101 | 87 | 115 | 26 | 15 | 174 | 45 | M8 | 15 | 1 ¼ |
| 50 | 117 | 135 | 148 | 32 | 15 | 194 | 45 | M8 | 19 | 1 ½ |
| 63 | 144 | 135 | 166 | 39 | 15 | 224 | 45 | M8 | 25 | 2 |

Diaphragm valves type 517



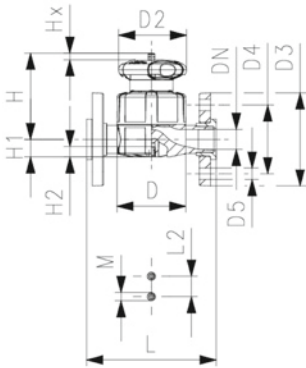
Diaphragm valve type 517 PVC-C With backing flanges PP-V metric/BS

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

Option:

- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches
- * O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | PTFE/ EPDM* Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------|-------------------|------------------------|-------------------|
| 20 | 15 | ½ | 10 | 125 | 163 517 112 | 1 | 0.447 | 163 517 132 |
| 25 | 20 | ¾ | 10 | 271 | 163 517 113 | 1 | 0.696 | 163 517 133 |
| 32 | 25 | 1 | 10 | 481 | 163 517 114 | 1 | 1.388 | 163 517 134 |
| 40 | 32 | 1 ¼ | 10 | 759 | 163 517 115 | 1 | 1.797 | 163 517 135 |
| 50 | 40 | 1 ½ | 10 | 1263 | 163 517 116 | 1 | 2.854 | 163 517 136 |
| 63 | 50 | 2 | 10 | 1728 | 163 517 117 | 1 | 3.318 | 163 517 137 |

| d (mm) | D (mm) | D2 (mm) | D3 (mm) | D4 (mm) | D5 (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L2 (mm) | M | Lift = Hx (mm) | closest inch (inch) |
|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|-----------|------------|----|----------------------|---------------------------|
| 20 | 65 | 65 | 95 | 65 | 14 | 73 | 14 | 12 | 130 | 25 | M6 | 7 | ½ |
| 25 | 80 | 65 | 105 | 75 | 14 | 81 | 18 | 12 | 150 | 25 | M6 | 10 | ¾ |
| 32 | 88 | 87 | 115 | 85 | 14 | 107 | 22 | 12 | 160 | 25 | M6 | 13 | 1 |
| 40 | 101 | 87 | 140 | 100 | 18 | 115 | 26 | 15 | 180 | 45 | M8 | 15 | 1 ¼ |
| 50 | 117 | 135 | 150 | 110 | 18 | 148 | 32 | 15 | 200 | 45 | M8 | 19 | 1 ½ |
| 63 | 144 | 135 | 165 | 125 | 18 | 166 | 39 | 15 | 230 | 45 | M8 | 25 | 2 |

Copiable Configurator GF Diaphragm Valve

Valve body type

- A20 Type 514 - True Union Design
- A21 Type 515 - Spigots
- A22 Type 517 - Flanges

Material

- B01 PVC-U
- B02 PVC-C
- B03 ABS

Dimension

- C05 DN 10 3/8"
- C06 DN 15 1/2"
- C07 DN 20 3/4"
- C08 DN 25 1"
- C09 DN 32 1 1/4"
- C10 DN 40 1 1/2"
- C11 DN 50 2"

Version

- D11 standard
- D05 silicone free / oil free

Diaphragm

- E01 EPDM
- E02 FPM
- E11 NBR
- E12 PTFE/EPDM
- E04 PTFE/FPM

Connecting parts

- H01 PVC-U Cemented socket metric
- H02 PVC-U Cemented socket JIS
- H03 PVC-U Cemented socket ASTM
- H04 PVC-U Cemented socket Zoll BS
- H05 PVC-U Cemented spigot metric
- H06 PVC-U Threaded socket Rp (ISO)
- H08 PVC-U Threaded socket Rc (JIS)
- H09 PVC-U Threaded socket NPT (ASTM)
- H11 PVC-C Cemented socket metric
- H13 PVC-C Cemented socket Zoll ASTM
- H14 PVC-C Cemented spigot metric
- H20 ABS Cemented socket metric
- H21 ABS Cemented socket Zoll BS
- H24 ABS Cemented spigot metric
- H40 PE-80 Fusion socket metric
- H41 PE-100 Butt fusion spigot SDR11 metric
- H43 PE-100 Butt fusion spigot long SDR11 metric
- H62 Fixed flange PVC-U JIS
- H70 Backing flange PVC-U metric with PVC-U endings
- H71 Backing flange PVC-U Zoll ANSI with PVC-U endings
- H71 PVCC Backing flange PVC-U Zoll ANSI with PVC-C endings
- H72 PVCC Backing flange PP-steel metric with PVC-U endings
- H72 PVCC Backing flange PP-steel metric with PVC-C endings
- H72 ABS Backing flange PP-steel metric with ABS endings
- H73 PVCC Backing flange PP-steel Zoll ANSI with PVC-U endings
- H73 PVCC Backing flange PP-steel Zoll ANSI with PVC-C endings
- H73 ABS Backing flange PP-steel Zoll ANSI with ABS endings
- H74 PVCC Backing flange PP-V metric with PVC-U endings
- H74 PVCC Backing flange PP-V metric with PVC-C endings
- H74 ABS Backing flange PP-V metric with ABS endings
- H74 PVCC Backing flange PP-V metric with PVC-C endings
- H75 PVCC Backing flange PP-V ANSI with PVC-U endings
- H75 PVCC Backing flange PP-V ANSI with PVC-C endings
- H78 PVCC Backing flange PP-GF JIS with PVC-U endings
- H80 PVC-U valve end blank

Electrical feedback

- I33 Electrical feedback with Ag, Ni limit switches
- I34 Electrical feedback with Au limit switches

Manual actuated: pressure tight housing

- K30 Bonnet pressure tight
- K31 Bonnet not pressure tight

Pressure range

- M01 PN10
- M02 PN16

Example:

Diaphragm valve with valve body type 515, PVC-U, EPDM diaphragm, DN25, cemented spigots metric, electrical feedback, pressure tight housing, PN10



A21 B01 C08 D11 E01 H05 I33 K30 M01

P =



Diaphragm valves pneumatic DIASTAR Six



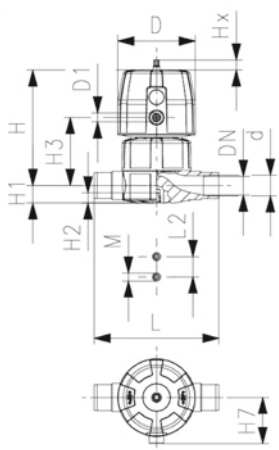
Diaphragm valve DIASTAR Six PVC-C FC (Fail safe to close) With solvent cement spigots metric

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

Option:

- Individual configuration of the valve



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------|----|----------------|
| 25 | 20 | ¾ | 6 | 271 | 163 615 013 | 1 | 0.979 |
| 32 | 25 | 1 | 6 | 481 | 163 615 014 | 1 | 1.166 |
| 40 | 32 | 1 ¼ | 6 | 759 | 163 615 015 | 1 | 1.908 |
| 50 | 40 | 1 ½ | 6 | 960 | 163 615 016 | 1 | 2.464 |
| 63 | 50 | 2 | 6 | 1181 | 163 615 017 | 1 | 3.431 |

| d (mm) | D (mm) | D1_G (inch) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | Lift = Hx (mm) | closest inch (inch) |
|-----------|-----------|----------------|-----------|------------|------------|------------|------------|-----------|------------|----|----------------------|---------------------------|
| 25 | 96 | ¾ | 132 | 18 | 12 | 73 | 57 | 144 | 25 | M6 | 10 | ¾ |
| 32 | 96 | ¾ | 143 | 22 | 12 | 84 | 57 | 154 | 25 | M6 | 13 | 1 |
| 40 | 120 | ¾ | 173 | 26 | 15 | 99 | 69 | 174 | 45 | M8 | 14 | 1 ¼ |
| 50 | 120 | ¾ | 193 | 32 | 15 | 119 | 69 | 194 | 45 | M8 | 16 | 1 ½ |
| 63 | 120 | ¾ | 205 | 39 | 15 | 132 | 69 | 224 | 45 | M8 | 16 | 2 |



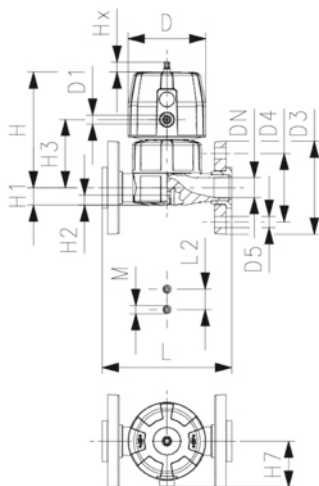
Diaphragm valve DIASTAR Six PVC-C FC (Fail safe to close) With backing flanges PP-V metric/BS

Model:

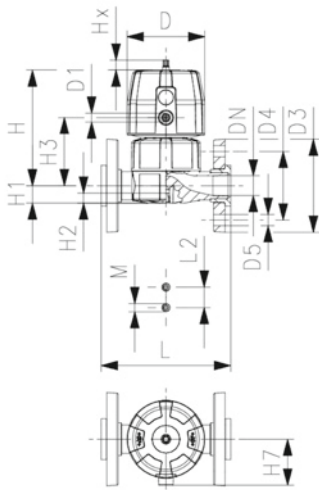
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

Option:

- Individual configuration of the valve



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------|----|----------------|
| 25 | 20 | ¾ | 6 | 271 | 163 617 113 | 1 | 1.215 |
| 32 | 25 | 1 | 6 | 481 | 163 617 114 | 1 | 1.502 |
| 40 | 32 | 1 ¼ | 6 | 759 | 163 617 115 | 1 | 2.436 |
| 50 | 40 | 1 ½ | 6 | 960 | 163 617 116 | 1 | 3.004 |
| 63 | 50 | 2 | 6 | 1181 | 163 617 117 | 1 | 4.399 |



| d (mm) | D (mm) | D1_G (inch) | D3 (mm) | D4 (mm) | D5 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | Lift = Hx (mm) |
|-----------|-----------|----------------|------------|------------|------------|-----------|------------|------------|------------|------------|-----------|------------|----|----------------------|
| 25 | 96 | 3/8 | 105 | 75 | 14 | 132 | 18 | 12 | 73 | 57 | 150 | 25 | M6 | 10 |
| 32 | 96 | 3/8 | 115 | 85 | 14 | 143 | 22 | 12 | 84 | 57 | 160 | 25 | M6 | 13 |
| 40 | 120 | 3/8 | 140 | 100 | 18 | 173 | 26 | 15 | 99 | 69 | 180 | 45 | M8 | 14 |
| 50 | 120 | 3/8 | 150 | 110 | 18 | 193 | 32 | 15 | 119 | 69 | 200 | 45 | M8 | 16 |
| 63 | 120 | 3/8 | 165 | 125 | 18 | 205 | 39 | 15 | 132 | 69 | 230 | 45 | M8 | 16 |

| d (mm) | closest inch (inch) |
|-----------|---------------------------|
| 25 | 3/4 |
| 32 | 1 |
| 40 | 1 1/4 |
| 50 | 1 1/2 |
| 63 | 2 |



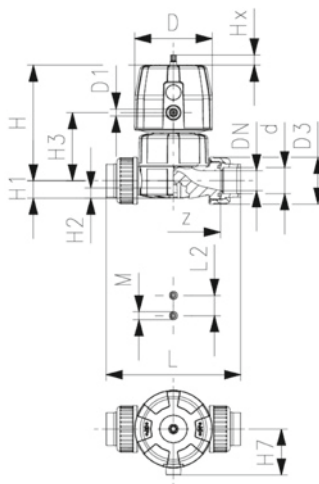
**Diaphragm valve DIASTAR Six PVC-C
FC (Fail safe to close)
Unions with solvent cement sockets metric**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

Option:

- Individual configuration of the valve



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|-----------------------------------|--------------------|----|----------------|
| 25 | 20 | 3/4 | 6 | 271 | 163 614 013 | 1 | 1.067 |
| 32 | 25 | 1 | 6 | 481 | 163 614 014 | 1 | 1.302 |
| 40 | 32 | 1 1/4 | 6 | 759 | 163 614 015 | 1 | 2.152 |
| 50 | 40 | 1 1/2 | 6 | 960 | 163 614 016 | 1 | 2.795 |
| 63 | 50 | 2 | 6 | 1181 | 163 614 017 | 1 | 3.972 |

| d (mm) | D (mm) | D1_G (inch) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | z (mm) | Lift = Hx (mm) | closest inch (inch) |
|-----------|-----------|----------------|-----------|------------|------------|------------|------------|-----------|------------|----|-----------|----------------------|---------------------------|
| 25 | 96 | 3/8 | 132 | 18 | 12 | 73 | 57 | 152 | 25 | M6 | 114 | 10 | 3/4 |
| 32 | 96 | 3/8 | 143 | 22 | 12 | 84 | 57 | 166 | 25 | M6 | 122 | 13 | 1 |
| 40 | 120 | 3/8 | 173 | 26 | 15 | 99 | 69 | 192 | 45 | M8 | 140 | 14 | 1 1/4 |
| 50 | 120 | 3/8 | 193 | 32 | 15 | 119 | 69 | 222 | 45 | M8 | 160 | 16 | 1 1/2 |
| 63 | 120 | 3/8 | 205 | 39 | 15 | 132 | 69 | 266 | 45 | M8 | 190 | 16 | 2 |

Diaphragm valves pneumatic DIASTAR Ten



Diaphragm valve DIASTAR Ten PVC-C
FO (Fail safe to open)
Unions with solvent cement sockets metric

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

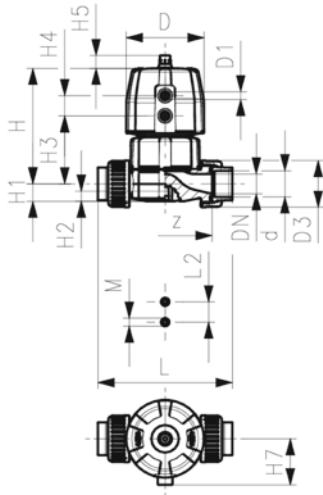
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--------------|--|--------------------|----|----------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 644 012 | 1 | 0.554 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 644 013 | 1 | 0.968 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 644 014 | 1 | 1.194 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 644 015 | 1 | 1.945 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 644 016 | 1 | 3.326 |
| 63 | 50 | 2 | 10 | 10* | 1728 | 163 644 017 | 1 | 4.011 |

| d (mm) | PTFE/ EPDM* Code | SP | Weight (kg) |
|-----------|------------------------|----|----------------|
| 20 | 163 644 032 | 1 | 0.562 |
| 25 | 163 644 033 | 1 | 0.979 |
| 32 | 163 644 034 | 1 | 1.213 |
| 40 | 163 644 035 | 1 | 1.965 |
| 50 | 163 644 036 | 1 | 3.870 |
| 63 | 163 644 037 | 1 | 4.830 |

| d (mm) | D (mm) | D1_G (inch) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | z (mm) | Lift = Hx (mm) |
|-----------|-----------|----------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|-----------|----------------------|
| 20 | 68 | ¾ | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 128 | 25 | M6 | 96 | 7 |
| 25 | 96 | ¾ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 152 | 25 | M6 | 114 | 10 |
| 32 | 96 | ¾ | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 166 | 25 | M6 | 122 | 13 |
| 40 | 120 | ¾ | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 192 | 45 | M8 | 140 | 15 |
| 50 | 150 | ¾ | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 222 | 45 | M8 | 160 | 19 |
| 63 | 150 | ¾ | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 266 | 45 | M8 | 190 | 23 |

| d (mm) | closest inch (inch) |
|-----------|---------------------------|
| 20 | ½ |
| 25 | ¾ |
| 32 | 1 |
| 40 | 1 ¼ |
| 50 | 1 ½ |
| 63 | 2 |



**Diaphragm valve DIASTAR Ten PVC-C
DA (Double acting)
Unions with solvent cement sockets metric**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

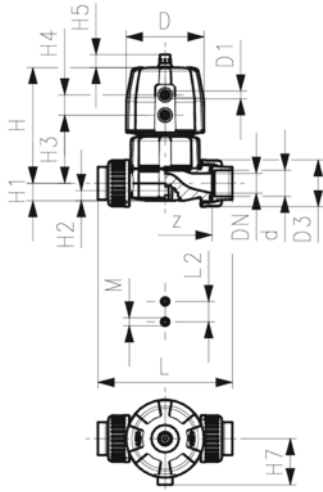
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--------------|-----------------------------------|--------------------|----------------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 654 012 | 1 0.538 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 654 013 | 1 0.932 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 654 014 | 1 1.164 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 654 015 | 1 1.885 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 654 016 | 1 3.092 |
| 63 | 50 | 2 | 10 | 10* | 1728 | 163 654 017 | 1 4.053 |

| d (mm) | PTFE/ EPDM* Code | SP Weight (kg) |
|-----------|------------------------|----------------------|
| 20 | 163 654 032 | 1 0.546 |
| 25 | 163 654 033 | 1 0.943 |
| 32 | 163 654 034 | 1 1.183 |
| 40 | 163 654 035 | 1 1.905 |
| 50 | 163 654 036 | 1 3.120 |
| 63 | 163 654 037 | 1 4.080 |

| d (mm) | D (mm) | D1_G (inch) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | z (mm) | Lift = Hx (mm) |
|-----------|-----------|----------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|-----------|----------------------|
| 20 | 68 | ¾ | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 128 | 25 | M6 | 96 | 7 |
| 25 | 96 | ¾ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 152 | 25 | M6 | 114 | 10 |
| 32 | 96 | ¾ | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 166 | 25 | M6 | 122 | 13 |
| 40 | 120 | ¾ | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 192 | 45 | M8 | 140 | 15 |
| 50 | 150 | ¾ | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 222 | 45 | M8 | 160 | 19 |
| 63 | 150 | ¾ | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 266 | 45 | M8 | 190 | 23 |

| d (mm) | closest inch (inch) |
|-----------|---------------------------|
| 20 | ½ |
| 25 | ¾ |
| 32 | 1 |
| 40 | 1 ¼ |
| 50 | 1 ½ |
| 63 | 2 |



**Diaphragm valve DIASTAR Ten PVC-C
DA (Double acting)
With solvent cement spigots metric**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

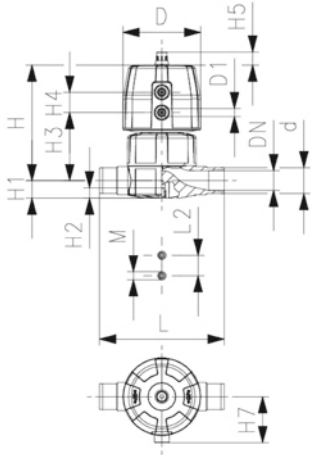
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--------------|--|--------------|-------------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 655 012 | 1 0.473 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 655 013 | 1 0.844 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 655 014 | 1 1.028 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 655 015 | 1 1.638 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 655 016 | 1 2.762 |
| 63 | 50 | 2 | 10 | 10* | 1728 | 163 655 017 | 1 3.512 |

| d (mm) | PTFE/ EPDM* Code | SP Weight (kg) |
|-----------|------------------------|-------------------|
| 20 | 163 655 032 | 1 0.473 |
| 25 | 163 655 033 | 1 0.844 |
| 32 | 163 655 034 | 1 1.049 |
| 40 | 163 655 035 | 1 1.659 |
| 50 | 163 655 036 | 1 2.791 |
| 63 | 163 655 037 | 1 3.540 |

| d (mm) | D (mm) | D1_G (inch) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | Lift = Hx (mm) | closest inch (inch) |
|-----------|-----------|----------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|----------------------|---------------------------|
| 20 | 68 | ⅞ | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 124 | 25 | M6 | 7 | ½ |
| 25 | 96 | ⅞ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 144 | 25 | M6 | 10 | ¾ |
| 32 | 96 | ⅞ | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 154 | 25 | M6 | 13 | 1 |
| 40 | 120 | ⅞ | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 174 | 45 | M8 | 15 | 1 ¼ |
| 50 | 150 | ⅞ | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 194 | 45 | M8 | 19 | 1 ½ |
| 63 | 150 | ⅞ | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 224 | 45 | M8 | 23 | 2 |



**Diaphragm valve DIASTAR Ten PVC-C
DA (Double acting)
With backing flanges PP-V metric/BS**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

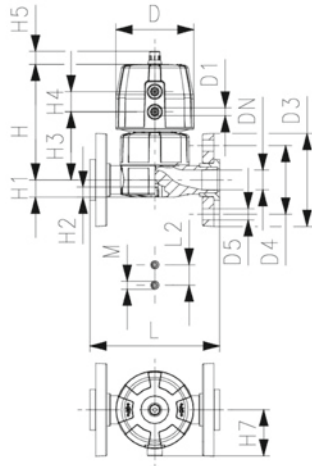
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--------------|--|--------------------|-------------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 657 112 | 1 0.657 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 657 113 | 1 1.080 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 657 114 | 1 1.364 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 657 115 | 1 2.166 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 657 116 | 1 3.302 |
| 63 | 50 | 2 | 10 | 10* | 1728 | 163 657 117 | 1 4.480 |

| d (mm) | PTFE/ EPDM* Code | SP Weight (kg) |
|-----------|------------------------|-------------------|
| 20 | 163 657 132 | 1 0.657 |
| 25 | 163 657 133 | 1 1.080 |
| 32 | 163 657 134 | 1 1.441 |
| 40 | 163 657 135 | 1 2.187 |
| 50 | 163 657 136 | 1 3.331 |
| 63 | 163 657 137 | 1 4.508 |

| d (mm) | D (mm) | D1_G (inch) | D3 (mm) | D4 (mm) | D5 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M |
|-----------|-----------|----------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|
| 20 | 68 | ¾ | 95 | 65 | 14 | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 130 | 25 | M6 |
| 25 | 96 | ¾ | 105 | 75 | 14 | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 150 | 25 | M6 |
| 32 | 96 | ¾ | 115 | 85 | 14 | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 160 | 25 | M6 |
| 40 | 120 | ¾ | 140 | 100 | 18 | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 180 | 45 | M8 |
| 50 | 150 | ¾ | 150 | 110 | 18 | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 200 | 45 | M8 |
| 63 | 150 | ¾ | 165 | 125 | 18 | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 230 | 45 | M8 |

| d (mm) | Lift = Hx (mm) | closest inch (inch) |
|-----------|----------------------|---------------------------|
| 20 | 7 | ½ |
| 25 | 10 | ¾ |
| 32 | 13 | 1 |
| 40 | 15 | 1 ¼ |
| 50 | 19 | 1 ½ |
| 63 | 23 | 2 |



Diaphragm valve DIASTAR Ten PVC-C
FO (Fail safe to open)
With solvent cement spigots metric

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

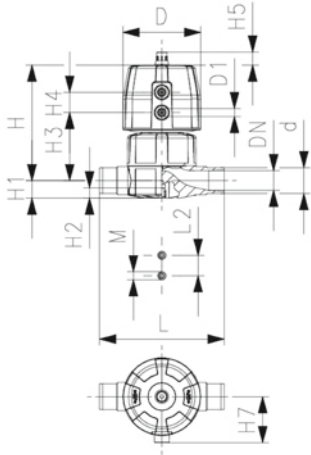
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | PN* (bar) | EPDM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------|--------------|-------------------|
| 20 | 15 | ½ | 10 | 125 | 10* | 163 645 012 | 1 0.489 |
| 25 | 20 | ¾ | 10 | 271 | 10* | 163 645 013 | 1 0.880 |
| 32 | 25 | 1 | 10 | 481 | 10* | 163 645 014 | 1 1.058 |
| 40 | 32 | 1 ¼ | 10 | 759 | 10* | 163 645 015 | 1 1.698 |
| 50 | 40 | 1 ½ | 10 | 1263 | 10* | 163 645 016 | 1 3.512 |
| 63 | 50 | 2 | 10 | 1728 | 10* | 163 645 017 | 1 4.262 |

| d (mm) | PTFE/ EPDM* Code | SP Weight (kg) |
|-----------|------------------------|-------------------|
| 20 | 163 645 032 | 1 0.489 |
| 25 | 163 645 033 | 1 0.880 |
| 32 | 163 645 034 | 1 1.079 |
| 40 | 163 645 035 | 1 1.719 |
| 50 | 163 645 036 | 1 3.541 |
| 63 | 163 645 037 | 1 4.290 |

| d (mm) | D (mm) | D1_G (inch) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | Lift = Hx (mm) | closest inch (inch) |
|-----------|-----------|----------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|----------------------|---------------------------|
| 20 | 68 | ⅞ | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 124 | 25 | M6 | 7 | ½ |
| 25 | 96 | ⅞ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 144 | 25 | M6 | 10 | ¾ |
| 32 | 96 | ⅞ | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 154 | 25 | M6 | 13 | 1 |
| 40 | 120 | ⅞ | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 174 | 45 | M8 | 15 | 1 ¼ |
| 50 | 150 | ⅞ | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 194 | 45 | M8 | 19 | 1 ½ |
| 63 | 150 | ⅞ | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 224 | 45 | M8 | 23 | 2 |



**Diaphragm valve DIASTAR Ten PVC-C
FO (Fail safe to open)
With backing flanges PP-V metric/BS**

Model:

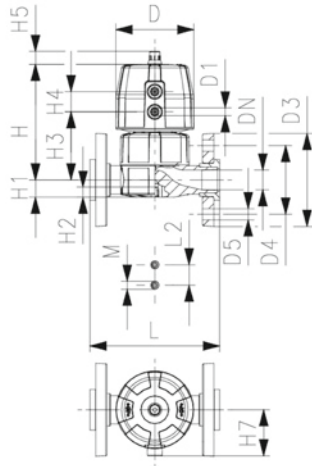
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**



| d (mm) | DN (mm) | PN (bar) | PN* (bar) | Size (inch) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|-------------|--------------|----------------|--|--------------------|----|----------------|
| 20 | 15 | 10 | 10* | ½ | 125 | 163 647 112 | 1 | 0.673 |
| 25 | 20 | 10 | 10* | ¾ | 271 | 163 647 113 | 1 | 1.116 |
| 32 | 25 | 10 | 10* | 1 | 481 | 163 647 114 | 1 | 1.394 |
| 40 | 32 | 10 | 10* | 1 ¼ | 759 | 163 647 115 | 1 | 2.226 |
| 50 | 40 | 10 | 10* | 1 ½ | 1263 | 163 647 116 | 1 | 4.052 |
| 63 | 50 | 10 | 10* | 2 | 1728 | 163 647 117 | 1 | 5.230 |

| d (mm) | PTFE/ EPDM* Code | SP | Weight (kg) |
|-----------|------------------------|----|----------------|
| 20 | 163 647 132 | 1 | 0.673 |
| 25 | 163 647 133 | 1 | 1.116 |
| 32 | 163 647 134 | 1 | 1.415 |
| 40 | 163 647 135 | 1 | 2.247 |
| 50 | 163 647 136 | 1 | 4.081 |
| 63 | 163 647 137 | 1 | 4.768 |

| d (mm) | D (mm) | D1_G (inch) | D3 (mm) | D4 (mm) | D5 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M |
|-----------|-----------|----------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|
| 20 | 68 | ⅞ | 95 | 65 | 14 | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 130 | 25 | M6 |
| 25 | 96 | ⅞ | 105 | 75 | 14 | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 150 | 25 | M6 |
| 32 | 96 | ⅞ | 115 | 85 | 14 | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 160 | 25 | M6 |
| 40 | 120 | ⅞ | 140 | 100 | 18 | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 180 | 45 | M8 |
| 50 | 150 | ¾ | 150 | 110 | 18 | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 200 | 45 | M8 |
| 63 | 150 | ¾ | 165 | 125 | 18 | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 230 | 45 | M8 |

| d (mm) | Lift = Hx (mm) | closest inch (inch) |
|-----------|----------------------|---------------------------|
| 20 | 7 | ½ |
| 25 | 10 | ¾ |
| 32 | 13 | 1 |
| 40 | 15 | 1 ¼ |
| 50 | 19 | 1 ½ |
| 63 | 23 | 2 |



**Diaphragm valve DIASTAR Ten PVC-C
FC (Fail safe to close)
Unions with solvent cement sockets metric**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

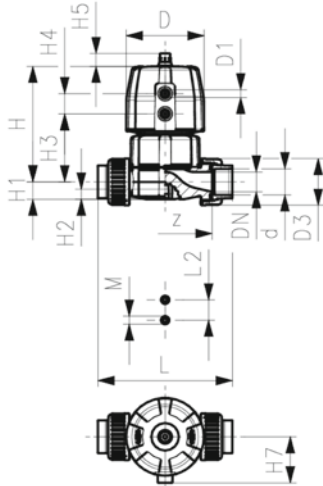
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM

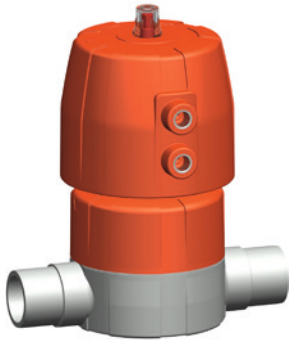


| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--------------|-----------------------------------|--------------------|----------------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 624 012 | 1 0.572 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 624 013 | 1 1.142 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 624 014 | 1 1.376 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 624 015 | 1 2.305 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 624 016 | 1 3.932 |
| 63 | 50 | 2 | 10 | 6* | 1728 | 163 624 017 | 1 4.893 |

| d (mm) | PTFE/ EPDM* Code | SP Weight (kg) |
|-----------|------------------------|----------------------|
| 20 | 163 624 032 | 1 0.612 |
| 25 | 163 624 033 | 1 1.128 |
| 32 | 163 624 034 | 1 1.393 |
| 40 | 163 624 035 | 1 2.325 |
| 50 | 163 624 036 | 1 3.960 |
| 63 | 163 624 037 | 1 4.925 |

| d (mm) | D (mm) | D1_G (inch) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | z (mm) | Lift = Hx (mm) |
|-----------|-----------|----------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|-----------|----------------------|
| 20 | 68 | ¾ | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 128 | 25 | M6 | 96 | 7 |
| 25 | 96 | ¾ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 152 | 25 | M6 | 114 | 10 |
| 32 | 96 | ¾ | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 166 | 25 | M6 | 122 | 13 |
| 40 | 120 | ¾ | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 192 | 45 | M8 | 140 | 15 |
| 50 | 150 | ¾ | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 222 | 45 | M8 | 160 | 19 |
| 63 | 150 | ¾ | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 266 | 45 | M8 | 190 | 23 |

| d (mm) | closest inch (inch) |
|-----------|---------------------------|
| 20 | ¾ |
| 25 | ¾ |
| 32 | 1 |
| 40 | 1 ¼ |
| 50 | 1 ½ |
| 63 | 2 |



**Diaphragm valve DIASTAR Ten PVC-C
FC (Fail safe to close)
With solvent cement spigots metric**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

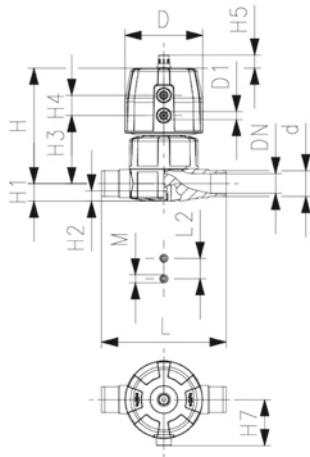
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

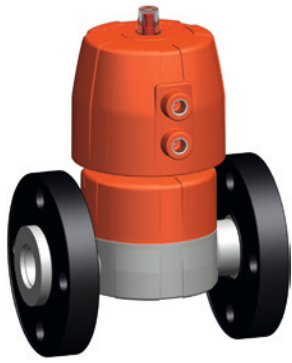
* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--------------|--|--------------------|----|----------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 625 012 | 1 | 0.510 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 625 013 | 1 | 1.054 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 625 014 | 1 | 1.238 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 625 015 | 1 | 2.058 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 625 016 | 1 | 3.602 |
| 63 | 50 | 2 | 10 | 6* | 1728 | 163 625 017 | 1 | 4.352 |

| d (mm) | PTFE/ EPDM* Code | SP | Weight (kg) |
|-----------|------------------------|----|----------------|
| 20 | 163 625 032 | 1 | 0.539 |
| 25 | 163 625 033 | 1 | 1.054 |
| 32 | 163 625 034 | 1 | 1.259 |
| 40 | 163 625 035 | 1 | 2.079 |
| 50 | 163 625 036 | 1 | 3.631 |
| 63 | 163 625 037 | 1 | 4.380 |

| d (mm) | D (mm) | D1_G (inch) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | Lift = Hx (mm) | closest inch (inch) |
|-----------|-----------|----------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|----------------------|---------------------------|
| 20 | 68 | ⅞ | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 124 | 25 | M6 | 7 | ½ |
| 25 | 96 | ⅞ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 144 | 25 | M6 | 10 | ¾ |
| 32 | 96 | ⅞ | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 154 | 25 | M6 | 13 | 1 |
| 40 | 120 | ⅞ | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 174 | 45 | M8 | 15 | 1 ¼ |
| 50 | 150 | ⅞ | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 194 | 45 | M8 | 19 | 1 ½ |
| 63 | 150 | ⅞ | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 224 | 45 | M8 | 23 | 2 |



**Diaphragm valve DIASTAR Ten PVC-C
FC (Fail safe to close)
With backing flanges PP-V metric/BS**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

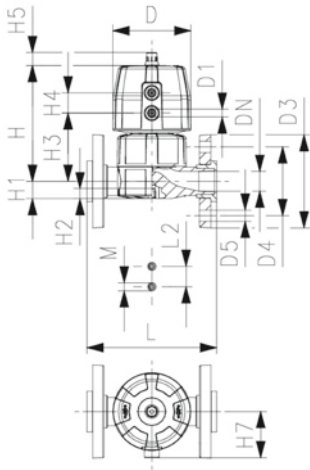
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



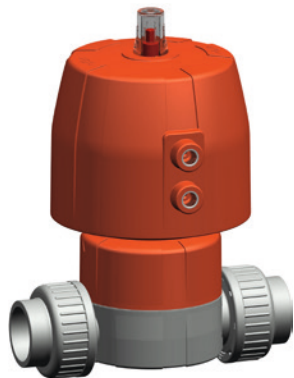
| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--------------|--|--------------------|----|----------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 627 112 | 1 | 0.723 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 627 113 | 1 | 1.290 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 627 114 | 1 | 1.574 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 627 115 | 1 | 2.586 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 627 116 | 1 | 4.142 |
| 63 | 50 | 2 | 10 | 6* | 1728 | 163 627 117 | 1 | 5.320 |

| d (mm) | PTFE/ EPDM* Code | SP | Weight (kg) |
|-----------|------------------------|----|----------------|
| 20 | 163 627 132 | 1 | 0.723 |
| 25 | 163 627 133 | 1 | 1.290 |
| 32 | 163 627 134 | 1 | 1.595 |
| 40 | 163 627 135 | 1 | 2.607 |
| 50 | 163 627 136 | 1 | 4.171 |
| 63 | 163 627 137 | 1 | 5.348 |

| d (mm) | D (mm) | D1_G (inch) | D3 (mm) | D4 (mm) | D5 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M |
|-----------|-----------|----------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|
| 20 | 68 | ¾ | 95 | 65 | 14 | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 130 | 25 | M6 |
| 25 | 96 | ¾ | 105 | 75 | 14 | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 150 | 25 | M6 |
| 32 | 96 | ¾ | 115 | 85 | 14 | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 160 | 25 | M6 |
| 40 | 120 | ¾ | 140 | 100 | 18 | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 180 | 45 | M8 |
| 50 | 150 | ¾ | 150 | 110 | 18 | 193 | 32 | 15 | 119 | 36 | 26 | 88 | 200 | 45 | M8 |
| 63 | 150 | ¾ | 165 | 125 | 18 | 205 | 39 | 15 | 132 | 36 | 26 | 88 | 230 | 45 | M8 |

| d (mm) | Lift = Hx (mm) | closest inch (inch) |
|-----------|----------------------|---------------------------|
| 20 | 7 | ½ |
| 25 | 10 | ¾ |
| 32 | 13 | 1 |
| 40 | 15 | 1 ¼ |
| 50 | 19 | 1 ½ |
| 63 | 23 | 2 |

Diaphragm valves pneumatic DIASTAR TenPlus



**Diaphragm valve DIASTAR TenPlus PVC-C
FC (Fail safe to close)
Unions with solvent cement sockets metric**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

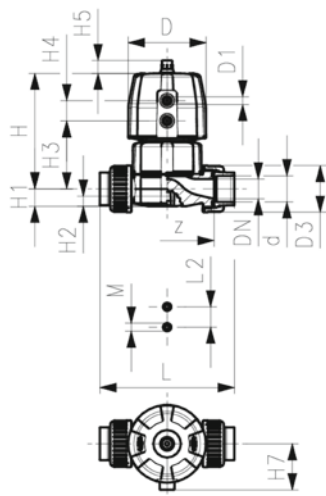
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **both sides**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--------------|--|--------------------|----------------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 684 012 | 1 1.004 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 684 013 | 1 1.142 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 684 014 | 1 1.968 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 684 015 | 1 3.375 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 684 016 | 1 5.340 |
| 63 | 50 | 2 | 10 | 10* | 1728 | 163 684 017 | 1 6.300 |

| d (mm) | PTFE/ EPDM* Code | SP Weight (kg) |
|-----------|------------------------|----------------------|
| 20 | 163 684 032 | 1 1.012 |
| 25 | 163 684 033 | 1 1.153 |
| 32 | 163 684 034 | 1 1.987 |
| 40 | 163 684 035 | 1 3.395 |
| 50 | 163 684 036 | 1 5.368 |
| 63 | 163 684 037 | 1 6.327 |

| d (mm) | D (mm) | D1_G (inch) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | z (mm) | Lift = Hx (mm) |
|-----------|-----------|----------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|-----------|----------------------|
| 20 | 96 | ¾ | 127 | 14 | 12 | 68 | 25 | 16 | 57 | 128 | 25 | M6 | 96 | 7 |
| 25 | 96 | ¾ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 152 | 25 | M6 | 114 | 10 |
| 32 | 120 | ½ | 167 | 22 | 12 | 93 | 26 | 26 | 69 | 166 | 25 | M6 | 122 | 13 |
| 40 | 150 | ¼ | 196 | 26 | 15 | 101 | 36 | 26 | 88 | 192 | 45 | M8 | 140 | 15 |
| 50 | 180 | ¼ | 239 | 32 | 15 | 124 | 37 | 26 | 103 | 222 | 45 | M8 | 160 | 19 |
| 63 | 180 | ¼ | 251 | 39 | 15 | 137 | 37 | 26 | 103 | 266 | 45 | M8 | 190 | 23 |

| d (mm) | closest inch (inch) |
|-----------|---------------------------|
| 20 | ½ |
| 25 | ¾ |
| 32 | 1 |
| 40 | 1 ¼ |
| 50 | 1 ½ |
| 63 | 2 |



**Diaphragm valve DIASTAR TenPlus PVC-C
FC (Fail safe to close)
With solvent cement spigots metric**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

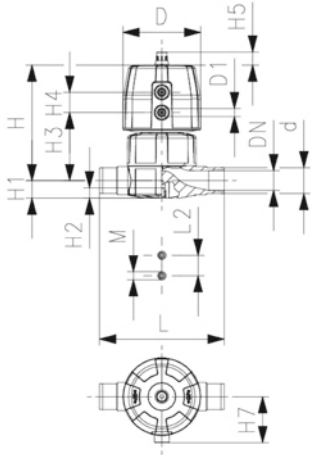
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **both sides**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value (Δp=1 bar) (L/min) | EPDM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--------------|-----------------------------------|--------------------|-------------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 685 012 | 1 0.943 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 685 013 | 1 1.054 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 685 014 | 1 1.947 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 685 015 | 1 3.128 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 685 016 | 1 5.010 |
| 63 | 50 | 2 | 10 | 10* | 1728 | 163 685 017 | 1 5.759 |

| d (mm) | PTFE/ EPDM* Code | SP Weight (kg) |
|-----------|------------------------|-------------------|
| 20 | 163 685 032 | 1 0.939 |
| 25 | 163 685 033 | 1 1.054 |
| 32 | 163 685 034 | 1 1.853 |
| 40 | 163 685 035 | 1 3.149 |
| 50 | 163 685 036 | 1 5.039 |
| 63 | 163 685 037 | 1 5.787 |

| d (mm) | D (mm) | D1_G (inch) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | Lift = Hx (mm) | closest inch (inch) |
|-----------|-----------|----------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|----------------------|---------------------------|
| 20 | 96 | ¾ | 127 | 14 | 12 | 68 | 25 | 16 | 57 | 124 | 25 | M6 | 7 | ½ |
| 25 | 96 | ¾ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 144 | 25 | M6 | 10 | ¾ |
| 32 | 120 | ½ | 167 | 22 | 12 | 93 | 26 | 26 | 69 | 154 | 25 | M6 | 13 | 1 |
| 40 | 150 | ¼ | 196 | 26 | 15 | 101 | 36 | 26 | 88 | 174 | 45 | M8 | 15 | 1 ¼ |
| 50 | 180 | ¼ | 239 | 32 | 15 | 124 | 37 | 26 | 103 | 194 | 45 | M8 | 19 | 1 ½ |
| 63 | 180 | ¼ | 251 | 39 | 15 | 137 | 37 | 26 | 103 | 224 | 45 | M8 | 23 | 2 |



**Diaphragm valve DIASTAR TenPlus PVC-C
FC (Fail safe to close)
With backing flanges PP-V metric/BS**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

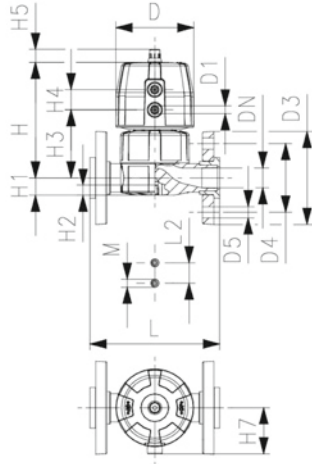
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **both sides**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--------------|-----------------------------------|--------------------|-------------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 687 112 | 1 1.123 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 687 113 | 1 1.290 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 687 114 | 1 2.168 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 687 115 | 1 3.656 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 687 116 | 1 5.550 |
| 63 | 50 | 2 | 10 | 10* | 1728 | 163 687 117 | 1 6.727 |

| d (mm) | PTFE/ EPDM* Code | SP Weight (kg) |
|-----------|------------------------|-------------------|
| 20 | 163 687 132 | 1 1.123 |
| 25 | 163 687 133 | 1 1.290 |
| 32 | 163 687 134 | 1 2.320 |
| 40 | 163 687 135 | 1 3.677 |
| 50 | 163 687 136 | 1 5.579 |
| 63 | 163 687 137 | 1 7.147 |

| d (mm) | D (mm) | D1_G (inch) | D3 (mm) | D4 (mm) | D5 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H7 (mm) | L (mm) | L2 (mm) | M |
|-----------|-----------|----------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|-----------|------------|----|
| 20 | 96 | ¾ | 95 | 65 | 14 | 127 | 14 | 12 | 68 | 25 | 16 | 57 | 130 | 25 | M6 |
| 25 | 96 | ¾ | 105 | 75 | 14 | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 150 | 25 | M6 |
| 32 | 120 | ¾ | 115 | 85 | 14 | 167 | 22 | 12 | 93 | 26 | 26 | 69 | 160 | 25 | M6 |
| 40 | 150 | ¾ | 140 | 100 | 18 | 196 | 26 | 15 | 101 | 36 | 26 | 88 | 180 | 45 | M8 |
| 50 | 180 | ¾ | 150 | 110 | 18 | 239 | 32 | 15 | 124 | 37 | 26 | 103 | 200 | 45 | M8 |
| 63 | 180 | ¾ | 165 | 125 | 18 | 251 | 39 | 15 | 137 | 37 | 26 | 103 | 230 | 45 | M8 |

| d (mm) | Lift = Hx (mm) | closest inch (inch) |
|-----------|----------------------|---------------------------|
| 20 | 7 | ½ |
| 25 | 10 | ¾ |
| 32 | 13 | 1 |
| 40 | 15 | 1 ¼ |
| 50 | 19 | 1 ½ |
| 63 | 23 | 2 |

Diaphragm valves DIASTAR big dimensions



Diaphragm valve type DIASTAR PVC-C
Series 025 FC (Fail safe to close)
With fixed flanges PVC-C metric

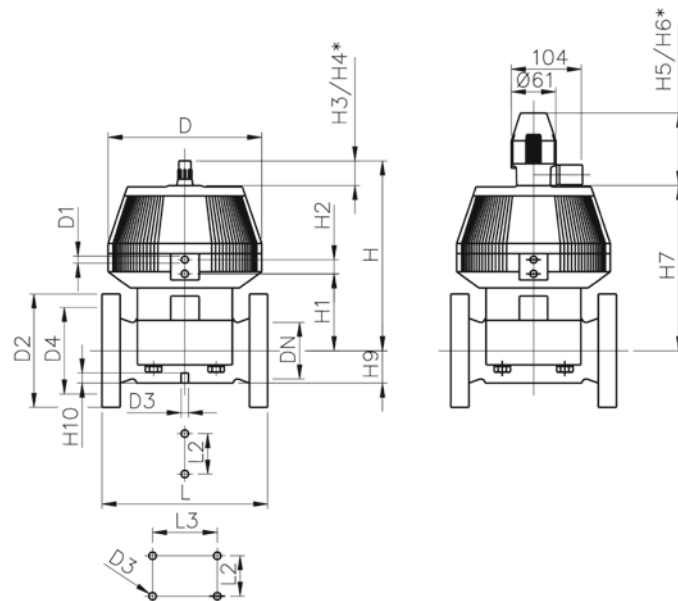
Model:

- Connecting dimension: ISO 7005 / EN 1092 / DIN 25 PN10 / BS4504
- With position indicator / Working pressure: **one side**
- * With backing flanges PP-V
- ** **DN80, DN100 and DN150 fixed flanges metric and inch ANSI B16.5**

| | d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | Weight (kg) | PTFE/EPDM Code | Weight (kg) |
|----|-----------|----------------|------------|-------------|--|--------------------|----------------|--------------------|----------------|
| * | 75 | 2 ½ | 65 | 10 | 992 | 199 025 697 | 13.600 | 199 025 727 | 13.600 |
| ** | 90 | 3 | 80 | 10 | 1700 | 199 025 698 | 17.830 | 199 025 728 | 17.973 |
| ** | 110 | 4 | 100 | 6 | 2700 | 199 025 699 | 24.700 | 199 025 729 | 24.700 |

| | d (mm) | D (mm) | D1_G (inch) | D2 (mm) | D3[M] (mm) | D4 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | H7 (mm) | H9 (mm) |
|----|-----------|-----------|----------------|------------|---------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|
| * | 75 | 280 | ¼ | 185 | 8 | 145 | 344 | 148 | 24 | 46 | 100 | 129 | 195 | 298 | 46 |
| ** | 90 | 280 | ¼ | 200 | 12 | 160 | 348 | 150 | 24 | 46 | 100 | 129 | 195 | 302 | 57 |
| ** | 110 | 335 | ¼ | 225 | 12 | 180 | 395 | 176 | 24 | 46 | 100 | 129 | 195 | 349 | 69 |

| | d (mm) | H10 (mm) | L (mm) | L2 (mm) |
|----|-----------|-------------|-----------|------------|
| * | 75 | 15 | 290 | 70 |
| ** | 90 | 15 | 310 | 120 |
| ** | 110 | 20 | 350 | 120 |





**Diaphragm valve type DIASTAR PVC-C
Series 025 FO (Fail safe to open)
With fixed flanges PVC-C metric**

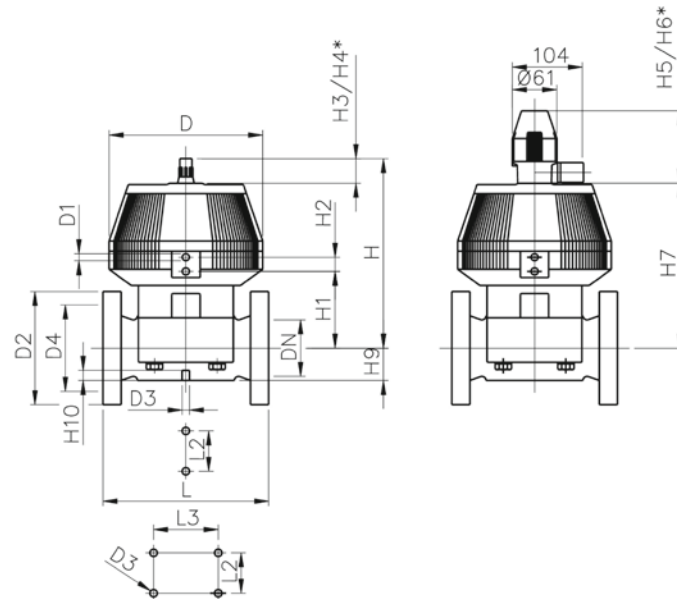
Model:

- Connecting dimension: ISO 7005 / EN 1092 / DIN 25 PN10 / BS4504
- With position indicator / Working pressure: **one side**
- * With backing flanges PP-V
- ** **DN80, DN100 and DN150 fixed flanges metric and inch ANSI B16.5**

| | d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | Weight (kg) | PTFE/EPDM Code | Weight (kg) |
|----|-----------|----------------|------------|-------------|--|--------------------|----------------|--------------------|----------------|
| * | 75 | 2 ½ | 65 | 10 | 992 | 199 025 707 | 13.600 | 199 025 737 | 13.600 |
| ** | 90 | 3 | 80 | 10 | 1700 | 199 025 708 | 17.400 | 199 025 738 | 17.400 |
| ** | 110 | 4 | 100 | 6 | 2700 | 199 025 709 | 24.700 | 199 025 679 | 24.700 |

| | d (mm) | D (mm) | D1_G (inch) | D2 (mm) | D3[M] (mm) | D4 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | H7 (mm) | H9 (mm) |
|----|-----------|-----------|----------------|------------|---------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|
| * | 75 | 280 | ¼ | 185 | 8 | 145 | 344 | 148 | 24 | 46 | 100 | 129 | 195 | 298 | 46 |
| ** | 90 | 280 | ¼ | 200 | 12 | 160 | 348 | 150 | 24 | 46 | 100 | 129 | 195 | 302 | 57 |
| ** | 110 | 335 | ¼ | 225 | 12 | 180 | 395 | 176 | 24 | 46 | 100 | 129 | 195 | 349 | 69 |

| | d (mm) | H10 (mm) | L (mm) | L2 (mm) |
|----|-----------|-------------|-----------|------------|
| * | 75 | 15 | 290 | 70 |
| ** | 90 | 15 | 310 | 120 |
| ** | 110 | 20 | 350 | 120 |





**Diaphragm valve type DIASTAR PVC-C
Series 025 DA (Double acting)
With fixed flanges PVC-C metric**

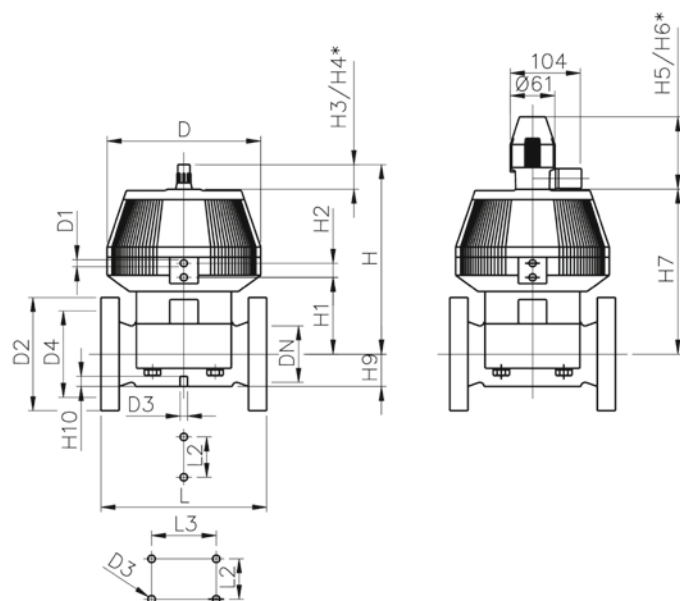
Model:

- Connecting dimension: ISO 7005 / EN 1092 / DIN 25 PN10 / BS4504
- With position indicator / Working pressure: **one side**
- * With backing flanges PP-V
- ** **DN80 and DN100 fixed flanges metric and inch ANSI B16.5**

| | d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | Weight (kg) | PTFE/EPDM Code | Weight (kg) |
|----|-----------|----------------|------------|-------------|--|--------------------|----------------|--------------------|----------------|
| * | 75 | 2 ½ | 65 | 10 | 992 | 199 025 717 | 12.529 | 199 025 747 | 13.600 |
| ** | 90 | 3 | 80 | 10 | 1700 | 199 025 718 | 17.400 | 199 025 748 | 17.400 |
| ** | 110 | 4 | 100 | 6 | 2700 | 199 025 719 | 24.700 | 199 025 749 | 24.700 |

| | d (mm) | D (mm) | D1_G (inch) | D2 (mm) | D3[M] (mm) | D4 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | H7 (mm) | H9 (mm) |
|----|-----------|-----------|----------------|------------|---------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|
| * | 75 | 280 | ¼ | 185 | 8 | 145 | 344 | 148 | 24 | 46 | 100 | 129 | 195 | 298 | 46 |
| ** | 90 | 280 | ¼ | 200 | 12 | 160 | 348 | 150 | 24 | 46 | 100 | 129 | 195 | 302 | 57 |
| ** | 110 | 335 | ¼ | 225 | 12 | 180 | 395 | 176 | 24 | 46 | 100 | 129 | 195 | 349 | 69 |

| | d (mm) | H10 (mm) | L (mm) | L2 (mm) |
|----|-----------|-------------|-----------|------------|
| * | 75 | 15 | 290 | 70 |
| ** | 90 | 15 | 310 | 120 |
| ** | 110 | 20 | 350 | 120 |



Diaphragm Valve Type 604 / 605

Packs a punch



The full-plastic diaphragm valve 604 / 605 with integrated pneumatic actuator from GF Piping Systems ensures best flow performance in compact design. With this corrosion free valve we offer an additional product with the most economic price-performance ratio which is suitable for many applications.

Easy installation and operation

- The compact design enables installation in limited spaces
- No re-torquing needed due to full plastic design without metal parts and screws
- Radially dismountable due to true unions
- Maintenance free
- Same installation length as all GF diaphragm valves and market standard valves
- Integrated optical position feedback
- QR-Code on valve leads to online available product documents

High safety

- Uniform temperature expansion of plastic/plastic connection prevents leakages
- High chemical resistance due to large material range

High Flexibility

- Operation options: FC, FO, DA
- Diaphragms available in PTFE, FKM, EPDM for neutral and aggressive media
- Various connection options with true union or spigot version
- Available Standards: Metric, ASTM, BS, JIS
- Best quality and reliability for high number of cycles
- Long lifetime

Best flow performance

- Linear flow characteristic for simple valve control
- Optimized flow geometry with soft transitions and radii doubles the flow rate
- Suitable for media with low number of particles/solids

Applications

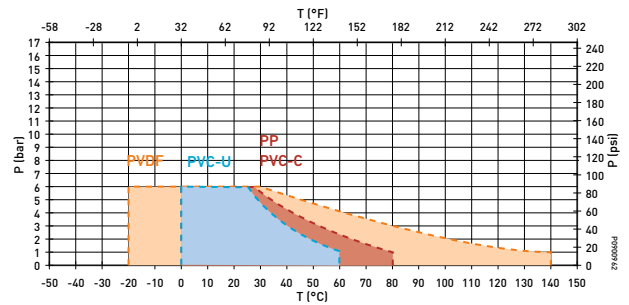
- Chemical Process Industry
- Dosing
- Water Treatment

+ Technical Data

| | |
|------------------------|--|
| Dimension | DN 15 (1/2") |
| Pressure Rating | PN 6 |
| Body | PVC-U / CPVC (Polyvinylchlorid) PP-H (Polypropylen) PVDF (Polyvinylidenfluorid) Other materials on request |
| Diaphragms | PTFE with EPDM Backing Diaphragm PTFE with FKM Backing Diaphragm EPDM FKM |
| Valve Housing | PP-GF (orange) |
| Connections | Type 604: Body with true union connection to match all standard GF unions and end-connections Type 605: Body with cementing resp. welding spigots Available on request: Various inserts from the GF range |
| Mounting | Threaded inserts for safe mounting on valve body |
| Flow | Double flow rate compared to a typical diaphragm valve |
| Standards | ISO 9393 EN 12266 |

Pressure-Temperature Diagram

The following Pressure-Temperature Diagram is based on a lifetime of 25 years with water or similar media.



Diaphragm Valve Type 604 / 605

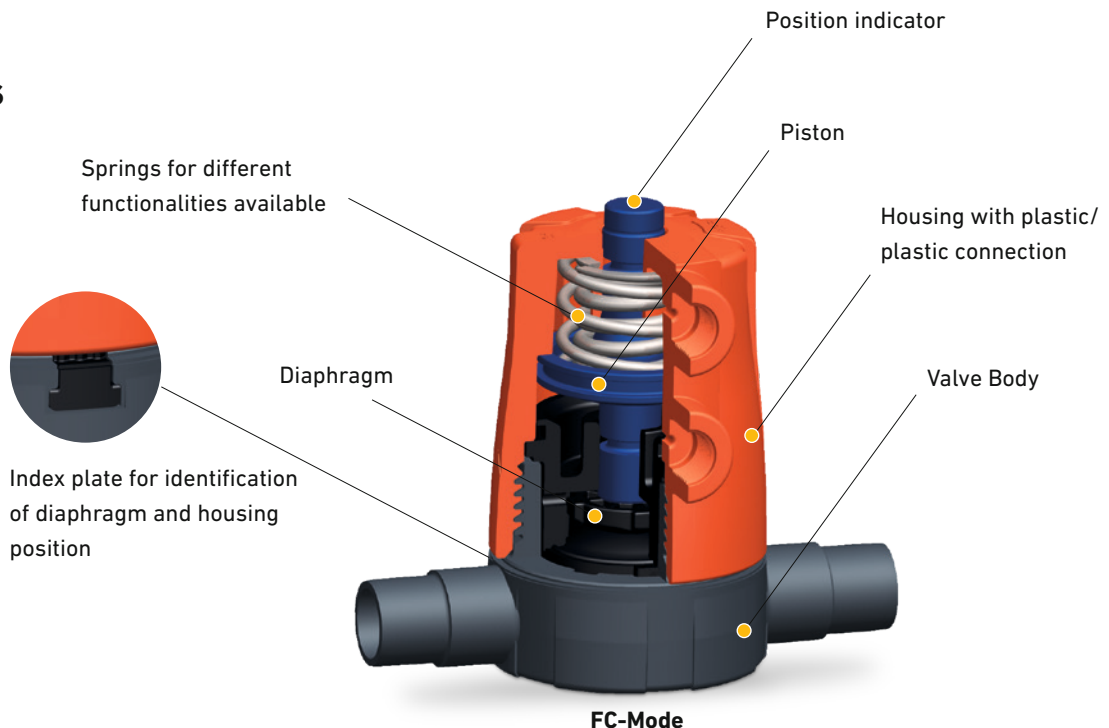
| DN | d | inch | Kv 100 l/min | m ³ /h | Cv100 gpm |
|----|----|------|-----------------|-------------------|--------------|
| 15 | 20 | 1/2" | 125 | 7,5 | 0,55 |

Kv Values

KV 100 at pressure differential p = 1 bar

CV 100 at pressure differential p = 1 psi

+ Features





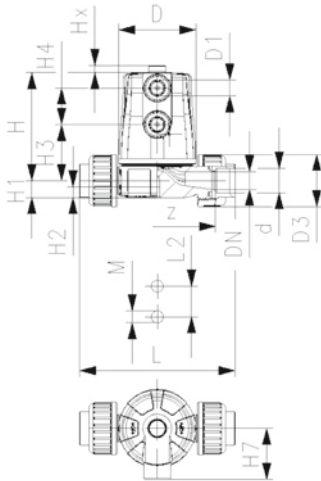
Diaphragm valve type 604 PVC-C Unions with solvent cement socket metric

Model:

- Compact full plastic design without screws
- High flow rate
- Actuator housing with thread for easy maintenance
- Quick opening & closing times
- For easy installation and removal
- Market standard installation length

Option:

- Individual configuration of the valve
- * O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | Actuator | EPDM Code | PTFE/ EPDM* Code |
|-----------|------------|----------------|-------------|--|----------|--------------|------------------------|
| 20 | 15 | ½ | 6 | 125 | FC | 163 604 012 | 163 604 032 |
| 20 | 15 | ½ | 6 | 125 | FO | 163 604 014 | 163 604 034 |
| 20 | 15 | ½ | 6 | 125 | DA | 163 604 015 | 163 604 035 |

| D | D1_G | D3 | H | H1 | H2 | H3 | H4 | H7 | L | L2 | M | z | Lift = Hx |
|------|--------|------|------|------|------|------|------|------|------|------|------|------|-----------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 131 | 25 | M6 | 99 | 6 |
| 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 131 | 25 | M6 | 99 | 6 |
| 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 131 | 25 | M6 | 99 | 6 |



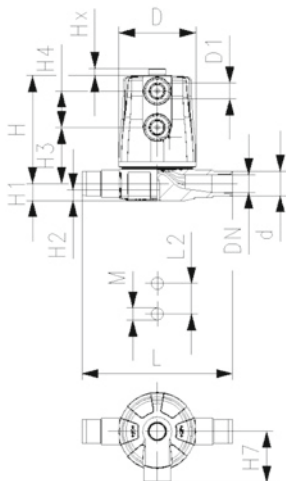
Diaphragm valve type 605 PVC-C With solvent cement spigot metric

Model:

- Compact full plastic design without screws
- High flow rate
- Actuator housing with thread for easy maintenance
- Market standard installation length
- Quick opening & closing times
- For easy installation and removal

Option:

- Individual configuration of the valve
- * O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | Actuator | EPDM Code | PTFE/ EPDM* Code |
|-----------|------------|----------------|-------------|--|----------|--------------|------------------------|
| 20 | 15 | ½ | 6 | 125 | FC | 163 605 012 | 163 605 032 |
| 20 | 15 | ½ | 6 | 125 | FO | 163 605 014 | 163 605 034 |
| 20 | 15 | ½ | 6 | 125 | DA | 163 605 015 | 163 605 035 |

| D | D1_G | H | H1 | H2 | H3 | H4 | H7 | L | L2 | M | Lift = Hx |
|------|--------|------|------|------|------|------|------|------|------|------|-----------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 65 | ¼ | 89 | 14 | 12 | 46 | 30 | 42 | 124 | 25 | M6 | 6 |
| 65 | ¼ | 89 | 14 | 12 | 46 | 30 | 42 | 124 | 25 | M6 | 6 |
| 65 | ¼ | 89 | 14 | 12 | 46 | 30 | 42 | 124 | 25 | M6 | 6 |

Pressure reducing valves type 582

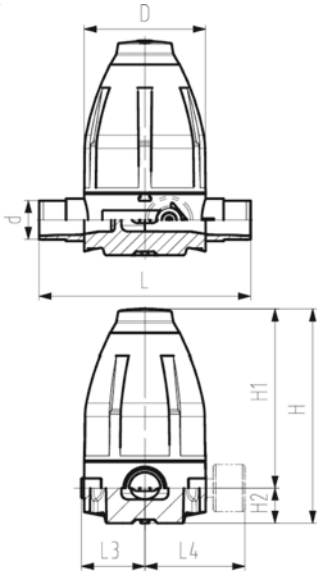


Pressure reducing valve type 582 PVC-C
With solvent cement spigots metric
Without manometer

Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

0.3-3.0 bar (4-44 psi) on request
 Manometer on request



| d (mm) | DN (mm) | Size (inch) | PN (bar) | O-rings EPDM Code | Weight (kg) | SP | O-rings FKM Code |
|-----------|------------|----------------|-------------|-------------------------|----------------|----|------------------------|
| 16 | 10 | 3/8 | 10 | 163 582 001 | 0.650 | 1 | 163 582 011 |
| 20 | 15 | 1/2 | 10 | 163 582 002 | 0.650 | 1 | 163 582 012 |
| 25 | 20 | 3/4 | 10 | 163 582 003 | 1.450 | 1 | 163 582 013 |
| 32 | 25 | 1 | 10 | 163 582 004 | 1.460 | 1 | 163 582 014 |
| 40 | 32 | 1 1/4 | 10 | 163 582 005 | 4.070 | 1 | 163 582 015 |
| 50 | 40 | 1 1/2 | 10 | 163 582 006 | 4.080 | 1 | 163 582 016 |
| 63 | 50 | 2 | 10 | 163 582 007 | 4.160 | 1 | 163 582 017 |

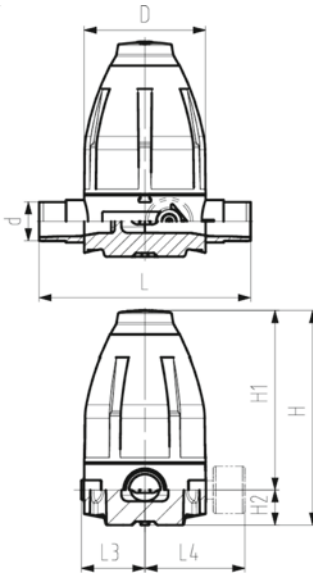
| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | L (mm) | L3 (mm) | M | closest inch (inch) |
|-----------|-----------|-----------|------------|------------|------------|-----------|------------|----|------------------------|
| 16 | 79 | 132 | 111 | 21 | 12 | 134 | 42 | M6 | 3/8 |
| 20 | 79 | 132 | 111 | 21 | 12 | 134 | 42 | M6 | 1/2 |
| 25 | 100 | 177 | 148 | 29 | 14 | 174 | 53 | M6 | 3/4 |
| 32 | 100 | 177 | 148 | 29 | 14 | 174 | 53 | M6 | 1 |
| 40 | 147 | 251 | 207 | 44 | 21 | 224 | 76 | M8 | 1 1/4 |
| 50 | 147 | 251 | 207 | 44 | 21 | 224 | 76 | M8 | 1 1/2 |
| 63 | 147 | 251 | 207 | 44 | 21 | 244 | 76 | M8 | 2 |



Pressure reducing valve type 582 PVC-C
With solvent cement spigots metric
With manometer

Model:

- Diaphragm PTFE/EPDM
 - Integrated stainless steel mounting inserts
 - 0.5-9.0 bar (7-130 psi)
 - Attention: Manometer with brass connection in direct contact with medium. Check for chemical resistance, otherwise chose the optional manometer adapter for media separation.
- 0.3-3.0 bar (4-44 psi) on request



| d (mm) | DN (mm) | Size (inch) | PN (bar) | O-rings EPDM Code | Weight (kg) | SP | O-rings FKM Code |
|-----------|------------|----------------|-------------|-------------------------|----------------|----|------------------------|
| 16 | 10 | 3/8 | 10 | 163 582 021 | 0.680 | 1 | 163 582 031 |
| 20 | 15 | 1/2 | 10 | 163 582 022 | 0.680 | 1 | 163 582 032 |
| 25 | 20 | 3/4 | 10 | 163 582 023 | 1.480 | 1 | 163 582 033 |
| 32 | 25 | 1 | 10 | 163 582 024 | 1.490 | 1 | 163 582 034 |
| 40 | 32 | 1 1/4 | 10 | 163 582 025 | 4.100 | 1 | 163 582 035 |
| 50 | 40 | 1 1/2 | 10 | 163 582 026 | 4.110 | 1 | 163 582 036 |
| 63 | 50 | 2 | 10 | 163 582 027 | 4.190 | 1 | 163 582 037 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | L (mm) | L3 (mm) | L4 (mm) | M | closest inch (inch) |
|-----------|-----------|-----------|------------|------------|------------|-----------|------------|------------|----|------------------------|
| 16 | 79 | 132 | 111 | 21 | 12 | 134 | 42 | 77 | M6 | 3/8 |
| 20 | 79 | 132 | 111 | 21 | 12 | 134 | 42 | 77 | M6 | 1/2 |
| 25 | 100 | 177 | 148 | 29 | 14 | 174 | 53 | 88 | M6 | 3/4 |
| 32 | 100 | 177 | 148 | 29 | 14 | 174 | 53 | 88 | M6 | 1 |
| 40 | 147 | 251 | 207 | 44 | 21 | 224 | 76 | 111 | M8 | 1 1/4 |
| 50 | 147 | 251 | 207 | 44 | 21 | 224 | 76 | 111 | M8 | 1 1/2 |
| 63 | 147 | 251 | 207 | 44 | 21 | 244 | 76 | 111 | M8 | 2 |

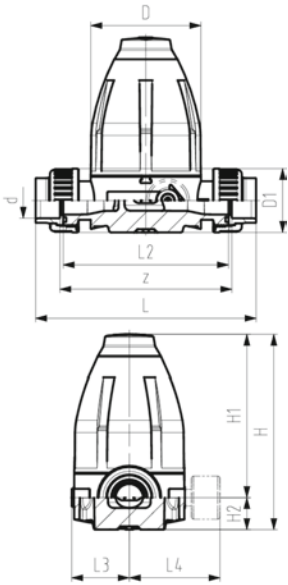


Pressure reducing valve type 582 PVC-C
Unions with solvent cement sockets metric
Without manometer

Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

0.3-3.0 bar (4-44 psi) on request
 Manometer on request



| d (mm) | DN (mm) | Size (inch) | PN (bar) | O-rings EPDM Code | Weight (kg) | SP | O-rings FKM Code |
|-----------|------------|----------------|-------------|-------------------------|----------------|----|------------------------|
| 20 | 15 | ½ | 10 | 163 582 102 | 0.730 | 1 | 163 582 112 |
| 25 | 20 | ¾ | 10 | 163 582 103 | 1.540 | 1 | 163 582 113 |
| 32 | 25 | 1 | 10 | 163 582 104 | 1.580 | 1 | 163 582 114 |
| 40 | 32 | 1 ¼ | 10 | 163 582 105 | 4.220 | 1 | 163 582 115 |
| 50 | 40 | 1 ½ | 10 | 163 582 106 | 4.410 | 1 | 163 582 116 |
| 63 | 50 | 2 | 10 | 163 582 107 | 4.660 | 1 | 163 582 117 |

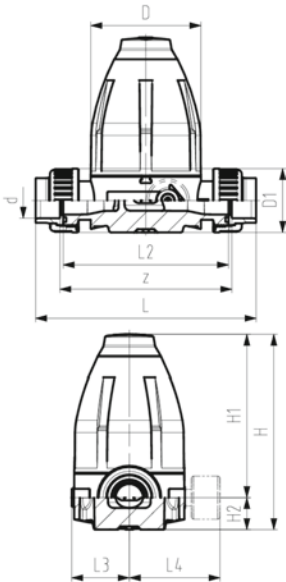
| d (mm) | D (mm) | D1 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | L (mm) | L2 (mm) | L3 (mm) | M | z (mm) | closest inch (inch) |
|-----------|-----------|------------|-----------|------------|------------|------------|-----------|------------|------------|----|-----------|------------------------|
| 20 | 79 | 43 | 132 | 111 | 21 | 12 | 162 | 120 | 42 | M6 | 126 | ½ |
| 25 | 100 | 51 | 177 | 148 | 29 | 14 | 198 | 150 | 53 | M6 | 156 | ¾ |
| 32 | 100 | 58 | 177 | 148 | 29 | 14 | 204 | 150 | 53 | M6 | 156 | 1 |
| 40 | 147 | 72 | 251 | 207 | 44 | 21 | 267 | 205 | 76 | M8 | 211 | 1 ¼ |
| 50 | 147 | 83 | 251 | 207 | 44 | 21 | 273 | 205 | 76 | M8 | 211 | 1 ½ |
| 63 | 147 | 100 | 251 | 207 | 44 | 21 | 287 | 205 | 76 | M8 | 211 | 2 |



**Pressure reducing valve type 582 PVC-C
Unions with solvent cement sockets metric
With manometer**

Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)
- Attention: Manometer with brass connection in direct contact with medium. Check for chemical resistance, otherwise chose the optional manometer adapter for media separation.
0.3-3.0 bar (4-44 psi) on request



| d (mm) | DN (mm) | Size (inch) | PN (bar) | O-rings EPDM Code | Weight (kg) | SP | O-rings FKM Code |
|-----------|------------|----------------|-------------|-------------------------|----------------|----|------------------------|
| 20 | 15 | ½ | 10 | 163 582 122 | 0.760 | 1 | 163 582 132 |
| 25 | 20 | ¾ | 10 | 163 582 123 | 1.570 | 1 | 163 582 133 |
| 32 | 25 | 1 | 10 | 163 582 124 | 1.610 | 1 | 163 582 134 |
| 40 | 32 | 1 ¼ | 10 | 163 582 125 | 4.250 | 1 | 163 582 135 |
| 50 | 40 | 1 ½ | 10 | 163 582 126 | 4.440 | 1 | 163 582 136 |
| 63 | 50 | 2 | 10 | 163 582 127 | 4.690 | 1 | 163 582 137 |

| d (mm) | D (mm) | D1 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | L (mm) | L2 (mm) | L3 (mm) | L4 (mm) | M | z (mm) | closest inch (inch) |
|-----------|-----------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|----|-----------|------------------------|
| 20 | 79 | 43 | 132 | 111 | 21 | 12 | 162 | 120 | 42 | 77 | M6 | 126 | ½ |
| 25 | 100 | 51 | 177 | 148 | 29 | 14 | 198 | 150 | 53 | 88 | M6 | 156 | ¾ |
| 32 | 100 | 58 | 177 | 148 | 29 | 14 | 204 | 150 | 53 | 88 | M6 | 156 | 1 |
| 40 | 147 | 72 | 251 | 207 | 44 | 21 | 267 | 205 | 76 | 111 | M8 | 211 | 1 ¼ |
| 50 | 147 | 83 | 251 | 207 | 44 | 21 | 273 | 205 | 76 | 111 | M8 | 211 | 1 ½ |
| 63 | 147 | 100 | 251 | 207 | 44 | 21 | 287 | 205 | 76 | 111 | M8 | 211 | 2 |

Pressure retaining valves type 586

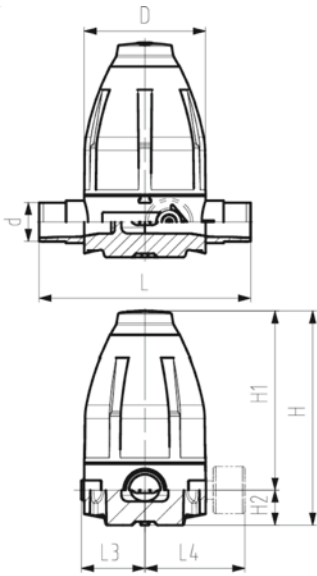


Pressure retaining valve type 586 PVC-C
With solvent cement spigots metric
Without manometer

Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

0.3-3.0 bar (4-44 psi) on request
 Manometer on request



| d (mm) | DN (mm) | Size (inch) | PN (bar) | O-rings EPDM Code | Weight (kg) | SP | GP | O-rings FKM Code |
|-----------|------------|----------------|-------------|-------------------------|----------------|----|----|------------------------|
| 16 | 10 | 3/8 | 10 | 163 586 001 | 0.640 | 1 | | 163 586 011 |
| 20 | 15 | 1/2 | 10 | 163 586 002 | 0.650 | 1 | 6 | 163 586 012 |
| 25 | 20 | 3/4 | 10 | 163 586 003 | 1.470 | 1 | | 163 586 013 |
| 32 | 25 | 1 | 10 | 163 586 004 | 1.470 | 1 | | 163 586 014 |
| 40 | 32 | 1 1/4 | 10 | 163 586 005 | 4.100 | 1 | | 163 586 015 |
| 50 | 40 | 1 1/2 | 10 | 163 586 006 | 4.100 | 1 | | 163 586 016 |
| 63 | 50 | 2 | 10 | 163 586 007 | 4.180 | 1 | | 163 586 017 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | L (mm) | L3 (mm) | M | closest inch (inch) |
|-----------|-----------|-----------|------------|------------|------------|-----------|------------|----|------------------------|
| 16 | 79 | 132 | 111 | 21 | 12 | 134 | 42 | M6 | 3/8 |
| 20 | 79 | 132 | 111 | 21 | 12 | 134 | 42 | M6 | 1/2 |
| 25 | 100 | 177 | 148 | 29 | 14 | 174 | 53 | M6 | 3/4 |
| 32 | 100 | 177 | 148 | 29 | 14 | 174 | 53 | M6 | 1 |
| 40 | 147 | 251 | 207 | 44 | 21 | 224 | 76 | M8 | 1 1/4 |
| 50 | 147 | 251 | 207 | 44 | 21 | 224 | 76 | M8 | 1 1/2 |
| 63 | 147 | 251 | 207 | 44 | 21 | 244 | 76 | M8 | 2 |

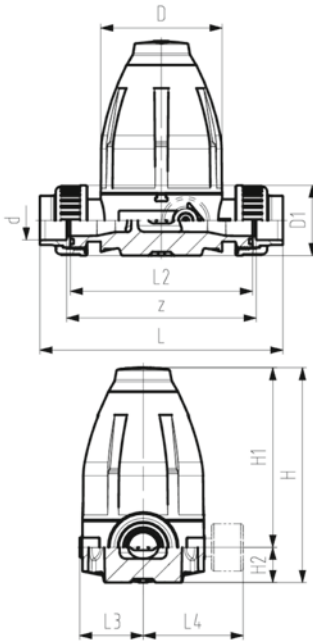


**Pressure retaining valve type 586 PVC-C
Unions with solvent cement sockets metric
Without manometer**

Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

0.3-3.0 bar (4-44 psi) on request
Manometer on request



| d (mm) | DN (mm) | Size (inch) | PN (bar) | O-rings EPDM Code | Weight (kg) | SP | GP | O-rings FKM Code |
|-----------|------------|----------------|-------------|-------------------------|----------------|----|----|------------------------|
| 20 | 15 | ½ | 10 | 163 586 102 | 0.720 | 1 | 6 | 163 586 112 |
| 25 | 20 | ¾ | 10 | 163 586 103 | 1.560 | 1 | | 163 586 113 |
| 32 | 25 | 1 | 10 | 163 586 104 | 1.600 | 1 | | 163 586 114 |
| 40 | 32 | 1 ¼ | 10 | 163 586 105 | 4.360 | 1 | | 163 586 115 |
| 50 | 40 | 1 ½ | 10 | 163 586 106 | 4.430 | 1 | | 163 586 116 |
| 63 | 50 | 2 | 10 | 163 586 107 | 4.690 | 1 | | 163 586 117 |

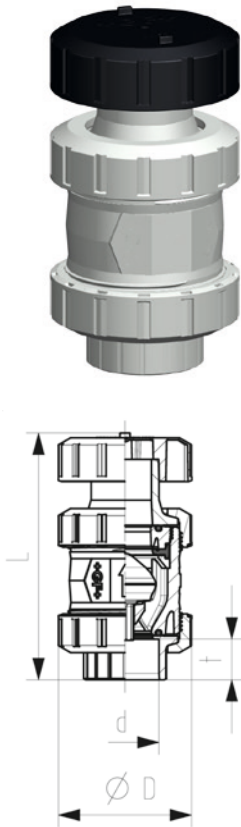
| d (mm) | D (mm) | D1 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | L (mm) | L2 (mm) | L3 (mm) | M | z (mm) | closest inch (inch) |
|-----------|-----------|------------|-----------|------------|------------|------------|-----------|------------|------------|----|-----------|------------------------|
| 20 | 79 | 43 | 132 | 111 | 21 | 12 | 162 | 120 | 42 | M6 | 126 | ½ |
| 25 | 100 | 51 | 177 | 148 | 29 | 14 | 198 | 150 | 53 | M6 | 156 | ¾ |
| 32 | 100 | 58 | 177 | 148 | 29 | 14 | 204 | 150 | 53 | M6 | 156 | 1 |
| 40 | 147 | 72 | 251 | 207 | 44 | 21 | 267 | 205 | 76 | M8 | 211 | 1 ¼ |
| 50 | 147 | 83 | 251 | 207 | 44 | 21 | 273 | 205 | 76 | M8 | 211 | 1 ½ |
| 63 | 147 | 100 | 251 | 207 | 44 | 21 | 287 | 205 | 76 | M8 | 211 | 2 |

Process control valves

Ventilating and bleed valve Type 591 PVC-C With solvent cement sockets metric

Model:

- With protection cap up to DN50 made of PP-GF, DN65-100 made of POM
- Floater made of PP-H
- Designed for easy installation and removal
- Compact installation length

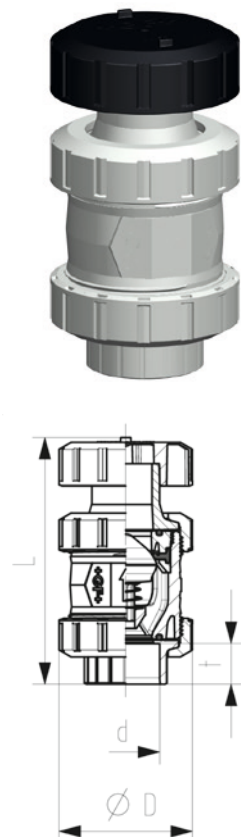


| d (mm) | DN (mm) | PN (bar) | EPDM Code | FKM Code | D (mm) | L (mm) | t (mm) | closest inch (inch) |
|-----------|------------|-------------|--------------|-------------|-----------|-----------|-----------|---------------------------|
| 16 | 10 | 16 | 163 591 001 | 163 591 011 | 50 | 118 | 14 | 3/8 |
| 20 | 15 | 16 | 163 591 002 | 163 591 012 | 50 | 124 | 16 | 1/2 |
| 25 | 20 | 16 | 163 591 003 | 163 591 013 | 58 | 142 | 19 | 3/4 |
| 32 | 25 | 16 | 163 591 004 | 163 591 014 | 68 | 157 | 22 | 1 |
| 40 | 32 | 16 | 163 591 005 | 163 591 015 | 84 | 179 | 26 | 1 1/4 |
| 50 | 40 | 16 | 163 591 006 | 163 591 016 | 97 | 197 | 31 | 1 1/2 |
| 63 | 50 | 16 | 163 591 007 | 163 591 017 | 124 | 229 | 38 | 2 |
| 75 | 65 | 16 | 163 591 008 | 163 591 018 | 166 | 258 | 45 | 2 1/2 |
| 90 | 80 | 16 | 163 591 009 | 163 591 019 | 200 | 277 | 52 | 3 |
| 110 | 100 | 16 | 163 591 010 | 163 591 020 | 238 | 320 | 64 | 4 |

Ventilating valve type 595 PVC-C With solvent cement sockets metric

Model:

- With protection cap up to DN50 made of PP-GF, DN65-100 made of POM
- Spring HALAR coated
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Compact installation length



| d (mm) | DN (mm) | PN (bar) | EPDM Code | FKM Code | D (mm) | L (mm) | t (mm) | closest inch (inch) |
|-----------|------------|-------------|--------------|-------------|-----------|-----------|-----------|---------------------------|
| 16 | 10 | 16 | 163 595 001 | 163 595 011 | 50 | 118 | 14 | 3/8 |
| 20 | 15 | 16 | 163 595 002 | 163 595 012 | 50 | 124 | 16 | 1/2 |
| 25 | 20 | 16 | 163 595 003 | 163 595 013 | 58 | 142 | 19 | 3/4 |
| 32 | 25 | 16 | 163 595 004 | 163 595 014 | 68 | 157 | 22 | 1 |
| 40 | 32 | 16 | 163 595 005 | 163 595 015 | 84 | 179 | 26 | 1 1/4 |
| 50 | 40 | 16 | 163 595 006 | 163 595 016 | 97 | 197 | 31 | 1 1/2 |
| 63 | 50 | 16 | 163 595 007 | 163 595 017 | 124 | 229 | 38 | 2 |
| 75 | 65 | 16 | 163 595 008 | 163 595 018 | 166 | 258 | 45 | 2 1/2 |
| 90 | 80 | 16 | 163 595 009 | 163 595 019 | 200 | 277 | 52 | 3 |
| 110 | 100 | 16 | 163 595 010 | 163 595 020 | 238 | 320 | 64 | 4 |

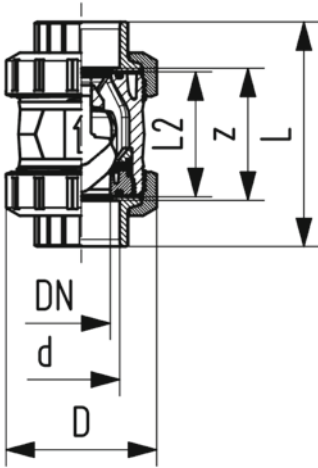
Cone check valves



Check valve type 561 PVC-C With solvent cement sockets metric

Model:

- Sealing at a minimum water column of 2 m
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 16 | 10 | 3/8 | 16 | 190 | 163 561 001 | 1 | 0.120 | 163 561 011 | 1 | 0.120 |
| 20 | 15 | 1/2 | 16 | 180 | 163 561 002 | 1 | 0.120 | 163 561 012 | 1 | 0.120 |
| 25 | 20 | 3/4 | 16 | 380 | 163 561 003 | 1 | 0.260 | 163 561 013 | 1 | 0.280 |
| 32 | 25 | 1 | 16 | 460 | 163 561 004 | 1 | 0.280 | 163 561 014 | 1 | 0.280 |
| 40 | 32 | 1 1/4 | 16 | 850 | 163 561 005 | 1 | 0.490 | 163 561 015 | 1 | 0.490 |
| 50 | 40 | 1 1/2 | 16 | 1080 | 163 561 006 | 1 | 0.710 | 163 561 016 | 1 | 0.710 |
| 63 | 50 | 2 | 16 | 1670 | 163 561 007 | 1 | 1.456 | 163 561 017 | 1 | 1.470 |
| 75 | 65 | 2 1/2 | 16 | 2950 | 163 561 008 | 1 | 3.460 | 163 561 018 | 1 | 3.480 |
| 90 | 80 | 3 | 16 | 3600 | 163 561 009 | 1 | 5.540 | 163 561 019 | 1 | 5.570 |
| 110 | 100 | 4 | 16 | 4150 | 163 561 010 | 1 | 8.930 | 163 561 020 | 1 | 8.970 |

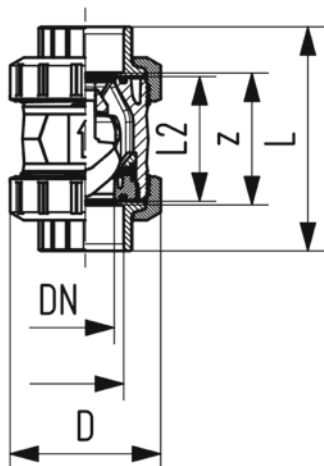
| d (mm) | D (mm) | L (mm) | L2 (mm) | z (mm) | closest inch (inch) |
|-----------|-----------|-----------|------------|-----------|---------------------------|
| 16 | 50 | 92 | 56 | 64 | 3/8 |
| 20 | 50 | 95 | 56 | 64 | 1/2 |
| 25 | 58 | 110 | 65 | 72 | 3/4 |
| 32 | 68 | 123 | 71 | 79 | 1 |
| 40 | 84 | 146 | 85 | 94 | 1 1/4 |
| 50 | 97 | 157 | 89 | 95 | 1 1/2 |
| 63 | 124 | 183 | 101 | 107 | 2 |
| 75 | 166 | 233 | 136 | 144 | 2 1/2 |
| 90 | 200 | 254 | 141 | 151 | 3 |
| 110 | 238 | 301 | 164 | 174 | 4 |



Check valve type 561 PVC-C With threaded sockets Rp

Model:

- Sealing at a minimum water column of 2 m
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360
- New DN65-DN100



| d (mm) | DN (mm) | Thread Type | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|-------------|----------------|-------------|--|--------------------|----|----------------|
| 16 | 10 | Rp | 3/8 | 10 | 190 | 163 561 021 | 1 | 0.120 |
| 20 | 15 | Rp | 1/2 | 10 | 180 | 163 561 022 | 1 | 0.120 |
| 25 | 20 | Rp | 3/4 | 10 | 380 | 163 561 023 | 1 | 0.260 |
| 32 | 25 | Rp | 1 | 10 | 460 | 163 561 024 | 1 | 0.290 |
| 40 | 32 | Rp | 1 1/4 | 10 | 850 | 163 561 025 | 1 | 0.490 |
| 50 | 40 | Rp | 1 1/2 | 10 | 1080 | 163 561 026 | 1 | 0.740 |
| 63 | 50 | Rp | 2 | 10 | 1670 | 163 561 027 | 1 | 1.530 |
| 75 | 65 | Rp | 2 1/2 | 10 | 2950 | 163 561 028 | 1 | 3.530 |
| 90 | 80 | Rp | 3 | 10 | 3600 | 163 561 029 | 1 | 5.670 |
| 110 | 100 | Rp | 4 | 10 | 4150 | 163 561 030 | 1 | 8.990 |

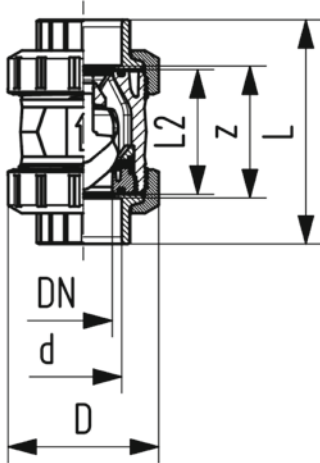
| FKM Code | SP | Weight (kg) | D (mm) | L (mm) | L2 (mm) | z (mm) |
|--------------------|----|----------------|-----------|-----------|------------|-----------|
| 163 561 031 | 1 | 0.120 | 50 | 95 | 56 | 69 |
| 163 561 032 | 1 | 0.120 | 50 | 100 | 56 | 67 |
| 163 561 033 | 1 | 0.280 | 58 | 114 | 65 | 78 |
| 163 561 034 | 1 | 0.290 | 68 | 127 | 71 | 85 |
| 163 561 035 | 1 | 0.500 | 84 | 146 | 85 | 100 |
| 163 561 036 | 1 | 0.750 | 97 | 152 | 89 | 106 |
| 163 561 037 | 1 | 1.530 | 124 | 177 | 101 | 121 |
| 163 561 038 | 1 | 3.550 | 166 | 233 | 136 | 144 |
| 163 561 039 | 1 | 5.700 | 200 | 254 | 141 | 151 |
| 163 561 040 | 1 | 9.030 | 238 | 301 | 164 | 174 |



Check valve type 562 PVC-C
With solvent cement sockets metric

Model:

- For horizontal or vertical installation
- Sealing at a minimum water column of 1 m
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|-------------|--|--------------------|----|----------------|--------------------|----|----------------|
| 16 | 10 | 16 | 190 | 163 562 001 | 1 | 0.120 | 163 562 011 | 1 | 0.120 |
| 20 | 15 | 16 | 180 | 163 562 002 | 1 | 0.120 | 163 562 012 | 1 | 0.120 |
| 25 | 20 | 16 | 380 | 163 562 003 | 1 | 0.260 | 163 562 013 | 1 | 0.280 |
| 32 | 25 | 16 | 460 | 163 562 004 | 1 | 0.280 | 163 562 014 | 1 | 0.280 |
| 40 | 32 | 16 | 850 | 163 562 005 | 1 | 0.490 | 163 562 015 | 1 | 0.490 |
| 50 | 40 | 16 | 1080 | 163 562 006 | 1 | 0.710 | 163 562 016 | 1 | 0.710 |
| 63 | 50 | 16 | 1670 | 163 562 007 | 1 | 1.460 | 163 562 017 | 1 | 1.470 |
| 75 | 65 | 16 | 2950 | 163 562 008 | 1 | 3.460 | 163 562 018 | 1 | 3.480 |
| 90 | 80 | 16 | 3600 | 163 562 009 | 1 | 5.540 | 163 562 019 | 1 | 5.570 |
| 110 | 100 | 16 | 4150 | 163 562 010 | 1 | 8.930 | 163 562 020 | 1 | 8.970 |

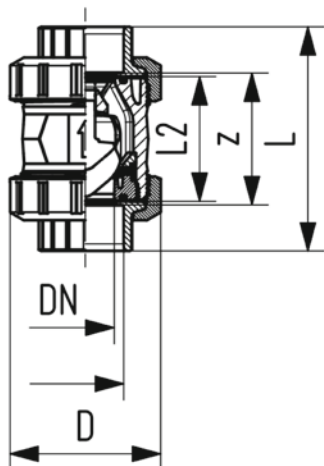
| d (mm) | D (mm) | L (mm) | L2 (mm) | z (mm) | closest inch (inch) |
|-----------|-----------|-----------|------------|-----------|---------------------------|
| 16 | 50 | 92 | 56 | 64 | $\frac{3}{8}$ |
| 20 | 50 | 95 | 56 | 64 | $\frac{1}{2}$ |
| 25 | 58 | 110 | 65 | 72 | $\frac{3}{4}$ |
| 32 | 68 | 123 | 71 | 79 | 1 |
| 40 | 84 | 146 | 85 | 94 | 1 $\frac{1}{4}$ |
| 50 | 97 | 157 | 89 | 95 | 1 $\frac{1}{2}$ |
| 63 | 124 | 183 | 101 | 107 | 2 |
| 75 | 166 | 233 | 136 | 144 | 2 $\frac{1}{2}$ |
| 90 | 200 | 254 | 141 | 151 | 3 |
| 110 | 238 | 301 | 164 | 174 | 4 |



Check valve type 562 PVC-C
With threaded sockets Rp

Model:

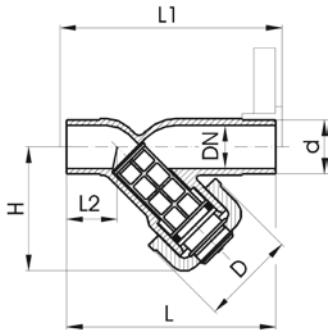
- For horizontal or vertical installation
- Sealing at a minimum water column of 1 m
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360
- New DN65-DN100



| Rp (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|--------------|------------|-------------|--|--------------------|----|----------------|--------------------|----|----------------|
| 3/8 | 10 | 10 | 190 | 163 562 021 | 1 | 0.120 | 163 562 031 | 1 | 0.120 |
| 1/2 | 15 | 10 | 180 | 163 562 022 | 1 | 0.120 | 163 562 032 | 1 | 0.120 |
| 3/4 | 20 | 10 | 380 | 163 562 023 | 1 | 0.260 | 163 562 033 | 1 | 0.280 |
| 1 | 25 | 10 | 460 | 163 562 024 | 1 | 0.290 | 163 562 034 | 1 | 0.290 |
| 1 1/4 | 32 | 10 | 850 | 163 562 025 | 1 | 0.490 | 163 562 035 | 1 | 0.500 |
| 1 1/2 | 40 | 10 | 1080 | 163 562 026 | 1 | 0.740 | 163 562 036 | 1 | 0.750 |
| 2 | 50 | 10 | 1670 | 163 562 027 | 1 | 1.530 | 163 562 037 | 1 | 1.530 |
| 2 1/2 | 65 | 10 | 2950 | 163 562 028 | 1 | 3.530 | 163 562 038 | 1 | 3.550 |
| 3 | 80 | 10 | 3600 | 163 562 029 | 1 | 5.670 | 163 562 039 | 1 | 5.700 |
| 4 | 100 | 10 | 4150 | 163 562 030 | 1 | 8.990 | 163 562 040 | 1 | 9.030 |

| Rp (inch) | D (mm) | L (mm) | L2 (mm) | z (mm) |
|--------------|-----------|-----------|------------|-----------|
| 3/8 | 50 | 95 | 56 | 69 |
| 1/2 | 50 | 100 | 56 | 67 |
| 3/4 | 58 | 114 | 65 | 78 |
| 1 | 68 | 127 | 71 | 85 |
| 1 1/4 | 84 | 146 | 85 | 100 |
| 1 1/2 | 97 | 152 | 89 | 106 |
| 2 | 124 | 177 | 101 | 121 |
| 2 1/2 | 166 | 233 | 136 | 144 |
| 3 | 200 | 254 | 141 | 151 |
| 4 | 238 | 301 | 164 | 174 |

Strainers



Line strainer type 305 PVC-C With solvent cement spigots metric

Model:

- Protects valves, pumps, etc. from becoming soiled
- Easy dismantling for cleaning the screens
- Overall length EN 558
- Cylindrical screen must be ordered separately

| d (mm) | DN (mm) | PN (bar) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|-------------|--------------------|----|----------------|--------------------|----|----------------|
| 20 | 15 | 10 | 163 305 302 | 1 | 0.110 | 163 305 317 | 1 | 0.120 |
| 25 | 20 | 10 | 163 305 303 | 1 | 0.160 | 163 305 318 | 1 | 0.160 |
| 32 | 25 | 10 | 163 305 304 | 1 | 0.250 | 163 305 319 | 1 | 0.250 |
| 40 | 32 | 10 | 163 305 305 | 1 | 0.380 | 163 305 320 | 1 | 0.640 |
| 50 | 40 | 10 | 163 305 306 | 1 | 0.640 | 163 305 321 | 1 | 0.640 |
| 63 | 50 | 10 | 163 305 307 | 1 | 1.072 | 163 305 322 | 1 | 1.076 |

| d (mm) | D (mm) | H (mm) | L (mm) | L1 (mm) | L2 (mm) | closest inch (inch) |
|-----------|-----------|-----------|-----------|------------|------------|---------------------------|
| 20 | 43 | 65 | 124 | 130 | 28 | ½ |
| 25 | 54 | 76 | 144 | 150 | 37 | ¾ |
| 32 | 62 | 90 | 154 | 160 | 37 | 1 |
| 40 | 71 | 104 | 174 | 180 | 44 | 1 ¼ |
| 50 | 88 | 124 | 194 | 200 | 48 | 1 ½ |
| 63 | 103 | 148 | 224 | 230 | 60 | 2 |



Screen stainless steel Screen perforation 0.5 mm

Model:

- Stainless Steel A4 Quality (AISI 316)
- For line strainers Type 305

| d (mm) | DN (mm) | kv-value ($\Delta p=1$ bar) (l/min) | Code | D (mm) | L (mm) | closest inch (inch) |
|-----------|------------|--|--------------------|-----------|-----------|---------------------------|
| 20 | 15 | 35 | 161 486 100 | 14 | 39 | ½ |
| 25 | 20 | 60 | 161 486 101 | 18 | 48 | ¾ |
| 32 | 25 | 85 | 161 486 102 | 24 | 60 | 1 |
| 40 | 32 | 130 | 161 486 103 | 30 | 71 | 1 ¼ |
| 50 | 40 | 200 | 161 486 104 | 38 | 87 | 1 ½ |
| 63 | 50 | 330 | 161 486 105 | 48 | 106 | 2 |
| 75 | 65 | 460 | 161 486 106 | 61 | 100 | 2 ½ |
| 90 | 80 | 665 | 161 486 107 | 73 | 118 | 3 |

PVC-C metric

silicon free/paint compatible





Unions

211



Silicon free

212



Ball valves type 543

213



Ball valves type 546

214



Diaphragm valves type 317

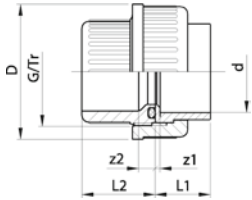
216



Cone check valves

217

Unions



Union PVC-C metric Silicone-free

Model:

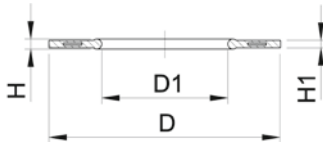
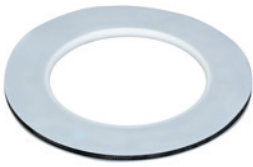
- Silicone free/paint-compatible
- Union End: PVC-C solvent socket metric
- Union bush: PVC-C solvent cement socket metric
- Gasket: with O-ring

| d (mm) | Size (inch) | PN (bar) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|----------------|-------------|--------------------|----------------------|-------------|----------------------|
| 16 | | 16 | 723 510 155 | 1 | 0.028 | 723 510 180 |
| 20 | | 16 | 723 510 156 | 1 | 0.046 | 723 510 181 |
| 25 | | 16 | 723 510 157 | 1 | 0.071 | 723 510 182 |
| 32 | | 16 | 723 510 158 | 1 | 0.099 | 723 510 183 |
| 40 | | 16 | 723 510 159 | 1 | 0.190 | 723 510 184 |
| 50 | | 16 | 723 510 160 | 1 | 0.240 | 723 510 185 |
| 63 | | 16 | 723 510 161 | 1 | 0.425 | 723 510 186 |
| 75 | 2 ½ | 10 | 723 510 162 | 1 | 0.670 | 723 510 187 |
| 90 | | 10 | 723 510 163 | 1 | 1.008 | 723 510 188 |
| 110 | | 10 | 723 510 164 | 1 | 1.553 | 723 510 189 |

| d (mm) | D (mm) | L1 (mm) | L2 (mm) | z1 (mm) | z2 (mm) | G/Tr (inch) |
|-----------|-----------|------------|------------|------------|------------|----------------|
| 16 | 35 | 19 | 24 | 3 | 8 | 3/4 |
| 20 | 43 | 21 | 26 | 3 | 9 | 1 |
| 25 | 53 | 24 | 29 | 3 | 9 | 1 1/4 |
| 32 | 60 | 27 | 33 | 3 | 9 | 1 1/2 |
| 40 | 74 | 32 | 39 | 3 | 10 | 2 |
| 50 | 83 | 33 | 46 | 3 | 10 | 2 1/4 |
| 63 | 103 | 40 | 58 | 3 | 10 | 2 3/4 |
| 75 | 135 | 47 | 62 | 3 | 18 | Tr108x5 |
| 90 | 158 | 56 | 69 | 5 | 18 | Tr128x5 |
| 110 | 188 | 66 | 72 | 5 | 11 | Tr154x6 |

Silicon free

Profile Flange Gasket, metric MPTFE envelope / EPDM inside



Model:

- For all metric GF Flange Adaptors
- Centering on the inner diameter of the bolt circle
- Envelope made of modified PTFE with diffusion barrier
- Ideal for aggressive media, High-Purity and silicone-free / paint compatible (acc. VDMA test)
- EPDM Profile Flange Gasket inside
- Individually bagged
- Suitable for contact with food stuff (conform to FDA 21 § 177.1550)

| d (mm) | DN (mm) | PN (bar) | EPDM Code | D (mm) | D1 (mm) | di FA (mm) | H (mm) | H1 (mm) |
|-----------|------------|-------------|--------------------|-----------|------------|---------------|-----------|------------|
| 20 | 15 | 16 | 747 440 706 | 51 | 20 | 10 - 20 | 4 | 3 |
| 25 | 20 | 16 | 747 440 707 | 61 | 22 | 12 - 22 | 4 | 3 |
| 32 | 25 | 16 | 747 440 708 | 71 | 28 | 18 - 28 | 4 | 3 |
| 40 | 32 | 16 | 747 440 709 | 82 | 40 | 30 - 40 | 4 | 3 |
| 50 | 40 | 16 | 747 440 710 | 92 | 46 | 36 - 46 | 4 | 3 |
| 63 | 50 | 16 | 747 440 711 | 107 | 58 | 48 - 58 | 5 | 4 |
| 75 | 65 | 16 | 747 440 712 | 127 | 69 | 59 - 69 | 5 | 4 |
| 90 | 80 | 16 | 747 440 713 | 142 | 84 | 73 - 84 | 5 | 4 |
| 110 | 100 | 16 | 747 440 714 | 162 | 104 | 94 - 104 | 6 | 5 |
| 125 | 100 | 16 | 747 440 715 | 162 | 123 | 113 - 123 | 6 | 5 |
| 140 | 125 | 16 | 747 440 716 | 192 | 137 | 127 - 137 | 6 | 5 |
| 160 - 180 | 150 | 16 | 747 440 717 | 218 | 160 | 150 - 160 | 8 | 6 |
| 200 | 200 | 16 | 747 440 719 | 273 | 203 | 192 - 203 | 8 | 6 |
| 225 | 200 | 16 | 747 440 720 | 273 | 220 | 207 - 220 | 8 | 6 |
| 250 | 250 | 16 | 747 440 721 | 328 | 252 | 238 - 252 | 8 | 6 |
| 280 | 250 | 16 | 747 440 722 | 328 | 274 | 264 - 274 | 8 | 6 |
| 315 | 300 | 16 | 747 440 723 | 378 | 306 | 296 - 306 | 8 | 6 |
| 355 | 350 | 16 | 747 440 724 | 438 | 355 | 340 - 355 | 10 | 7 |
| 400 | 400 | 16 | 747 440 725 | 489 | 400 | 385 - 400 | 10 | 7 |

Ball valves type 543



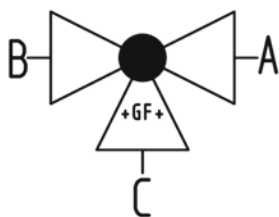
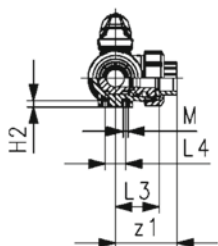
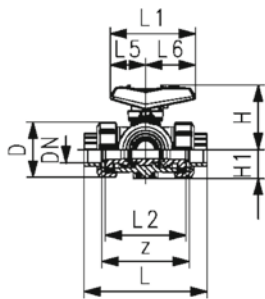
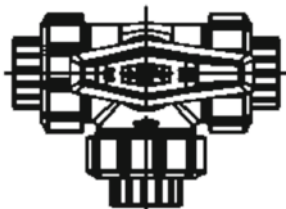
3-Way Ball Valve Type 543 Pro PVC-C silicone free Horizontal/L-port With solvent cement sockets metric

Model:

- Lockable lever as standard (DN10-DN50)
- Silicone free/paint-compatible
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme
- Z-dimension, valve end and union nut are compatible with type 543 (1stGeneration)

Option:

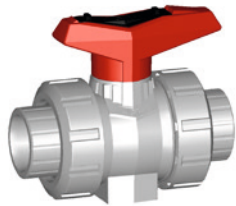
- Interface-module with position feedback sensor, incl. LED feedback (DN10-50)
- Manual spring return lever ("Dead man") (DN10-25)
- Pneumatic or electric actuators from GF
- Individual configuration of the valve possible



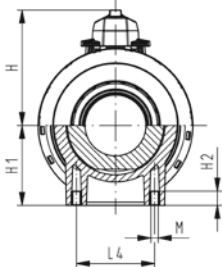
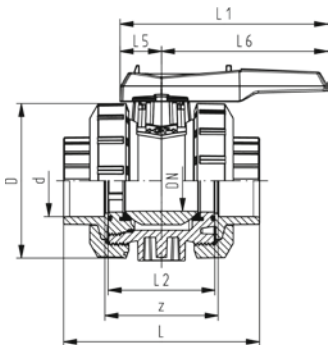
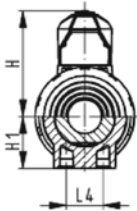
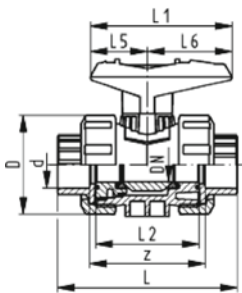
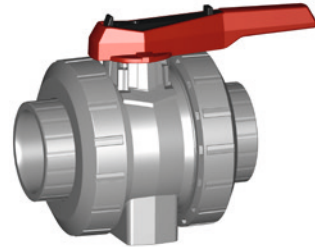
| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|------------|-------------|--|--------------|----------------------|-------------|----------------------|
| 16 | 10 | 10 | 50 | 163 543 141 | 1 | 163 543 151 | 0.265 |
| 20 | 15 | 10 | 75 | 163 543 142 | 1 | 163 543 152 | 0.272 |
| 25 | 20 | 10 | 150 | 163 543 143 | 1 | 163 543 153 | 0.391 |
| 32 | 25 | 10 | 280 | 163 543 144 | 1 | 163 543 154 | 0.598 |
| 40 | 32 | 10 | 480 | 163 543 145 | 1 | 163 543 155 | 1.018 |
| 50 | 40 | 10 | 620 | 163 543 146 | 1 | 163 543 156 | 1.509 |
| 63 | 50 | 10 | 1230 | 163 543 147 | 1 | 163 543 157 | 2.938 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M (mm) | z (mm) | z1 (mm) | closest inch (inch) |
|-----------|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|------------|---------------------------|
| 16 | 50 | 57 | 28 | 8 | 109 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 81 | 40 | 3/8 |
| 20 | 50 | 57 | 28 | 8 | 112 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 81 | 40 | 1/2 |
| 25 | 58 | 67 | 32 | 8 | 131 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 94 | 47 | 3/4 |
| 32 | 68 | 73 | 36 | 8 | 151 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 107 | 54 | 1 |
| 40 | 84 | 90 | 45 | 9 | 181 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 130 | 65 | 1 1/4 |
| 50 | 97 | 97 | 51 | 9 | 205 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 143 | 72 | 1 1/2 |
| 63 | 124 | 116 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 185 | 92 | 2 |

Ball valves type 546



DN10/15 - 50



Ball valve type 546 PVC-C SF With solvent cement sockets metric

Model:

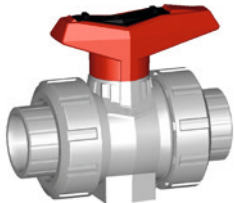
- Silicone free/paint-compatible
- For easy installation and removal
- Ball seat PVDF
- Without mounting inserts
- Valve end and union nut are **not compatible** with type 346 (DN10/15-50) and type 370 (DN65-100)

Option:

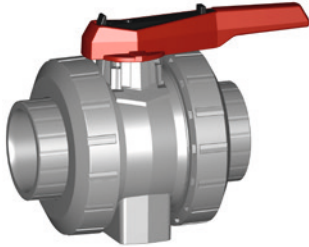
- Individual configuration of the valve
- Multifunctional module with integrated limit switches

| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 16 | 10 | 16 | 71 | 163 546 601 | 1 | 0.160 | 163 546 611 | 1 | 0.160 |
| 20 | 15 | 16 | 185 | 163 546 602 | 1 | 0.160 | 163 546 612 | 1 | 0.160 |
| 25 | 20 | 16 | 350 | 163 546 603 | 1 | 0.245 | 163 546 613 | 1 | 0.245 |
| 32 | 25 | 16 | 700 | 163 546 604 | 1 | 0.365 | 163 546 614 | 1 | 0.365 |
| 40 | 32 | 16 | 1000 | 163 546 605 | 1 | 0.660 | 163 546 615 | 1 | 0.660 |
| 50 | 40 | 16 | 1600 | 163 546 606 | 1 | 0.890 | 163 546 616 | 1 | 0.890 |
| 63 | 50 | 16 | 3100 | 163 546 607 | 1 | 1.650 | 163 546 617 | 1 | 1.650 |
| 75 | 65 | 16 | 5000 | 163 546 608 | 1 | 5.300 | 163 546 618 | 1 | 5.400 |
| 90 | 80 | 16 | 7000 | 163 546 609 | 1 | 8.000 | 163 546 619 | 1 | 8.100 |
| 110 | 100 | 16 | 11000 | 163 546 610 | 1 | 12.700 | 163 546 620 | 1 | 12.800 |

| d (mm) | D (mm) | H (mm) | H1 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | z (mm) | closest inch (inch) |
|-----------|-----------|-----------|------------|-----------|------------|------------|------------|------------|------------|-----------|---------------------------|
| 16 | 50 | 57 | 27 | 92 | 77 | 56 | 25 | 32 | 45 | 64 | 3/8 |
| 20 | 50 | 57 | 27 | 95 | 77 | 56 | 25 | 32 | 45 | 64 | 1/2 |
| 25 | 58 | 67 | 30 | 110 | 97 | 65 | 25 | 39 | 58 | 72 | 3/4 |
| 32 | 68 | 73 | 36 | 123 | 97 | 71 | 25 | 39 | 58 | 79 | 1 |
| 40 | 84 | 90 | 44 | 146 | 128 | 85 | 45 | 54 | 74 | 94 | 1 1/4 |
| 50 | 97 | 97 | 51 | 157 | 128 | 89 | 45 | 54 | 74 | 95 | 1 1/2 |
| 63 | 124 | 116 | 64 | 183 | 152 | 101 | 45 | 66 | 87 | 107 | 2 |
| 75 | 166 | 149 | 85 | 233 | 270 | 136 | 70 | 64 | 206 | 144 | 2 1/2 |
| 90 | 200 | 161 | 105 | 254 | 270 | 141 | 70 | 64 | 206 | 151 | 3 |
| 110 | 238 | 178 | 123 | 301 | 320 | 164 | 120 | 64 | 256 | 174 | 4 |



DN10/15 - 50



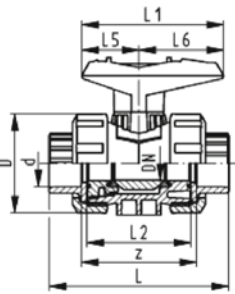
Ball valve type 546 PVC-C SF
With mounting inserts
With solvent cement sockets metric

Model:

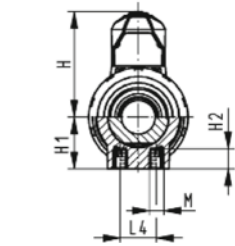
- Silicone free/paint-compatible
- For easy installation and removal
- Ball seal: PVDF
- Integrated stainless steel mounting inserts
- Valve end and union nut are **not compatible** with type 346 (DN10/15-50) and type 370 (DN65-100)

Option:

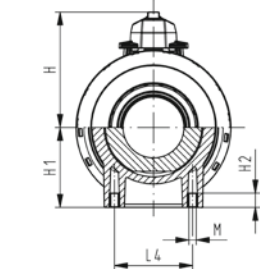
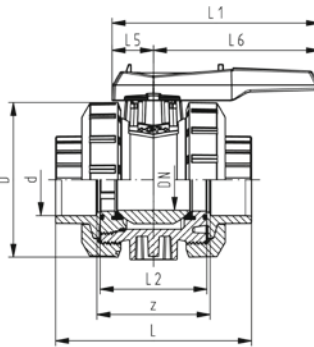
- Individual configuration of the valve
- Multifunctional module with integrated limit switches



| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 16 | 10 | 16 | 71 | 800 000 621 | 1 | 0.160 | 800 000 631 | 1 | 0.160 |
| 20 | 15 | 16 | 185 | 800 000 622 | 1 | 0.160 | 800 000 632 | 1 | 0.160 |
| 25 | 20 | 16 | 350 | 800 000 623 | 1 | 0.245 | 800 000 633 | 1 | 0.245 |
| 32 | 25 | 16 | 700 | 800 000 624 | 1 | 0.365 | 800 000 634 | 1 | 0.365 |
| 40 | 32 | 16 | 1000 | 800 000 625 | 1 | 0.660 | 800 000 635 | 1 | 0.660 |
| 50 | 40 | 16 | 1600 | 800 000 626 | 1 | 0.890 | 800 000 636 | 1 | 0.890 |
| 63 | 50 | 16 | 3100 | 800 000 627 | 1 | 1.650 | 800 000 637 | 1 | 1.650 |
| 75 | 65 | 16 | 5000 | 800 000 628 | 1 | 5.300 | 800 000 638 | 1 | 5.400 |
| 90 | 80 | 16 | 7000 | 800 000 629 | 1 | 8.000 | 800 000 639 | 1 | 8.100 |
| 110 | 100 | 16 | 11000 | 800 000 630 | 1 | 12.700 | 800 000 640 | 1 | 12.800 |



| d (mm) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) | closest inch (inch) |
|-----------|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|-----|-----------|---------------------------|
| 16 | 50 | 57 | 27 | 12 | 92 | 77 | 56 | 25 | 32 | 45 | M6 | 64 | 3/8 |
| 20 | 50 | 57 | 27 | 12 | 95 | 77 | 56 | 25 | 32 | 45 | M6 | 64 | 1/2 |
| 25 | 58 | 67 | 30 | 12 | 110 | 97 | 65 | 25 | 39 | 58 | M6 | 72 | 3/4 |
| 32 | 68 | 73 | 36 | 12 | 123 | 97 | 71 | 25 | 39 | 58 | M6 | 79 | 1 |
| 40 | 84 | 90 | 44 | 15 | 146 | 128 | 85 | 45 | 54 | 74 | M8 | 94 | 1 1/4 |
| 50 | 97 | 97 | 51 | 15 | 157 | 128 | 89 | 45 | 54 | 74 | M8 | 95 | 1 1/2 |
| 63 | 124 | 116 | 64 | 15 | 183 | 152 | 101 | 45 | 66 | 87 | M8 | 107 | 2 |
| 75 | 166 | 149 | 85 | 15 | 233 | 270 | 136 | 70 | 64 | 206 | M8 | 144 | 2 1/2 |
| 90 | 200 | 161 | 105 | 15 | 254 | 270 | 141 | 70 | 64 | 206 | M8 | 151 | 3 |
| 110 | 238 | 178 | 123 | 22 | 301 | 320 | 164 | 120 | 64 | 256 | M12 | 174 | 4 |



Diaphragm valves type 317



Diaphragm valve type 317 PVC-C SF With flanges

Model:

- Silicone free/paint-compatible
- Flat sealing faces
- DN 15-65 with backing flange
- DN 80-150 with fixed flange
- Overall length according to EN 558

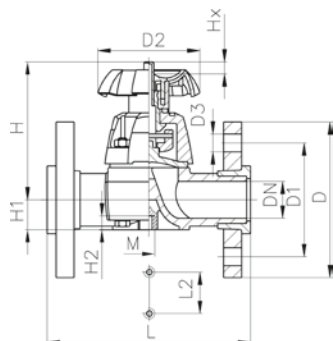
Option:

- Handwheel lockable DN15-65 (basic version not lockable)

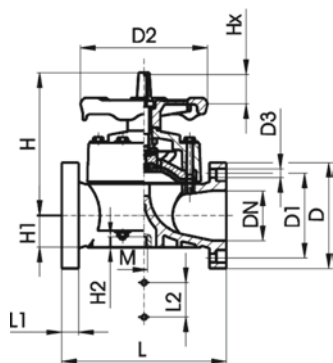
* DN80 and DN150 fixed flanges metric and inch ANSI B16.5

| | d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | Weight (kg) | PTFE with EPDM supp. Diaphragm Code | Weight (kg) |
|---|-----------|------------|----------------|-------------|--|--------------------|----------------|--|----------------|
| | 75 | 65 | 2 ½ | 10 | 992 | 163 317 723 | 4.425 | 163 317 738 | 4.425 |
| * | 90 | 80 | 3 | 10 | 1700 | 163 317 724 | 9.750 | 163 317 739 | 9.750 |
| | 110 | 100 | 4 | 6 | 2700 | 163 317 725 | 13.600 | 163 317 740 | 13.600 |

| | d (mm) | D (mm) | D1 (mm) | D2 (mm) | D3 (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | M | AL |
|---|-----------|-----------|------------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----|----|
| | 75 | 185 | 145 | 152 | 18 | 201 | 46 | 15 | 290 | | 70 | M8 | 4 |
| * | 90 | 200 | 160 | 270 | 18 | 265 | 57 | 23 | 310 | 35 | 120 | M12 | 8 |
| | 110 | 225 | 180 | 270 | 18 | 304 | 69 | 23 | 350 | 35 | 120 | M12 | 8 |



DN 15-65



DN 80-100

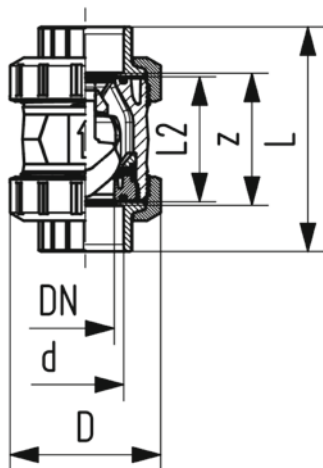
Cone check valves



Check valve type 562 PVC-C SF With solvent cement sockets metric

Model:

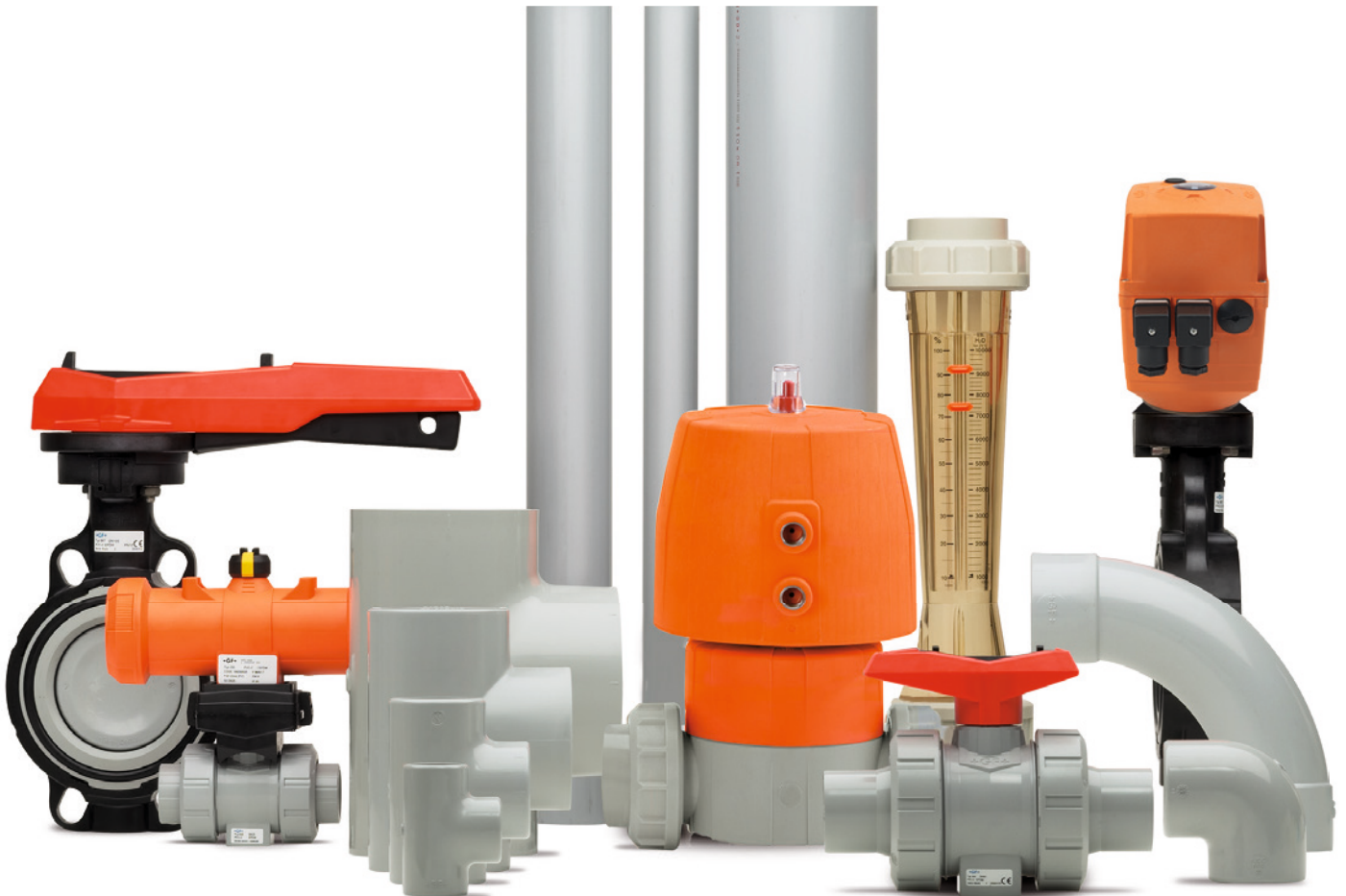
- For horizontal or vertical installation
- Sealing at a minimum water column of 1 m
- Silicone free/paint-compatible
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360
- New DN65-DN100




















| d (mm) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|------------|-------------|--|--------------------|----|----------------|--------------------|----|----------------|
| 16 | 10 | 16 | 190 | 163 562 201 | 1 | 0.120 | 163 562 211 | 1 | 0.120 |
| 20 | 15 | 16 | 180 | 163 562 202 | 1 | 0.120 | 163 562 212 | 1 | 0.120 |
| 25 | 20 | 16 | 380 | 163 562 203 | 1 | 0.260 | 163 562 213 | 1 | 0.280 |
| 32 | 25 | 16 | 460 | 163 562 204 | 1 | 0.280 | 163 562 214 | 1 | 0.280 |
| 40 | 32 | 16 | 850 | 163 562 205 | 1 | 0.490 | 163 562 215 | 1 | 0.490 |
| 50 | 40 | 16 | 1080 | 163 562 206 | 1 | 0.710 | 163 562 216 | 1 | 0.710 |
| 63 | 50 | 16 | 1670 | 163 562 207 | 1 | 1.460 | 163 562 217 | 1 | 1.470 |
| 75 | 65 | 16 | 2950 | 163 562 208 | 1 | 3.460 | 163 562 218 | 1 | 3.480 |
| 90 | 80 | 16 | 3600 | 163 562 209 | 1 | 5.540 | 163 562 219 | 1 | 5.570 |
| 110 | 100 | 16 | 4150 | 163 562 210 | 1 | 8.930 | 163 562 220 | 1 | 8.970 |

| d (mm) | D (mm) | L (mm) | L2 (mm) | z (mm) | closest inch (inch) |
|-----------|-----------|-----------|------------|-----------|---------------------------|
| 16 | 50 | 92 | 56 | 64 | $\frac{3}{8}$ |
| 20 | 50 | 95 | 56 | 64 | $\frac{1}{2}$ |
| 25 | 58 | 110 | 65 | 72 | $\frac{3}{4}$ |
| 32 | 68 | 123 | 71 | 79 | 1 |
| 40 | 84 | 146 | 85 | 94 | $1 \frac{1}{4}$ |
| 50 | 97 | 157 | 89 | 95 | $1 \frac{1}{2}$ |
| 63 | 124 | 183 | 101 | 107 | 2 |
| 75 | 166 | 233 | 136 | 144 | $2 \frac{1}{2}$ |
| 90 | 200 | 254 | 141 | 151 | 3 |
| 110 | 238 | 301 | 164 | 174 | 4 |

PVC-C ASTM / ANSI / BS



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Diaphragm valves DIASTAR big dimensions

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Diaphragm valves pneumatic type 604

279



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282



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284



Process control valves

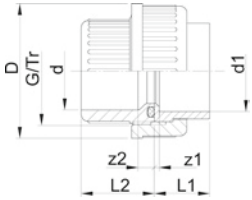
285



Cone check valves

286

Unions



Adaptor union PVC-C metric ASTM

Model:

- Union End: PVC-C solvent cement socket inch ASTM
- Union bush: PVC-C solvent cement socket metric
- Gasket: O-ring EPDM code no. 748 410 005-011
- Gasket: O-ring FKM code no. 749 410 005-011

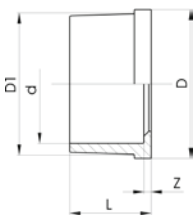
| d (mm) | PN (bar) | d1 (inch) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|-------------|--------------|--------------------|----|----------------|--------------------|----|----------------|
| 16 | 10 | 3/8 | 723 514 105 | 10 | 0.022 | 723 514 130 | 1 | 0.022 |
| 20 | 10 | 1/2 | 723 514 106 | 10 | 0.047 | 723 514 131 | 1 | 0.047 |
| 25 | 10 | 3/4 | 723 514 107 | 10 | 0.065 | 723 514 132 | 1 | 0.065 |
| 32 | 10 | 1 | 723 514 108 | 10 | 0.103 | 723 514 133 | 1 | 0.093 |
| 40 | 10 | 1 1/4 | 723 514 109 | 10 | 0.174 | 723 514 134 | 1 | 0.161 |
| 50 | 10 | 1 1/2 | 723 514 110 | 5 | 0.239 | 723 514 135 | 1 | 0.226 |
| 63 | 10 | 2 | 723 514 111 | 5 | 0.435 | 723 514 136 | 1 | 0.372 |

| d (mm) | z1 (mm) | z2 (mm) | D (mm) | L1 (mm) | L2 (mm) | G (inch) |
|-----------|------------|------------|-----------|------------|------------|-------------|
| 16 | 19 | 14 | 35 | 22 | 25 | 3/4 |
| 20 | 20 | 16 | 43 | 25 | 26 | 1 |
| 25 | 25 | 19 | 51 | 28 | 29 | 1 1/4 |
| 32 | 29 | 22 | 58 | 31 | 33 | 1 1/2 |
| 40 | 32 | 26 | 74 | 35 | 39 | 2 |
| 50 | 35 | 31 | 83 | 38 | 46 | 2 1/4 |
| 63 | 38 | 37 | 100 | 41 | 58 | 2 3/4 |

Union end PVC-C ASTM

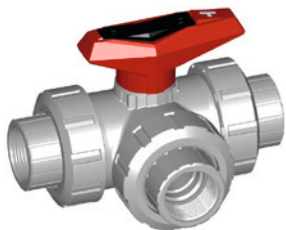
Model:

- For union 723 510 105-114
- With solvent cement socket ASTM



| PN (bar) | d1 (inch) | Code | SP | Weight (kg) | z (mm) | D (mm) | D1 (mm) | L (mm) |
|-------------|--------------|--------------------|-----|----------------|-----------|-----------|------------|-----------|
| 16 | 3/8 | 723 602 005 | 500 | 0.006 | 3 | 24 | 22 | 22 |
| 16 | 1/2 | 723 602 006 | 500 | 0.013 | 3 | 30 | 28 | 25 |
| 16 | 3/4 | 723 602 007 | 603 | 0.016 | 3 | 39 | 36 | 28 |
| 16 | 1 | 723 602 008 | 650 | 0.025 | 3 | 45 | 42 | 32 |
| 16 | 1 1/4 | 723 602 009 | 210 | 0.040 | 3 | 57 | 53 | 35 |
| 16 | 1 1/2 | 723 602 010 | 380 | 0.049 | 3 | 63 | 59 | 38 |
| 16 | 2 | 723 602 011 | 250 | 0.080 | 3 | 78 | 74 | 41 |
| 16 | 2 1/2 | 723 602 012 | 20 | 0.169 | 3 | 101 | 91 | 47 |
| 16 | 3 | 723 602 013 | 50 | 0.275 | 5 | 121 | 108 | 56 |
| 16 | 4 | 723 602 014 | 25 | 0.420 | 5 | 146 | 131 | 66 |

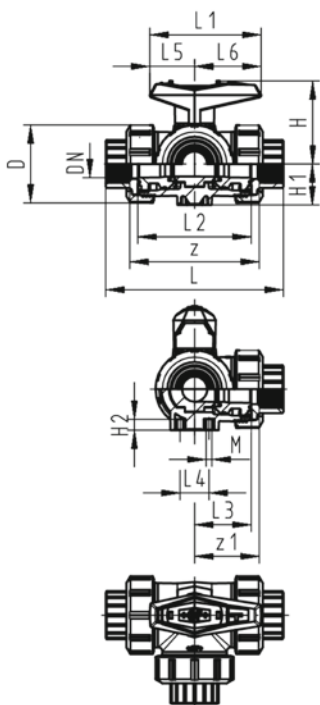
Ball valves type 543



3-Way ball valve type 543 PVC-C Horizontal/T-port With threaded sockets NPT

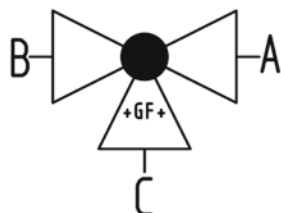
Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme

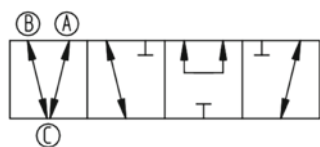


| d (mm) | DN (mm) | Thread | Type | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|--------|------|----------------|-------------|--|---------------|----|----------------|
| 16 | 10 | | NPT | 3/8 | 10 | 140 | 163543301_old | 1 | 0.264 |
| 20 | 15 | | NPT | 1/2 | 10 | 200 | 163543302_old | 1 | 0.271 |
| 25 | 20 | | NPT | 3/4 | 10 | 470 | 163543303_old | 1 | 0.389 |
| 32 | 25 | | NPT | 1 | 10 | 793 | 163543304_old | 1 | 0.590 |
| 40 | 32 | | NPT | 1 1/4 | 10 | 1290 | 163543305_old | 1 | 1.007 |
| 50 | 40 | | NPT | 1 1/2 | 10 | 1910 | 163543306_old | 1 | 1.487 |
| 63 | 50 | | NPT | 2 | 10 | 3100 | 163543307_old | 1 | 2.889 |

| FKM Code | SP | Weight (kg) |
|---------------|----|----------------|
| 163543311_old | 1 | 0.264 |
| 163543312_old | 1 | 0.271 |
| 163543313_old | 1 | 0.389 |
| 163543314_old | 1 | 0.590 |
| 163543315_old | 1 | 1.007 |
| 163543316_old | 1 | 1.487 |
| 163543317_old | 1 | 2.889 |



| D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M (mm) | z (mm) | z1 (mm) |
|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|------------|
| 50 | 57 | 28 | 8 | 115 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 87 | 43 |
| 50 | 57 | 28 | 8 | 114 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 81 | 40 |
| 58 | 67 | 32 | 8 | 131 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 96 | 48 |
| 68 | 73 | 36 | 8 | 155 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 111 | 56 |
| 84 | 90 | 45 | 9 | 181 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 134 | 67 |
| 97 | 97 | 51 | 9 | 205 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 159 | 80 |
| 124 | 116 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 213 | 106 |

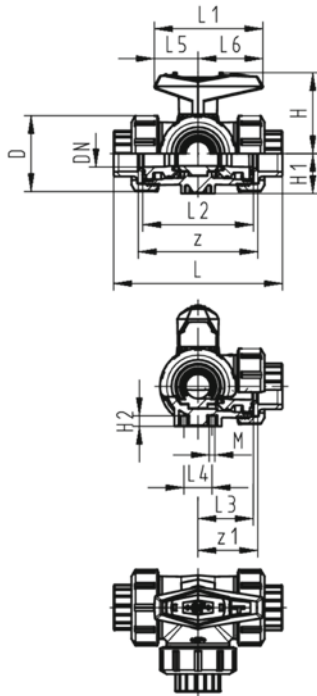




3-Way ball valve type 543 PVC-C
Horizontal/T-port
With solvent cement sockets ASTM

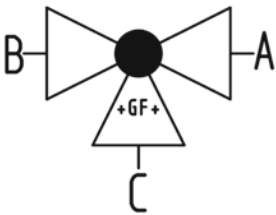
Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme



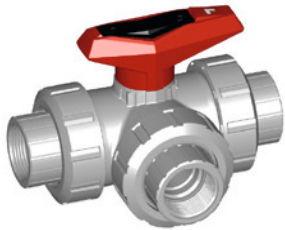
| d | DN | Size | PN | kv-value | EPDM | SP | Weight |
|------|------|--------|-------|---------------------|---------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| | | | | (l/min) | | | |
| 16 | 10 | 3/8 | 10 | 140 | 163543281_old | 1 | 0.264 |
| 20 | 15 | 1/2 | 10 | 200 | 163543282_old | 1 | 0.271 |
| 25 | 20 | 3/4 | 10 | 470 | 163543283_old | 1 | 0.389 |
| 32 | 25 | 1 | 10 | 793 | 163543284_old | 1 | 0.590 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 163543285_old | 1 | 1.007 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 163543286_old | 1 | 1.458 |
| 63 | 50 | 2 | 10 | 3100 | 163543287_old | 1 | 2.889 |

| FKM Code | SP | Weight |
|---------------|----|--------|
| | | (kg) |
| 163543291_old | 1 | 0.264 |
| 163543292_old | 1 | 0.271 |
| 163543293_old | 1 | 0.389 |
| 163543294_old | 1 | 0.590 |
| 163543295_old | 1 | 1.007 |
| 163543296_old | 1 | 1.487 |
| 163543297_old | 1 | 2.889 |



| D | H | H1 | H2 | L | L1 | L2 | L3 | L4 | L5 | L6 | M | z | z1 |
|------|------|------|------|------|------|------|------|------|------|------|---|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) | (mm) |
| 50 | 57 | 28 | 8 | 123 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 85 | 42 |
| 50 | 57 | 28 | 8 | 122 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 77 | 38 |
| 58 | 67 | 32 | 8 | 141 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 92 | 46 |
| 68 | 73 | 36 | 8 | 161 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 105 | 53 |
| 84 | 90 | 45 | 9 | 187 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 126 | 63 |
| 97 | 97 | 51 | 9 | 213 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 143 | 72 |
| 124 | 116 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 185 | 92 |

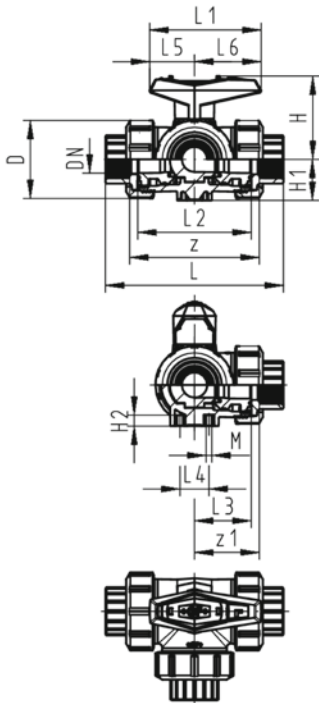




3-Way ball valve type 543 PVC-C
Horizontal/L-port
With threaded sockets NPT

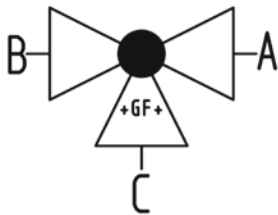
Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme



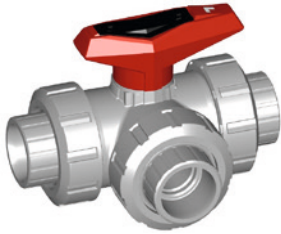
| d (mm) | DN (mm) | Thread Type | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|-------------|----------------|-------------|--|---------------|----|----------------|
| 16 | 10 | NPT | 3/8 | 10 | 50 | 163543101_old | 1 | 0.265 |
| 20 | 15 | NPT | 1/2 | 10 | 75 | 163543102_old | 1 | 0.272 |
| 25 | 20 | NPT | 3/4 | 10 | 150 | 163543103_old | 1 | 0.391 |
| 32 | 25 | NPT | 1 | 10 | 280 | 163543104_old | 1 | 0.598 |
| 40 | 32 | NPT | 1 1/4 | 10 | 480 | 163543105_old | 1 | 1.018 |
| 50 | 40 | NPT | 1 1/2 | 10 | 620 | 163543106_old | 1 | 1.509 |
| 63 | 50 | NPT | 2 | 10 | 1230 | 163543107_old | 1 | 2.938 |

| FKM Code | SP | Weight (kg) |
|---------------|----|----------------|
| 163543111_old | 1 | 0.265 |
| 163543112_old | 1 | 0.272 |
| 163543113_old | 1 | 0.391 |
| 163543114_old | 1 | 0.598 |
| 163543115_old | 1 | 1.018 |
| 163543116_old | 1 | 1.509 |
| 163543117_old | 1 | 2.938 |



| D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) | z1 (mm) |
|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|---|-----------|------------|
| 50 | 57 | 28 | 8 | 115 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 87 | 43 |
| 50 | 57 | 28 | 8 | 114 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 81 | 40 |
| 58 | 67 | 32 | 8 | 131 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 96 | 48 |
| 68 | 73 | 36 | 8 | 155 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 111 | 56 |
| 84 | 90 | 45 | 9 | 181 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 134 | 67 |
| 97 | 97 | 51 | 9 | 205 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 159 | 80 |
| 124 | 116 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 213 | 106 |

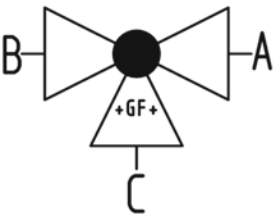
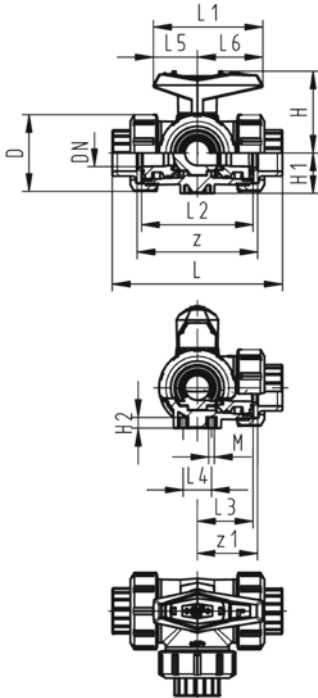




3-Way ball valve type 543 PVC-C
Horizontal/L-port
With solvent cement sockets ASTM

Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme

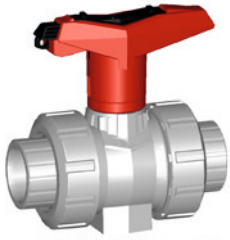


| d | DN | Size | PN | kv-value | EPDM | SP | Weight |
|------|------|--------|-------|---------------------|---------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| | | | | (l/min) | | | |
| 16 | 10 | 3/8 | 10 | 50 | 163543081_old | 1 | 0.265 |
| 20 | 15 | 1/2 | 10 | 75 | 163543082_old | 1 | 0.272 |
| 25 | 20 | 3/4 | 10 | 150 | 163543083_old | 1 | 0.391 |
| 32 | 25 | 1 | 10 | 280 | 163543084_old | 1 | 0.598 |
| 40 | 32 | 1 1/4 | 10 | 480 | 163543085_old | 1 | 1.018 |
| 50 | 40 | 1 1/2 | 10 | 620 | 163543086_old | 1 | 1.480 |
| 63 | 50 | 2 | 10 | 1230 | 163543087_old | 1 | 2.938 |

| FKM Code | SP | Weight |
|---------------|----|--------|
| | | (kg) |
| 163543091_old | 1 | 0.265 |
| 163543092_old | 1 | 0.272 |
| 163543093_old | 1 | 0.391 |
| 163543094_old | 1 | 0.598 |
| 163543095_old | 1 | 1.018 |
| 163543096_old | 1 | 1.496 |
| 163543097_old | 1 | 2.938 |

| D | H | H1 | H2 | L | L1 | L2 | L3 | L4 | L5 | L6 | M | z | z1 |
|------|------|------|------|------|------|------|------|------|------|------|---|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) | (mm) |
| 50 | 57 | 28 | 8 | 123 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 85 | 42 |
| 50 | 57 | 28 | 8 | 122 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 77 | 38 |
| 58 | 67 | 32 | 8 | 141 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 92 | 46 |
| 68 | 73 | 36 | 8 | 161 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 105 | 53 |
| 84 | 90 | 45 | 9 | 187 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 126 | 63 |
| 97 | 97 | 51 | 9 | 213 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 143 | 72 |
| 124 | 116 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 185 | 92 |

Ball valves type 546



DN10/15 - 50



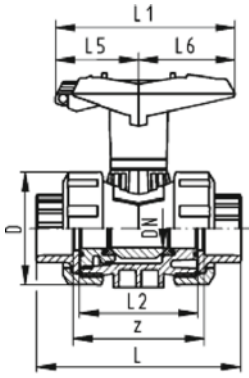
Ball valve type 546 PVC-C
With lockable handle
With solvent cement sockets Inch ASTM
Including 2 threaded union ends NPT

Model:

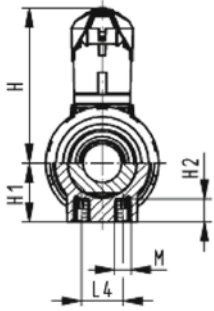
- For easy installation and removal
- Ball seat PTFE
- Integrated stainless steel mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50
- Valve end and union nut are **not compatible** with type 346 (DN10/15-50) and type 370 (DN65-100)
- Lockable hand lever with ratchet settings

Option:

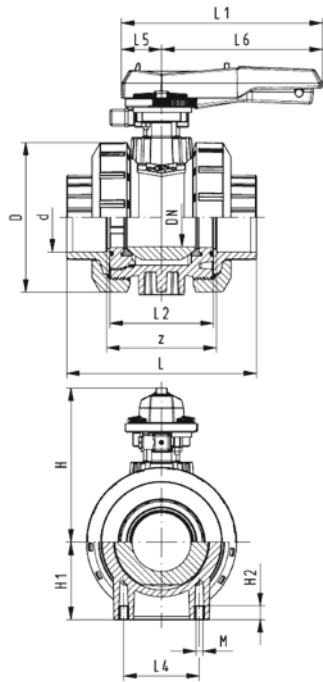
- Individual configuration of the valve
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from GF

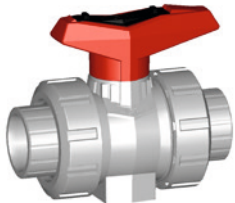


| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|----------------|------------|-------------|--|--------------|----------------------|-------------|----------------------|
| 3/8 | 10 | 16 | 71 | 163 546 361 | 1 | 0.205 | 163 546 371 |
| 1/2 | 15 | 16 | 185 | 163 546 362 | 1 | 0.225 | 163 546 372 |
| 3/4 | 20 | 16 | 350 | 163 546 363 | 1 | 0.325 | 163 546 373 |
| 1 | 25 | 16 | 700 | 163 546 364 | 1 | 0.485 | 163 546 374 |
| 1 1/4 | 32 | 16 | 1000 | 163 546 365 | 1 | 0.840 | 163 546 375 |
| 1 1/2 | 40 | 16 | 1600 | 163 546 366 | 1 | 0.930 | 163 546 376 |
| 2 | 50 | 16 | 3100 | 163 546 367 | 1 | 1.987 | 163 546 377 |
| 2 1/2 | 65 | 16 | 5000 | 163 546 368 | 1 | 5.800 | 163 546 378 |
| 3 | 80 | 16 | 7000 | 163 546 369 | 1 | 8.500 | 163 546 379 |
| 4 | 100 | 16 | 11000 | 163 546 370 | 1 | 13.100 | 163 546 380 |

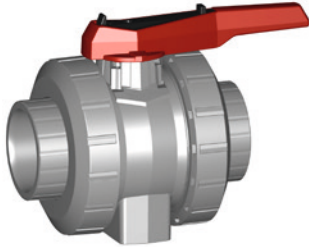


| Size (inch) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) |
|----------------|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|-----|-----------|
| 3/8 | 50 | 79 | 27 | 12 | 105 | 87 | 56 | 25 | 42 | 45 | M6 | 67 |
| 1/2 | 50 | 79 | 27 | 12 | 105 | 87 | 56 | 25 | 42 | 45 | M6 | 61 |
| 3/4 | 58 | 88 | 30 | 12 | 121 | 108 | 65 | 25 | 50 | 58 | M6 | 70 |
| 1 | 68 | 94 | 36 | 12 | 133 | 108 | 71 | 25 | 50 | 58 | M6 | 76 |
| 1 1/4 | 84 | 113 | 44 | 15 | 154 | 140 | 85 | 45 | 66 | 75 | M8 | 90 |
| 1 1/2 | 97 | 119 | 51 | 15 | 164 | 140 | 89 | 45 | 66 | 75 | M8 | 94 |
| 2 | 124 | 141 | 64 | 15 | 183 | 165 | 101 | 45 | 78 | 87 | M8 | 107 |
| 2 1/2 | 166 | 224 | 85 | 15 | 233 | 270 | 136 | 70 | 64 | 206 | M8 | 144 |
| 3 | 200 | 235 | 105 | 15 | 254 | 270 | 141 | 70 | 64 | 206 | M8 | 151 |
| 4 | 238 | 245 | 123 | 22 | 301 | 320 | 164 | 120 | 64 | 256 | M12 | 174 |





DN10/15 - 50



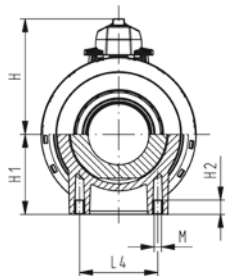
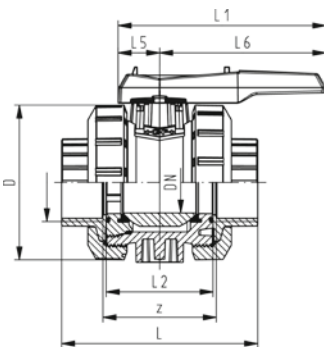
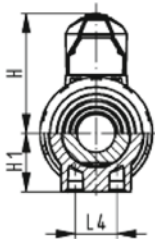
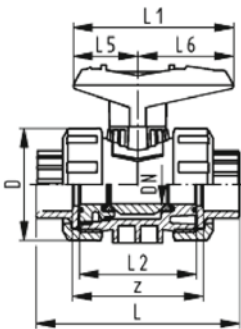
Ball valve type 546 PVC-C
With solvent cement sockets Inch ASTM
Including 2 threaded union ends NPT

Model:

- For easy installation and removal
- Ball seat PTFE
- Without mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50
- Valve end and union nut are **not compatible** with type 346 (DN10/15-50) and type 370 (DN65-100)

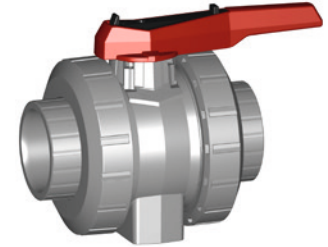
Option:

- Individual configuration of the valve
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from GF



| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|----------------|------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 3/8 | 10 | 16 | 71 | 163 546 301 | 1 | 0.190 | 163 546 311 | 1 | 0.190 |
| 1/2 | 15 | 16 | 185 | 163 546 302 | 1 | 0.242 | 163 546 312 | 1 | 0.244 |
| 3/4 | 20 | 16 | 350 | 163 546 303 | 1 | 0.349 | 163 546 313 | 1 | 0.300 |
| 1 | 25 | 16 | 700 | 163 546 304 | 1 | 0.512 | 163 546 314 | 1 | 0.515 |
| 1 1/4 | 32 | 16 | 1000 | 163 546 305 | 1 | 0.651 | 163 546 315 | 1 | 0.800 |
| 1 1/2 | 40 | 16 | 1600 | 163 546 306 | 1 | 1.158 | 163 546 316 | 1 | 0.905 |
| 2 | 50 | 16 | 3100 | 163 546 307 | 1 | 2.045 | 163 546 317 | 1 | 2.068 |
| 2 1/2 | 65 | 16 | 5000 | 163 546 308 | 1 | 5.400 | 163 546 318 | 1 | 3.871 |
| 3 | 80 | 16 | 7000 | 163 546 309 | 1 | 5.809 | 163 546 319 | 1 | 8.100 |
| 4 | 100 | 16 | 11000 | 163 546 310 | 1 | 9.544 | 163 546 320 | 1 | 9.541 |

| Size (inch) | D (mm) | H (mm) | H1 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | z (mm) |
|----------------|-----------|-----------|------------|-----------|------------|------------|------------|------------|------------|-----------|
| 3/8 | 50 | 57 | 27 | 105 | 77 | 56 | 25 | 32 | 45 | 67 |
| 1/2 | 50 | 57 | 27 | 105 | 77 | 56 | 25 | 32 | 45 | 61 |
| 3/4 | 58 | 67 | 30 | 121 | 97 | 65 | 25 | 39 | 58 | 70 |
| 1 | 68 | 73 | 36 | 133 | 97 | 71 | 25 | 39 | 58 | 76 |
| 1 1/4 | 84 | 90 | 44 | 154 | 128 | 85 | 45 | 54 | 74 | 90 |
| 1 1/2 | 97 | 97 | 51 | 164 | 128 | 89 | 45 | 54 | 74 | 94 |
| 2 | 124 | 116 | 64 | 183 | 152 | 101 | 45 | 66 | 87 | 107 |
| 2 1/2 | 166 | 149 | 85 | 233 | 270 | 136 | 70 | 64 | 206 | 144 |
| 3 | 200 | 161 | 105 | 254 | 270 | 141 | 70 | 64 | 206 | 151 |
| 4 | 238 | 178 | 123 | 301 | 320 | 164 | 120 | 64 | 256 | 174 |



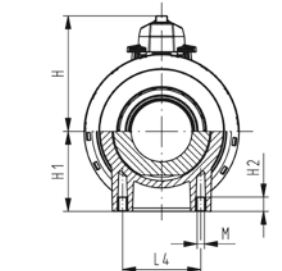
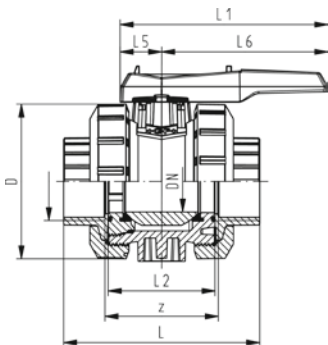
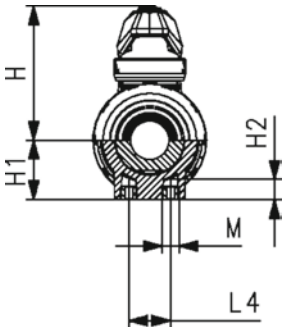
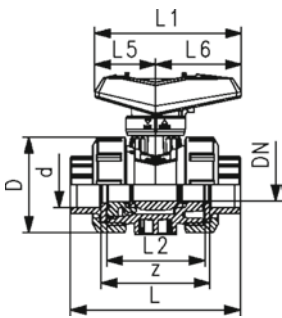
Ball valve type 546 Pro PVC-C
With solvent cement sockets Inch ASTM
Including 2 threaded union ends NPT

Model:

- Lockable lever as standard (DN10-DN50)
- For easy installation and removal
- Ball seat PTFE
- Integrated stainless steel mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50
- Z-dimension, valve end and union nut **are compatible** with type 546 (1st Generation)

Option:

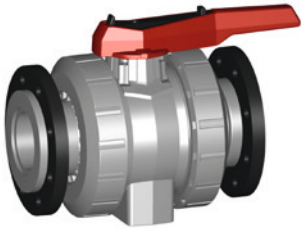
- Interface-module with position feedback sensor, incl. LED feedback (DN10-50)
- Manual spring return lever ("Dead man") (DN10-25)
- Pneumatic or electric actuators from GF
- Individual configuration of the valve possible
- Multifunctional module with integrated limit switches (DN65-100)



| d (mm) | DN (mm) | Thread | Type | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|--------|------|----------------|-------------|--|--------------------|----|----------------|
| 16 | 10 | NPT | | 3/8 | 16 | 71 | 163 546 341 | 1 | 0.194 |
| 20 | 15 | NPT | | 1/2 | 16 | 185 | 163 546 342 | 1 | 0.248 |
| 25 | 20 | NPT | | 3/4 | 16 | 350 | 163 546 343 | 1 | 0.358 |
| 32 | 25 | NPT | | 1 | 16 | 700 | 163 546 344 | 1 | 0.517 |
| 40 | 32 | NPT | | 1 1/4 | 16 | 1000 | 163 546 345 | 1 | 0.652 |
| 50 | 40 | NPT | | 1 1/2 | 16 | 1600 | 163 546 346 | 1 | 1.166 |
| 63 | 50 | NPT | | 2 | 16 | 3100 | 163 546 347 | 1 | 2.055 |
| 75 | 65 | NPT | | 2 1/2 | 16 | 5000 | 163 546 348 | 1 | 5.400 |
| 90 | 80 | NPT | | 3 | 16 | 7000 | 163 546 349 | 1 | 5.821 |
| 110 | 100 | NPT | | 4 | 16 | 11000 | 163 546 350 | 1 | 12.800 |

| FKM Code | SP | Weight (kg) |
|--------------------|----|----------------|
| 163 546 351 | 1 | 0.194 |
| 163 546 352 | 1 | 0.250 |
| 163 546 353 | 1 | 0.267 |
| 163 546 354 | 1 | 0.520 |
| 163 546 355 | 1 | 0.810 |
| 163 546 356 | 1 | 1.180 |
| 163 546 357 | 1 | 2.078 |
| 163 546 358 | 1 | 5.400 |
| 163 546 359 | 1 | 6.689 |
| 163 546 360 | 1 | 12.800 |

| D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) |
|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|-----|-----------|
| 50 | 61 | 27 | 12 | 92 | 82 | 56 | 25 | 35 | 47 | M6 | 68 |
| 50 | 61 | 27 | 12 | 95 | 82 | 56 | 25 | 35 | 47 | M6 | 67 |
| 58 | 74 | 30 | 12 | 110 | 106 | 65 | 25 | 44 | 62 | M6 | 70 |
| 68 | 80 | 36 | 12 | 123 | 106 | 71 | 25 | 44 | 62 | M6 | 82 |
| 84 | 95 | 44 | 15 | 146 | 131 | 85 | 45 | 57 | 74 | M8 | 98 |
| 97 | 102 | 51 | 15 | 157 | 131 | 89 | 45 | 57 | 74 | M8 | 99 |
| 124 | 117 | 64 | 15 | 183 | 152 | 101 | 45 | 66 | 86 | M8 | 111 |
| 166 | 150 | 85 | 15 | 233 | 270 | 136 | 70 | 64 | 206 | M8 | 148 |
| 200 | 161 | 105 | 15 | 255 | 270 | 141 | 70 | 64 | 206 | M8 | 163 |
| 238 | 178 | 123 | 22 | 301 | 320 | 164 | 120 | 64 | 256 | M12 | 178 |



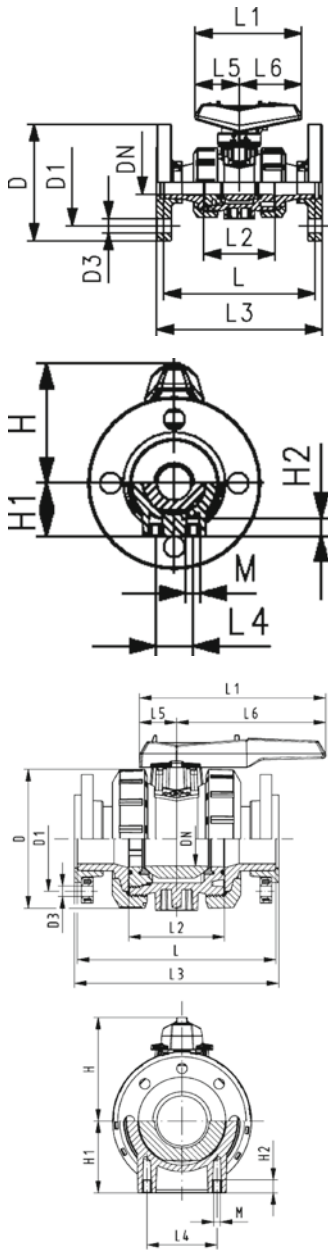
Ball valve type 546 Pro PVC-C
With backing flanges PP-st Inch ANSI

Model:

- For easy installation and removal
- Ball seat PTFE
- Integrated stainless steel mounting inserts
- Z-dimension, valve end and union nut **are compatible** with type 546 (1st Generation)
- Overall length according to EN 558 (basic series: row 1)
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

Option:

- Pneumatic or electric actuators from GF
- Multifunctional module with integrated limit switches (DN65-100)
- Individual configuration of the valve possible



| d | DN | Size | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|--------|-------|---------------------|--------------------|----|--------|--------------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| | 15 | ½ | 16 | 185 | 800 024 423 | 1 | 0.600 | 800 059 402 | 1 | 0.700 |
| | 20 | ¾ | 16 | 350 | 800 014 862 | 1 | 0.760 | 800 047 037 | 1 | 0.700 |
| | 25 | 1 | 16 | 700 | 800 024 425 | 1 | 1.250 | 800 046 363 | 1 | 1.200 |
| | 32 | 1 ¼ | 16 | 1000 | 800 070 456 | 1 | 1.300 | 800 070 458 | 1 | 1.300 |
| | 40 | 1 ½ | 16 | 1600 | 800 063 570 | 1 | 1.500 | 800 047 209 | 1 | 2.300 |
| | 50 | 2 | 16 | 3100 | 800 044 800 | 1 | 1.695 | 800 012 189 | 1 | 3.580 |
| | 75 | 2 ½ | 16 | 5000 | 163 546 168 | 1 | 6.000 | 163 546 178 | 1 | 6.000 |
| | 90 | 3 | 16 | 7000 | 163 546 169 | 1 | 9.100 | 163 546 179 | 1 | 9.100 |
| | 110 | 4 | 16 | 11000 | 163 546 170 | 1 | 14.200 | 163 546 180 | 1 | 14.200 |

| d | D | D1 | D3 | H | H1 | H2 | L1 | L2 | L3 | L4 | L5 | L6 | M |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | |
| | 96 | 70 | 15 | 87 | 27 | 12 | 82 | 56 | 130 | 25 | 35 | 47 | M6 |
| | 101 | 75 | 15 | 104 | 30 | 12 | 105 | 65 | 150 | 25 | 44 | 62 | M6 |
| | 123 | 90 | 19 | 115 | 36 | 12 | 105 | 71 | 160 | 25 | 44 | 74 | M6 |
| | 135 | 100 | 19 | 139 | 44 | 12 | 131 | 85 | 180 | 45 | 57 | 74 | M8 |
| | 140 | 105 | 19 | 152 | 51 | 12 | 131 | 89 | 200 | 45 | 57 | 74 | M8 |
| | 165 | 120 | 19 | 181 | 64 | 12 | 152 | 101 | 230 | 45 | 66 | 86 | M8 |
| 75 | 185 | 140 | 19 | 150 | 85 | 15 | 269 | 136 | 290 | 70 | 64 | 206 | M8 |
| 90 | 200 | 152 | 19 | 161 | 105 | 15 | 269 | 141 | 310 | 70 | 64 | 206 | M8 |
| 110 | 229 | 190 | 19 | 178 | 123 | 22 | 319 | 164 | 350 | 120 | 64 | 256 | M12 |



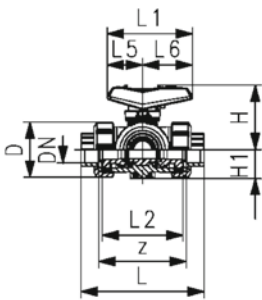
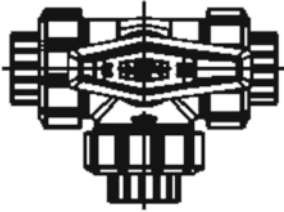
3-Way ball valve type 543 Pro PVC-C
Horizontal/T-port
With solvent cement sockets metric

Model:

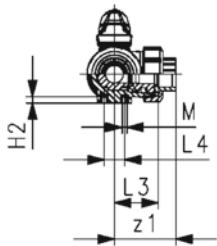
- Lockable lever as standard (DN10-DN50)
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme
- Z-dimension, valve end and union nut are compatible with type 543 (1stGeneration)

Option:

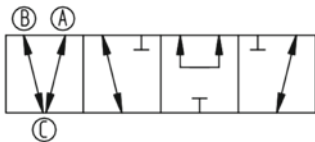
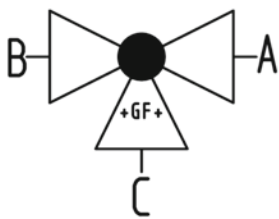
- Interface-module with position feedback sensor, incl. LED feedback (DN10-50)
- Manual spring return lever ("Dead man") (DN10-25)
- Pneumatic or electric actuators from GF
- Individual configuration of the valve possible



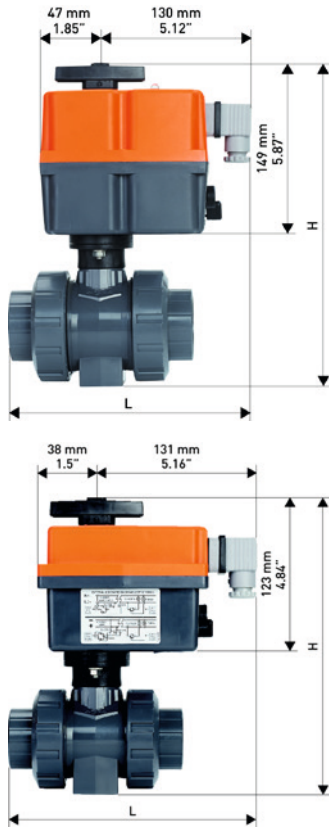
| d | DN | Size | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|--------|-------|---------------------|--------------------|----|--------|--------------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| 16 | 10 | 3/8 | 10 | 140 | 163 543 201 | 1 | 0.264 | 163 543 211 | 1 | 0.264 |
| 20 | 15 | 1/2 | 10 | 200 | 163 543 202 | 1 | 0.271 | 163 543 212 | 1 | 0.271 |
| 25 | 20 | 3/4 | 10 | 470 | 163 543 203 | 1 | 0.389 | 163 543 213 | 1 | 0.389 |
| 32 | 25 | 1 | 10 | 793 | 163 543 204 | 1 | 0.561 | 163 543 214 | 1 | 0.590 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 163 543 205 | 1 | 1.007 | 163 543 215 | 1 | 1.007 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 163 543 206 | 1 | 1.487 | 163 543 216 | 1 | 1.487 |
| 63 | 50 | 2 | 10 | 3100 | 163 543 207 | 1 | 2.889 | 163 543 217 | 1 | 2.889 |



| d | D | H | H1 | H2 | L | L1 | L2 | L3 | L4 | L5 | L6 | M | z | z1 | closest |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | inch |
| 16 | 50 | 61 | 28 | 8 | 109 | 82 | 73 | 36 | 25 | 35 | 47 | 6 | 81 | 40 | 3/8 |
| 20 | 50 | 61 | 28 | 8 | 112 | 82 | 73 | 36 | 25 | 35 | 47 | 6 | 81 | 40 | 1/2 |
| 25 | 58 | 74 | 32 | 8 | 131 | 106 | 86 | 43 | 25 | 44 | 62 | 6 | 94 | 47 | 3/4 |
| 32 | 68 | 80 | 36 | 8 | 151 | 106 | 99 | 50 | 25 | 44 | 62 | 6 | 107 | 54 | 1 |
| 40 | 84 | 95 | 45 | 9 | 181 | 131 | 120 | 60 | 45 | 57 | 74 | 8 | 130 | 65 | 1 1/4 |
| 50 | 97 | 102 | 51 | 9 | 205 | 131 | 137 | 69 | 45 | 57 | 74 | 8 | 143 | 72 | 1 1/2 |
| 63 | 124 | 117 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 86 | 8 | 185 | 92 | 2 |



Ball valves electric type 104



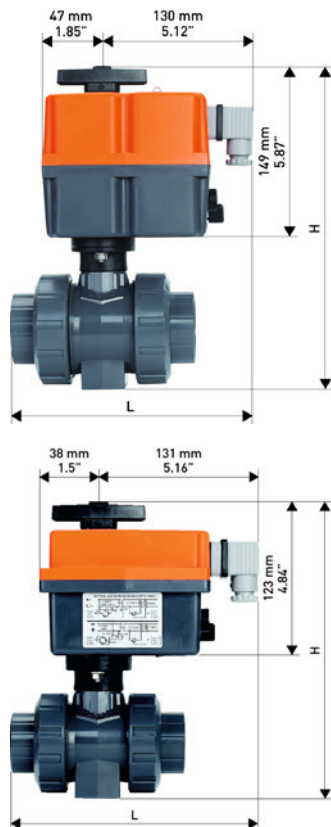
Ball valve type 104 PVC-C 24V With solvent cement sockets Inch ASTM Inclusive 2 threaded valve ends NPT

Model:

- Voltage according data sheet
- Control range 90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | Tension | EPDM Code | SP | Weight (kg) | FKM Code |
|-----------|------------|----------------|-------------|--|---------|--------------------|----|----------------|--------------------|
| 16 | 10 | 3/8 | 10 | 70 | 24V | 199 104 342 | 1 | 0.995 | 199 104 352 |
| 20 | 15 | 1/2 | 10 | 185 | 24V | 199 104 343 | 1 | 0.995 | 199 104 353 |
| 25 | 20 | 3/4 | 10 | 350 | 24V | 199 104 344 | 1 | 1.050 | 199 104 354 |
| 32 | 25 | 1 | 10 | 700 | 24V | 199 104 345 | 1 | 1.120 | 199 104 355 |
| 40 | 32 | 1 1/4 | 10 | 1000 | 24V | 199 104 346 | 1 | 1.290 | 199 104 356 |
| | 40 | | 10 | 1600 | 24-240V | 199 104 347 | 1 | 2.010 | 199 104 357 |
| | 50 | | 10 | 3100 | 24-240V | 199 104 348 | 1 | 2.395 | 199 104 358 |

| H (mm) | L (mm) | Type of actuator | Inch (inch) | B (mm) |
|-----------|-----------|------------------|----------------|-----------|
| 194 | 178.5 | 10Nm | 3/8 | 50 |
| 194 | 178.5 | 10Nm | 1/2 | 50 |
| 207 | 186.0 | 10Nm | 3/4 | 58 |
| 217 | 192.5 | 10Nm | 1 | 68 |
| 236 | 204.5 | 10Nm | 1 1/4 | 84 |
| 275 | 208.5 | 20Nm | 1 1/2 | 97 |
| 307 | 221.5 | 20Nm | 2 | 124 |



Ball valve type 104 PVC-C 100-230V
With solvent cement sockets Inch ASTM
Inclusive 2 threaded valve ends NPT

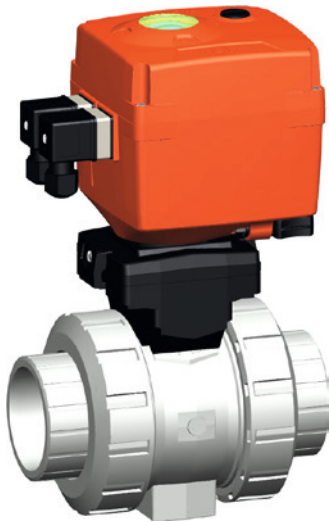
Model:

- Voltage according data sheet
- Control range 90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | Tension | EPDM Code | SP | Weight (kg) | FKM Code |
|-----------|------------|----------------|-------------|--|----------|--------------------|----|----------------|--------------------|
| 16 | 10 | 3/8 | 10 | 70 | 100-230V | 199 104 322 | 1 | 0.995 | 199 104 332 |
| 20 | 15 | 1/2 | 10 | 185 | 100-230V | 199 104 323 | 1 | 0.995 | 199 104 333 |
| 25 | 20 | 3/4 | 10 | 350 | 100-230V | 199 104 324 | 1 | 1.050 | 199 104 334 |
| 32 | 25 | 1 | 10 | 700 | 100-230V | 199 104 325 | 1 | 1.120 | 199 104 335 |
| 40 | 32 | 1 1/4 | 10 | 1000 | 100-230V | 199 104 326 | 1 | 1.290 | 199 104 336 |
| | 40 | | 10 | 1600 | 24-240V | 199 104 347 | 1 | 2.010 | 199 104 357 |
| | 50 | | 10 | 3100 | 24-240V | 199 104 348 | 1 | 2.395 | 199 104 358 |

| H (mm) | L (mm) | Type of actuator | Inch (inch) | B (mm) |
|-----------|-----------|------------------|----------------|-----------|
| 194 | 178.5 | 10Nm | 3/8 | 50 |
| 194 | 178.5 | 10Nm | 1/2 | 50 |
| 207 | 186.0 | 10Nm | 3/4 | 58 |
| 217 | 192.5 | 10Nm | 1 | 68 |
| 236 | 204.5 | 10Nm | 1 1/4 | 84 |
| 275 | 208.5 | 20Nm | 1 1/2 | 97 |
| 307 | 221.5 | 20Nm | 2 | 124 |

Ball valves electric type 127



Ball valve type 127 PVC-C 100-230V
With manual emergency override
With solvent cement sockets Inch ASTM
Inclusive 2 threaded valve ends NPT

Model:

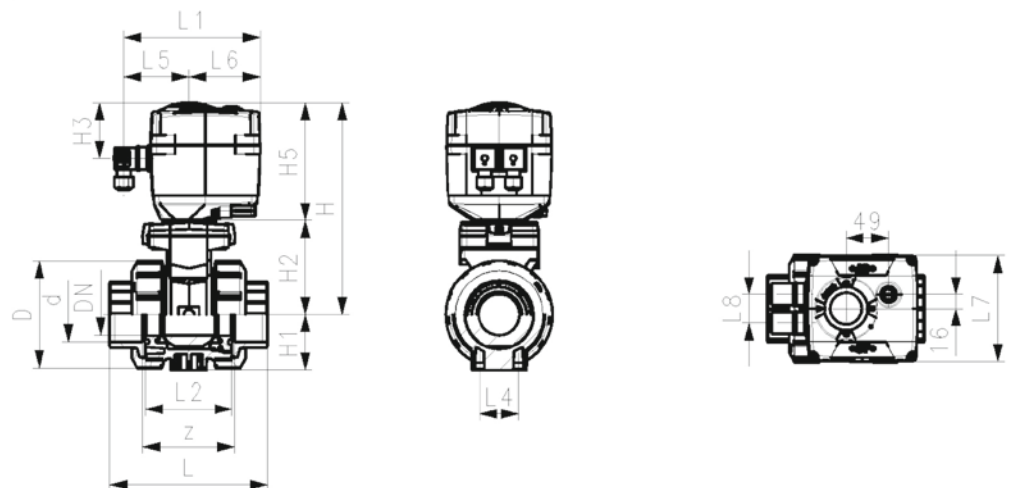
- Built on with electric actuator EA15
- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Heating element, position feedback (Open/Close)
- Integrated stainless steel mounting inserts

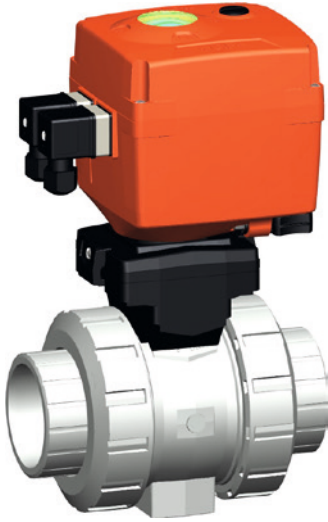
Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit

| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | Weight (kg) | FKM Code | Weight (kg) |
|----------------|------------|-------------|--|--------------|----------------|-------------|----------------|
| 3/8 | 10 | 10 | 70 | 199 127 302 | 2.100 | 199 127 312 | 2.100 |
| 1/2 | 15 | 10 | 185 | 199 127 303 | 2.100 | 199 127 313 | 2.100 |
| 3/4 | 20 | 10 | 350 | 199 127 304 | 2.200 | 199 127 314 | 2.200 |
| 1 | 25 | 10 | 700 | 199 127 305 | 2.300 | 199 127 315 | 2.300 |
| 1 1/4 | 32 | 10 | 1000 | 199 127 306 | 2.600 | 199 127 316 | 2.600 |
| 1 1/2 | 40 | 10 | 1600 | 199 127 307 | 3.000 | 199 127 317 | 3.000 |
| 2 | 50 | 10 | 3100 | 199 127 308 | 3.800 | 199 127 318 | 3.800 |

| Size (inch) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | L8 (mm) | z (mm) |
|----------------|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|
| 3/8 | 50 | 200 | 27 | 64 | 64 | 137 | 105 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 67 |
| 1/2 | 50 | 200 | 27 | 64 | 64 | 137 | 105 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 61 |
| 3/4 | 58 | 209 | 30 | 73 | 64 | 137 | 121 | 161 | 65 | 25 | 77 | 83 | 122 | 33 | 70 |
| 1 | 68 | 209 | 36 | 73 | 64 | 137 | 133 | 161 | 71 | 25 | 77 | 83 | 122 | 33 | 76 |
| 1 1/4 | 84 | 220 | 44 | 84 | 64 | 137 | 154 | 161 | 85 | 45 | 77 | 83 | 122 | 33 | 90 |
| 1 1/2 | 97 | 220 | 51 | 84 | 64 | 137 | 164 | 161 | 89 | 45 | 77 | 83 | 122 | 33 | 94 |
| 2 | 124 | 243 | 64 | 106 | 64 | 137 | 183 | 161 | 101 | 45 | 77 | 83 | 122 | 33 | 107 |





Ball valve type 127 PVC-C 24V
With manual emergency override
With solvent cement sockets Inch ASTM
Inclusive 2 threaded valve ends NPT

Model:

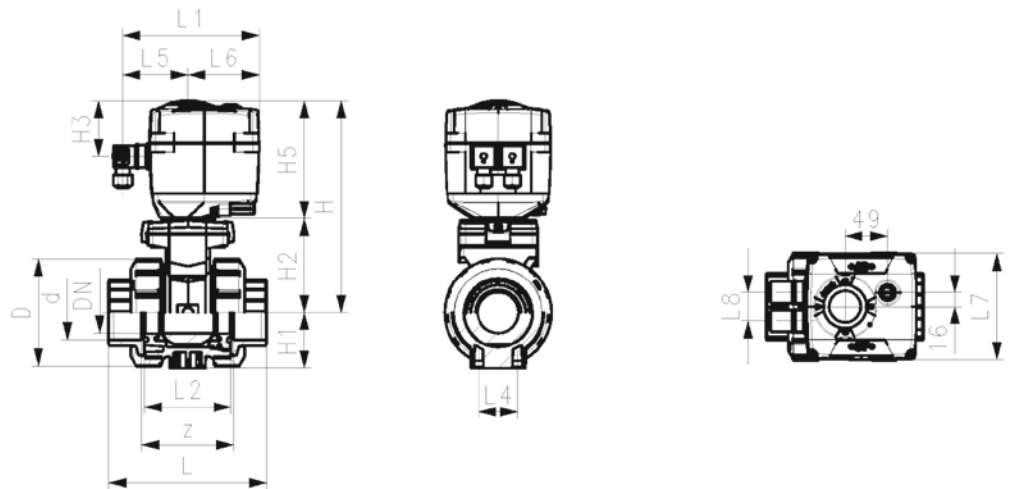
- Built on with electric actuator EA15
- Voltage 24V AC/DC
- Factory set control range 90°<
- Heating element, position feedback (Open/Close)
- Integrated stainless steel mounting inserts

Option:

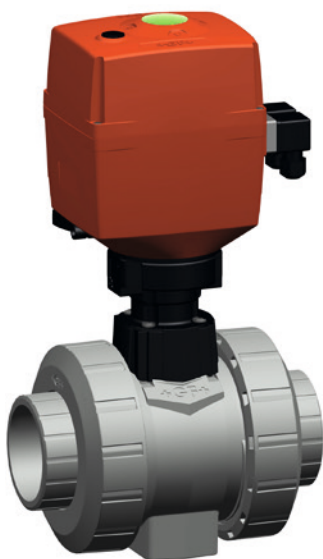
- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit

| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | Weight (kg) | FKM Code | Weight (kg) |
|----------------|------------|-------------|--|--------------|----------------|-------------|----------------|
| 3/8 | 10 | 10 | 70 | 199 127 322 | 2.100 | 199 127 332 | 2.100 |
| 1/2 | 15 | 10 | 185 | 199 127 323 | 2.100 | 199 127 333 | 2.100 |
| 3/4 | 20 | 10 | 350 | 199 127 324 | 2.200 | 199 127 334 | 2.200 |
| 1 | 25 | 10 | 700 | 199 127 325 | 2.300 | 199 127 335 | 2.300 |
| 1 1/4 | 32 | 10 | 1000 | 199 127 326 | 2.600 | 199 127 336 | 2.600 |
| 1 1/2 | 40 | 10 | 1600 | 199 127 327 | 3.000 | 199 127 337 | 3.000 |
| 2 | 50 | 10 | 3100 | 199 127 328 | 3.800 | 199 127 338 | 3.800 |

| Size (inch) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | L8 (mm) | z (mm) |
|----------------|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|
| 3/8 | 50 | 200 | 27 | 64 | 64 | 137 | 105 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 67 |
| 1/2 | 50 | 200 | 27 | 64 | 64 | 137 | 105 | 161 | 56 | 25 | 77 | 83 | 122 | 33 | 61 |
| 3/4 | 58 | 209 | 30 | 73 | 64 | 137 | 121 | 161 | 65 | 25 | 77 | 83 | 122 | 33 | 70 |
| 1 | 68 | 209 | 36 | 73 | 64 | 137 | 133 | 161 | 71 | 25 | 77 | 83 | 122 | 33 | 76 |
| 1 1/4 | 84 | 220 | 44 | 84 | 64 | 137 | 154 | 161 | 85 | 45 | 77 | 83 | 122 | 33 | 90 |
| 1 1/2 | 97 | 220 | 51 | 84 | 64 | 137 | 164 | 161 | 89 | 45 | 77 | 83 | 122 | 33 | 94 |
| 2 | 124 | 243 | 64 | 106 | 64 | 137 | 183 | 161 | 101 | 45 | 77 | 83 | 122 | 33 | 107 |



Ball valves electric type 182



Ball valve type 182 PVC-C 24V
Manual emergency override
Solvent cement sockets Inch ASTM
Incl. 2 threaded valve ends NPT

Model:

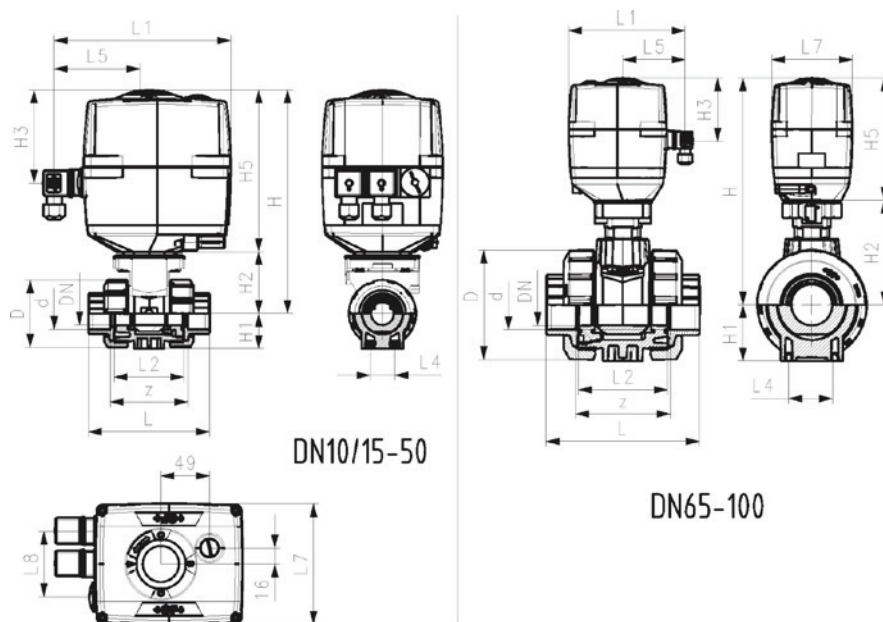
- Voltage 24V AC/DC
- Factory set control range 90°<
- Heating element, position feedback (Open/Close/ Middle)
- Integrated stainless steel mounting inserts

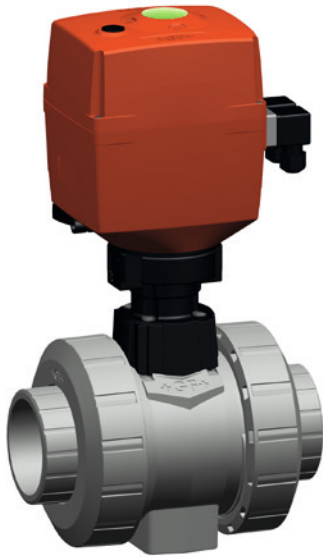
Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EA | EPDM Code | Weight (kg) | FKM Code | Weight (kg) |
|----------------|------------|-------------|--|-------|--------------------|----------------|--------------------|----------------|
| 3/8 | 10 | 10 | 70 | EA25 | 199 182 422 | 2.100 | 199 182 432 | 2.100 |
| 1/2 | 15 | 10 | 185 | EA25 | 199 182 423 | 2.100 | 199 182 433 | 2.100 |
| 3/4 | 20 | 10 | 350 | EA25 | 199 182 424 | 2.200 | 199 182 434 | 2.200 |
| 1 | 25 | 10 | 700 | EA25 | 199 182 425 | 2.300 | 199 182 435 | 2.300 |
| 1 1/4 | 32 | 10 | 1000 | EA25 | 199 182 426 | 2.600 | 199 182 436 | 2.600 |
| 1 1/2 | 40 | 10 | 1600 | EA25 | 199 182 427 | 3.000 | 199 182 437 | 3.000 |
| 2 | 50 | 10 | 3100 | EA25 | 199 182 428 | 3.800 | 199 182 438 | 3.800 |
| 2 1/2 | 65 | 10 | 5000 | EA45 | 199 182 429 | 7.800 | 199 182 439 | 7.800 |
| 3 | 80 | 10 | 7000 | EA120 | 199 182 430 | 10.400 | 199 182 440 | 10.400 |
| 4 | 100 | 10 | 11000 | EA120 | 199 182 431 | 15.000 | 199 182 441 | 15.000 |

| Size (inch) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L7 (mm) | z (mm) |
|----------------|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|-----------|
| 3/8 | 50 | 231 | 27 | 64 | 94 | 167 | 105 | 180 | 56 | 25 | 97 | 122 | 67 |
| 1/2 | 50 | 231 | 27 | 64 | 94 | 167 | 105 | 180 | 56 | 25 | 97 | 122 | 61 |
| 3/4 | 58 | 240 | 30 | 73 | 94 | 167 | 121 | 180 | 65 | 25 | 97 | 122 | 70 |
| 1 | 68 | 240 | 36 | 73 | 94 | 167 | 133 | 180 | 71 | 25 | 97 | 122 | 76 |
| 1 1/4 | 84 | 251 | 44 | 84 | 94 | 167 | 154 | 180 | 85 | 45 | 97 | 122 | 90 |
| 1 1/2 | 97 | 251 | 51 | 84 | 94 | 167 | 164 | 180 | 89 | 45 | 97 | 122 | 94 |
| 2 | 124 | 273 | 64 | 106 | 94 | 167 | 183 | 180 | 101 | 45 | 97 | 122 | 107 |
| 2 1/2 | 166 | 347 | 85 | 156 | 94 | 190 | 233 | 180 | 136 | 70 | 98 | 122 | 144 |
| 3 | 200 | 358 | 105 | 168 | 94 | 190 | 254 | 180 | 141 | 70 | 98 | 122 | 151 |
| 4 | 238 | 365 | 123 | 175 | 94 | 190 | 301 | 180 | 164 | 120 | 98 | 122 | 174 |





Ball valve type 182 PVC-C 100-230V
Manual emergency override
Solvent cement sockets Inch ASTM
Incl. 2 threaded valve ends NPT

Model:

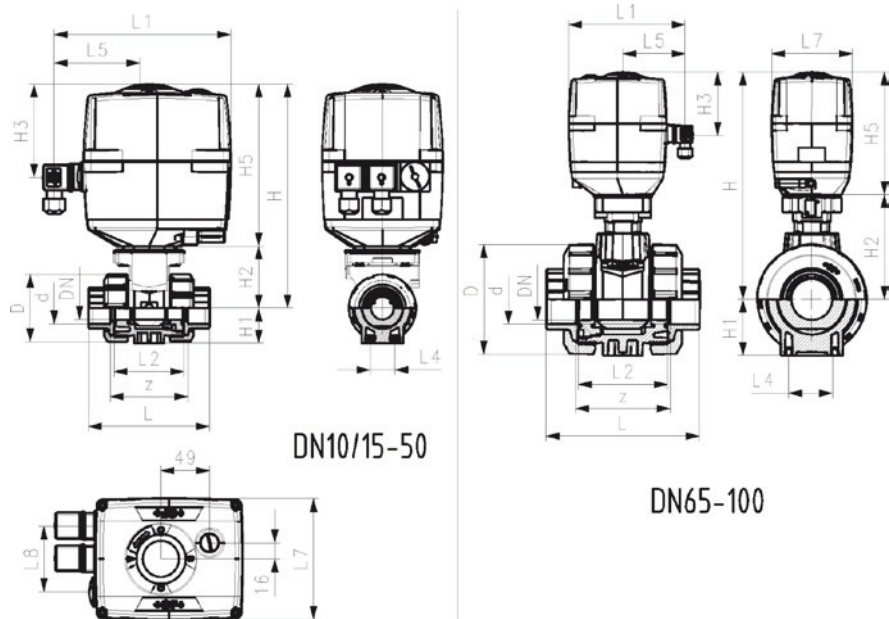
- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Heating element, position feedback (Open/Close/ Middle)
- Integrated stainless steel mounting inserts

Option:

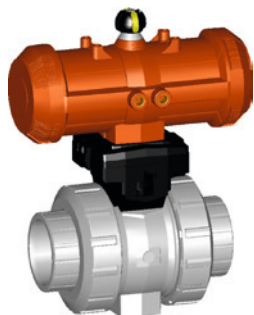
- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EA | EPDM Code | Weight (kg) | FKM Code | Weight (kg) |
|----------------|------------|-------------|--|-------|--------------------|----------------|--------------------|----------------|
| 3/8 | 10 | 10 | 70 | EA25 | 199 182 402 | 2.100 | 199 182 412 | 2.100 |
| 1/2 | 15 | 10 | 185 | EA25 | 199 182 403 | 2.100 | 199 182 413 | 2.100 |
| 3/4 | 20 | 10 | 350 | EA25 | 199 182 404 | 2.200 | 199 182 414 | 2.200 |
| 1 | 25 | 10 | 700 | EA25 | 199 182 405 | 2.300 | 199 182 415 | 2.300 |
| 1 1/4 | 32 | 10 | 1000 | EA25 | 199 182 406 | 2.600 | 199 182 416 | 2.600 |
| 1 1/2 | 40 | 10 | 1600 | EA25 | 199 182 407 | 3.000 | 199 182 417 | 3.000 |
| 2 | 50 | 10 | 3100 | EA25 | 199 182 408 | 3.800 | 199 182 418 | 3.800 |
| 2 1/2 | 65 | 10 | 5000 | EA45 | 199 182 409 | 7.800 | 199 182 419 | 7.800 |
| 3 | 80 | 10 | 7000 | EA120 | 199 182 410 | 10.400 | 199 182 420 | 10.400 |
| 4 | 100 | 10 | 11000 | EA120 | 199 182 411 | 15.000 | 199 182 421 | 15.000 |

| Size (inch) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L7 (mm) | z (mm) |
|----------------|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|-----------|
| 3/8 | 50 | 231 | 27 | 64 | 94 | 167 | 105 | 180 | 56 | 25 | 97 | 122 | 67 |
| 1/2 | 50 | 231 | 27 | 64 | 94 | 167 | 105 | 180 | 56 | 25 | 97 | 122 | 61 |
| 3/4 | 58 | 240 | 30 | 73 | 94 | 167 | 121 | 180 | 65 | 25 | 97 | 122 | 70 |
| 1 | 68 | 240 | 36 | 73 | 94 | 167 | 133 | 180 | 71 | 25 | 97 | 122 | 76 |
| 1 1/4 | 84 | 251 | 44 | 84 | 94 | 167 | 154 | 180 | 85 | 45 | 97 | 122 | 90 |
| 1 1/2 | 97 | 251 | 51 | 84 | 94 | 167 | 164 | 180 | 89 | 45 | 97 | 122 | 94 |
| 2 | 124 | 273 | 64 | 106 | 94 | 167 | 183 | 180 | 101 | 45 | 97 | 122 | 107 |
| 2 1/2 | 166 | 346 | 85 | 156 | 94 | 190 | 233 | 180 | 136 | 70 | 98 | 122 | 144 |
| 3 | 200 | 358 | 105 | 168 | 94 | 190 | 254 | 180 | 141 | 70 | 98 | 122 | 151 |
| 4 | 238 | 365 | 123 | 175 | 94 | 190 | 301 | 180 | 164 | 120 | 98 | 122 | 174 |



Ball valves pneumatic type 233



DN10/15 - 50



Ball valve type 233 PVC-C
DA (Double acting)
Without manual override
With solvent cement sockets Inch ASTM
Inclusive 2 threaded valve ends NPT

Model:

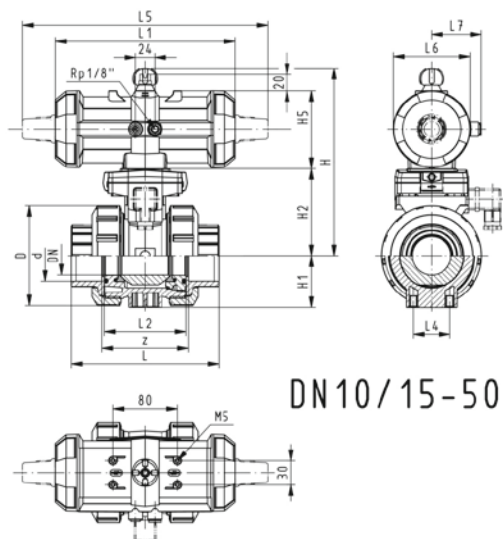
- Control time 90°<) 1-2s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50

Option:

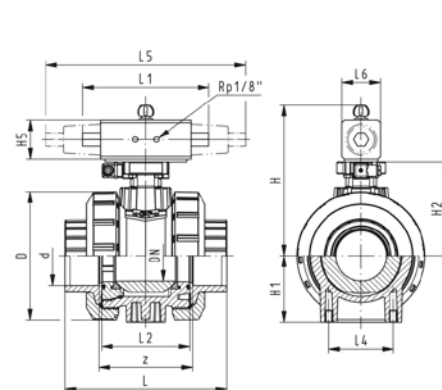
- Individual configuration of the valve

| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 10 | 3/8 | 10 | 70 | 199 233 402 | 1 | 1.200 | 199 233 412 | 1 | 1.200 |
| 15 | 1/2 | 10 | 185 | 199 233 403 | 1 | 1.200 | 199 233 413 | 1 | 1.200 |
| 20 | 3/4 | 10 | 350 | 199 233 404 | 1 | 1.300 | 199 233 414 | 1 | 1.300 |
| 25 | 1 | 10 | 700 | 199 233 405 | 1 | 1.400 | 199 233 415 | 1 | 1.400 |
| 32 | 1 1/4 | 10 | 1000 | 199 233 406 | 1 | 2.500 | 199 233 416 | 1 | 2.500 |
| 40 | 1 1/2 | 10 | 1600 | 199 233 407 | 1 | 2.800 | 199 233 417 | 1 | 2.800 |
| 50 | 2 | 10 | 3100 | 199 233 408 | 1 | 3.700 | 199 233 418 | 1 | 3.700 |
| 65 | 2 1/2 | 10 | 5000 | 199 233 409 | 1 | 7.000 | 199 233 419 | 1 | 7.000 |
| 80 | 3 | 10 | 7000 | 199 233 410 | 1 | 10.100 | 199 233 420 | 1 | 10.100 |
| 100 | 4 | 10 | 11000 | 199 233 411 | 1 | 14.600 | 199 233 421 | 1 | 14.600 |

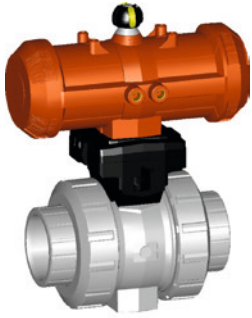
| D | H | H1 | H2 | H5 | L | L1 | L2 | L4 | L5 | L6 | L7 | z |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 27 | 62 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 67 |
| 50 | 159 | 27 | 62 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 61 |
| 58 | 168 | 30 | 71 | 77 | 121 | 194 | 65 | 25 | 261 | 76 | 48 | 70 |
| 68 | 168 | 36 | 71 | 77 | 133 | 194 | 71 | 25 | 261 | 76 | 48 | 76 |
| 84 | 202 | 44 | 84 | 99 | 154 | 224 | 85 | 45 | 305 | 95 | 59 | 90 |
| 97 | 202 | 51 | 84 | 99 | 164 | 224 | 89 | 45 | 305 | 95 | 59 | 94 |
| 124 | 225 | 64 | 106 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |
| 166 | 257 | 85 | 156 | 66 | 233 | 144 | 136 | 70 | | 60 | | 144 |
| 200 | 274 | 105 | 168 | 70 | 254 | 152 | 141 | 70 | | 65 | | 151 |
| 238 | 273 | 123 | 175 | 78 | 301 | 169 | 164 | 120 | | 72 | | 174 |



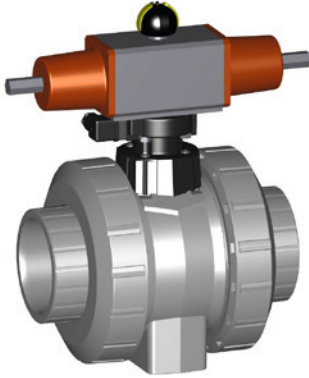
DN 10/15-50



DN 65-100



DN10/15 - 50



**Ball valve type 233 PVC-C
FO (Fail safe to open)
Without manual override
With solvent cement sockets Inch ASTM**

Model:

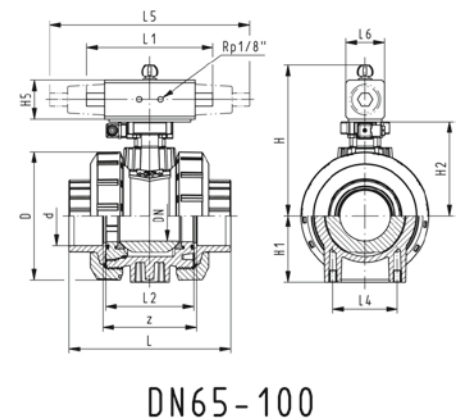
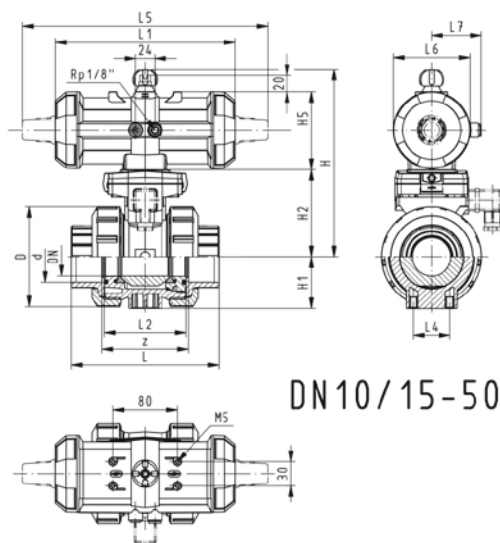
- Control time 90° < 1-2s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50

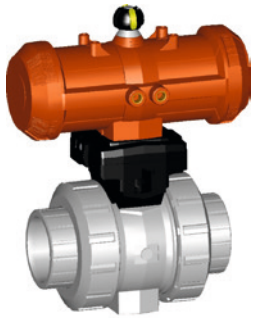
Option:

- Individual configuration of the valve

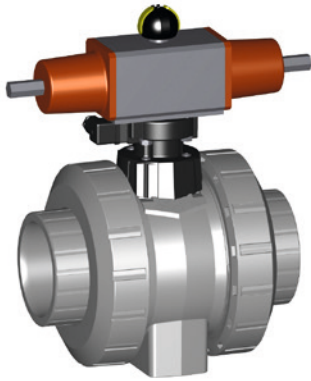
| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 10 | 3/8 | 10 | 70 | 199 233 382 | 1 | 1.200 | 199 233 392 | 1 | 1.200 |
| 15 | 1/2 | 10 | 185 | 199 233 383 | 1 | 1.200 | 199 233 393 | 1 | 1.200 |
| 20 | 3/4 | 10 | 350 | 199 233 384 | 1 | 1.300 | 199 233 394 | 1 | 1.300 |
| 25 | 1 | 10 | 700 | 199 233 385 | 1 | 1.400 | 199 233 395 | 1 | 1.400 |
| 32 | 1 1/4 | 10 | 1000 | 199 233 386 | 1 | 2.500 | 199 233 396 | 1 | 2.500 |
| 40 | 1 1/2 | 10 | 1600 | 199 233 387 | 1 | 2.800 | 199 233 397 | 1 | 2.800 |
| 50 | 2 | 10 | 3100 | 199 233 388 | 1 | 3.700 | 199 233 398 | 1 | 3.700 |
| 65 | 2 1/2 | 10 | 5000 | 199 233 389 | 1 | 8.200 | 199 233 399 | 1 | 8.200 |
| 80 | 3 | 10 | 7000 | 199 233 390 | 1 | 10.800 | 199 233 400 | 1 | 10.800 |
| 100 | 4 | 10 | 11000 | 199 233 391 | 1 | 16.400 | 199 233 401 | 1 | 16.400 |

| D | H | H1 | H2 | H5 | L | L1 | L2 | L4 | L5 | L6 | L7 | z |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 27 | 62 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 67 |
| 50 | 159 | 27 | 62 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 61 |
| 58 | 168 | 30 | 71 | 77 | 121 | 194 | 65 | 25 | 261 | 76 | 48 | 70 |
| 68 | 168 | 36 | 71 | 77 | 133 | 194 | 71 | 25 | 261 | 76 | 48 | 76 |
| 84 | 202 | 44 | 84 | 99 | 154 | 224 | 85 | 45 | 305 | 95 | 59 | 90 |
| 97 | 202 | 51 | 84 | 99 | 164 | 224 | 89 | 45 | 305 | 95 | 59 | 94 |
| 124 | 225 | 64 | 106 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |
| 166 | 262 | 85 | 156 | 70 | 233 | | 136 | 70 | 276 | 65 | | 144 |
| 200 | 281 | 105 | 168 | 78 | 254 | | 141 | 70 | 341 | 72 | | 151 |
| 238 | 292 | 123 | 175 | 86 | 301 | | 164 | 120 | 369 | 80 | | 174 |





DN10/15 - 50



**Ball valve type 233 PVC-C
FC (Fail safe to close)
Without manual override
With solvent cement sockets Inch ASTM
Inclusive 2 threaded valve ends NPT**

Model:

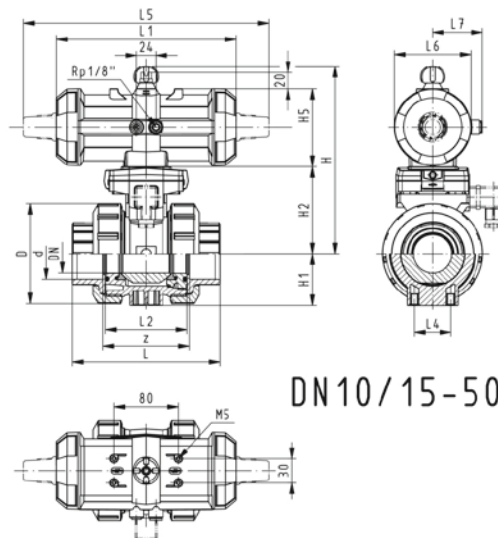
- Control time 90°<) 1-2s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50

Option:

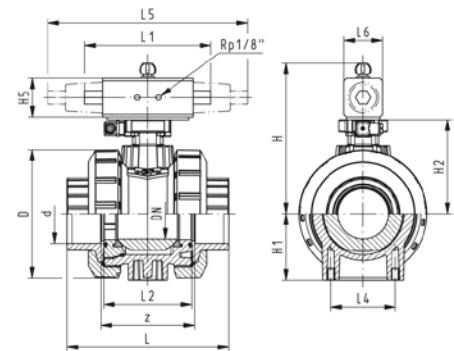
- Individual configuration of the valve

| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 10 | 3/8 | 10 | 70 | 199 233 362 | 1 | 1.200 | 199 233 372 | 1 | 1.200 |
| 15 | 1/2 | 10 | 185 | 199 233 363 | 1 | 1.200 | 199 233 373 | 1 | 1.200 |
| 20 | 3/4 | 10 | 350 | 199 233 364 | 1 | 1.300 | 199 233 374 | 1 | 1.300 |
| 25 | 1 | 10 | 700 | 199 233 365 | 1 | 1.400 | 199 233 375 | 1 | 1.273 |
| 32 | 1 1/4 | 10 | 1000 | 199 233 366 | 1 | 2.500 | 199 233 376 | 1 | 2.500 |
| 40 | 1 1/2 | 10 | 1600 | 199 233 367 | 1 | 2.800 | 199 233 377 | 1 | 2.490 |
| 50 | 2 | 10 | 3100 | 199 233 368 | 1 | 3.700 | 199 233 378 | 1 | 3.700 |
| 65 | 2 1/2 | 10 | 5000 | 199 233 369 | 1 | 8.200 | 199 233 379 | 1 | 8.200 |
| 80 | 3 | 10 | 7000 | 199 233 370 | 1 | 10.800 | 199 233 380 | 1 | 10.800 |
| 100 | 4 | 10 | 11000 | 199 233 371 | 1 | 16.400 | 199 233 381 | 1 | 16.400 |

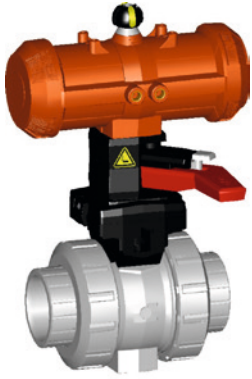
| D | H | H1 | H2 | H5 | L | L1 | L2 | L4 | L5 | L6 | L7 | z |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 27 | 62 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 67 |
| 50 | 159 | 27 | 62 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 61 |
| 58 | 168 | 30 | 71 | 77 | 121 | 194 | 65 | 25 | 261 | 76 | 48 | 70 |
| 68 | 168 | 36 | 71 | 77 | 133 | 194 | 71 | 25 | 261 | 76 | 48 | 76 |
| 84 | 202 | 44 | 84 | 99 | 154 | 224 | 85 | 45 | 305 | 95 | 59 | 90 |
| 97 | 202 | 51 | 84 | 99 | 164 | 224 | 89 | 45 | 305 | 95 | 59 | 94 |
| 124 | 225 | 64 | 106 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |
| 166 | 262 | 85 | 156 | 70 | 233 | | 136 | 70 | 276 | 65 | | 144 |
| 200 | 281 | 105 | 168 | 78 | 254 | | 141 | 70 | 341 | 72 | | 151 |
| 238 | 292 | 123 | 175 | 86 | 301 | | 164 | 120 | 369 | 80 | | 174 |



DN10/15-50



DN65-100



DN10/15 - 50

Ball valve type 233 PVC-C
DA (Double acting)
With manual override
With solvent cement sockets Inch ASTM
Inclusive 2 threaded valve ends NPT

Model:

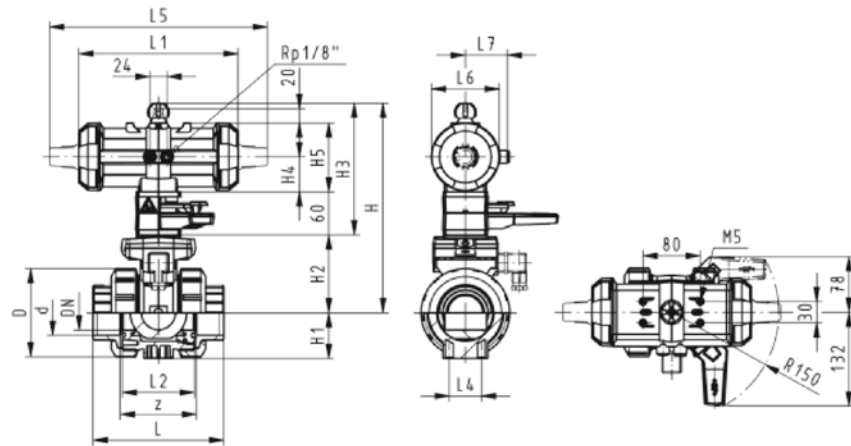
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts

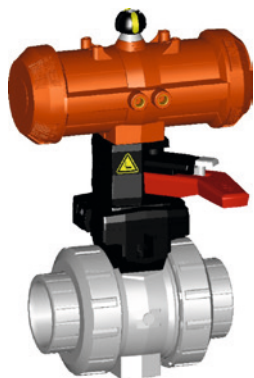
Option:

- Individual configuration of the valve

| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 10 | 3/8 | 10 | 70 | 199 233 342 | 1 | 1.500 | 199 233 352 | 1 | 1.500 |
| 15 | 1/2 | 10 | 185 | 199 233 343 | 1 | 1.500 | 199 233 353 | 1 | 1.500 |
| 20 | 3/4 | 10 | 350 | 199 233 344 | 1 | 1.600 | 199 233 354 | 1 | 1.600 |
| 25 | 1 | 10 | 700 | 199 233 345 | 1 | 1.700 | 199 233 355 | 1 | 1.700 |
| 32 | 1 1/4 | 10 | 1000 | 199 233 346 | 1 | 2.800 | 199 233 356 | 1 | 2.800 |
| 40 | 1 1/2 | 10 | 1600 | 199 233 347 | 1 | 3.100 | 199 233 357 | 1 | 3.100 |
| 50 | 2 | 10 | 3100 | 199 233 348 | 1 | 4.000 | 199 233 358 | 1 | 4.000 |

| D | H | H1 | H2 | H3 | H4 | H5 | L | L1 | L2 | L4 | L5 | L6 | L7 | z |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 27 | 62 | 168 | 40 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 67 |
| 50 | 159 | 27 | 62 | 168 | 40 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 61 |
| 58 | 168 | 30 | 71 | 168 | 40 | 77 | 121 | 194 | 65 | 25 | 261 | 76 | 48 | 70 |
| 68 | 168 | 36 | 71 | 168 | 40 | 77 | 133 | 194 | 71 | 25 | 261 | 76 | 48 | 76 |
| 84 | 202 | 44 | 84 | 187 | 51 | 99 | 154 | 224 | 85 | 45 | 305 | 95 | 59 | 90 |
| 97 | 202 | 51 | 84 | 187 | 51 | 99 | 164 | 224 | 89 | 45 | 305 | 95 | 59 | 94 |
| 124 | 225 | 64 | 106 | 187 | 51 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |





DN10/15 - 50

Ball valve type 233 PVC-C
FO (Fail safe to open)
With manual override
With solvent cement sockets Inch ASTM
Inclusive 2 threaded valve ends NPT

Model:

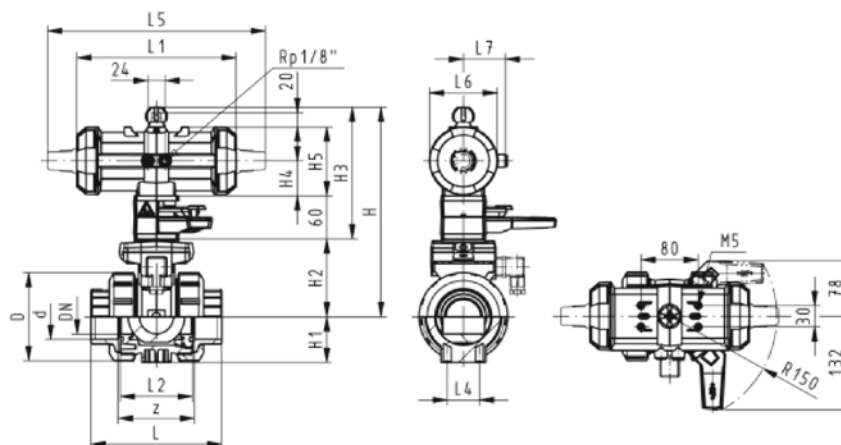
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°<) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts

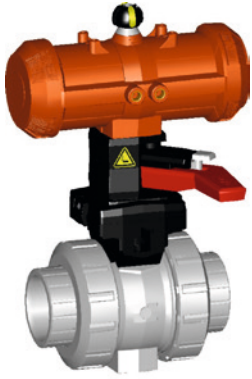
Option:

- Individual configuration of the valve

| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 10 | 3/8 | 10 | 70 | 199 233 322 | 1 | 1.500 | 199 233 332 | 1 | 1.500 |
| 15 | 1/2 | 10 | 185 | 199 233 323 | 1 | 1.500 | 199 233 333 | 1 | 1.500 |
| 20 | 3/4 | 10 | 350 | 199 233 324 | 1 | 1.600 | 199 233 334 | 1 | 1.600 |
| 25 | 1 | 10 | 700 | 199 233 325 | 1 | 1.700 | 199 233 335 | 1 | 1.700 |
| 32 | 1 1/4 | 10 | 1000 | 199 233 326 | 1 | 2.800 | 199 233 336 | 1 | 2.800 |
| 40 | 1 1/2 | 10 | 1600 | 199 233 327 | 1 | 3.100 | 199 233 337 | 1 | 3.100 |
| 50 | 2 | 10 | 3100 | 199 233 328 | 1 | 4.000 | 199 233 338 | 1 | 4.000 |

| D | H | H1 | H2 | H3 | H4 | H5 | L | L1 | L2 | L4 | L5 | L6 | L7 | z |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 27 | 62 | 168 | 40 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 67 |
| 50 | 159 | 27 | 62 | 168 | 40 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 61 |
| 58 | 168 | 30 | 71 | 168 | 40 | 77 | 121 | 194 | 65 | 25 | 261 | 76 | 48 | 70 |
| 68 | 168 | 36 | 71 | 168 | 40 | 77 | 133 | 194 | 71 | 25 | 261 | 76 | 48 | 76 |
| 84 | 202 | 44 | 84 | 187 | 51 | 99 | 154 | 224 | 85 | 45 | 305 | 95 | 59 | 90 |
| 97 | 202 | 51 | 84 | 187 | 51 | 99 | 164 | 224 | 89 | 45 | 305 | 95 | 59 | 94 |
| 124 | 225 | 64 | 106 | 187 | 51 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |





DN10/15 - 50

Ball valve type 233 PVC-C
FC (fail safe to close)
With manual override
With solvent cement sockets Inch ASTM
Inclusive 2 threaded valve ends NPT

Model:

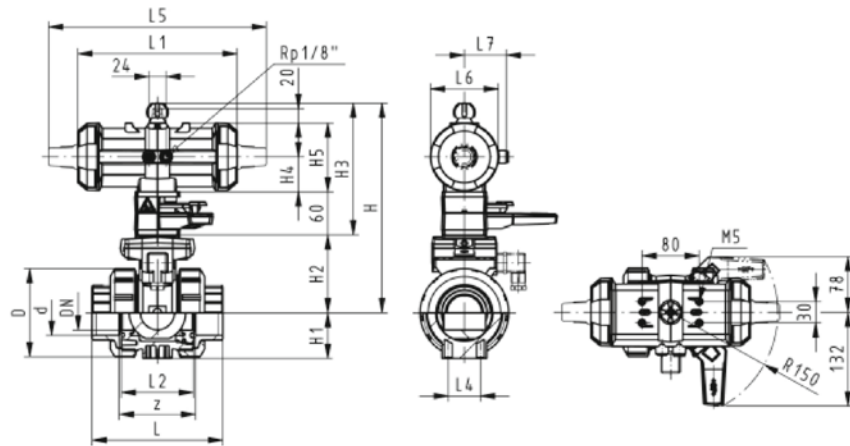
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

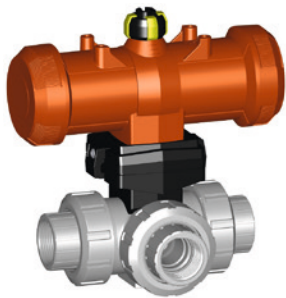
- Individual configuration of the valve

| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 10 | 3/8 | 10 | 70 | 199 233 302 | 1 | 1.500 | 199 233 312 | 1 | 1.500 |
| 15 | 1/2 | 10 | 185 | 199 233 303 | 1 | 1.500 | 199 233 313 | 1 | 1.500 |
| 20 | 3/4 | 10 | 350 | 199 233 304 | 1 | 1.600 | 199 233 314 | 1 | 1.600 |
| 25 | 1 | 10 | 700 | 199 233 305 | 1 | 1.700 | 199 233 315 | 1 | 1.511 |
| 32 | 1 1/4 | 10 | 1000 | 199 233 306 | 1 | 2.800 | 199 233 316 | 1 | 2.800 |
| 40 | 1 1/2 | 10 | 1600 | 199 233 307 | 1 | 3.100 | 199 233 317 | 1 | 2.731 |
| 50 | 2 | 10 | 3100 | 199 233 308 | 1 | 4.000 | 199 233 318 | 1 | 4.000 |

| D | H | H1 | H2 | H3 | H4 | H5 | L | L1 | L2 | L4 | L5 | L6 | L7 | z |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 27 | 62 | 168 | 40 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 67 |
| 50 | 159 | 27 | 62 | 168 | 40 | 77 | 105 | 194 | 56 | 25 | 261 | 76 | 48 | 61 |
| 58 | 168 | 30 | 71 | 168 | 40 | 77 | 121 | 194 | 65 | 25 | 261 | 76 | 48 | 70 |
| 68 | 168 | 36 | 71 | 168 | 40 | 77 | 133 | 194 | 71 | 25 | 261 | 76 | 48 | 76 |
| 84 | 202 | 44 | 84 | 187 | 51 | 99 | 154 | 224 | 85 | 45 | 305 | 95 | 59 | 90 |
| 97 | 202 | 51 | 84 | 187 | 51 | 99 | 164 | 224 | 89 | 45 | 305 | 95 | 59 | 94 |
| 124 | 225 | 64 | 106 | 187 | 51 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |



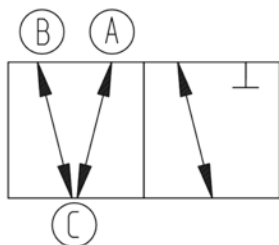
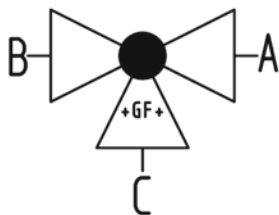
Ball valves pneumatic type 285



3-Way ball valve type 285 PVC-C
Horizontal/T-port
DA (Double acting)
Without manual override
With threaded sockets NPT

Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

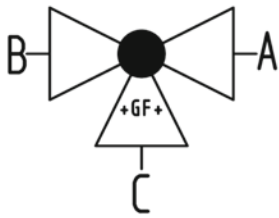


| d (mm) | DN (mm) | Thread Type | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|-------------|----------------|-------------|-----------------------------------|--------------------|----|----------------|
| 16 | 10 | NPT | 3/8 | 10 | 140 | 199 285 962 | 1 | 0.944 |
| 20 | 15 | NPT | 1/2 | 10 | 200 | 199 285 963 | 1 | 0.951 |
| 25 | 20 | NPT | 3/4 | 10 | 470 | 199 285 964 | 1 | 1.088 |
| 32 | 25 | NPT | 1 | 10 | 793 | 199 285 965 | 1 | 1.289 |
| 40 | 32 | NPT | 1 1/4 | 10 | 1290 | 199 285 966 | 1 | 2.184 |
| 50 | 40 | NPT | 1 1/2 | 10 | 1910 | 199 285 967 | 1 | 2.664 |
| 63 | 50 | NPT | 2 | 10 | 3100 | 199 285 968 | 1 | 4.112 |

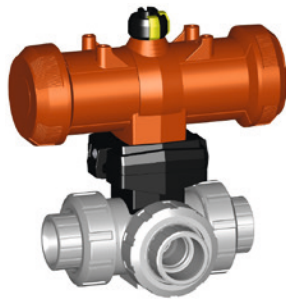
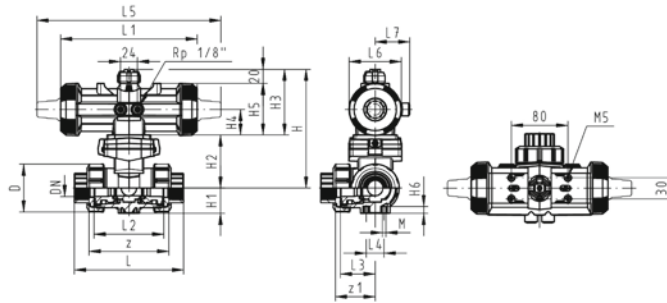
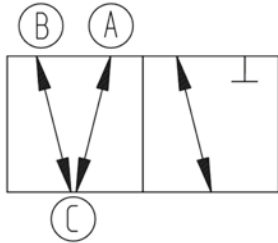
| FKM Code | SP | Weight (kg) |
|--------------------|----|----------------|
| 199 285 972 | 1 | 0.944 |
| 199 285 973 | 1 | 0.951 |
| 199 285 974 | 1 | 1.088 |
| 199 285 975 | 1 | 1.289 |
| 199 285 976 | 1 | 2.184 |
| 199 285 977 | 1 | 2.664 |
| 199 285 978 | 1 | 4.112 |

| D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 115 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 114 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 131 | 194 | 86 | 43 | 25 | 261 | 76 | 48 |
| 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 155 | 194 | 99 | 50 | 25 | 261 | 76 | 48 |
| 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 181 | 224 | 120 | 60 | 45 | 305 | 95 | 59 |
| 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 205 | 224 | 137 | 69 | 45 | 305 | 95 | 59 |
| 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 | 59 |

| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 87 | 43 |
| 6 | 81 | 40 |
| 6 | 96 | 48 |



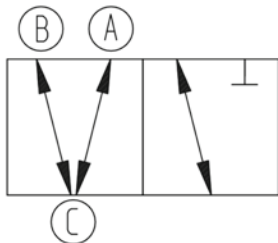
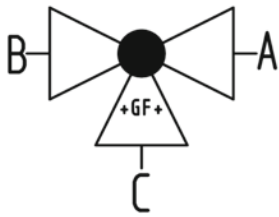
| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 111 | 56 |
| 8 | 134 | 67 |
| 8 | 159 | 80 |
| 8 | 213 | 106 |



3-Way ball valve type 285 PVC-C
Horizontal/T-port
DA (Double acting)
Without manual override
With solvent cement sockets ASTM

Model:

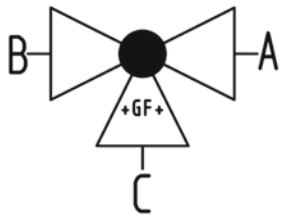
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



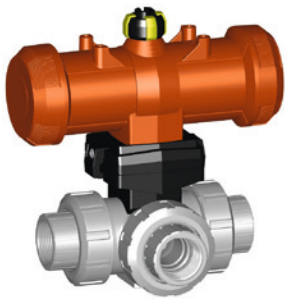
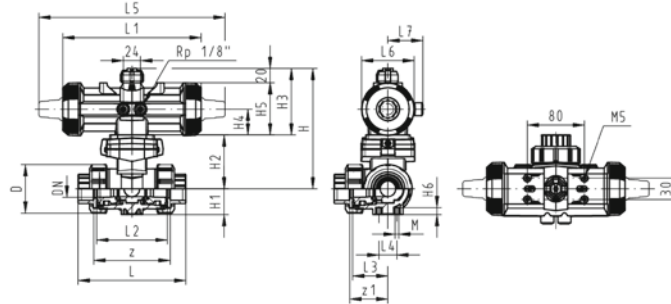
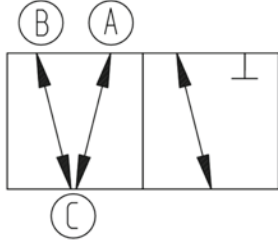
| d | DN | Size | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|--------|-------|---------------------|-------------|------|--------|-------------|------|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | Code | (kg) | Code | Code | (kg) |
| | | | | (L/min) | | | | | | |
| 16 | 10 | 3/8 | 10 | 140 | 199 285 982 | 1 | 0.944 | 199 285 992 | 1 | 0.944 |
| 20 | 15 | 1/2 | 10 | 200 | 199 285 983 | 1 | 0.951 | 199 285 993 | 1 | 0.951 |
| 25 | 20 | 3/4 | 10 | 470 | 199 285 984 | 1 | 1.088 | 199 285 994 | 1 | 1.088 |
| 32 | 25 | 1 | 10 | 793 | 199 285 985 | 1 | 1.289 | 199 285 995 | 1 | 1.289 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 199 285 986 | 1 | 2.184 | 199 285 996 | 1 | 2.184 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 199 285 987 | 1 | 2.664 | 199 285 997 | 1 | 2.664 |
| 63 | 50 | 2 | 10 | 3100 | 199 285 988 | 1 | 4.112 | 199 285 998 | 1 | 4.112 |

| D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 123 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 122 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 141 | 194 | 86 | 43 | 25 | 261 | 76 | 48 |
| 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 161 | 194 | 99 | 50 | 25 | 261 | 76 | 48 |
| 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 187 | 224 | 120 | 60 | 45 | 305 | 95 | 59 |
| 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 213 | 224 | 137 | 69 | 45 | 305 | 95 | 59 |
| 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 | 59 |

| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 85 | 42 |
| 6 | 77 | 38 |
| 6 | 92 | 46 |



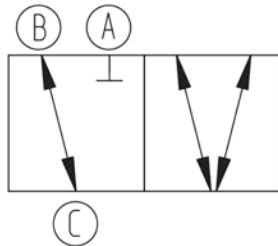
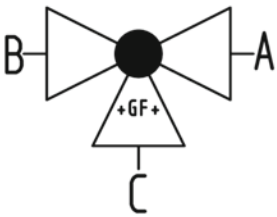
| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 105 | 53 |
| 8 | 126 | 63 |
| 8 | 143 | 72 |
| 8 | 185 | 92 |



3-Way ball valve type 285 PVC-C
Horizontal/T-port
Without manual override
With threaded sockets NPT

Model:

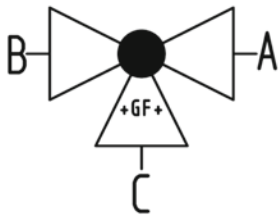
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



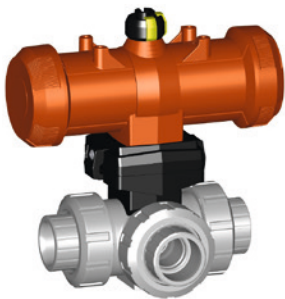
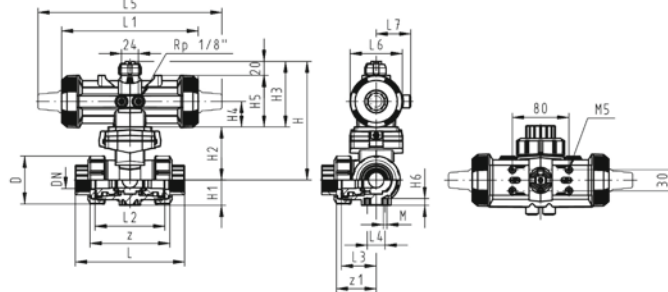
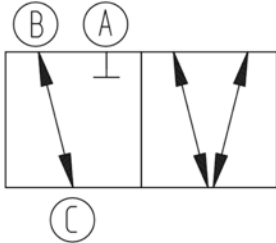
| d | DN | Thread Type | Size | PN | kv-value | EPDM | SP | Weight |
|------|------|-------------|--------|-------|---------------------|--------------------|----|--------|
| (mm) | (mm) | | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| | | | | | (L/min) | | | |
| 16 | 10 | NPT | 3/8 | 10 | 140 | 199 285 482 | 1 | 1.135 |
| 20 | 15 | NPT | 1/2 | 10 | 200 | 199 285 483 | 1 | 1.141 |
| 25 | 20 | NPT | 3/4 | 10 | 470 | 199 285 484 | 1 | 1.278 |
| 32 | 25 | NPT | 1 | 10 | 793 | 199 285 485 | 1 | 1.479 |
| 40 | 32 | NPT | 1 1/4 | 10 | 1290 | 199 285 486 | 1 | 2.608 |
| 50 | 40 | NPT | 1 1/2 | 10 | 1910 | 199 285 487 | 1 | 3.088 |
| 63 | 50 | NPT | 2 | 10 | 3100 | 199 285 488 | 1 | 4.536 |

| FKM Code | SP | Weight (kg) |
|--------------------|----|-------------|
| 199 285 492 | 1 | 1.135 |
| 199 285 493 | 1 | 1.141 |
| 199 285 494 | 1 | 1.278 |
| 199 285 495 | 1 | 1.479 |
| 199 285 496 | 1 | 2.608 |
| 199 285 497 | 1 | 3.088 |
| 199 285 498 | 1 | 4.536 |

| D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 115 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 114 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 131 | 194 | 86 | 43 | 25 | 261 | 76 | 48 |
| 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 155 | 194 | 99 | 50 | 25 | 261 | 76 | 48 |
| 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 181 | 224 | 120 | 60 | 45 | 305 | 95 | 59 |
| 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 205 | 224 | 137 | 69 | 45 | 305 | 95 | 59 |
| 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 | 59 |



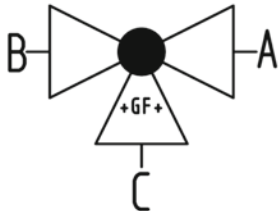
| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 87 | 43 |
| 6 | 81 | 40 |
| 6 | 96 | 48 |
| 6 | 111 | 56 |
| 8 | 134 | 67 |
| 8 | 159 | 80 |
| 8 | 213 | 106 |



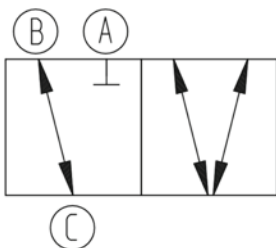
3-Way ball valve type 285 PVC-C
Horizontal/T-port
Without manual override
With solvent cement sockets ASTM

Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90° <) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

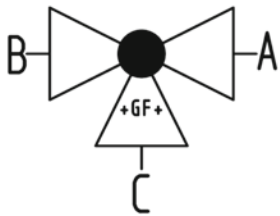


| d | DN | Size | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|------|--------|-------|------------|-------------|----|--------|-------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | (Δp=1 bar) | Code | | (kg) | Code | | (kg) |
| | | | | (l/min) | | | | | | |
| 16 | 10 | 3/8 | 10 | 140 | 199 285 502 | 1 | 1.135 | 199 285 512 | 1 | 1.135 |
| 20 | 15 | 1/2 | 10 | 200 | 199 285 503 | 1 | 1.141 | 199 285 513 | 1 | 1.141 |
| 25 | 20 | 3/4 | 10 | 470 | 199 285 504 | 1 | 1.278 | 199 285 514 | 1 | 1.278 |
| 32 | 25 | 1 | 10 | 793 | 199 285 505 | 1 | 1.479 | 199 285 515 | 1 | 1.479 |
| 40 | 32 | 1 1/4 | 10 | 1290 | 199 285 506 | 1 | 2.608 | 199 285 516 | 1 | 2.608 |
| 50 | 40 | 1 1/2 | 10 | 1910 | 199 285 507 | 1 | 3.088 | 199 285 517 | 1 | 3.088 |
| 63 | 50 | 2 | 10 | 3100 | 199 285 508 | 1 | 4.536 | 199 285 518 | 1 | 4.536 |

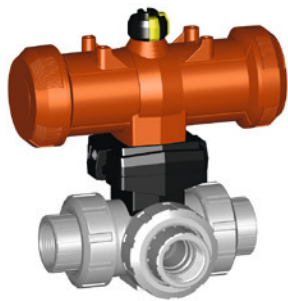
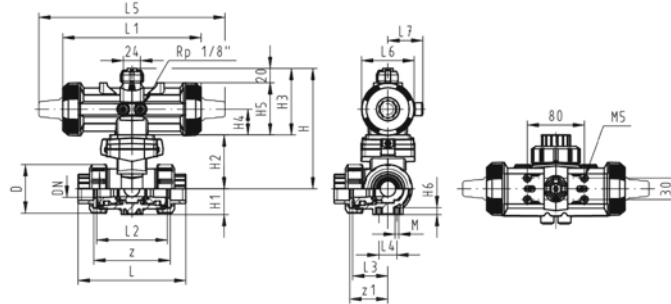
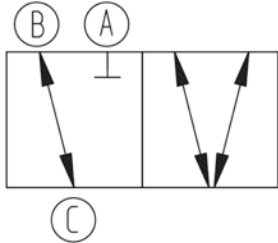


| D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 123 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 122 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 141 | 194 | 86 | 43 | 25 | 261 | 76 | 48 |
| 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 161 | 194 | 99 | 50 | 25 | 261 | 76 | 48 |
| 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 187 | 224 | 120 | 60 | 45 | 305 | 95 | 59 |
| 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 213 | 224 | 137 | 69 | 45 | 305 | 95 | 59 |
| 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 | 59 |

| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 85 | 42 |
| 6 | 77 | 38 |
| 6 | 92 | 46 |



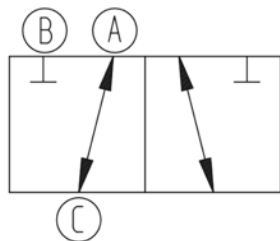
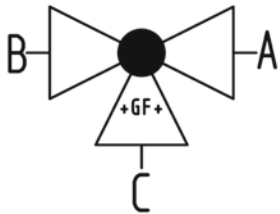
| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 105 | 53 |
| 8 | 126 | 63 |
| 8 | 143 | 72 |
| 8 | 185 | 92 |



3-Way ball valve type 285 PVC-C
Horizontal/L-port
DA (Double acting)
Without manual override
With threaded sockets NPT

Model:

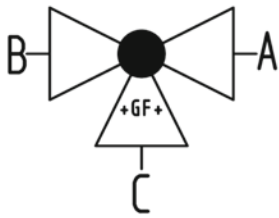
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90° < 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



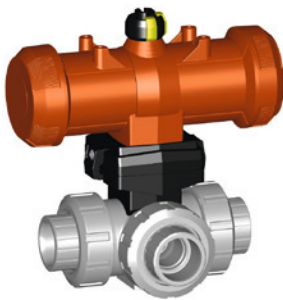
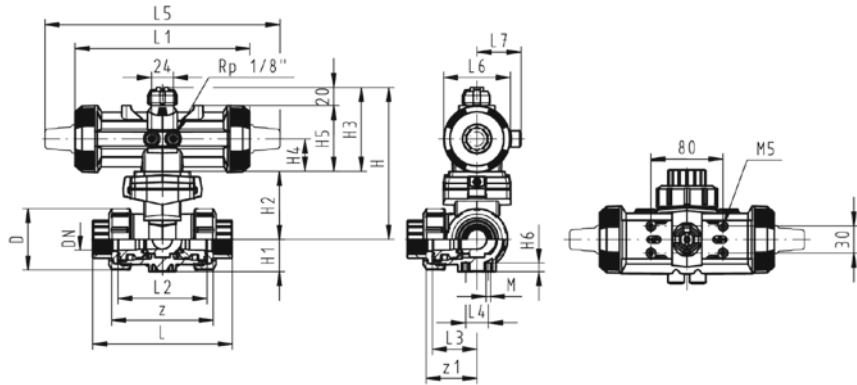
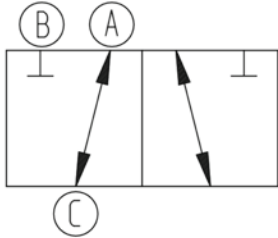
| d | DN | Thread Type | Size | PN | kv-value | EPDM | SP | Weight |
|------|------|-------------|--------|-------|---------------------|--------------------|----|--------|
| (mm) | (mm) | | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| | | | | | (L/min) | | | |
| 16 | 10 | NPT | 3/8 | 10 | 50 | 199 285 922 | 1 | 0.945 |
| 20 | 15 | NPT | 1/2 | 10 | 75 | 199 285 923 | 1 | 0.952 |
| 25 | 20 | NPT | 3/4 | 10 | 150 | 199 285 924 | 1 | 1.090 |
| 32 | 25 | NPT | 1 | 10 | 280 | 199 285 925 | 1 | 1.296 |
| 40 | 32 | NPT | 1 1/4 | 10 | 480 | 199 285 926 | 1 | 2.195 |
| 50 | 40 | NPT | 1 1/2 | 10 | 620 | 199 285 927 | 1 | 2.686 |
| 63 | 50 | NPT | 2 | 10 | 1230 | 199 285 928 | 1 | 4.161 |

| FKM Code | SP | Weight |
|--------------------|----|--------|
| | | (kg) |
| 199 285 932 | 1 | 0.945 |
| 199 285 933 | 1 | 0.952 |
| 199 285 934 | 1 | 1.090 |
| 199 285 935 | 1 | 1.296 |
| 199 285 936 | 1 | 2.195 |
| 199 285 937 | 1 | 2.686 |
| 199 285 938 | 1 | 4.161 |

| D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 115 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 114 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 131 | 194 | 86 | 43 | 25 | 261 | 76 | 48 |
| 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 155 | 194 | 99 | 50 | 25 | 261 | 76 | 48 |
| 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 181 | 224 | 120 | 60 | 45 | 305 | 95 | 59 |
| 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 205 | 224 | 137 | 69 | 45 | 305 | 95 | 59 |
| 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 | 59 |



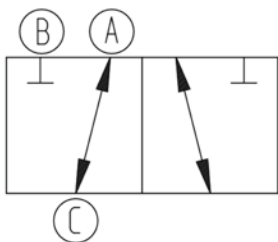
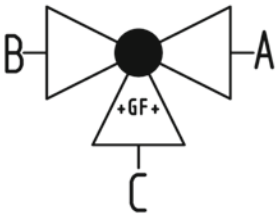
| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 87 | 43 |
| 6 | 81 | 40 |
| 6 | 96 | 48 |
| 6 | 111 | 56 |
| 8 | 134 | 67 |
| 8 | 159 | 80 |
| 8 | 213 | 106 |



3-Way ball valve type 285 PVC-C
Horizontal/L-port
DA (Double acting)
Without manual override
With solvent cement sockets ASTM

Model:

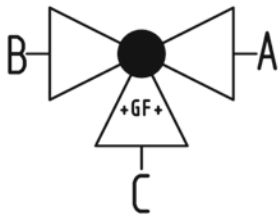
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°(<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



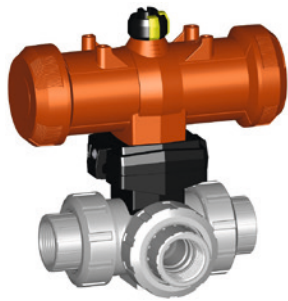
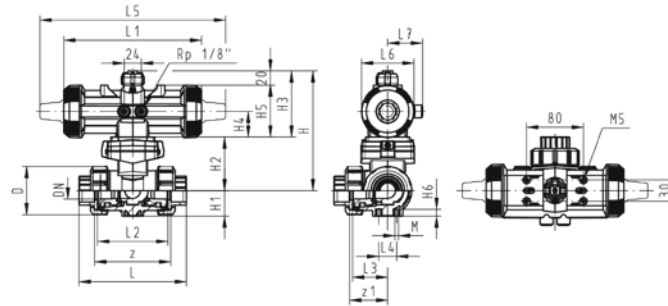
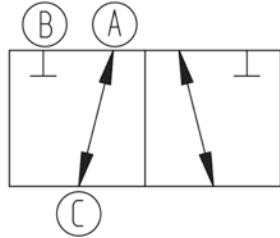
| d | DN | Size | PN | kv-value | EPDM | SP Weight | FKM | SP Weight |
|------|------|--------|-------|---------------------|-------------|-----------|-------------|-----------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | (kg) | Code | (kg) |
| | | | | (l/min) | | | | |
| 16 | 10 | 3/8 | 10 | 50 | 199 285 942 | 1 0.945 | 199 285 952 | 1 0.945 |
| 20 | 15 | 1/2 | 10 | 75 | 199 285 943 | 1 0.952 | 199 285 953 | 1 0.952 |
| 25 | 20 | 3/4 | 10 | 150 | 199 285 944 | 1 1.090 | 199 285 954 | 1 1.090 |
| 32 | 25 | 1 | 10 | 280 | 199 285 945 | 1 1.296 | 199 285 955 | 1 1.296 |
| 40 | 32 | 1 1/4 | 10 | 480 | 199 285 946 | 1 2.195 | 199 285 956 | 1 2.195 |
| 50 | 40 | 1 1/2 | 10 | 620 | 199 285 947 | 1 2.686 | 199 285 957 | 1 2.686 |
| 63 | 50 | 2 | 10 | 1230 | 199 285 948 | 1 4.161 | 199 285 958 | 1 4.161 |

| D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 123 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 122 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 141 | 194 | 86 | 43 | 25 | 261 | 76 | 48 |
| 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 161 | 194 | 99 | 50 | 25 | 261 | 76 | 48 |
| 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 187 | 224 | 120 | 60 | 45 | 305 | 95 | 59 |
| 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 213 | 224 | 137 | 69 | 45 | 305 | 95 | 59 |
| 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 | 59 |

| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 85 | 42 |
| 6 | 77 | 38 |
| 6 | 92 | 46 |



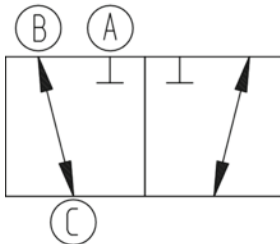
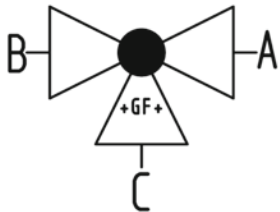
| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 105 | 53 |
| 8 | 126 | 63 |
| 8 | 143 | 72 |
| 8 | 185 | 92 |



3-Way ball valve type 285 PVC-C
Horizontal/L-port
Without manual override
With threaded sockets NPT

Model:

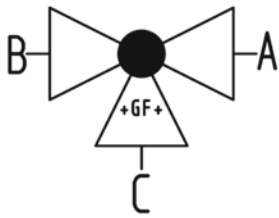
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



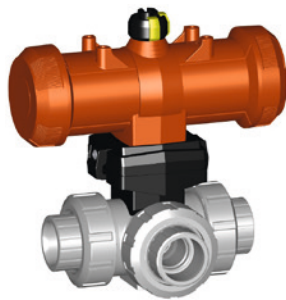
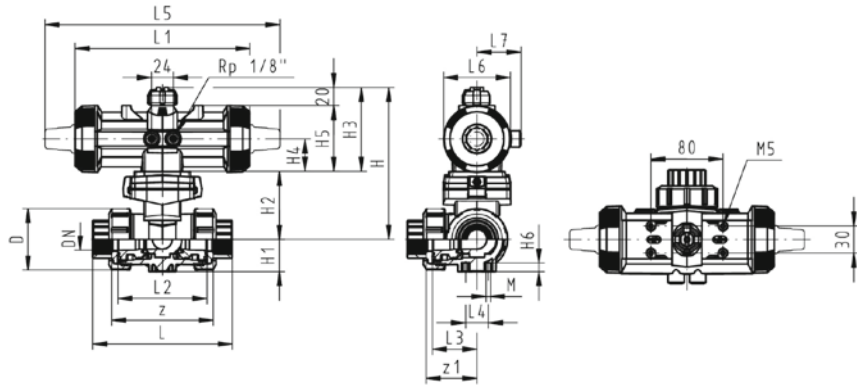
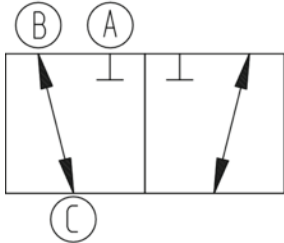
| d | DN | Thread | Type | Size | PN | kv-value | EPDM | SP | Weight |
|------|------|--------|------|--------|-------|---------------------|--------------------|----|--------|
| (mm) | (mm) | | | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| | | | | | | (L/min) | | | |
| 16 | 10 | NPT | | 3/8 | 10 | 50 | 199 285 442 | 1 | 1.136 |
| 20 | 15 | NPT | | 1/2 | 10 | 75 | 199 285 443 | 1 | 1.142 |
| 25 | 20 | NPT | | 3/4 | 10 | 150 | 199 285 444 | 1 | 1.280 |
| 32 | 25 | NPT | | 1 | 10 | 280 | 199 285 445 | 1 | 1.486 |
| 40 | 32 | NPT | | 1 1/4 | 10 | 480 | 199 285 446 | 1 | 2.619 |
| 50 | 40 | NPT | | 1 1/2 | 10 | 620 | 199 285 447 | 1 | 3.110 |
| 63 | 50 | NPT | | 2 | 10 | 1230 | 199 285 448 | 1 | 4.585 |

| FKM Code | SP | Weight (kg) |
|--------------------|----|-------------|
| 199 285 452 | 1 | 1.136 |
| 199 285 453 | 1 | 1.142 |
| 199 285 454 | 1 | 1.280 |
| 199 285 455 | 1 | 1.486 |
| 199 285 456 | 1 | 2.619 |
| 199 285 457 | 1 | 3.110 |
| 199 285 458 | 1 | 4.585 |

| D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 115 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 114 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 131 | 194 | 86 | 43 | 25 | 261 | 76 | 48 |
| 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 155 | 194 | 99 | 50 | 25 | 261 | 76 | 48 |
| 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 181 | 224 | 120 | 60 | 45 | 305 | 95 | 59 |
| 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 205 | 224 | 137 | 69 | 45 | 305 | 95 | 59 |
| 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 | 59 |



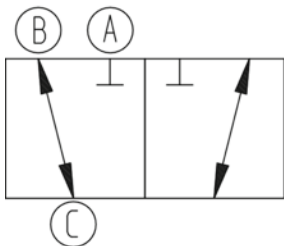
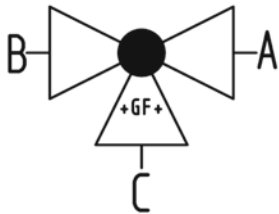
| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 87 | 43 |
| 6 | 81 | 40 |
| 6 | 96 | 48 |
| 6 | 111 | 56 |
| 8 | 134 | 67 |
| 8 | 159 | 80 |
| 8 | 213 | 106 |



3-Way ball valve type 285 PVC-C
Horizontal/L-port
Without manual override
With solvent cement sockets ASTM

Model:

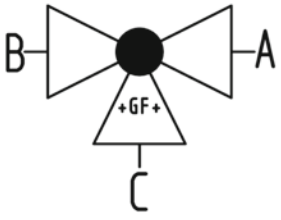
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



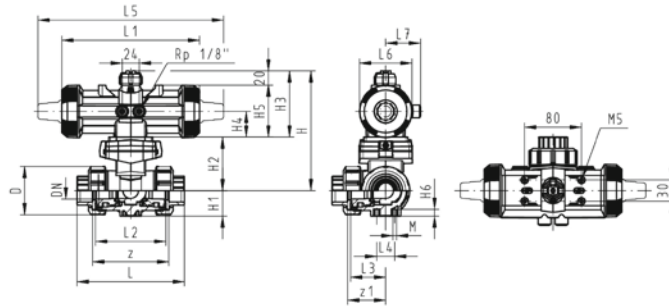
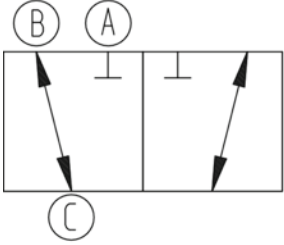
| d | DN | Size | PN | kv-value | EPDM | SP Weight | FKM | SP Weight |
|------|------|--------|-------|---------------------|-------------|-----------|-------------|-----------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | (kg) | Code | (kg) |
| | | | | (l/min) | | | | |
| 16 | 10 | 3/8 | 10 | 50 | 199 285 462 | 1 1.136 | 199 285 472 | 1 1.136 |
| 20 | 15 | 1/2 | 10 | 75 | 199 285 463 | 1 1.142 | 199 285 473 | 1 1.142 |
| 25 | 20 | 3/4 | 10 | 150 | 199 285 464 | 1 1.280 | 199 285 474 | 1 1.280 |
| 32 | 25 | 1 | 10 | 280 | 199 285 465 | 1 1.486 | 199 285 475 | 1 1.486 |
| 40 | 32 | 1 1/4 | 10 | 480 | 199 285 466 | 1 2.619 | 199 285 476 | 1 2.619 |
| 50 | 40 | 1 1/2 | 10 | 620 | 199 285 467 | 1 3.110 | 199 285 477 | 1 3.110 |
| 63 | 50 | 2 | 10 | 1230 | 199 285 468 | 1 4.585 | 199 285 478 | 1 4.585 |

| D | H | H1 | H2 | H3 | H4 | H5 | H6 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 123 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 50 | 159 | 28 | 62 | 97 | 40 | 77 | 8 | 122 | 194 | 73 | 36 | 25 | 261 | 76 | 48 |
| 58 | 168 | 32 | 71 | 97 | 40 | 77 | 8 | 141 | 194 | 86 | 43 | 25 | 261 | 76 | 48 |
| 68 | 168 | 36 | 71 | 97 | 40 | 77 | 8 | 161 | 194 | 99 | 50 | 25 | 261 | 76 | 48 |
| 84 | 203 | 45 | 84 | 119 | 51 | 99 | 9 | 187 | 224 | 120 | 60 | 45 | 305 | 95 | 59 |
| 97 | 203 | 51 | 84 | 119 | 51 | 99 | 9 | 213 | 224 | 137 | 69 | 45 | 305 | 95 | 59 |
| 124 | 225 | 65 | 106 | 119 | 51 | 99 | 9 | 261 | 224 | 179 | 89 | 45 | 305 | 95 | 59 |

| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 85 | 42 |
| 6 | 77 | 38 |
| 6 | 92 | 46 |



| M | z | z1 |
|------|------|------|
| (mm) | (mm) | (mm) |
| 6 | 105 | 53 |
| 8 | 126 | 63 |
| 8 | 143 | 72 |
| 8 | 185 | 92 |



Butterfly valves type 578



Lug-style end installation butterfly valve type 578 PVC-C

Bare shaft

Flange standard ANSI/ASME

Model:

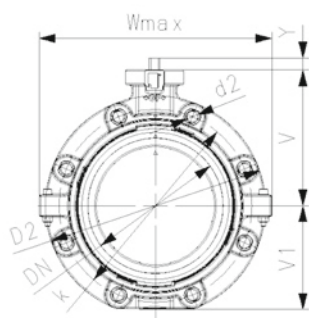
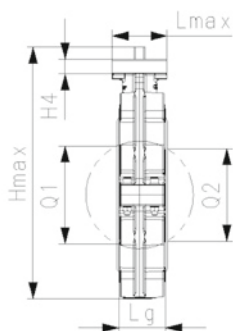
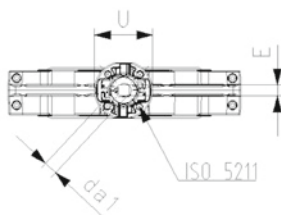
- Housing material: PP-GF30 with SS316 lug-inserts
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Interface F07 according to DIN/ISO 5211
- Interface F10 for the dimensions DN250-300 according to DIN/ISO 5211

Option:

- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|-----------|----------------|------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 63 | 2 | 50 | 10 | 740 | 163 578 902 | 1 | 1.299 | 163 578 922 | 1 | 1.299 |
| 75 | 2 ½ | 65 | 10 | 1500 | 163 578 903 | 1 | 1.456 | 163 578 923 | 1 | 1.456 |
| 90 | 3 | 80 | 10 | 2400 | 163 578 904 | 1 | 1.701 | 163 578 924 | 1 | 1.701 |
| 110 | 4 | 100 | 10 | 3800 | 163 578 905 | 1 | 2.606 | 163 578 925 | 1 | 2.606 |
| 140 | 5 | 125 | 10 | 8600 | 163 578 906 | 1 | 4.120 | 163 578 926 | 1 | 4.120 |
| 160 | 6 | 150 | 10 | 11400 | 163 578 907 | 1 | 5.881 | 163 578 927 | 1 | 5.881 |
| 225 | 8 | 200 | 10 | 19900 | 163 578 908 | 1 | 7.125 | 163 578 928 | 1 | 7.125 |
| 280 | 10 | 250 | 10 | 34000 | 163 578 909 | 1 | 17.880 | 163 578 929 | 1 | 17.880 |
| 315 | 12 | 300 | 10 | 50000 | 163 578 910 | 1 | 24.416 | 163 578 930 | 1 | 24.416 |

| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | d2 (mm) | k (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|
| 63 | 238.3 | 84.8 | 159.5 | 90 | 133.3 | 23 | 78.8 | 44.7 | 160 | 40 | | UNC 5/8 | 120.7 |
| 75 | 251.2 | 84.8 | 166.1 | 90 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | UNC 5/8 | 139.7 |
| 90 | 263.0 | 84.8 | 171.8 | 90 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | UNC 5/8 | 152.4 |
| 110 | 288.9 | 84.8 | 181.4 | 90 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | UNC 5/8 | 190.5 |
| 140 | 318.1 | 84.8 | 195.4 | 90 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | UNC 3/4 | 215.9 |
| 160 | 341.9 | 84.8 | 207.4 | 90 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | UNC 3/4 | 241.3 |
| 225 | 390.4 | 84.8 | 228.9 | 90 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | UNC 3/4 | 298.5 |
| 280 | 511.5 | 125.0 | 304.6 | 125 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | UNC 7/8 | 362.0 |
| 315 | 560.9 | 125.0 | 325.4 | 125 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | UNC 7/8 | 431.8 |

| d (mm) | da1 (mm) |
|-----------|-------------|
| 63 | 13.5 |
| 75 | 13.5 |
| 90 | 13.5 |
| 110 | 17.3 |
| 140 | 17.3 |
| 160 | 21.1 |
| 225 | 21.1 |
| 280 | 27.0 |
| 315 | 27.0 |



Lug-style end installation butterfly valve type 578 PVC-C
With hand lever
Flange standard ANSI/ASME

Model:

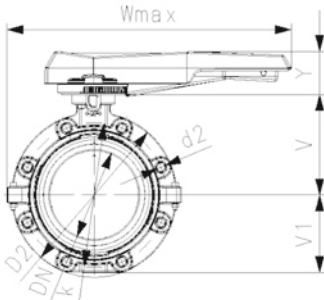
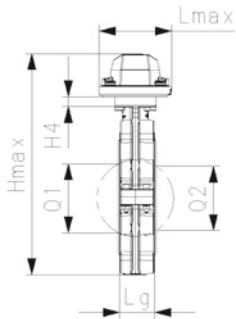
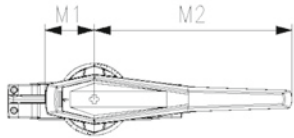
- Housing material: PP-GF30 with SS316 lug-inserts
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension ANSI/ASME B 16.5 Class 150
- We recommend for the dimensions DN250 and DN300 only 6 bar maximum system pressure for the hand lever version

Option:

- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d | Size | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|--------|------|-------|---------------------|-------------|----|--------|-------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| | | | | (l/min) | | | | | | |
| 63 | 2 | 50 | 10 | 740 | 163 578 102 | 1 | 1.800 | 163 578 122 | 1 | 1.800 |
| 75 | 2 ½ | 65 | 10 | 1500 | 163 578 103 | 1 | 1.895 | 163 578 123 | 1 | 1.895 |
| 90 | 3 | 80 | 10 | 2400 | 163 578 104 | 1 | 2.251 | 163 578 124 | 1 | 2.251 |
| 110 | 4 | 100 | 10 | 3800 | 163 578 105 | 1 | 3.146 | 163 578 125 | 1 | 3.146 |
| 140 | 5 | 125 | 10 | 8600 | 163 578 106 | 1 | 4.660 | 163 578 126 | 1 | 4.660 |
| 160 | 6 | 150 | 10 | 11400 | 163 578 107 | 1 | 6.430 | 163 578 127 | 1 | 6.430 |
| 225 | 8 | 200 | 10 | 19900 | 163 578 108 | 1 | 8.625 | 163 578 128 | 1 | 8.625 |
| 280 | 10 | 250 | 6 | 34000 | 163 578 109 | 1 | 19.528 | 163 578 129 | 1 | 19.528 |
| 315 | 12 | 300 | 6 | 50000 | 163 578 110 | 1 | 26.106 | 163 578 130 | 1 | 26.106 |

| d | Hmax | Lmax | Wmax | U | V | H4 | V1 | Lg | D2 | Q1 | Q2 | d2 | k |
|------|-------|-------|-------|------|-------|------|-------|-------|------|------|------|---------|-------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 278.9 | 115.2 | 287.8 | 90 | 133.3 | 23 | 78.8 | 44.7 | 160 | 40 | | UNC 5/8 | 120.7 |
| 75 | 291.8 | 115.2 | 296.3 | 90 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | UNC 5/8 | 139.7 |
| 90 | 303.6 | 115.2 | 310.3 | 90 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | UNC 5/8 | 152.4 |
| 110 | 343.6 | 115.2 | 375.2 | 90 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | UNC 5/8 | 190.5 |
| 140 | 372.8 | 115.2 | 391.2 | 90 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | UNC 3/4 | 215.9 |
| 160 | 393.6 | 115.2 | 395.2 | 90 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | UNC 3/4 | 241.3 |
| 225 | 458.1 | 149.4 | 588.1 | 90 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | UNC 3/4 | 298.5 |
| 280 | 557.6 | 149.4 | 628.1 | 125 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | UNC 7/8 | 362.0 |
| 315 | 607.0 | 149.4 | 663.1 | 125 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | UNC 7/8 | 431.8 |

| d | M1 | M2 |
|------|-------|-------|
| (mm) | (mm) | (mm) |
| 63 | 63.7 | 205.6 |
| 75 | 63.7 | 205.6 |
| 90 | 63.7 | 205.6 |
| 110 | 63.7 | 255.2 |
| 140 | 63.7 | 255.2 |
| 160 | 63.7 | 255.2 |
| 225 | 101.7 | 408.1 |
| 280 | 101.7 | 408.1 |
| 315 | 101.7 | 408.1 |



Lug-style end installation butterfly valve type 578 PVC-C
With gear box
Flange standard ANSI/ASME

Model:

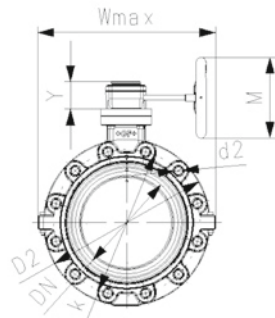
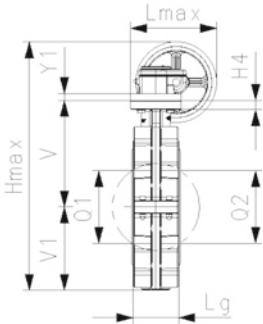
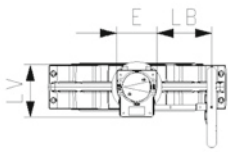
- Housing material: PP-GF30 with SS316 lug-inserts
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension ANSI/ASME B 16.5 Class 150

Option:

- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|-----------|----------------|------------|-------------|-----------------------------------|--------------------|----------------------|--------------------|----------------------|
| 63 | 2 | 50 | 10 | 740 | 163 578 142 | 1 3.535 | 163 578 162 | 1 3.535 |
| 75 | 2 ½ | 65 | 10 | 1500 | 163 578 143 | 1 3.698 | 163 578 163 | 1 3.698 |
| 90 | 3 | 80 | 10 | 2400 | 163 578 144 | 1 3.929 | 163 578 164 | 1 3.929 |
| 110 | 4 | 100 | 10 | 3800 | 163 578 145 | 1 4.834 | 163 578 165 | 1 4.834 |
| 140 | 5 | 125 | 10 | 8600 | 163 578 146 | 1 6.348 | 163 578 166 | 1 6.348 |
| 160 | 6 | 150 | 10 | 11400 | 163 578 147 | 1 8.109 | 163 578 167 | 1 8.109 |
| 225 | 8 | 200 | 10 | 19900 | 163 578 148 | 1 9.353 | 163 578 168 | 1 9.353 |
| 280 | 10 | 250 | 10 | 34000 | 163 578 149 | 1 21.210 | 163 578 169 | 1 21.210 |
| 315 | 12 | 300 | 10 | 50000 | 163 578 150 | 1 27.746 | 163 578 170 | 1 27.746 |

| d (mm) | Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | d2 (mm) | k (mm) |
|-----------|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|
| 63 | 319.4 | 169.1 | 263.5 | 90 | 133.3 | 23 | 78.8 | 44.7 | 160 | 40 | | UNC 5/8 | 120.7 |
| 75 | 332.3 | 169.1 | 272.0 | 90 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | UNC 5/8 | 139.7 |
| 90 | 344.1 | 169.1 | 286.0 | 90 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | UNC 5/8 | 152.4 |
| 110 | 380.8 | 169.1 | 301.0 | 90 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | UNC 5/8 | 190.5 |
| 140 | 410.0 | 169.1 | 317.0 | 90 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | UNC 3/4 | 215.9 |
| 160 | 430.8 | 169.1 | 321.0 | 90 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | UNC 3/4 | 241.3 |
| 225 | 479.3 | 169.1 | 360.0 | 90 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | UNC 3/4 | 298.5 |
| 280 | 615.6 | 212.6 | 440.0 | 125 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | UNC 7/8 | 362.0 |
| 315 | 665.0 | 212.6 | 510.0 | 125 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | UNC 7/8 | 431.8 |

| d (mm) | Y (mm) | E (mm) | Y1 (mm) | M (mm) | LV (mm) | LB (mm) |
|-----------|-----------|-----------|------------|-----------|------------|------------|
| 63 | 61.2 | 80 | | 160 | 112.3 | 129.5 |
| 75 | 61.2 | 80 | | 160 | 112.3 | 129.5 |
| 90 | 61.2 | 80 | | 160 | 112.3 | 129.5 |
| 110 | 61.2 | 80 | | 160 | 112.3 | 129.5 |
| 140 | 61.2 | 80 | | 160 | 112.3 | 129.5 |
| 160 | 61.2 | 80 | | 160 | 112.3 | 129.5 |
| 225 | 61.2 | 80 | | 160 | 112.3 | 129.5 |
| 280 | 68.4 | 100 | 17 | 200 | 130.0 | 134.0 |
| 315 | 68.4 | 100 | 17 | 200 | 130.0 | 134.0 |

Butterfly valves electric type 147



Lug-style end installation butterfly valve type 147 PVC-C
With electric actuator 230 V
Without manual override
Flange standard ANSI/ASME

Model:

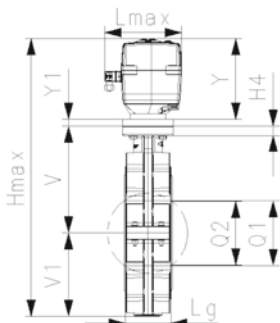
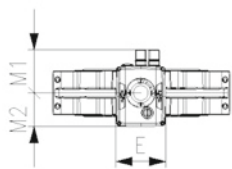
- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Heating element, position feedback (Open/Close/ Middle)
- Overall length according to EN 558, ISO 5752 (DN50-200 line 25, DN250-300 line 16)
- Connecting dimension ANSI/ASME B 16.5 Class 150

Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board

Note:

For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | Weight (kg) | PTFE Code |
|-----------|----------------|------------|-------------|-----------------------------------|--------------------|----------------|--------------------|
| 63 | 2 | 50 | 10 | 740 | 199 147 202 | 4.299 | 199 147 722 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 147 203 | 4.456 | 199 147 723 |
| 90 | 3 | 80 | 10 | 2400 | 199 147 204 | 4.701 | 199 147 724 |
| 110 | 4 | 100 | 10 | 3800 | 199 147 205 | 5.606 | 199 147 725 |
| 140 | 5 | 125 | 10 | 8600 | 199 147 206 | 7.120 | 199 147 726 |
| 160 | 6 | 150 | 10 | 11400 | 199 147 207 | 8.881 | 199 147 727 |
| 225 | 8 | 200 | 10 | 19900 | 199 147 208 | 13.625 | 199 147 728 |
| 280 | 10 | 250 | 6 | 34000 | 199 147 209 | 24.385 | |
| 315 | 12 | 300 | 4 | 50000 | 199 147 210 | 30.916 | |

| Hmax (mm) | Lmax (mm) | Wmax (mm) | U (mm) | V (mm) | H4 (mm) | V1 (mm) | Lg (mm) | D2 (mm) | Q1 (mm) | Q2 (mm) | d2 (mm) | k (mm) | Y (mm) |
|--------------|--------------|--------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|
| 378.3 | 190 | 165 | 90 | 133.3 | 23 | 78.8 | 44.7 | 160 | 40 | | UNC 5/8 | 120.7 | 166.2 |
| 391.2 | 190 | 182 | 90 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | UNC 5/8 | 139.7 | 166.2 |
| 426.1 | 190 | 210 | 90 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | UNC 5/8 | 152.4 | 189.3 |
| 462.8 | 190 | 240 | 90 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | UNC 5/8 | 190.5 | 189.3 |
| 492.0 | 190 | 272 | 90 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | UNC 3/4 | 215.9 | 189.3 |
| 522.8 | 190 | 300 | 90 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | UNC 3/4 | 241.3 | 199.3 |
| 571.3 | 190 | 360 | 90 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | UNC 3/4 | 298.5 | 199.3 |
| 670.6 | 190 | 440 | 125 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | UNC 7/8 | 362.0 | 199.3 |
| 720.0 | 190 | 510 | 125 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | UNC 7/8 | 431.8 | 199.3 |

| E (mm) | Y1 (mm) | M1 (mm) | M2 (mm) |
|-----------|------------|------------|------------|
| 122.3 | | 107.3 | 82.7 |
| 122.3 | | 107.3 | 82.7 |
| 122.3 | | 107.3 | 82.7 |
| 122.3 | | 107.3 | 82.7 |
| 122.3 | | 107.3 | 82.7 |
| 122.3 | | 107.3 | 82.7 |
| 122.3 | 17 | 107.3 | 82.7 |
| 122.3 | 17 | 107.3 | 82.7 |



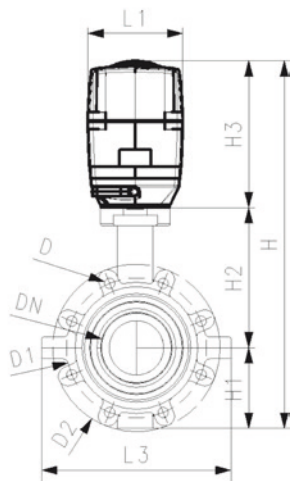
Lug-style, end installation butterfly valve type 147 PVC-C
With electric actuator 24V
Without manual override
Flange standard ANSI/ASME

Model:

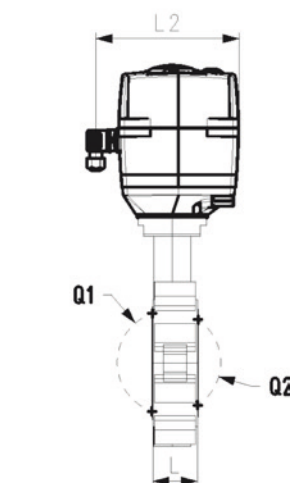
- Voltage 24V AC/DC
- Factory set control range 90°<
- Heating element, position feedback (Open/Close/ Middle)
- Overall length according to EN 558, ISO 5752 (DN50-200 line 25, DN250-300 line 16)
- Connecting dimension ANSI/ASME B 16.5 Class 150

Option:

- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit, Monitoring board, Position controller, Profibus DP board



| d | Size | DN | PN | kv-value | EPDM | Weight | PTFE |
|------|--------|------|-------|---------------------|--------------------|--------|--------------------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | (kg) | Code |
| | | | | (l/min) | | | |
| 63 | 2 | 50 | 10 | 740 | 199 147 282 | 4.299 | 199 147 742 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 147 283 | 4.456 | 199 147 743 |
| 90 | 3 | 80 | 10 | 2400 | 199 147 284 | 4.701 | 199 147 744 |
| 110 | 4 | 100 | 10 | 3800 | 199 147 285 | 5.606 | 199 147 745 |
| 140 | 5 | 125 | 10 | 8600 | 199 147 286 | 5.606 | 199 147 746 |
| 160 | 6 | 150 | 10 | 11400 | 199 147 287 | 8.881 | 199 147 747 |
| 225 | 8 | 200 | 10 | 19900 | 199 147 288 | 13.625 | 199 147 748 |
| 280 | 10 | 250 | 4 | 34000 | 199 147 289 | 24.385 | |
| 315 | 12 | 300 | 6 | 50000 | 199 147 290 | 30.916 | |



| Actuator unit type | d2 | D | D1 | H | H1 | H2 | H3 | L | L1 | L2 | L3 | Q1 | Q2 |
|--------------------|------|---------|-------|------|------|------|------|------|------|------|------|------|------|
| | (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| EA-45 | 160 | UNC 5/8 | 120.6 | 399 | 77 | 134 | 188 | 45 | 122 | 180 | 165 | 40 | |
| EA-45 | 180 | UNC 5/8 | 139.7 | 411 | 83 | 140 | 188 | 46 | 122 | 180 | 182 | 54 | 35 |
| EA-120 | 195 | UNC 5/8 | 152.4 | 423 | 89 | 146 | 188 | 49 | 122 | 180 | 210 | 67 | 50 |
| EA-120 | 226 | UNC 5/8 | 190.5 | 461 | 106 | 167 | 188 | 56 | 122 | 180 | 240 | 88 | 74 |
| EA-120 | 258 | UNC 3/4 | 215.9 | 490 | 121 | 181 | 188 | 64 | 122 | 180 | 272 | 113 | 97 |
| EA-120 | 284 | UNC 3/4 | 241.3 | 510 | 133 | 189 | 188 | 72 | 122 | 180 | 300 | 139 | 123 |
| EA-250 | 341 | UNC 3/4 | 298.4 | 577 | 159 | 210 | 208 | 73 | 122 | 180 | 360 | 178 | 169 |
| EA-250 | 482 | UNC 7/8 | 431.8 | 727 | 234 | 285 | 208 | 113 | 122 | 180 | 510 | 256 | 253 |
| EA-250 | 412 | UNC 7/8 | 362.0 | 677 | 205 | 264 | 208 | 113 | 122 | 180 | 440 | 210 | 207 |

Butterfly valves pneumatic type 244



Lug-style end installation butterfly valve type 244 PVC-C
With pneumatic actuator - fail safe to close (FC)
Without manual override
Flange standard ANSI/ASME

Model:

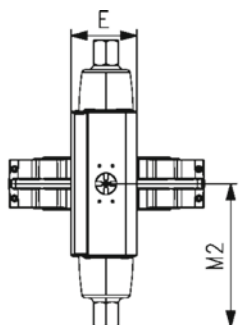
- Housing material: PP-GF30 with SS316 lug-inserts
- Control range 90°<
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension ANSI/ASME B 16.5 Class 150

Option:

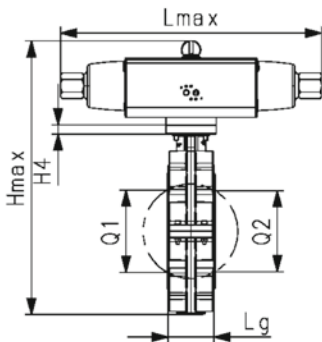
- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)

Note:

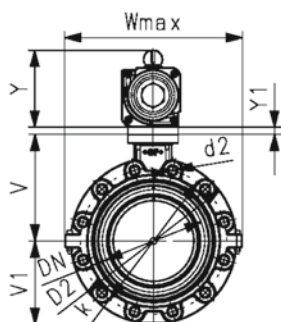
For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d | Size | DN | PN | kv-value | EPDM | SP | Weight | FKM | SP | Weight |
|------|--------|------|-------|---------------------|-------------|----|--------|-------------|----|--------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) | Code | | (kg) |
| 63 | 2 | 50 | 10 | 740 | 199 244 162 | 1 | 3.499 | 199 244 182 | 1 | 3.499 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 244 163 | 1 | 3.656 | 199 244 183 | 1 | 3.656 |
| 90 | 3 | 80 | 10 | 2400 | 199 244 164 | 1 | 4.692 | 199 244 184 | 1 | 4.692 |
| 110 | 4 | 100 | 10 | 3800 | 199 244 165 | 1 | 6.406 | 199 244 185 | 1 | 6.406 |
| 140 | 5 | 125 | 10 | 8600 | 199 244 166 | 1 | 9.222 | 199 244 186 | 1 | 9.222 |
| 160 | 6 | 150 | 10 | 11400 | 199 244 167 | 1 | 12.902 | 199 244 187 | 1 | 12.902 |
| 225 | 8 | 200 | 10 | 19900 | 199 244 168 | 1 | 16.691 | 199 244 188 | 1 | 16.691 |
| 280 | 10 | 250 | 10 | 34000 | 199 244 169 | 1 | 33.880 | 199 244 189 | 1 | 33.880 |
| 315 | 12 | 300 | 5 | 50000 | 199 244 170 | 1 | 43.985 | 199 244 190 | 1 | 43.985 |



| d | Size | Hmax | Lmax | Wmax | U | V | H4 | V1 | Lg | D2 | Q1 | Q2 | d2 |
|------|--------|-------|-------|------|------|-------|------|-------|-------|------|------|------|---------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | |
| 63 | 2 | 328.1 | 274.4 | 165 | 90 | 133.3 | 23 | 78.8 | 44.7 | 160 | 40 | | UNC 5/8 |
| 75 | 2 ½ | 341.0 | 274.4 | 182 | 90 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | UNC 5/8 |
| 90 | 3 | 365.7 | 325.2 | 210 | 90 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | UNC 5/8 |
| 110 | 4 | 388.3 | 359.6 | 240 | 90 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | UNC 5/8 |
| 140 | 5 | 452.2 | 418.0 | 272 | 90 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | UNC 3/4 |
| 160 | 6 | 476.6 | 434.0 | 280 | 90 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | UNC 3/4 |
| 225 | 8 | 532.0 | 498.4 | 360 | 90 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | UNC 3/4 |
| 280 | 10 | 679.5 | 646.0 | 440 | 125 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | UNC 7/8 |
| 315 | 12 | 749.0 | 681.0 | 510 | 125 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | UNC 7/8 |



| d | Size | k | Y | E | Y1 | M2 |
|------|--------|-------|-------|-------|------|-------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 2 | 120.7 | 98.2 | 70.4 | 15.0 | 137.2 |
| 75 | 2 ½ | 139.7 | 98.2 | 70.4 | 15.0 | 137.2 |
| 90 | 3 | 152.4 | 111.1 | 83.3 | 15.0 | 162.6 |
| 110 | 4 | 190.5 | 114.8 | 87.0 | | 179.8 |
| 140 | 5 | 215.9 | 149.5 | 107.5 | | 209.0 |
| 160 | 6 | 241.3 | 153.1 | 111.1 | | 217.0 |
| 225 | 8 | 298.5 | 160.0 | 118.0 | | 249.2 |
| 280 | 10 | 362.0 | 190.0 | 148.0 | 18.2 | 323.0 |
| 315 | 12 | 431.8 | 210.1 | 168.0 | 18.2 | 340.5 |



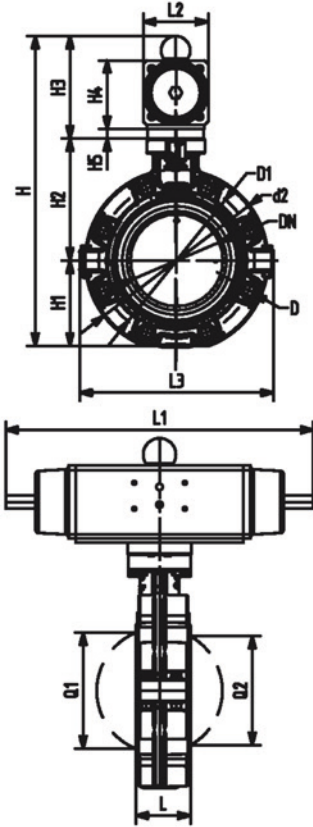
Lug-style, end installation butterfly valve type 244 PVC-C
With pneumatic actuator - fail safe to open (FO)
Without manual override
Flange standard ANSI/ASME

Model:

- Housing material: PP-GF30 with SS316 lug-inserts
- Control range 90°<
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension ANSI/ASME B 16.5 Class 150

Option:

- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)



| d | Size | DN | PN | kv-value | EPDM | FKM |
|------|--------|------|-------|---------------------|-------------|-------------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | Code |
| | | | | (l/min) | | |
| 63 | 2 | 50 | 10 | 740 | 199 244 202 | 199 244 222 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 244 203 | 199 244 223 |
| 90 | 3 | 80 | 10 | 2400 | 199 244 204 | 199 244 224 |
| 110 | 4 | 100 | 10 | 3800 | 199 244 205 | 199 244 225 |
| 140 | 5 | 125 | 10 | 8600 | 199 244 206 | 199 244 226 |
| 160 | 6 | 150 | 10 | 11400 | 199 244 207 | 199 244 227 |
| 225 | 8 | 200 | 10 | 19900 | 199 244 208 | 199 244 228 |
| 280 | 10 | 250 | 10 | 34000 | 199 244 209 | 199 244 229 |
| 315 | 12 | 300 | 5 | 50000 | 199 244 210 | 199 244 230 |

| Actuator unit type | d2 | D | D1 | H | H1 | H2 | H3 | H4 | H5 | L | L1 | L2 | L3 |
|--------------------|------|---------|-------|------|------|------|------|------|------|------|------|------|------|
| | (mm) | | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| PA-30 FO | 160 | UNC 5/8 | 120.6 | 328 | 77 | 134 | 117 | 70 | 15 | 45 | 276 | 65 | 150 |
| PA-30 FO | 180 | UNC 5/8 | 139.7 | 340 | 83 | 140 | 117 | 70 | 15 | 46 | 276 | 65 | 160 |
| PA-35 FO | 195 | UNC 5/8 | 152.4 | 361 | 89 | 146 | 126 | 78 | 15 | 49 | 326 | 72 | 175 |
| PA-40 FO | 226 | UNC 5/8 | 190.5 | 402 | 106 | 167 | 129 | 86 | | 56 | 370 | 80 | 244 |
| PA-45 FO | 258 | UNC 3/4 | 215.9 | 441 | 121 | 181 | 139 | 96 | | 64 | 411 | 90 | 272 |
| PA-50 FO | 284 | UNC 3/4 | 241.3 | 471 | 133 | 189 | 149 | 106 | | 72 | 423 | 100 | 297 |
| PA-55 FO | 341 | UNC 3/4 | 298.4 | 530 | 159 | 210 | 161 | 118 | | 73 | 452 | 112 | 360 |
| PA-70 FO | 412 | UNC 7/8 | 362.0 | 660 | 205 | 264 | 191 | | | 113 | 648 | 137 | 440 |
| PA-70 FO | 482 | UNC 7/8 | 431.8 | 715 | 234 | 285 | 196 | 157 | | 113 | 663 | 145 | 510 |

| Q1 | Q2 |
|------|------|
| (mm) | (mm) |
| 40 | |
| 54 | 35 |
| 67 | 50 |
| 88 | 74 |
| 113 | 97 |
| 139 | 123 |
| 178 | 169 |
| 210 | 207 |
| 256 | 253 |



Lug-style butterfly valve type 244 PVC-C
DA (Double acting)
Without manual override
Flange standard ANSI/ASME

Model:

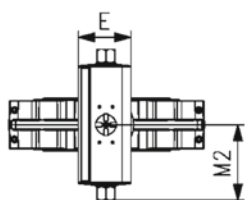
- Housing material: PP-GF30 with SS316 lug-inserts
- Control range 90°<
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension ANSI/ASME B 16.5 Class 150

Option:

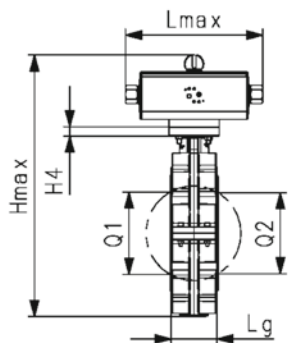
- Optional accessory: Valve-Integrated position feedback with limit switches (limit switches have to be ordered separately)

Note:

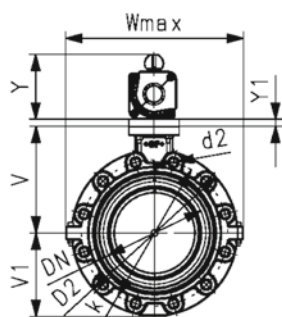
For some material combination (e.g. DN300 valves with PE/PP pipes) special flange adapters are needed. Please check the "Perfect flange connection tool" on www.gfps.com



| d | Size | DN | PN | kv-value | EPDM | FKM |
|------|--------|------|-------|---------------------|-------------|-------------|
| (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | Code |
| | | | | (l/min) | | |
| 63 | 2 | 50 | 10 | 740 | 199 244 242 | 199 244 262 |
| 75 | 2 ½ | 65 | 10 | 1500 | 199 244 243 | 199 244 263 |
| 90 | 3 | 80 | 10 | 2400 | 199 244 244 | 199 244 264 |
| 110 | 4 | 100 | 10 | 3800 | 199 244 245 | 199 244 265 |
| 140 | 5 | 125 | 10 | 8600 | 199 244 246 | 199 244 266 |
| 160 | 6 | 150 | 10 | 11400 | 199 244 247 | 199 244 267 |
| 225 | 8 | 200 | 10 | 19900 | 199 244 248 | 199 244 268 |
| 280 | 10 | 250 | 10 | 34000 | 199 244 249 | 199 244 269 |
| 315 | 12 | 300 | 5 | 50000 | 199 244 250 | 199 244 270 |



| d | Size | Hmax | Lmax | Wmax | U | V | H4 | V1 | Lg | D2 | Q1 | Q2 | d2 |
|------|--------|-------|-------|------|------|-------|------|-------|-------|------|------|------|---------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | |
| 63 | 2 | 319.4 | 196.2 | 165 | 90 | 133.9 | 23 | 78.8 | 44.7 | 160 | 40 | | UNC 5/8 |
| 75 | 2 ½ | 332.3 | 196.2 | 182 | 90 | 139.9 | 23 | 85.1 | 45.7 | 180 | 54 | 35 | UNC 5/8 |
| 90 | 3 | 352.8 | 205.6 | 210 | 90 | 145.6 | 23 | 91.2 | 48.7 | 195 | 67 | 50 | UNC 5/8 |
| 110 | 4 | 384.7 | 242.0 | 240 | 90 | 166.0 | 23 | 107.5 | 55.6 | 226 | 88 | 74 | UNC 5/8 |
| 140 | 5 | 413.9 | 272.0 | 272 | 90 | 180.0 | 23 | 122.7 | 63.5 | 258 | 113 | 97 | UNC 3/4 |
| 160 | 6 | 473.0 | 280.0 | 280 | 90 | 189.0 | 23 | 134.5 | 71.5 | 284 | 139 | 123 | UNC 3/4 |
| 225 | 8 | 521.5 | 360.0 | 360 | 90 | 210.5 | 23 | 161.5 | 72.5 | 341 | 178 | 169 | UNC 3/4 |
| 280 | 10 | 649.5 | 339.6 | 440 | 125 | 264.4 | 23 | 206.9 | 113.2 | 412 | 210 | 207 | UNC 7/8 |
| 315 | 12 | 698.9 | 339.6 | 510 | 125 | 285.2 | 23 | 235.5 | 114.6 | 482 | 256 | 253 | UNC 7/8 |



| d | Size | k | Y | E | Y1 | M2 |
|------|--------|-------|-------|-------|------|-------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 63 | 2 | 120.7 | 92.3 | 64.5 | | 98.1 |
| 75 | 2 ½ | 139.7 | 92.3 | 64.5 | | 98.1 |
| 90 | 3 | 152.4 | 98.2 | 70.4 | 15 | 102.8 |
| 110 | 4 | 190.5 | 111.2 | 83.3 | | 121.0 |
| 140 | 5 | 215.9 | 111.2 | 83.3 | | 121.0 |
| 160 | 6 | 241.3 | 149.5 | 107.5 | | 145.0 |
| 225 | 8 | 298.5 | 160.0 | 118.0 | | 249.2 |
| 280 | 10 | 362.0 | 160.0 | 118.0 | | 169.8 |
| 315 | 12 | 431.8 | 160.0 | 118.0 | | 169.8 |

Diaphragm valves type 317



Diaphragm valve type 317 PVC-C With backing flange PP-V Inch ANSI

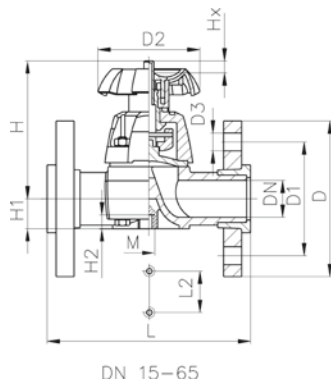
Model:

- Flat sealing faces
- DN65 with backing flange
- Overall length according to EN 558
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

Option:

- Handwheel with built-in locking mechanism (standard version is nonlockable)

* **DN80, DN100 and DN150 fixed flanges metric and inch ANSI B16.5**



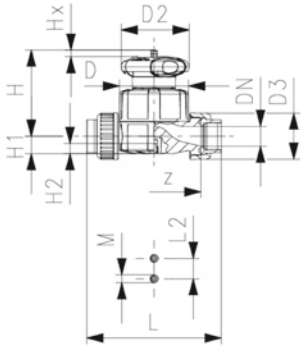
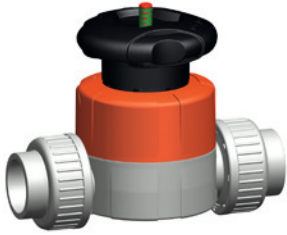
DN 15-65

| | d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | Weight (kg) |
|---|-----------|------------|----------------|-------------|--|--------------------|----------------|
| | 75 | 65 | 2 1/2 | 10 | 992 | 163 317 623 | 5.335 |
| * | 90 | 80 | 3 | 10 | 1700 | 163 317 024 | 9.722 |
| * | 110 | 100 | 4 | 6 | 2700 | 163 317 025 | 13.600 |

| | FKM Code | PTFEwith EPDM supp. diaphragm Code | Weight (kg) |
|---|--------------------|---|----------------|
| | 163 317 668 | 163 317 638 | 4.425 |
| * | 163 317 069 | | |
| * | 163 317 370 | 163 317 040 | 13.799 |

| | D (mm) | D1 (mm) | D2 (mm) | D3 (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | M | Lift = Hx (mm) | AL |
|---|-----------|------------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----|-------------------|----|
| | 185 | | 152 | | 201 | 46 | | 290 | | 70 | M8 | | 4 |
| * | 200 | 160 | 270 | 18 | 265 | 57 | 23 | 310 | 35 | 120 | M12 | 40 | 8 |
| * | 225 | 180 | 270 | 18 | 304 | 69 | 23 | 350 | 35 | 120 | M12 | 50 | 8 |

Diaphragm valves type 514



Diaphragm valve type 514 PVC-C With solvent cement sockets ASTM

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

Option:

- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches

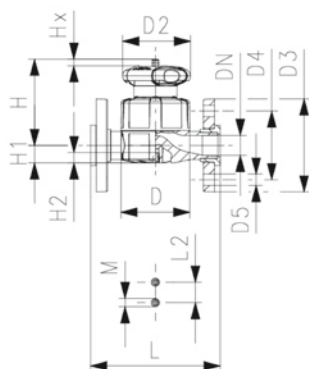
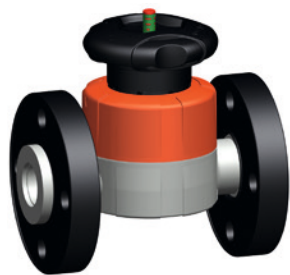
* O-Ring material: FKM

| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------------|----|----------------|
| 20 | 15 | ½ | 10 | 125 | 163 514 612 | 1 | 0.310 |
| 25 | 20 | ¾ | 10 | 271 | 163 514 613 | 1 | 0.445 |
| 32 | 25 | 1 | 10 | 481 | 163 514 614 | 1 | 0.708 |
| 40 | 32 | 1 ¼ | 10 | 759 | 163 514 615 | 1 | 0.998 |
| 50 | 40 | 1 ½ | 10 | 1263 | 163 514 616 | 1 | 1.692 |
| 63 | 50 | 2 | 10 | 1728 | 163 514 617 | 1 | 2.583 |

| FKM Code | PTFE/ EPDM* Code | SP | Weight (kg) |
|--------------------|------------------------|----|----------------|
| 163 514 662 | 163 514 632 | 1 | 0.310 |
| 163 514 663 | 163 514 633 | 1 | 0.522 |
| 163 514 664 | 163 514 634 | 1 | 0.727 |
| 163 514 665 | 163 514 635 | 1 | 1.412 |
| 163 514 666 | 163 514 636 | 1 | 1.726 |
| 163 514 667 | 163 514 637 | 1 | 3.382 |

| D (mm) | D2 (mm) | D3 (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L2 (mm) | M | z (mm) | Lift = Hx (mm) |
|-----------|------------|------------|-----------|------------|------------|-----------|------------|----|-----------|----------------------|
| 65 | 65 | 43 | 73 | 14 | 12 | 141 | 25 | M6 | 96 | 7 |
| 80 | 65 | 51 | 81 | 18 | 12 | 165 | 25 | M6 | 114 | 10 |
| 88 | 87 | 58 | 107 | 22 | 12 | 179 | 25 | M6 | 122 | 13 |
| 101 | 87 | 72 | 115 | 26 | 15 | 204 | 45 | M8 | 140 | 15 |
| 117 | 135 | 83 | 148 | 32 | 15 | 230 | 45 | M8 | 160 | 19 |
| 144 | 135 | 100 | 166 | 39 | 15 | 268 | 45 | M8 | 190 | 25 |

Diaphragm valves type 517



Diaphragm valve type 517 PVC-C With backing flanges PP-V Inch ANSI

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

Option:

- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches

* O-Ring material: FKM

| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------------|-------------------|
| 20 | 15 | ½ | 10 | 125 | 163 517 712 | 1 0.529 |
| 25 | 20 | ¾ | 10 | 271 | 163 517 713 | 1 0.696 |
| 32 | 25 | 1 | 10 | 481 | 163 517 714 | 1 1.388 |
| 40 | 32 | 1 ¼ | 10 | 759 | 163 517 715 | 1 1.797 |
| 50 | 40 | 1 ½ | 10 | 1263 | 163 517 716 | 1 2.854 |
| 63 | 50 | 2 | 10 | 1728 | 163 517 717 | 1 4.022 |

| FKM Code | PTFE/ EPDM* Code | SP Weight (kg) |
|--------------------|------------------------|-------------------|
| 163 517 762 | 163 517 732 | 1 0.456 |
| 163 517 763 | 163 517 733 | 1 0.696 |
| 163 517 764 | 163 517 734 | 1 0.951 |
| 163 517 765 | 163 517 735 | 1 1.818 |
| 163 517 766 | 163 517 736 | 1 2.883 |
| 163 517 767 | 163 517 737 | 1 4.050 |

| D | D2 | D3 | D4 | D5 | H | H1 | H2 | L | L2 | M | Lift = Hx (mm) |
|-----|-----|-----|-----|----|-----|----|----|-----|----|----|----------------------|
| 65 | 65 | 95 | 60 | 16 | 73 | 14 | 12 | 130 | 25 | M6 | 7 |
| 80 | 65 | 105 | 70 | 16 | 81 | 18 | 12 | 150 | 25 | M6 | 10 |
| 88 | 87 | 115 | 79 | 16 | 107 | 22 | 12 | 160 | 25 | M6 | 13 |
| 101 | 87 | 140 | 89 | 16 | 115 | 26 | 15 | 180 | 45 | M8 | 15 |
| 117 | 135 | 150 | 98 | 16 | 148 | 32 | 15 | 200 | 45 | M8 | 19 |
| 144 | 135 | 165 | 121 | 19 | 166 | 39 | 15 | 230 | 45 | M8 | 25 |

Copiable Configurator GF Diaphragm Valve

Valve body type

- A20 Type 514 - True Union Design
- A21 Type 515 - Spigots
- A22 Type 517 - Flanges

Material

- B01 PVC-U
- B02 PVC-C
- B03 ABS

Dimension

- C05 DN 10 3/8"
- C06 DN 15 1/2"
- C07 DN 20 3/4"
- C08 DN 25 1"
- C09 DN 32 1 1/4"
- C10 DN 40 1 1/2"
- C11 DN 50 2"

Version

- D11 standard
- D05 silicone free / oil free

Diaphragm

- E01 EPDM
- E02 FPM
- E11 NBR
- E12 PTFE/EPDM
- E04 PTFE/FPM

Connecting parts

- H01 PVC-U Cemented socket metric
- H02 PVC-U Cemented socket JIS
- H03 PVC-U Cemented socket ASTM
- H04 PVC-U Cemented socket Zoll BS
- H05 PVC-U Cemented spigot metric
- H06 PVC-U Threaded socket Rp (ISO)
- H08 PVC-U Threaded socket Rc (JIS)
- H09 PVC-U Threaded socket NPT (ASTM)
- H11 PVC-C Cemented socket metric
- H13 PVC-C Cemented socket Zoll ASTM
- H14 PVC-C Cemented spigot metric
- H20 ABS Cemented socket metric
- H21 ABS Cemented socket Zoll BS
- H24 ABS Cemented spigot metric
- H40 PE-80 Fusion socket metric
- H41 PE-100 Butt fusion spigot SDR11 metric
- H43 PE-100 Butt fusion spigot long SDR11 metric
- H62 Fixed flange PVC-U JIS
- H70 Backing flange PVC-U metric with PVC-U endings
- H71 Backing flange PVC-U Zoll ANSI with PVC-U endings
- H71 PVCC Backing flange PVC-U Zoll ANSI with PVC-C endings
- H72 PVCU Backing flange PP-steel metric with PVC-U endings
- H72 PVCC Backing flange PP-steel metric with PVC-C endings
- H72 ABS Backing flange PP-steel metric with ABS endings
- H73 PVCU Backing flange PP-steel Zoll ANSI with PVC-U endings
- H73 PVCC Backing flange PP-steel Zoll ANSI with PVC-C endings
- H73 ABS Backing flange PP-steel Zoll ANSI with ABS endings
- H74 PVCU Backing flange PP-V metric with PVC-U endings
- H74 PVCC Backing flange PP-V metric with PVC-C endings
- H74 ABS Backing flange PP-V metric with ABS endings
- H74 PVCC Backing flange PP-V metric with PVC-C endings
- H75 PVCU Backing flange PP-V ANSI with PVC-U endings
- H75 PVCC Backing flange PP-V ANSI with PVC-C endings
- H78 PVCU Backing flange PP-GF JIS with PVC-U endings
- H80 PVC-U valve end blank

Electrical feedback

- I33 Electrical feedback with Ag, Ni limit switches
- I34 Electrical feedback with Au limit switches

Manual actuated: pressure tight housing

- K30 Bonnet pressure tight
- K31 Bonnet not pressure tight

Pressure range

- M01 PN10
- M02 PN16

Example:

Diaphragm valve with valve body type 515, PVC-U, EPDM diaphragm, DN25, cemented spigots metric, electrical feedback, pressure tight housing, PN10



A21 B01 C08 D11 E01 H05 I33 K30 M01



Pneumatic Actuator DIASTAR

- P40 DIASTAR Six FC fail safe to close
- P43 DIASTAR Ten FC fail safe to close
- P44 DIASTAR Sixteen FC fail safe to close
- P45 DIASTAR Sixteen FO fail safe to open
- P46 DIASTAR Sixteen DA double acting
- P47 DIASTAR Ten FO fail safe to open
- P48 DIASTAR Ten DA double acting

Diaphragm valves pneumatic DIASTAR Six



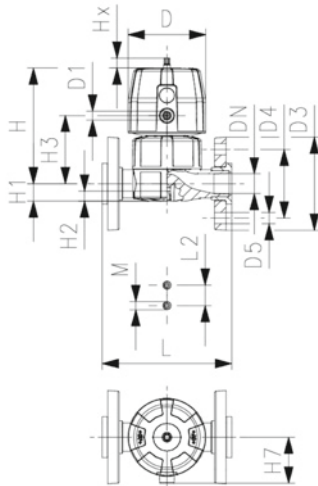
Diaphragm valve DIASTAR Six PVC-C FC (Fail safe to close) With backing flanges PP-V Inch ANSI

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

Option:

- Individual configuration of the valve



| Size | DN | PN | kv-value | EPDM | SP | Weight |
|--------|------|-------|---------------------|-------------|----|--------|
| (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| | | | (L/min) | | | |
| ¾ | 20 | 6 | 271 | 163 617 713 | 1 | 1.215 |
| 1 | 25 | 6 | 481 | 163 617 714 | 1 | 1.502 |
| 1 ¼ | 32 | 6 | 759 | 163 617 715 | 1 | 2.436 |
| 1 ½ | 40 | 6 | 960 | 163 617 716 | 1 | 3.004 |
| 2 | 50 | 6 | 1181 | 163 617 717 | 1 | 4.399 |

| Size | D | D1_G | D3 | D4 | D5 | H | H1 | H2 | H3 | H7 | L | L2 | M | Lift = Hx |
|--------|------|--------|------|------|------|------|------|------|------|------|------|------|----|-----------|
| (inch) | (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) |
| ¾ | 96 | ⅜ | 105 | 70 | 16 | 132 | 18 | 12 | 73 | 57 | 150 | 25 | M6 | 10 |
| 1 | 96 | ⅜ | 115 | 79 | 16 | 143 | 22 | 12 | 84 | 57 | 160 | 25 | M6 | 13 |
| 1 ¼ | 120 | ⅜ | 140 | 89 | 16 | 173 | 26 | 15 | 99 | 69 | 180 | 45 | M8 | 14 |
| 1 ½ | 120 | ⅜ | 150 | 98 | 16 | 193 | 32 | 15 | 119 | 69 | 200 | 45 | M8 | 16 |
| 2 | 120 | ⅜ | 165 | 121 | 19 | 205 | 39 | 15 | 132 | 69 | 230 | 45 | M8 | 16 |



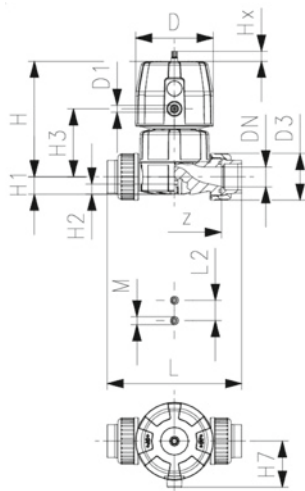
Diaphragm valve DIASTAR Six PVC-C FC (Fail safe to close) Unions with solvent cement sockets ASTM

Model:

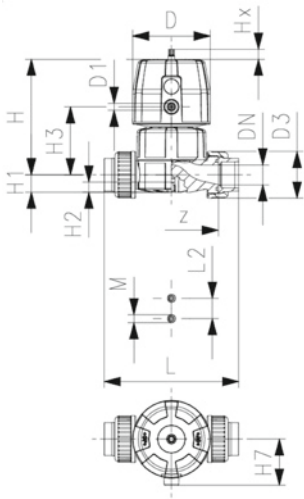
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

Option:

- Individual configuration of the valve



| d | DN | Size | PN | kv-value | EPDM | SP | Weight |
|------|------|--------|-------|---------------------|-------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| | | | | | | | |
| | | | | | | | |
| 25 | 20 | ¾ | 6 | 271 | 163 614 613 | 1 | 1.065 |
| 32 | 25 | 1 | 6 | 481 | 163 614 614 | 1 | 1.304 |
| 40 | 32 | 1 ¼ | 6 | 759 | 163 614 615 | 1 | 2.111 |
| 50 | 40 | 1 ½ | 6 | 960 | 163 614 616 | 1 | 2.780 |
| 63 | 50 | 2 | 6 | 1181 | 163 614 617 | 1 | 3.924 |



| D | D1_G | H | H1 | H2 | H3 | H7 | L | L2 | M | z | Lift = Hx |
|------|--------|------|------|------|------|------|------|------|----|------|-----------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) | (mm) |
| 96 | ⅜ | 132 | 18 | 12 | 73 | 57 | 165 | 25 | M6 | 114 | 10 |
| 96 | ⅜ | 143 | 22 | 12 | 84 | 57 | 179 | 25 | M6 | 122 | 13 |
| 120 | ⅜ | 173 | 26 | 15 | 99 | 69 | 204 | 45 | M8 | 140 | 14 |
| 120 | ⅜ | 193 | 32 | 15 | 119 | 69 | 230 | 45 | M8 | 160 | 16 |
| 120 | ⅜ | 205 | 39 | 15 | 132 | 69 | 268 | 45 | M8 | 190 | 16 |

Diaphragm valves pneumatic DIASTAR Ten



**Diaphragm valve DIASTAR Ten PVC-C
DA (Double acting)
With backing flanges PP-V Inch ANSI**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

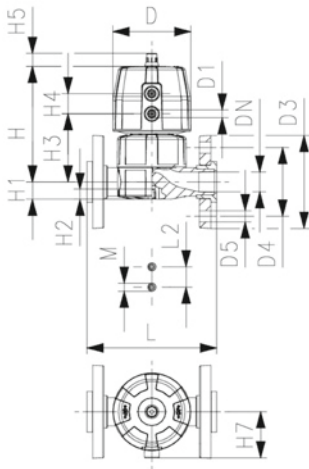
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



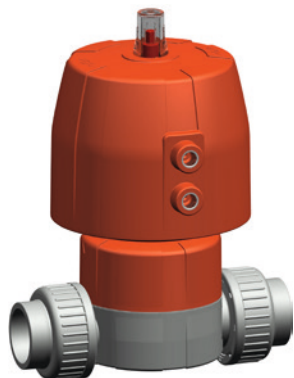
| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--------------|-----------------------------------|--------------------|----|----------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 657 712 | 1 | 0.657 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 657 713 | 1 | 1.080 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 657 714 | 1 | 1.364 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 657 715 | 1 | 2.166 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 657 716 | 1 | 3.302 |
| 63 | 50 | 2 | 10 | 10* | 1728 | 163 657 717 | 1 | 4.480 |

| FKM Code | PTFE/ EPDM* Code | SP | Weight (kg) |
|--------------------|------------------------|----|----------------|
| 163 657 762 | 163 657 732 | 1 | 0.657 |
| 163 657 763 | 163 657 733 | 1 | 1.080 |
| 163 657 764 | 163 657 734 | 1 | 1.385 |
| 163 657 765 | 163 657 735 | 1 | 2.187 |
| 163 657 766 | 163 657 736 | 1 | 3.331 |
| 163 657 767 | 163 657 737 | 1 | 4.508 |

| D | D1_G | D3 | D4 | D5 | H | H1 | H2 | H3 | H4 | H5 | H7 | L | L2 | M |
|------|--------|------|------|------|------|------|------|------|------|------|------|------|------|----|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | |
| 68 | ⅝ | 95 | 60 | 16 | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 130 | 25 | M6 |
| 96 | ⅝ | 105 | 70 | 16 | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 150 | 25 | M6 |
| 96 | ⅝ | 115 | 79 | 16 | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 160 | 25 | M6 |
| 120 | ⅝ | 140 | 89 | 16 | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 180 | 45 | M8 |
| 150 | ¾ | 150 | 98 | 16 | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 200 | 45 | M8 |
| 150 | ¾ | 165 | 121 | 19 | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 230 | 45 | M8 |

**Lift =
Hx
(mm)**

| |
|----|
| 7 |
| 10 |
| 13 |
| 15 |
| 19 |
| 23 |



**Diaphragm valve DIASTAR Ten PVC-C
DA (Double acting)
Unions with solvent cement sockets ASTM**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

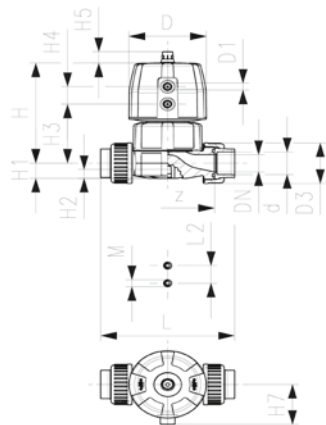
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--------------|-----------------------------------|--------------------|----|----------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 654 612 | 1 | 0.538 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 654 613 | 1 | 0.930 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 654 614 | 1 | 1.166 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 654 615 | 1 | 1.841 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 654 616 | 1 | 3.078 |
| 63 | 50 | 2 | 10 | 10* | 1728 | 163 654 617 | 1 | 4.005 |

| FKM Code | PTFE/ EPDM* Code | SP | Weight (kg) |
|--------------------|------------------------|----|----------------|
| 163 654 662 | 163 654 632 | 1 | 0.526 |
| 163 654 663 | 163 654 633 | 1 | 0.907 |
| 163 654 664 | 163 654 634 | 1 | 1.137 |
| 163 654 665 | 163 654 635 | 1 | 1.781 |
| 163 654 666 | 163 654 636 | 1 | 2.992 |
| 163 654 667 | 163 654 637 | 1 | 3.840 |

| D | D1_G | H | H1 | H2 | H3 | H4 | H5 | H7 | L | L2 | M | z | Lift = Hx (mm) |
|------|--------|------|------|------|------|------|------|------|------|------|----|------|----------------------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) | |
| 68 | ⅝ | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 141 | 25 | M6 | 96 | 7 |
| 96 | ⅝ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 165 | 25 | M6 | 114 | 10 |
| 96 | ⅝ | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 179 | 25 | M6 | 122 | 13 |
| 120 | ⅝ | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 204 | 45 | M8 | 140 | 15 |
| 150 | ⅝ | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 230 | 45 | M8 | 160 | 19 |
| 150 | ⅝ | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 268 | 45 | M8 | 190 | 23 |



**Diaphragm valve DIASTAR Ten PVC-C
FO (Fail safe to open)
With backing flanges PP-V Inch ANSI**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

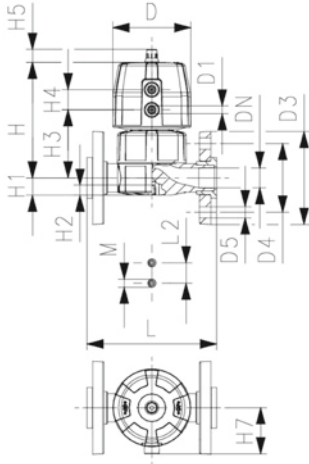
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--------------|--|--------------------|----|----------------|
| 20 | 15 | ½ | 10 | 10/10* | 125 | 163 647 712 | 1 | 0.673 |
| 25 | 20 | ¾ | 10 | 10/10* | 271 | 163 647 713 | 1 | 1.116 |
| 32 | 25 | 1 | 10 | 10/10* | 481 | 163 647 714 | 1 | 1.394 |
| 40 | 32 | 1 ¼ | 10 | 10/10* | 759 | 163 647 715 | 1 | 2.226 |
| 50 | 40 | 1 ½ | 10 | 10/10* | 1263 | 163 647 716 | 1 | 4.052 |
| 63 | 50 | 2 | 10 | 10/10* | 1728 | 163 647 717 | 1 | 5.230 |

| FKM Code | PTFE/ EPDM* Code | SP | Weight (kg) |
|--------------------|------------------------|----|----------------|
| 163 647 662 | 163 647 732 | 1 | 0.673 |
| 163 647 663 | 163 647 733 | 1 | 1.116 |
| 163 647 664 | 163 647 734 | 1 | 1.415 |
| 163 647 665 | 163 647 735 | 1 | 2.247 |
| 163 647 666 | 163 647 736 | 1 | 4.081 |
| 167 647 667 | 163 647 737 | 1 | 5.258 |

| D | D1_G | D3 | D4 | D5 | H | H1 | H2 | H3 | H4 | H5 | H7 | L | L2 | M |
|------|--------|------|------|------|------|------|------|------|------|------|------|------|------|----|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | |
| 68 | ⅞ | 95 | 60 | 16 | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 130 | 25 | M6 |
| 96 | ⅞ | 105 | 70 | 16 | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 150 | 25 | M6 |
| 96 | ⅞ | 115 | 79 | 16 | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 160 | 25 | M6 |
| 120 | ⅞ | 140 | 89 | 16 | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 180 | 45 | M8 |
| 150 | ⅞ | 150 | 98 | 16 | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 200 | 45 | M8 |
| 150 | ⅞ | 165 | 121 | 19 | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 230 | 45 | M8 |

**Lift =
Hx
(mm)**

| |
|----|
| 7 |
| 10 |
| 13 |
| 15 |
| 19 |
| 23 |



Diaphragm valve DIASTAR Ten PVC-C
FO (Fail safe to open)
Unions with solvent cement sockets ASTM

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

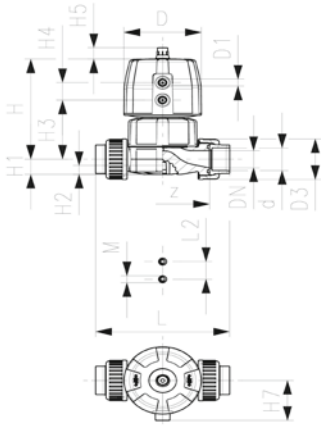
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



| d | DN | Size | PN | PN* | kv-value | EPDM | SP | Weight |
|------|------|--------|-------|-------|---------------------|--------------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| | | | | | (L/min) | | | |
| 20 | 15 | ½ | 10 | 5* | 125 | 163 644 612 | 1 | 0.554 |
| 25 | 20 | ¾ | 10 | 6* | 271 | 163 644 613 | 1 | 0.966 |
| 32 | 25 | 1 | 10 | 6* | 481 | 163 644 614 | 1 | 1.196 |
| 40 | 32 | 1 ¼ | 10 | 6* | 759 | 163 644 615 | 1 | 1.901 |
| 50 | 40 | 1 ½ | 10 | 6* | 1263 | 163 644 616 | 1 | 3.828 |
| 63 | 50 | 2 | 10 | 6* | 1728 | 163 644 617 | 1 | 4.755 |

| FKM Code | PTFE/EPDM* Code | SP | Weight (kg) |
|--------------------|--------------------|----|-------------|
| 163 644 662 | 163 644 632 | 1 | 0.542 |
| 163 644 663 | 163 644 633 | 1 | 0.943 |
| 163 644 664 | 163 644 634 | 1 | 1.167 |
| 163 644 665 | 163 644 635 | 1 | 1.841 |
| 163 644 666 | 163 644 636 | 1 | 3.742 |
| 163 644 667 | 163 644 637 | 1 | 4.590 |

| D | D1_G | H | H1 | H2 | H3 | H4 | H5 | H7 | L | L2 | M | z | Lift = Hx |
|------|--------|------|------|------|------|------|------|------|------|------|----|------|-----------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) | (mm) |
| 68 | ⅝ | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 141 | 25 | M6 | 96 | 7 |
| 96 | ⅝ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 165 | 25 | M6 | 114 | 10 |
| 96 | ⅝ | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 179 | 25 | M6 | 122 | 13 |
| 120 | ⅝ | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 204 | 45 | M8 | 140 | 15 |
| 150 | ⅝ | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 230 | 45 | M8 | 160 | 19 |
| 150 | ⅝ | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 268 | 45 | M8 | 190 | 23 |



**Diaphragm valve DIASTAR Ten PVC-C
FC (Fail safe to close)
Unions with solvent cement sockets ASTM**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

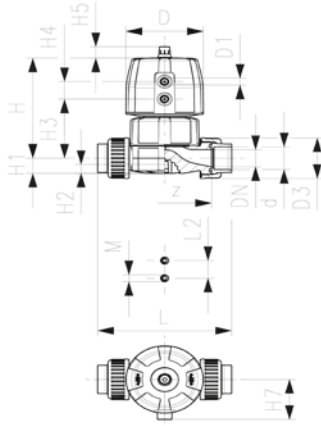
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--------------|--|--------------------|----|----------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 624 612 | 1 | 0.603 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 624 613 | 1 | 1.140 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 624 614 | 1 | 1.376 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 624 615 | 1 | 2.261 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 624 616 | 1 | 3.918 |
| 63 | 50 | 2 | 10 | 6* | 1728 | 163 624 617 | 1 | 4.845 |

| FKM Code | PTFE/ EPDM* Code | SP | Weight (kg) |
|--------------------|------------------------|----|----------------|
| 163 624 662 | 163 624 632 | 1 | 0.592 |
| 163 624 663 | 163 624 633 | 1 | 1.117 |
| 163 624 664 | 163 624 634 | 1 | 1.347 |
| 163 624 665 | 163 624 635 | 1 | 2.201 |
| 163 624 666 | 163 624 636 | 1 | 3.832 |
| 163 624 667 | 163 624 637 | 1 | 4.680 |

| D | D1_G | H | H1 | H2 | H3 | H4 | H5 | H7 | L | L2 | M | z | Lift = Hx (mm) |
|------|--------|------|------|------|------|------|------|------|------|------|----|------|----------------------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) | |
| 68 | ⅝ | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 141 | 25 | M6 | 96 | 7 |
| 96 | ⅝ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 165 | 25 | M6 | 114 | 10 |
| 96 | ⅝ | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 179 | 25 | M6 | 122 | 13 |
| 120 | ⅝ | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 204 | 45 | M8 | 140 | 15 |
| 150 | ¾ | 214 | 32 | 15 | 119 | 36 | 26 | 88 | 230 | 45 | M8 | 160 | 19 |
| 150 | ¾ | 226 | 39 | 15 | 132 | 36 | 26 | 88 | 268 | 45 | M8 | 190 | 23 |



**Diaphragm valve DIASTAR Ten PVC-C
FC (Fail safe to close)
With backing flanges PP-V Inch ANSI**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

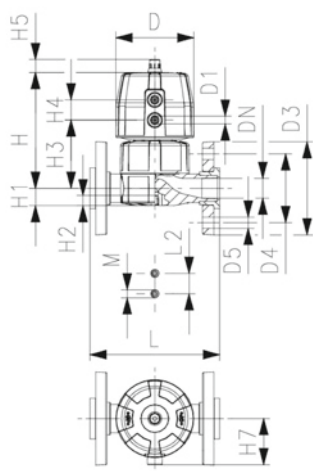
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **one side**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value (Δp=1 bar) (L/min) | EPDM Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--------------|-----------------------------------|--------------------|-------------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 627 712 | 1 0.723 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 627 713 | 1 1.290 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 627 714 | 1 1.574 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 627 715 | 1 2.586 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 627 716 | 1 4.142 |
| 63 | 50 | 2 | 10 | 6* | 1728 | 163 627 717 | 1 5.320 |

| FKM Code | PTFE/ EPDM* Code | SP Weight (kg) |
|--------------------|------------------------|-------------------|
| 163 627 762 | 163 627 732 | 1 0.723 |
| 163 627 763 | 163 627 733 | 1 1.290 |
| 163 627 764 | 163 627 734 | 1 1.595 |
| 163 627 765 | 163 627 735 | 1 2.607 |
| 163 627 766 | 163 627 736 | 1 4.171 |
| 163 627 767 | 163 627 737 | 1 5.433 |

| D | D1_G | D3 | D4 | D5 | H | H1 | H2 | H3 | H4 | H5 | H7 | L | L2 | M |
|------|--------|------|------|------|------|------|------|------|------|------|------|------|------|----|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | |
| 68 | ⅝ | 95 | 60 | 16 | 101 | 14 | 12 | 60 | 24 | 16 | 43 | 130 | 25 | M6 |
| 96 | ⅝ | 105 | 70 | 16 | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 150 | 25 | M6 |
| 96 | ⅝ | 115 | 79 | 16 | 143 | 22 | 12 | 84 | 25 | 16 | 57 | 160 | 25 | M6 |
| 120 | ⅝ | 140 | 89 | 16 | 173 | 26 | 15 | 99 | 26 | 26 | 69 | 180 | 45 | M8 |
| 150 | ¾ | 150 | 98 | 16 | 193 | 32 | 15 | 119 | 36 | 26 | 88 | 200 | 45 | M8 |
| 150 | ¾ | 165 | 121 | 19 | 205 | 39 | 15 | 132 | 36 | 26 | 88 | 230 | 45 | M8 |

Lift =

Hx

(mm)

| |
|----|
| 7 |
| 10 |
| 13 |
| 15 |
| 19 |
| 23 |

Diaphragm valves pneumatic DIASTAR TenPlus



**Diaphragm valve DIASTAR TenPlus PVC-C
FC (Fail safe to close)
With backing flanges PP-V Inch ANSI**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

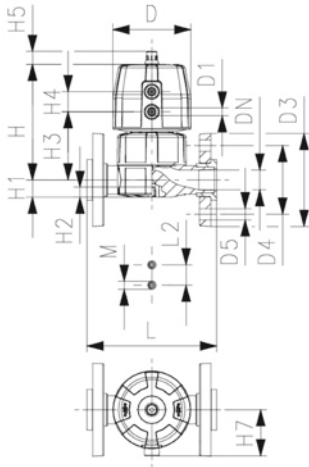
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **both sides**

* O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | PN* (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|----------------|-------------|--------------|-----------------------------------|--------------------|----|----------------|
| 20 | 15 | ½ | 10 | 10* | 125 | 163 687 712 | 1 | 1.123 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 687 713 | 1 | 1.290 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 687 714 | 1 | 2.168 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 687 715 | 1 | 3.656 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 687 716 | 1 | 5.550 |
| 63 | 50 | 2 | 10 | 10* | 1728 | 163 687 717 | 1 | 6.727 |

| FKM Code | PTFE/ EPDM* Code | SP | Weight (kg) |
|--------------------|------------------------|----|----------------|
| 163 687 762 | 163 687 732 | 1 | 1.151 |
| 163 687 763 | 163 687 733 | 1 | 1.290 |
| 163 687 764 | 163 687 734 | 1 | 2.189 |
| 163 687 765 | 163 687 735 | 1 | 3.677 |
| 163 687 766 | 163 687 736 | 1 | 5.579 |
| 163 687 767 | 163 687 737 | 1 | 6.755 |

| D | D1_G | D3 | D4 | D5 | H | H1 | H2 | H3 | H4 | H5 | H7 | L | L2 | M |
|------|--------|------|------|------|------|------|------|------|------|------|------|------|------|----|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | |
| 96 | ¾ | 95 | 60 | 16 | 127 | 14 | 12 | 68 | 25 | 16 | 57 | 130 | 25 | M6 |
| 96 | ¾ | 105 | 70 | 16 | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 150 | 25 | M6 |
| 120 | ½ | 115 | 79 | 16 | 167 | 22 | 12 | 93 | 26 | 26 | 69 | 160 | 25 | M6 |
| 150 | ¼ | 140 | 89 | 16 | 196 | 26 | 15 | 101 | 36 | 26 | 88 | 180 | 45 | M8 |
| 180 | ¼ | 150 | 98 | 16 | 239 | 32 | 15 | 124 | 37 | 26 | 103 | 200 | 45 | M8 |
| 180 | ¼ | 165 | 121 | 19 | 251 | 39 | 15 | 137 | 37 | 26 | 103 | 230 | 45 | M8 |

**Lift =
Hx
(mm)**

| |
|----|
| 7 |
| 10 |
| 13 |
| 15 |
| 19 |
| 23 |



**Diaphragm valve DIASTAR TenPlus PVC-C
FC (Fail safe to close)
Unions with solvent cement sockets ASTM**

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

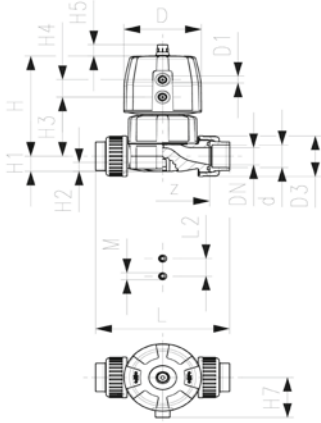
Option:

- Individual configuration of the valve
- Comprehensive range of accessories available

* PN: PTFE

Working Pressure: **both sides**

* O-Ring material: FKM



| d | DN | Size | PN | PN* | kv-value | EPDM | SP | Weight |
|------|------|--------|-------|-------|---------------------|--------------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| | | | | | (L/min) | | | |
| 20 | 15 | ½ | 10 | 10* | 125 | 163 684 612 | 1 | 1.004 |
| 25 | 20 | ¾ | 10 | 10* | 271 | 163 684 613 | 1 | 1.140 |
| 32 | 25 | 1 | 10 | 10* | 481 | 163 684 614 | 1 | 1.970 |
| 40 | 32 | 1 ¼ | 10 | 10* | 759 | 163 684 615 | 1 | 3.331 |
| 50 | 40 | 1 ½ | 10 | 10* | 1263 | 163 684 616 | 1 | 5.326 |
| 63 | 50 | 2 | 10 | 10* | 1728 | 163 684 617 | 1 | 6.252 |

| FKM Code | PTFE/EPDM* Code | SP | Weight (kg) |
|--------------------|--------------------|----|-------------|
| 163 684 662 | 163 684 632 | 1 | 0.992 |
| 163 684 663 | 163 684 633 | 1 | 1.117 |
| 163 684 664 | 163 684 634 | 1 | 1.941 |
| 163 684 665 | 163 684 635 | 1 | 3.271 |
| 163 684 666 | 163 684 636 | 1 | 5.240 |
| 163 684 667 | 163 684 637 | 1 | 6.087 |

| D | D1_G | H | H1 | H2 | H3 | H4 | H5 | H7 | L | L2 | M | z | Lift = Hx |
|------|--------|------|------|------|------|------|------|------|------|------|----|------|-----------|
| (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) | (mm) |
| 96 | ¾ | 127 | 14 | 12 | 68 | 25 | 16 | 57 | 141 | 25 | M6 | 96 | 7 |
| 96 | ¾ | 132 | 18 | 12 | 73 | 25 | 16 | 57 | 165 | 25 | M6 | 114 | 10 |
| 120 | ½ | 167 | 22 | 12 | 93 | 26 | 26 | 69 | 179 | 25 | M6 | 122 | 13 |
| 150 | ¾ | 196 | 26 | 15 | 101 | 36 | 26 | 88 | 204 | 45 | M8 | 140 | 15 |
| 180 | ¾ | 239 | 32 | 15 | 124 | 37 | 26 | 103 | 230 | 45 | M8 | 160 | 19 |
| 180 | ¾ | 251 | 39 | 15 | 137 | 37 | 26 | 103 | 268 | 45 | M8 | 190 | 23 |

Diaphragm valves DIASTAR big dimensions



Diaphragm valve type DIASTAR PVC-C
Series 025 FC (Fail safe to close)
With fixed flanges Inch ANSI

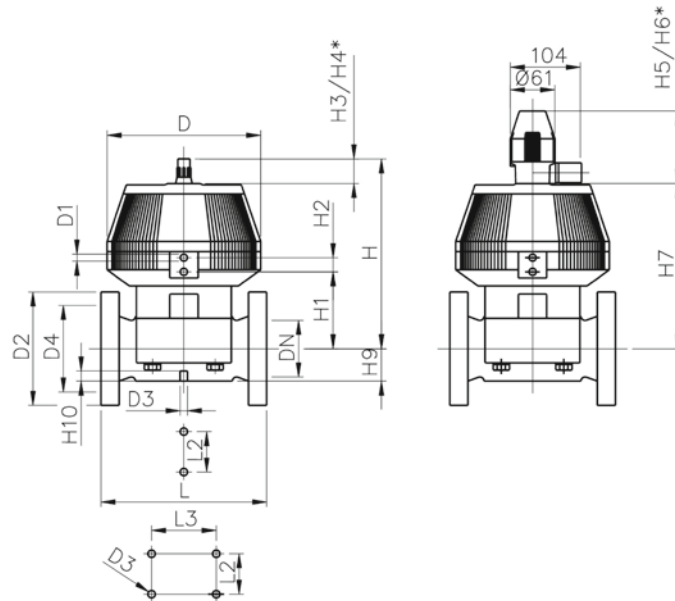
Model:

- Connecting dimension: ISO 7005 / EN 1092 / DIN 25 PN10 / BS4504
- With position indicator / Working pressure: **one side**
- * With backing flanges PP-V
- ** **DN80, DN100 and DN150 fixed flanges metric and inch ANSI B16.5**

| | d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | FKM Code | PTFE/EPDM Code | Weight (kg) |
|----|-----------|----------------|------------|-------------|--|--------------|-------------|-------------------|----------------|
| * | | 2 ½ | 65 | 10 | 992 | 199 025 637 | 199 025 471 | 199 025 667 | 13.600 |
| ** | 90 | 3 | 80 | 10 | 1700 | 199 025 698 | 199 025 472 | 199 025 728 | 17.973 |
| ** | 110 | 4 | 100 | 6 | 2700 | 199 025 699 | 199 025 473 | 199 025 729 | 24.700 |

| | D | D1_G | D2 | D3[M] | D4 | H | H1 | H2 | H3 | H4 | H5 | H6 | H7 | H9 | H10 |
|----|------|--------|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| | (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| * | 280 | ¼ | 185 | 8 | 145 | 344 | 148 | 24 | 46 | 100 | 129 | 195 | 298 | 46 | 15 |
| ** | 280 | ¼ | 200 | 12 | 160 | 348 | 150 | 24 | 46 | 100 | 129 | 195 | 302 | 57 | 15 |
| ** | 335 | ¼ | 225 | 12 | 180 | 395 | 176 | 24 | 46 | 100 | 129 | 195 | 349 | 69 | 20 |

| | L | L2 |
|----|------|------|
| | (mm) | (mm) |
| * | 290 | 70 |
| ** | 310 | 120 |
| ** | 350 | 120 |





Diaphragm valve type DIASTAR PVC-C
Series 025 FO (Fail safe to open)
With fixed flanges Inch ANSI

Model:

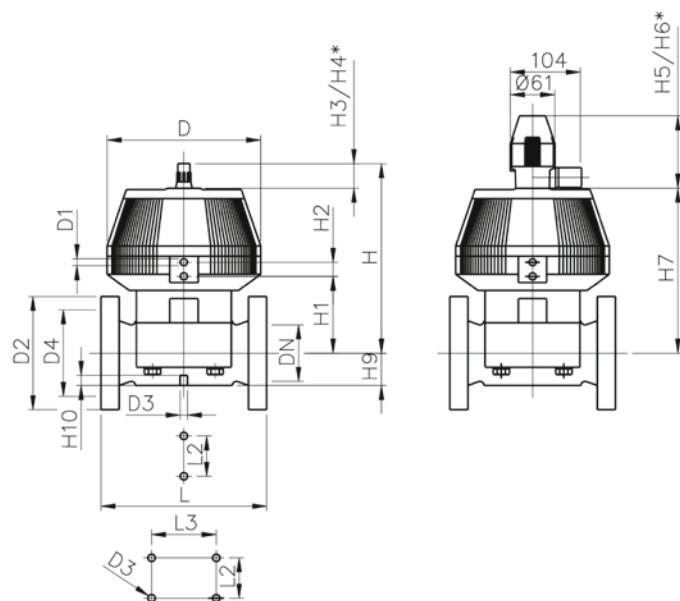
- Connecting dimension: ISO 7005 / EN 1092 / DIN 25 PN10 / BS4504
- With position indicator / Working pressure: **one side**
- * With backing flanges PP-V
- ** **DN80, DN100 and DN150 fixed flanges metric and inch ANSI B16.5**

| | d | Size | DN | PN | kv-value | EPDM | Weight |
|----|------|--------|------|-------|---------------------|--------------------|--------|
| | (mm) | (inch) | (mm) | (bar) | ($\Delta p=1$ bar) | Code | (kg) |
| | | | | | (L/min) | | |
| ** | 90 | 3 | 80 | 10 | 1700 | 199 025 708 | 17.400 |
| ** | 110 | 4 | 100 | 6 | 2700 | 199 025 709 | 24.700 |

| | FKM | PTFE/EPDM | Weight |
|----|--------------------|--------------------|--------|
| | Code | Code | (kg) |
| ** | 199 025 475 | 199 025 738 | 17.400 |
| ** | 199 025 476 | 199 025 679 | 24.700 |

| | D | D1_G | D2 | D3[M] | D4 | H | H1 | H2 | H3 | H4 | H5 | H6 | H7 | H9 | H10 |
|----|------|--------|------|-------|------|------|------|------|------|------|------|------|------|------|------|
| | (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| ** | 280 | ¼ | 200 | 12 | 160 | 348 | 150 | 24 | 46 | 100 | 129 | 195 | 302 | 57 | 15 |
| ** | 335 | ¼ | 225 | 12 | 180 | 395 | 176 | 24 | 46 | 100 | 129 | 195 | 349 | 69 | 20 |

| | L | L2 |
|----|------|------|
| | (mm) | (mm) |
| ** | 310 | 120 |
| ** | 350 | 120 |





**Diaphragm valve type DIASTAR PVC-C
Series 025 DA (Double acting)
With fixed flanges Inch ANSI**

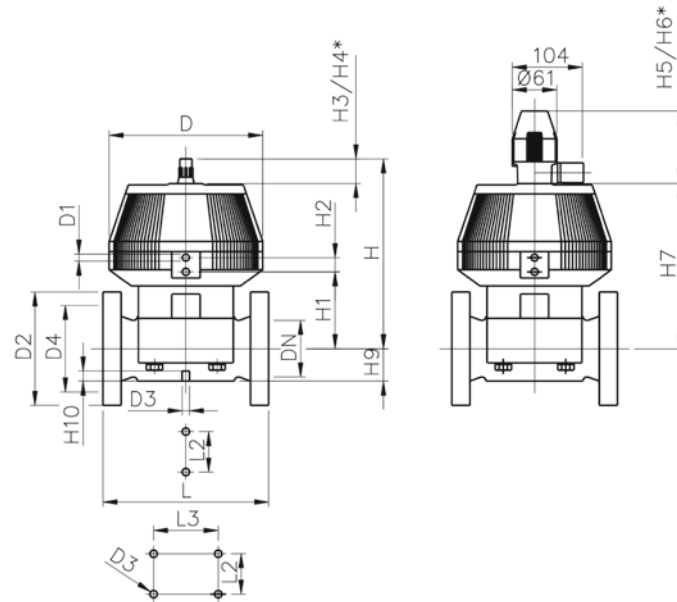
Model:

- Connecting dimension: ISO 7005 / EN 1092 / DIN 25 PN10 / BS4504
- With position indicator / Working pressure: **one side**
- * With backing flanges PP-V
- ** **DN80, DN100 and DN150 fixed flanges metric and inch ANSI B16.5**

| | d (mm) | Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | Weight (kg) | FKM Code | PTFE/EPDM Code |
|---|------------------|-----------------------|-------------------|--------------------|---|----------------------------|-----------------------|---------------------------|---------------------------------|
| * | | 2 ½ | 65 | 10 | 992 | 199 025 657 | 13.600 | 199 025 477 | 199 025 687 |

| | D (mm) | D1_G (inch) | D2 (mm) | D3[M] (mm) | D4 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | H7 (mm) | H9 (mm) | H10 (mm) |
|---|------------------|-----------------------|-------------------|----------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| * | 280 | ¼ | 185 | 8 | 145 | 344 | 148 | 24 | 46 | 100 | 129 | 195 | 298 | 46 | 15 |

| | L (mm) | L2 (mm) |
|---|------------------|-------------------|
| * | 290 | 70 |



Diaphragm Valve Type 604 / 605

Packs a punch



The full-plastic diaphragm valve 604 / 605 with integrated pneumatic actuator from GF Piping Systems ensures best flow performance in compact design. With this corrosion free valve we offer an additional product with the most economic price-performance ratio which is suitable for many applications.

Easy installation and operation

- The compact design enables installation in limited spaces
- No re-torquing needed due to full plastic design without metal parts and screws
- Radially dismountable due to true unions
- Maintenance free
- Same installation length as all GF diaphragm valves and market standard valves
- Integrated optical position feedback
- QR-Code on valve leads to online available product documents

High safety

- Uniform temperature expansion of plastic/plastic connection prevents leakages
- High chemical resistance due to large material range

High Flexibility

- Operation options: FC, FO, DA
- Diaphragms available in PTFE, FKM, EPDM for neutral and aggressive media
- Various connection options with true union or spigot version
- Available Standards: Metric, ASTM, BS, JIS
- Best quality and reliability for high number of cycles
- Long lifetime

Best flow performance

- Linear flow characteristic for simple valve control
- Optimized flow geometry with soft transitions and radii doubles the flow rate
- Suitable for media with low number of particles/solids

Applications

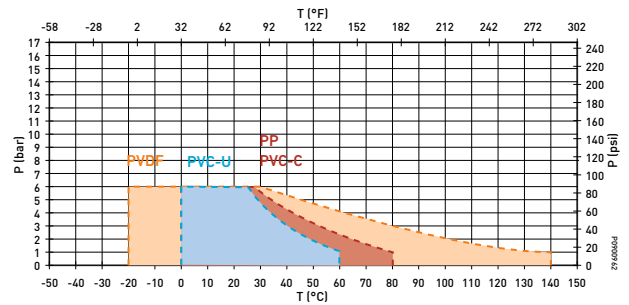
- Chemical Process Industry
- Dosing
- Water Treatment

+ Technical Data

| | |
|------------------------|--|
| Dimension | DN 15 (1/2") |
| Pressure Rating | PN 6 |
| Body | PVC-U / CPVC (Polyvinylchlorid) PP-H (Polypropylen) PVDF (Polyvinylidenfluorid) Other materials on request |
| Diaphragms | PTFE with EPDM Backing Diaphragm PTFE with FKM Backing Diaphragm EPDM FKM |
| Valve Housing | PP-GF (orange) |
| Connections | Type 604: Body with true union connection to match all standard GF unions and end-connections Type 605: Body with cementing resp. welding spigots Available on request: Various inserts from the GF range |
| Mounting | Threaded inserts for safe mounting on valve body |
| Flow | Double flow rate compared to a typical diaphragm valve |
| Standards | ISO 9393 EN 12266 |

Pressure-Temperature Diagram

The following Pressure-Temperature Diagram is based on a lifetime of 25 years with water or similar media.



Diaphragm Valve Type 604 / 605

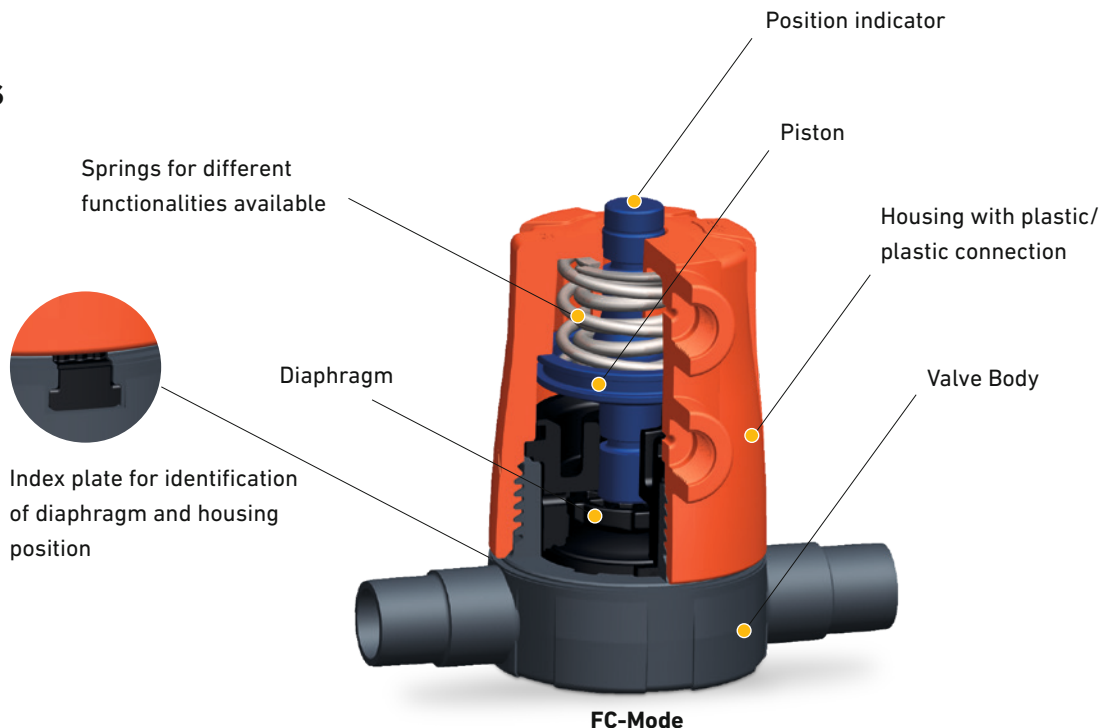
| DN | d | inch | Kv 100 l/min | m ³ /h | Cv100 gpm |
|----|----|------|-----------------|-------------------|--------------|
| 15 | 20 | 1/2" | 125 | 7,5 | 0,55 |

Kv Values

KV 100 at pressure differential p = 1 bar

CV 100 at pressure differential p = 1 psi

+ Features





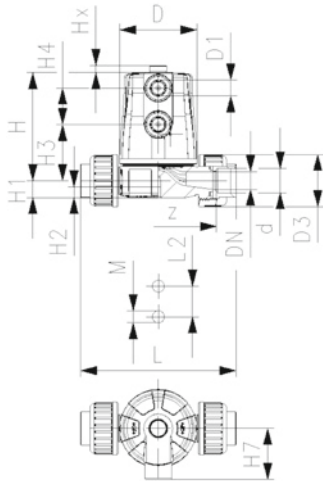
**Diaphragm valve type 604 PVC-C
Unions with solvent cement socket ASTM**

Model:

- Compact full plastic design without screws
- High flow rate
- Actuator housing with thread for easy maintenance
- Quick opening & closing times
- For easy installation and removal
- Market standard installation length

Option:

- Individual configuration of the valve
- * O-Ring material: FKM



| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | Actuator | EPDM Code | PTFE/ EPDM* Code |
|-----------|------------|----------------|-------------|--|----------|--------------|------------------------|
| 20 | 15 | ½ | 6 | 125 | FC | 163 604 612 | 163 604 632 |
| 20 | 15 | ½ | 6 | 125 | FO | 163 604 614 | 163 604 634 |
| 20 | 15 | ½ | 6 | 125 | DA | 163 604 615 | 163 604 635 |

| D (mm) | D1_G (inch) | D3 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H7 (mm) | L (mm) | L2 (mm) | M | z (mm) | Lift = Hx (mm) |
|-----------|----------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|----|-----------|-------------------|
| 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 140.6 | 25 | M6 | 96 | 6 |
| 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 140.6 | 25 | M6 | 96 | 6 |
| 65 | ¼ | 43 | 89 | 14 | 12 | 46 | 30 | 42 | 140.6 | 25 | M6 | 96 | 6 |

Pressure reducing valves type 582



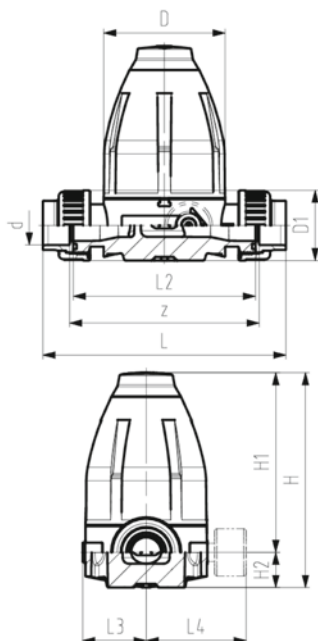
Pressure reducing valve type 582 PVC-C
Unions with solvent cement sockets ASTM
Without manometer

Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

0.3-3.0 bar (4-44 psi) on request

Manometer on request



| d (mm) | DN (mm) | Size (inch) | PN (bar) | O-rings EPDM Code | Weight (kg) | SP | GP | O-rings FKM Code |
|-----------|------------|----------------|-------------|-------------------------|----------------|----|----|------------------------|
| 20 | 15 | ½ | 10 | 163 582 202 | 0.730 | 1 | 1 | 163 582 212 |
| 25 | 20 | ¾ | 10 | 163 582 203 | 1.540 | 1 | | 163 582 213 |
| 32 | 25 | 1 | 10 | 163 582 204 | 1.580 | 1 | | 163 582 214 |
| 40 | 32 | 1 ¼ | 10 | 163 582 205 | 4.220 | 1 | | 163 582 215 |
| 50 | 40 | 1 ½ | 10 | 163 582 206 | 4.410 | 1 | | 163 582 216 |
| 63 | 50 | 2 | 10 | 163 582 207 | 4.660 | 1 | | 163 582 217 |

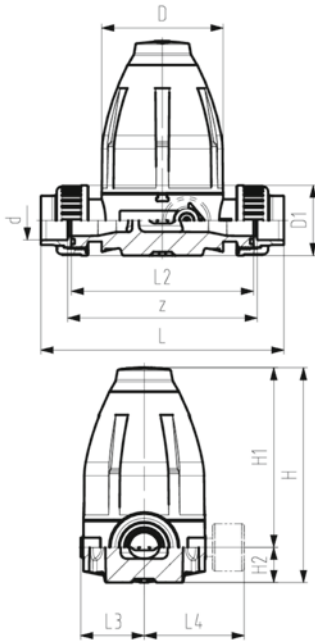
| D (mm) | D1 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | L (mm) | L2 (mm) | L3 (mm) | M | z (mm) | Inch (inch) |
|-----------|------------|-----------|------------|------------|------------|-----------|------------|------------|----|-----------|----------------|
| 79 | 43 | 132 | 111 | 21 | 12 | 171 | 120 | 42 | M6 | 126 | 1/2 |
| 100 | 51 | 177 | 148 | 29 | 14 | 207 | 150 | 53 | M6 | 156 | 3/4 |
| 100 | 58 | 177 | 148 | 29 | 14 | 214 | 150 | 53 | M6 | 156 | 1 |
| 147 | 72 | 251 | 207 | 44 | 21 | 275 | 205 | 76 | M8 | 211 | 1 1/4 |
| 147 | 83 | 251 | 207 | 44 | 21 | 281 | 205 | 76 | M8 | 211 | 1 1/2 |
| 147 | 101 | 251 | 207 | 44 | 21 | 288 | 205 | 76 | M8 | 211 | 2 |



**Pressure reducing valve type 582 PVC-C
Unions with solvent cement sockets ASTM
With manometer**

Model:

- Diaphragm PTFE/EPDM
 - Integrated stainless steel mounting inserts
 - 0.5-9.0 bar (7-130 psi)
 - Attention: Manometer with brass connection in direct contact with medium. Check for chemical resistance, otherwise chose the optional manometer adapter for media separation.
- 0.3-3.0 bar (4-44 psi) on request



| d (mm) | DN (mm) | Size (inch) | PN (bar) | O-rings EPDM Code | Weight (kg) | SP | O-rings FKM Code |
|-----------|------------|----------------|-------------|-------------------------|----------------|----|------------------------|
| 20 | 15 | ½ | 10 | 163 582 222 | 0.760 | 1 | 163 582 232 |
| 25 | 20 | ¾ | 10 | 163 582 223 | 1.570 | 1 | 163 582 233 |
| 32 | 25 | 1 | 10 | 163 582 224 | 1.610 | 1 | 163 582 234 |
| 40 | 32 | 1 ¼ | 10 | 163 582 225 | 4.250 | 1 | 163 582 235 |
| 50 | 40 | 1 ½ | 10 | 163 582 226 | 4.440 | 1 | 163 582 236 |
| 63 | 50 | 2 | 10 | 163 582 227 | 4.690 | 1 | 163 582 237 |

| D (mm) | D1 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | L (mm) | L2 (mm) | L3 (mm) | L4 (mm) | M | z (mm) | Inch (inch) |
|-----------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|----|-----------|----------------|
| 79 | 43 | 132 | 111 | 21 | 12 | 171 | 120 | 42 | 77 | M6 | 126 | 1/2 |
| 100 | 51 | 177 | 148 | 29 | 14 | 207 | 150 | 53 | 88 | M6 | 156 | 3/4 |
| 100 | 58 | 177 | 148 | 29 | 14 | 214 | 150 | 53 | 88 | M6 | 156 | 1 |
| 147 | 72 | 251 | 207 | 44 | 21 | 275 | 205 | 76 | 111 | M8 | 211 | 1 1/4 |
| 147 | 83 | 251 | 207 | 44 | 21 | 281 | 205 | 76 | 111 | M8 | 211 | 1 1/2 |
| 147 | 101 | 251 | 207 | 44 | 21 | 288 | 205 | 76 | 111 | M8 | 211 | 2 |

Pressure retaining valves type 586



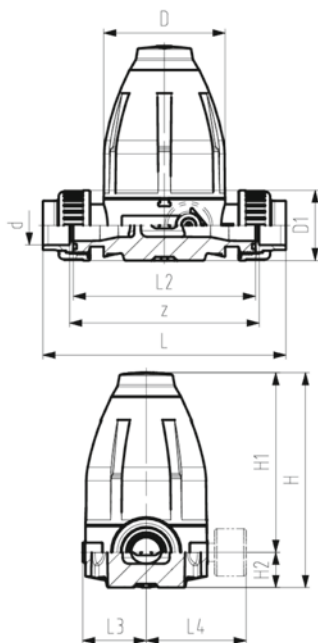
**Pressure retaining valve type 586 PVC-C
Unions with solvent cement sockets ASTM
Without manometer**

Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

0.3-3.0 bar (4-44 psi) on request

Manometer on request



| d (mm) | DN (mm) | Size (inch) | PN (bar) | O-rings EPDM Code | Weight (kg) | SP | O-rings FKM Code |
|-----------|------------|----------------|-------------|-------------------------|----------------|----|------------------------|
| 20 | 15 | ½ | 10 | 163 586 202 | 0.720 | 1 | 163 586 212 |
| 25 | 20 | ¾ | 10 | 163 586 203 | 1.560 | 1 | 163 586 213 |
| 32 | 25 | 1 | 10 | 163 586 204 | 1.600 | 1 | 163 586 214 |
| 40 | 32 | 1 ¼ | 10 | 163 586 205 | 4.360 | 1 | 163 586 215 |
| 50 | 40 | 1 ½ | 10 | 163 586 206 | 4.430 | 1 | 163 586 216 |
| 63 | 50 | 2 | 10 | 163 586 207 | 4.690 | 1 | 163 586 217 |

| D (mm) | D1 (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | L (mm) | L2 (mm) | L3 (mm) | M | z (mm) | Inch |
|-----------|------------|-----------|------------|------------|------------|-----------|------------|------------|----|-----------|-------|
| 79 | 43 | 132 | 111 | 21 | 12 | 171 | 120 | 42 | M6 | 126 | 1/2 |
| 100 | 51 | 177 | 148 | 29 | 14 | 207 | 150 | 53 | M6 | 156 | 3/4 |
| 100 | 58 | 177 | 148 | 29 | 14 | 214 | 150 | 53 | M6 | 156 | 1 |
| 147 | 72 | 251 | 207 | 44 | 21 | 275 | 205 | 76 | M8 | 211 | 1 1/4 |
| 147 | 83 | 251 | 207 | 44 | 21 | 281 | 205 | 76 | M8 | 211 | 1 1/2 |
| 147 | 101 | 251 | 207 | 44 | 21 | 288 | 205 | 76 | M8 | 211 | 2 |

Process control valves

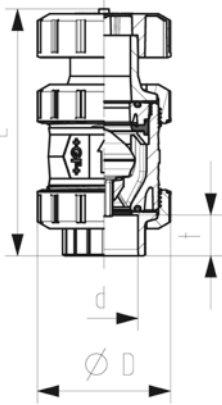


Ventilating and bleed valve Type 591 PVC-C With solvent cement sockets Inch ASTM Inclusive 2 threaded valve ends NPT

Model:

- With protection cap up to DN50 made of PP-GF, DN65-100 made of POM
- Floater made of PP-H
- Designed for easy installation and removal
- Compact installation length

| DN (mm) | Thread Type | Size (inch) | PN (bar) | EPDM Code | FKM Code | D (mm) | L (mm) | t (mm) |
|------------|-------------|----------------|-------------|--------------|-------------|-----------|-----------|-----------|
| 10 | NPT | 3/8 | 16 | 163 591 101 | 163 591 111 | 50 | 111 | 19 |
| 15 | NPT | 1/2 | 16 | 163 591 102 | 163 591 112 | 50 | 119 | 23 |
| 20 | NPT | 3/4 | 16 | 163 591 103 | 163 591 113 | 58 | 137 | 25 |
| 25 | NPT | 1 | 16 | 163 591 104 | 163 591 114 | 68 | 152 | 28 |
| 32 | NPT | 1 1/4 | 16 | 163 591 105 | 163 591 115 | 84 | 176 | 31 |
| 40 | NPT | 1 1/2 | 16 | 163 591 106 | 163 591 116 | 97 | 193 | 35 |
| 50 | NPT | 2 | 16 | 163 591 107 | 163 591 117 | 124 | 229 | 38 |
| 65 | NPT | 2 1/2 | 16 | 163 591 108 | 163 591 118 | 166 | 258 | 45 |
| 80 | NPT | 3 | 16 | 163 591 109 | 163 591 119 | 200 | 277 | 49 |
| 100 | NPT | 4 | 16 | 163 591 110 | 163 591 120 | 238 | 320 | 58 |

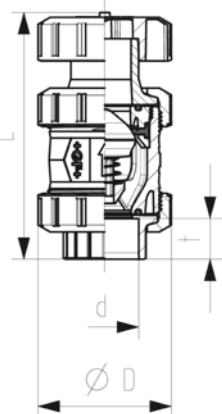


Ventilating valve type 595 PVC-C With solvent cement sockets Inch ASTM Inclusive 2 threaded valve ends NPT

Model:

- With protection cap up to DN50 made of PP-GF, DN65-100 made of POM
- Spring HALAR coated
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Compact installation length

| DN (mm) | Thread Type | Size (inch) | PN (bar) | EPDM Code | FKM Code | D (mm) | L (mm) | t (mm) |
|------------|-------------|----------------|-------------|--------------|-------------|-----------|-----------|-----------|
| 10 | NPT | 3/8 | 16 | 163 595 101 | 163 595 111 | 50 | 111 | 19 |
| 15 | NPT | 1/2 | 16 | 163 595 102 | 163 595 112 | 50 | 119 | 23 |
| 20 | NPT | 3/4 | 16 | 163 595 103 | 163 595 113 | 58 | 137 | 25 |
| 25 | NPT | 1 | 16 | 163 595 104 | 163 595 114 | 68 | 152 | 28 |
| 32 | NPT | 1 1/4 | 16 | 163 595 105 | 163 595 115 | 84 | 176 | 31 |
| 40 | NPT | 1 1/2 | 16 | 163 595 106 | 163 595 116 | 97 | 193 | 35 |
| 50 | NPT | 2 | 16 | 163 595 107 | 163 595 117 | 124 | 229 | 38 |
| 65 | NPT | 2 1/2 | 16 | 163 595 108 | 163 595 118 | 166 | 258 | 45 |
| 80 | NPT | 3 | 16 | 163 595 109 | 163 595 119 | 200 | 277 | 49 |
| 100 | NPT | 4 | 16 | 163 595 110 | 163 595 120 | 238 | 320 | 58 |



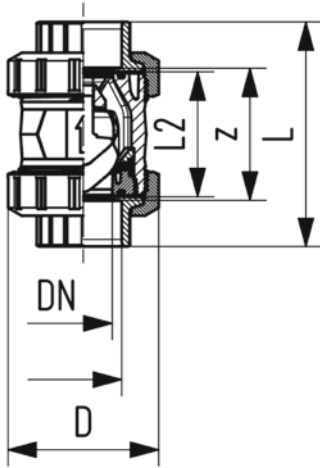
Cone check valves



Check valve type 561 PVC-C
With solvent cement sockets Inch ASTM
Inclusive 2 threaded valve ends NPT

Model:

- Sealing at a minimum water column of 2 m
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360
- New DN65-DN100



| d (mm) | DN (mm) | Thread Type | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) |
|-----------|------------|-------------|----------------|-------------|--|--------------------|----|----------------|
| 16 | 10 | NPT | 3/8 | 16 | 190 | 163 561 101 | 1 | 0.120 |
| 20 | 15 | NPT | 1/2 | 16 | 180 | 163 561 102 | 1 | 0.130 |
| 25 | 20 | NPT | 3/4 | 16 | 380 | 163 561 103 | 1 | 0.260 |
| 32 | 25 | NPT | 1 | 16 | 460 | 163 561 104 | 1 | 0.290 |
| 40 | 32 | NPT | 1 1/4 | 16 | 850 | 163 561 105 | 1 | 0.490 |
| 50 | 40 | NPT | 1 1/2 | 16 | 1080 | 163 561 106 | 1 | 0.710 |
| 63 | 50 | NPT | 2 | 16 | 1670 | 163 561 107 | 1 | 1.460 |
| 75 | 65 | NPT | 2 1/2 | 16 | 2950 | 163 561 108 | 1 | 3.500 |
| 90 | 80 | NPT | 3 | 16 | 3600 | 163 561 109 | 1 | 5.500 |
| 110 | 100 | NPT | 4 | 16 | 4150 | 163 561 110 | 1 | 8.820 |

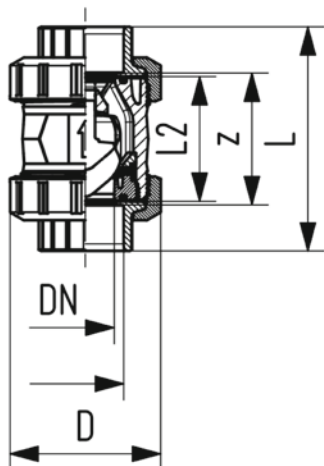
| FKM Code | SP | Weight (kg) | D (mm) | L (mm) | L2 (mm) | z (mm) |
|--------------------|----|----------------|-----------|-----------|------------|-----------|
| 163 561 111 | 1 | 0.120 | 50 | 105 | 56 | 67 |
| 163 561 112 | 1 | 0.130 | 50 | 105 | 56 | 61 |
| 163 561 113 | 1 | 0.280 | 58 | 121 | 65 | 70 |
| 163 561 114 | 1 | 0.290 | 68 | 133 | 71 | 76 |
| 163 561 115 | 1 | 0.490 | 84 | 154 | 85 | 90 |
| 163 561 116 | 1 | 0.720 | 97 | 164 | 89 | 94 |
| 163 561 117 | 1 | 1.470 | 124 | 183 | 101 | 107 |
| 163 561 118 | 1 | 3.510 | 166 | 233 | 136 | 144 |
| 163 561 119 | 1 | 5.520 | 200 | 254 | 141 | 151 |
| 163 561 120 | 1 | 8.860 | 238 | 301 | 164 | 174 |



Check valve type 562 PVC-C
With solvent cement sockets Inch ASTM
Inclusive 2 threaded valve ends NPT

Model:

- For horizontal or vertical installation
- Sealing at a minimum water column of 1 m
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360
- New DN65-DN100



| NPT (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|---------------|------------|-------------|--|--------------------|-------------------|-------------|--------------------|
| 3/8 | 10 | 16 | 190 | 163 562 101 | 1 | 0.120 | 163 562 111 |
| 1/2 | 15 | 16 | 180 | 163 562 102 | 1 | 0.130 | 163 562 112 |
| 3/4 | 20 | 16 | 380 | 163 562 103 | 1 | 0.260 | 163 562 113 |
| 1 | 25 | 16 | 460 | 163 562 104 | 1 | 0.290 | 163 562 114 |
| 1 1/4 | 32 | 16 | 850 | 163 562 105 | 1 | 0.490 | 163 562 115 |
| 1 1/2 | 40 | 16 | 1080 | 163 562 106 | 1 | 0.710 | 163 562 116 |
| 2 | 50 | 16 | 1670 | 163 562 107 | 1 | 1.460 | 163 562 117 |
| 2 1/2 | 65 | 16 | 2950 | 163 562 108 | 1 | 3.500 | 163 562 118 |
| 3 | 80 | 16 | 3600 | 163 562 109 | 1 | 5.500 | 163 562 119 |
| 4 | 100 | 16 | 4150 | 163 562 110 | 1 | 8.820 | 163 562 120 |

| NPT (inch) | D (mm) | L (mm) | L2 (mm) | z (mm) |
|---------------|-----------|-----------|------------|-----------|
| 3/8 | 50 | 105 | 56 | 67 |
| 1/2 | 50 | 105 | 56 | 61 |
| 3/4 | 58 | 121 | 65 | 70 |
| 1 | 68 | 133 | 71 | 76 |
| 1 1/4 | 84 | 154 | 85 | 90 |
| 1 1/2 | 97 | 164 | 89 | 94 |
| 2 | 124 | 183 | 101 | 107 |
| 2 1/2 | 166 | 233 | 136 | 144 |
| 3 | 200 | 254 | 141 | 151 |
| 4 | 238 | 301 | 164 | 174 |

PVC-C ASTM / ANSI

silicon free/paint compatible





Ball valves type 543

291



Ball valves type 546

293



Diaphragm valves type 514

295



Diaphragm valves type 517

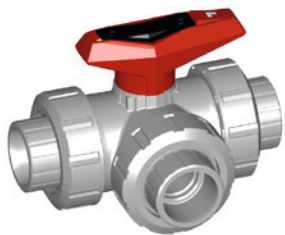
296



Cone check valves

297

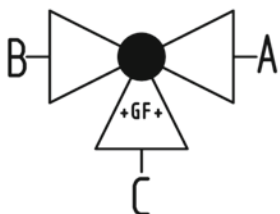
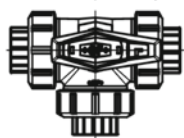
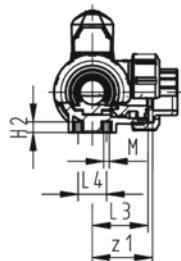
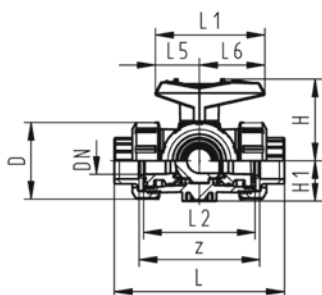
Ball valves type 543



3-Way ball valve type 543 PVC-C silicone free Horizontal/L-port With solvent cement sockets ASTM

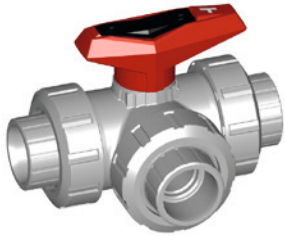
Model:

- Silicone free/paint-compatible
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme



| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|------------|----------------|-------------|--|---------------|----------------------|-------------|----------------------|
| 10 | 3/8 | 10 | 50 | 163543161_old | 1 | 0.265 | 163543171_old |
| 15 | 1/2 | 10 | 75 | 163543162_old | 1 | 0.272 | 163543172_old |
| 20 | 3/4 | 10 | 150 | 163543163_old | 1 | 0.391 | 163543173_old |
| 25 | 1 | 10 | 280 | 163543164_old | 1 | 0.598 | 163543174_old |
| 32 | 1 1/4 | 10 | 480 | 163543165_old | 1 | 1.018 | 163543175_old |
| 40 | 1 1/2 | 10 | 620 | 163543166_old | 1 | 1.509 | 163543176_old |
| 50 | 2 | 10 | 1230 | 163543167_old | 1 | 2.938 | 163543177_old |

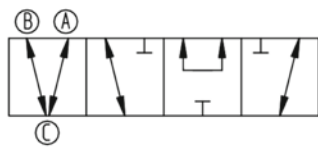
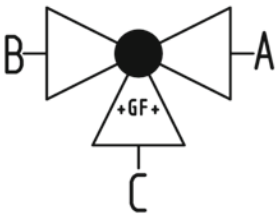
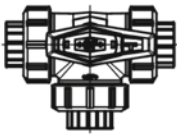
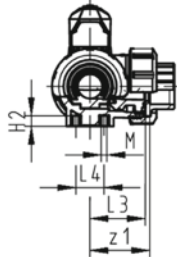
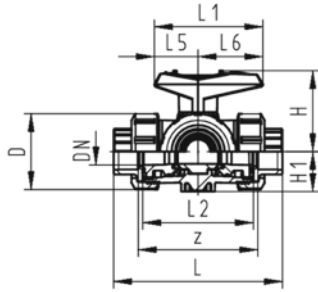
| D | H | H1 | H2 | L | L1 | L2 | L3 | L4 | L5 | L6 | M | z | z1 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 57 | 28 | 8 | 123 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 85 | 42 |
| 50 | 57 | 28 | 8 | 122 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 77 | 38 |
| 58 | 67 | 32 | 8 | 141 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 92 | 46 |
| 68 | 73 | 36 | 8 | 161 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 105 | 53 |
| 84 | 90 | 45 | 9 | 187 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 126 | 63 |
| 97 | 97 | 51 | 9 | 213 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 143 | 72 |
| 124 | 116 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 185 | 92 |



**3-Way ball valve type 543 PVC-C silicone free
Horizontal/T-port
With solvent cement sockets ASTM**

Model:

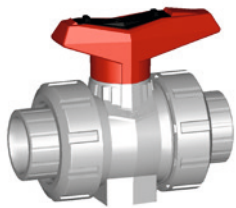
- Silicone free/paint-compatible
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme



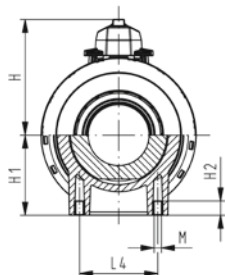
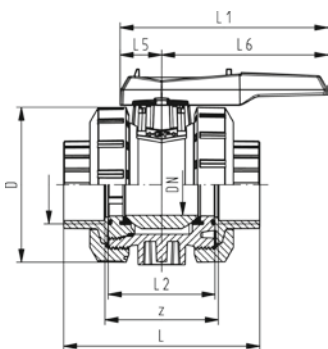
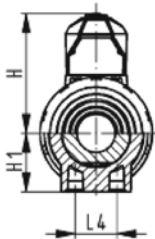
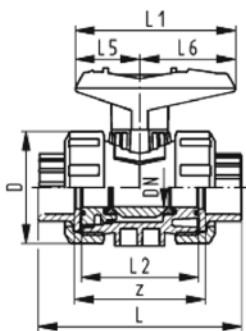
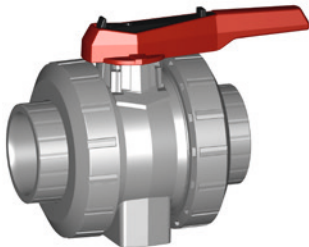
| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|------------|----------------|-------------|--|---------------|----------------------|-------------|----------------------|
| 10 | 3/8 | 10 | 140 | 163543361_old | 1 | 0.264 | 163543371_old |
| 15 | 1/2 | 10 | 200 | 163543362_old | 1 | 0.271 | 163543372_old |
| 20 | 3/4 | 10 | 470 | 163543363_old | 1 | 0.389 | 163543373_old |
| 25 | 1 | 10 | 793 | 163543364_old | 1 | 0.590 | 163543374_old |
| 32 | 1 1/4 | 10 | 1290 | 163543365_old | 1 | 1.007 | 163543375_old |
| 40 | 1 1/2 | 10 | 1910 | 163543366_old | 1 | 1.487 | 163543376_old |
| 50 | 2 | 10 | 3100 | 163543367_old | 1 | 2.889 | 163543377_old |

| D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M (mm) | z (mm) | z1 (mm) |
|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|-----------|-----------|------------|
| 50 | 57 | 28 | 8 | 123 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 85 | 42 |
| 50 | 57 | 28 | 8 | 122 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 77 | 38 |
| 58 | 67 | 32 | 8 | 141 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 92 | 46 |
| 68 | 73 | 36 | 8 | 161 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 105 | 53 |
| 84 | 90 | 45 | 9 | 187 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 126 | 63 |
| 97 | 97 | 51 | 9 | 213 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 143 | 72 |
| 124 | 116 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 185 | 92 |

Ball valves type 546



DN10/15 - 50



Ball valve type 546 PVC-C SF With solvent cement sockets Inch ASTM

Model:

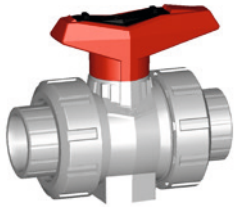
- Silicone free/paint-compatible
- For easy installation and removal
- Ball seals: Inch ASTM in PTFE
- Without mounting inserts
- Valve end and union nut are **not compatible** with type 346 (DN10/15-50) and type 370 (DN65-100)

Option:

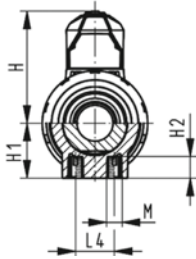
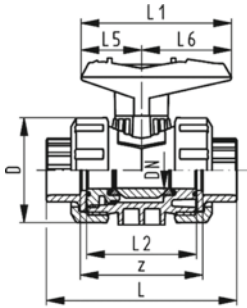
- Individual configuration of the valve
- Multifunctional module with integrated limit switches

| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | FKM Code | SP | Weight (kg) |
|----------------|------------|-------------|--|-------------|----|----------------|
| ½ | 15 | 16 | 185 | 163 546 692 | 1 | 0.160 |
| ¾ | 20 | 16 | 350 | 163 546 693 | 1 | 0.245 |
| 1 | 25 | 16 | 700 | 163 546 694 | 1 | 0.365 |
| 1 ¼ | 32 | 16 | 1000 | 163 546 695 | 1 | 0.660 |
| 1 ½ | 40 | 16 | 1600 | 163 546 696 | 1 | 0.890 |
| 2 | 50 | 16 | 3100 | 163 546 697 | 1 | 1.650 |
| 2 ½ | 65 | 16 | 5000 | 163 546 698 | 1 | 5.300 |
| 3 | 80 | 16 | 7000 | 163 546 699 | 1 | 7.900 |
| 4 | 100 | 16 | 11000 | 163 546 700 | 1 | 12.600 |

| Size (inch) | D (mm) | H (mm) | H1 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | z (mm) |
|----------------|-----------|-----------|------------|-----------|------------|------------|------------|------------|------------|-----------|
| ½ | 50 | 57 | 27 | 105 | 77 | 56 | 25 | 32 | 45 | 61 |
| ¾ | 58 | 67 | 30 | 121 | 97 | 65 | 25 | 39 | 58 | 70 |
| 1 | 68 | 73 | 36 | 133 | 97 | 71 | 25 | 39 | 58 | 76 |
| 1 ¼ | 84 | 90 | 44 | 154 | 128 | 85 | 45 | 54 | 74 | 90 |
| 1 ½ | 97 | 97 | 51 | 164 | 128 | 89 | 45 | 54 | 74 | 94 |
| 2 | 124 | 116 | 64 | 183 | 152 | 101 | 45 | 66 | 87 | 107 |
| 2 ½ | 166 | 149 | 85 | 233 | 270 | 136 | 70 | 64 | 206 | 144 |
| 3 | 200 | 161 | 105 | 254 | 270 | 141 | 70 | 64 | 206 | 151 |
| 4 | 238 | 178 | 123 | 301 | 320 | 164 | 120 | 64 | 256 | 174 |



DN10/15 - 50



Ball valve type 546 PVC-C SF
With mounting inserts
With solvent cement sockets Inch ASTM

Model:

- Silicone free/paint-compatible
- For easy installation and removal
- Ball seals:
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346
- - inch ASTM: PTFE

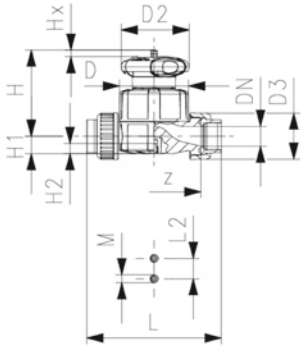
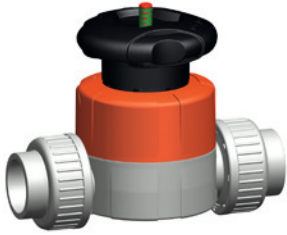
Option:

- Individual configuration of the valve
- Multifunctional module with integrated limit switches

| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|----------------|------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| ½ | 15 | 16 | 185 | 163 546 842 | 1 | 0.164 | 163 546 852 | 1 | 0.164 |
| ¾ | 20 | 16 | 350 | 163 546 843 | 1 | 0.249 | 163 546 853 | 1 | 0.249 |
| 1 | 25 | 16 | 700 | 163 546 844 | 1 | 0.369 | 163 546 854 | 1 | 0.369 |
| 1 ¼ | 32 | 16 | 1000 | 163 546 845 | 1 | 0.670 | 163 546 855 | 1 | 0.670 |
| 1 ½ | 40 | 16 | 1600 | 163 546 846 | 1 | 0.900 | 163 546 856 | 1 | 0.900 |
| 2 | 50 | 16 | 3100 | 163 546 847 | 1 | 1.660 | 163 546 857 | 1 | 1.660 |

| Size (inch) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) |
|----------------|-----------|-----------|------------|------------|-----------|------------|------------|------------|------------|------------|---|-----------|
| ½ | 50 | 57 | 27 | 12 | 105 | 77 | 56 | 25 | 32 | 45 | 6 | 61 |
| ¾ | 58 | 67 | 30 | 12 | 121 | 97 | 65 | 25 | 39 | 58 | 6 | 70 |
| 1 | 68 | 73 | 36 | 12 | 133 | 97 | 71 | 25 | 39 | 58 | 6 | 76 |
| 1 ¼ | 84 | 90 | 44 | 15 | 154 | 128 | 85 | 45 | 54 | 74 | 8 | 90 |
| 1 ½ | 97 | 97 | 51 | 15 | 164 | 128 | 89 | 45 | 54 | 74 | 8 | 94 |
| 2 | 124 | 116 | 64 | 15 | 183 | 152 | 101 | 45 | 66 | 87 | 8 | 107 |

Diaphragm valves type 514



Diaphragm valve type 514 PVC-C SF With solvent cement sockets ASTM

Model:

- Silicone free/paint-compatible
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

Option:

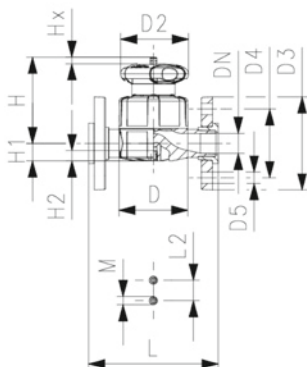
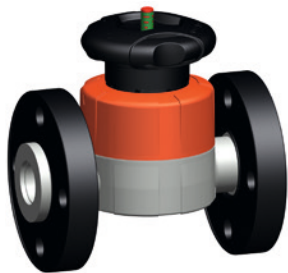
- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches

* O-Ring material: FKM

| d (mm) | DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | PTFE/ EPDM* Code | SP Weight (kg) |
|-----------|------------|----------------|-------------|--|--------------|-------------------|------------------------|-------------------|
| 20 | 15 | ½ | 10 | 125 | 163 514 622 | 1 | 0.409 | 163 514 672 |
| 25 | 20 | ¾ | 10 | 271 | 163 514 623 | 1 | 0.546 | 163 514 673 |
| 32 | 25 | 1 | 10 | 481 | 163 514 624 | 1 | 1.190 | 163 514 674 |
| 40 | 32 | 1 ¼ | 10 | 759 | 163 514 625 | 1 | 1.472 | 163 514 675 |
| 50 | 40 | 1 ½ | 10 | 1263 | 163 514 626 | 1 | 2.630 | 163 514 676 |
| 63 | 50 | 2 | 10 | 1728 | 163 514 627 | 1 | 3.547 | 163 514 677 |

| D | D2 | D3 | H | H1 | H2 | L | L2 | M | z | Lift = Hx (mm) |
|-----|-----|-----|-----|----|----|-----|----|----|-----|----------------------|
| 65 | 65 | 43 | 73 | 14 | 12 | 141 | 25 | M6 | 96 | 7 |
| 80 | 65 | 51 | 81 | 18 | 12 | 165 | 25 | M6 | 114 | 10 |
| 88 | 87 | 58 | 107 | 22 | 12 | 179 | 25 | M6 | 122 | 13 |
| 101 | 87 | 72 | 115 | 26 | 15 | 204 | 45 | M8 | 140 | 15 |
| 117 | 135 | 83 | 148 | 32 | 15 | 230 | 45 | M8 | 160 | 19 |
| 144 | 135 | 100 | 166 | 39 | 15 | 268 | 45 | M8 | 190 | 25 |

Diaphragm valves type 517



Diaphragm valve type 517 PVC-C SF With backing flanges PP-V Inch ANSI

Model:

- Silicone free/paint-compatible
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

Option:

- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches

* O-Ring material: FKM

| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) | PTFE/ EPDM* Code | SP | Weight (kg) |
|----------------|------------|-------------|--|--------------|----|----------------|------------------------|----|----------------|
| ½ | 15 | 10 | 125 | 163 517 722 | 1 | 0.528 | 163 517 772 | 1 | 0.528 |
| ¾ | 20 | 10 | 271 | 163 517 723 | 1 | 0.695 | 163 517 773 | 1 | 0.695 |
| 1 | 25 | 10 | 481 | 163 517 724 | 1 | 1.388 | 163 517 774 | 1 | 1.409 |
| 1 ¼ | 32 | 10 | 759 | 163 517 725 | 1 | 1.797 | 163 517 775 | 1 | 1.818 |
| 1 ½ | 40 | 10 | 1263 | 163 517 726 | 1 | 2.854 | 163 517 776 | 1 | 2.883 |
| 2 | 50 | 10 | 1728 | 163 517 727 | 1 | 4.022 | 163 517 777 | 1 | 4.050 |

| Size (inch) | D (mm) | D2 (mm) | D3 (mm) | D4 (mm) | D5 (mm) | H (mm) | H1 (mm) | H2 (mm) | L (mm) | L2 (mm) | M | Lift = Hx (mm) |
|----------------|-----------|------------|------------|------------|------------|-----------|------------|------------|-----------|------------|----|----------------------|
| ½ | 65 | 65 | 95 | 60 | 16 | 73 | 14 | 12 | 130 | 25 | M6 | 7 |
| ¾ | 80 | 65 | 105 | 70 | 16 | 81 | 18 | 12 | 150 | 25 | M6 | 10 |
| 1 | 88 | 87 | 115 | 79 | 16 | 107 | 22 | 12 | 160 | 25 | M6 | 13 |
| 1 ¼ | 101 | 87 | 140 | 89 | 16 | 115 | 26 | 15 | 180 | 45 | M8 | 15 |
| 1 ½ | 117 | 135 | 150 | 98 | 16 | 148 | 32 | 15 | 200 | 45 | M8 | 19 |
| 2 | 144 | 135 | 165 | 121 | 19 | 166 | 39 | 15 | 230 | 45 | M8 | 25 |

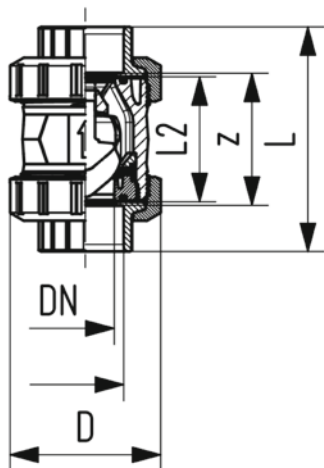
Cone check valves



**Check valve type 561 (without spring) PVC-C silicone free
With solvent cement sockets Inch ASTM**

Model:

- Sealing at a minimum water column of 2 m
- Silicone free/paint-compatible
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360
- New DN65-DN100



| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|--|--------------------|----|----------------|--------------------|----|----------------|
| 10 | 3/8 | 16 | 190 | 163 561 241 | 1 | 0.120 | 163 561 251 | 1 | 0.120 |
| 15 | 1/2 | 16 | 180 | 163 561 242 | 1 | 0.130 | 163 561 252 | 1 | 0.130 |
| 20 | 3/4 | 16 | 380 | 163 561 243 | 1 | 0.260 | 163 561 253 | 1 | 0.280 |
| 25 | 1 | 16 | 460 | 163 561 244 | 1 | 0.290 | 163 561 254 | 1 | 0.290 |
| 32 | 1 1/4 | 16 | 850 | 163 561 245 | 1 | 0.490 | 163 561 255 | 1 | 0.490 |
| 40 | 1 1/2 | 16 | 1080 | 163 561 246 | 1 | 0.710 | 163 561 256 | 1 | 0.720 |
| 50 | 2 | 16 | 1670 | 163 561 247 | 1 | 1.460 | 163 561 257 | 1 | 1.470 |
| 65 | 2 1/2 | 16 | 2950 | 163 561 248 | 1 | 3.500 | 163 561 258 | 1 | 3.510 |
| 80 | 3 | 16 | 3600 | 163 561 249 | 1 | 5.500 | 163 561 259 | 1 | 5.520 |
| 100 | 4 | 16 | 4150 | 163 561 250 | 1 | 8.820 | 163 561 260 | 1 | 8.860 |

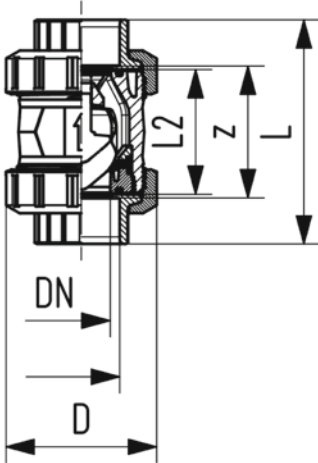
| D (mm) | L (mm) | L2 (mm) | z (mm) |
|-----------|-----------|------------|-----------|
| 50 | 105 | 56 | 67 |
| 50 | 105 | 56 | 61 |
| 58 | 121 | 65 | 70 |
| 68 | 133 | 71 | 76 |
| 84 | 154 | 85 | 90 |
| 97 | 164 | 89 | 94 |
| 124 | 183 | 101 | 107 |
| 166 | 233 | 136 | 144 |
| 200 | 254 | 141 | 151 |
| 238 | 301 | 164 | 174 |



Check valve type 562 PVC-C SF
With solvent cement sockets Inch ASTM

Model:

- For horizontal or vertical installation
- Sealing at a minimum water column of 1 m
- Silicone free/paint-compatible
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360
- New DN65-DN100



| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|----------------|------------|-------------|--|--------------------|----|----------------|--------------------|----|----------------|
| 3/8 | 10 | 16 | 190 | 163 562 241 | 1 | 0.120 | 163 562 251 | 1 | 0.120 |
| 1/2 | 15 | 16 | 180 | 163 562 242 | 1 | 0.130 | 163 562 252 | 1 | 0.130 |
| 3/4 | 20 | 16 | 380 | 163 562 243 | 1 | 0.260 | 163 562 253 | 1 | 0.280 |
| 1 | 25 | 16 | 460 | 163 562 244 | 1 | 0.290 | 163 562 254 | 1 | 0.290 |
| 1 1/4 | 32 | 16 | 850 | 163 562 245 | 1 | 0.490 | 163 562 255 | 1 | 0.490 |
| 1 1/2 | 40 | 16 | 1080 | 163 562 246 | 1 | 0.710 | 163 562 256 | 1 | 0.720 |
| 2 | 50 | 16 | 1670 | 163 562 247 | 1 | 1.460 | 163 562 257 | 1 | 1.470 |
| 2 1/2 | 65 | 16 | 2950 | 163 562 248 | 1 | 3.500 | 163 562 258 | 1 | 3.510 |
| 3 | 80 | 16 | 3600 | 163 562 249 | 1 | 5.500 | 163 562 259 | 1 | 5.520 |
| 4 | 100 | 16 | 4150 | 163 562 250 | 1 | 8.820 | 163 562 260 | 1 | 8.860 |

| Size (inch) | D (mm) | L (mm) | L2 (mm) | z (mm) |
|----------------|-----------|-----------|------------|-----------|
| 3/8 | 50 | 105 | 56 | 67 |
| 1/2 | 50 | 105 | 56 | 61 |
| 3/4 | 58 | 121 | 65 | 70 |
| 1 | 68 | 133 | 71 | 76 |
| 1 1/4 | 84 | 154 | 85 | 90 |
| 1 1/2 | 97 | 164 | 89 | 94 |
| 2 | 124 | 183 | 101 | 107 |
| 2 1/2 | 166 | 233 | 136 | 144 |
| 3 | 200 | 254 | 141 | 151 |
| 4 | 238 | 301 | 164 | 174 |

PVC-C JIS





Ball valves type 543

301



Ball valves type 546

303



Ball valves electric type 127

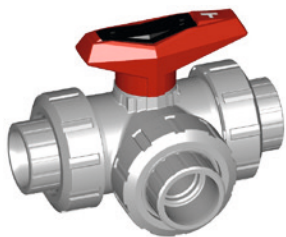
304



Ball valves pneumatic type 235

305

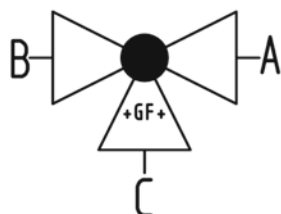
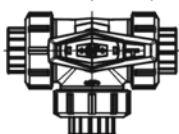
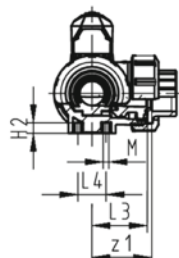
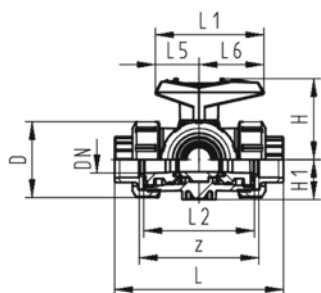
Ball valves type 543



3-Way ball valve type 543 PVC-C Horizontal/T-port With solvent cement sockets JIS

Model:

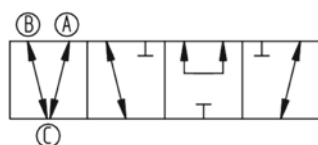
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme

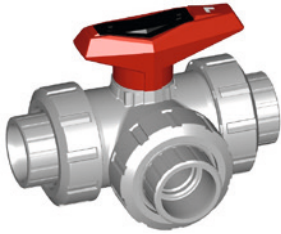


| d | DN | Size | PN | kv-value | EPDM | SP | Weight |
|------|------|--------|-------|---------------------|---------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| 20 | 15 | ½ | 10 | 200 | 163543322_old | 1 | 0.271 |
| 25 | 20 | ¾ | 10 | 470 | 163543323_old | 1 | 0.389 |
| 32 | 25 | 1 | 10 | 793 | 163543324_old | 1 | 0.590 |
| 40 | 32 | 1 ¼ | 10 | 1290 | 163543325_old | 1 | 1.007 |
| 50 | 40 | 1 ½ | 10 | 1910 | 163543326_old | 1 | 1.487 |
| 63 | 50 | 2 | 10 | 3100 | 163543327_old | 1 | 2.889 |

| FKM Code | SP | Weight |
|---------------|----|--------|
| | | (kg) |
| 163543332_old | 1 | 0.271 |
| 163543333_old | 1 | 0.389 |
| 163543334_old | 1 | 0.590 |
| 163543335_old | 1 | 1.007 |
| 163543336_old | 1 | 1.487 |
| 163543337_old | 1 | 2.889 |

| D | H | H1 | H2 | L | L1 | L2 | L3 | L4 | L5 | L6 | M | z | z1 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 57 | 28 | 8 | 112 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 81 | 40 |
| 58 | 67 | 32 | 8 | 131 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 94 | 47 |
| 68 | 73 | 36 | 8 | 151 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 107 | 54 |
| 84 | 90 | 45 | 9 | 181 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 130 | 65 |
| 97 | 97 | 51 | 9 | 205 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 143 | 72 |
| 124 | 116 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 185 | 92 |

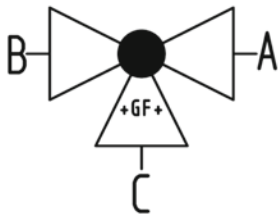
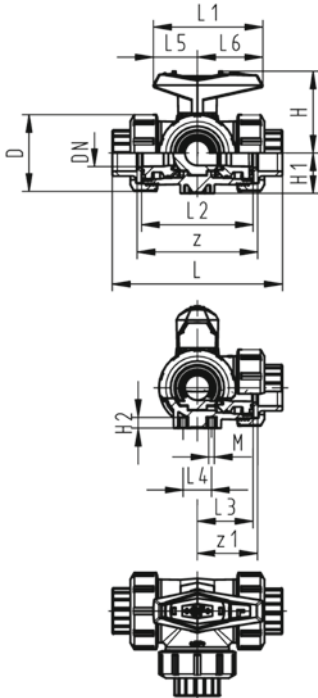




3-Way ball valve type 543 PVC-C
Horizontal/L-port
With solvent cement sockets JIS

Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seat PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme

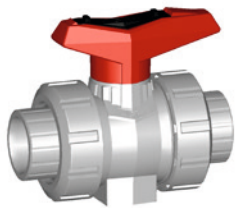


| d | DN | Size | PN | kv-value | EPDM | SP | Weight |
|------|------|--------|-------|---------------------|----------------------|----|--------|
| (mm) | (mm) | (inch) | (bar) | ($\Delta p=1$ bar) | Code | | (kg) |
| | | | | (l/min) | | | |
| 20 | 15 | ½ | 10 | 75 | 163543122_old | 1 | 0.272 |
| 25 | 20 | ¾ | 10 | 150 | 163543123_old | 1 | 0.391 |
| 32 | 25 | 1 | 10 | 280 | 163543124_old | 1 | 0.598 |
| 40 | 32 | 1 ¼ | 10 | 480 | 163543125_old | 1 | 1.018 |
| 50 | 40 | 1 ½ | 10 | 620 | 163543126_old | 1 | 1.509 |
| 63 | 50 | 2 | 10 | 1230 | 163543127_old | 1 | 2.938 |

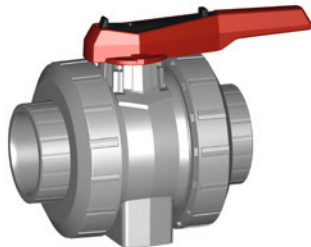
| FKM | SP | Weight |
|----------------------|----|--------|
| Code | | (kg) |
| 163543132_old | 1 | 0.272 |
| 163543133_old | 1 | 0.391 |
| 163543134_old | 1 | 0.598 |
| 163543135_old | 1 | 1.018 |
| 163543136_old | 1 | 1.509 |
| 163543137_old | 1 | 2.938 |

| D | H | H1 | H2 | L | L1 | L2 | L3 | L4 | L5 | L6 | M | z | z1 |
|------|------|------|------|------|------|------|------|------|------|------|---|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | | (mm) | (mm) |
| 50 | 57 | 28 | 8 | 112 | 77 | 73 | 36 | 25 | 32 | 45 | 6 | 81 | 40 |
| 58 | 67 | 32 | 8 | 131 | 97 | 86 | 43 | 25 | 39 | 58 | 6 | 94 | 47 |
| 68 | 73 | 36 | 8 | 151 | 97 | 99 | 50 | 25 | 39 | 58 | 6 | 107 | 54 |
| 84 | 90 | 45 | 9 | 181 | 128 | 120 | 60 | 45 | 54 | 74 | 8 | 130 | 65 |
| 97 | 97 | 51 | 9 | 205 | 128 | 137 | 69 | 45 | 54 | 74 | 8 | 143 | 72 |
| 124 | 116 | 65 | 9 | 261 | 152 | 179 | 89 | 45 | 66 | 87 | 8 | 185 | 92 |

Ball valves type 546



DN10/15 - 50



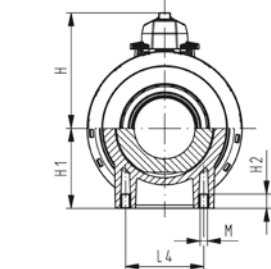
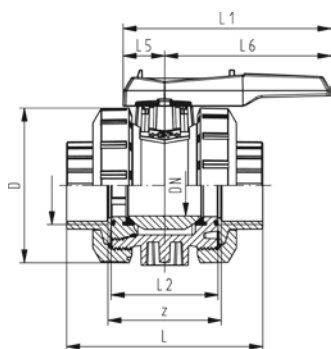
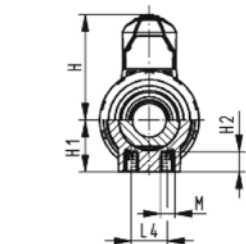
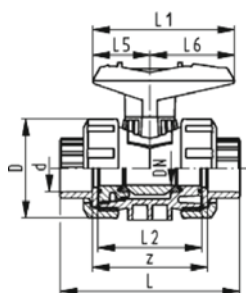
Ball valve type 546 PVC-C With mounting inserts With solvent cement sockets JIS

Model:

- For easy installation and removal
- Ball seat PTFE
- Integrated stainless steel mounting inserts
- Valve end and union nut are **not compatible** with type 346 (DN10/15-50) and type 370 (DN65-100)

Option:

- Individual configuration of the valve
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from GF



| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|----------------|------------|-------------|--|--------------|-------------------|-------------|-------------------|
| 1/2 | 15 | 16 | 185 | 163 546 422 | 1 | 0.160 | 163 546 432 |
| 3/4 | 20 | 16 | 350 | 163 546 423 | 1 | 0.256 | 163 546 433 |
| 1 | 25 | 16 | 700 | 163 546 424 | 1 | 0.370 | 163 546 434 |
| 1 1/4 | 32 | 16 | 1000 | 163 546 425 | 1 | 0.660 | 163 546 435 |
| 1 1/2 | 40 | 16 | 1600 | 163 546 426 | 1 | 0.907 | 163 546 436 |
| 2 | 50 | 16 | 3100 | 163 546 427 | 1 | 1.679 | 163 546 437 |
| 2 1/2 | 65 | 16 | 5000 | 163 546 428 | 1 | 5.300 | 163 546 438 |
| 3 | 80 | 16 | 7000 | 163 546 429 | 1 | 8.000 | 163 546 439 |
| 4 | 100 | 16 | 11000 | 163 546 430 | 1 | 12.500 | 163 546 440 |

| Size (inch) | D (mm) | H (mm) | H1 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) |
|----------------|-----------|-----------|------------|-----------|------------|------------|------------|------------|------------|-----|-----------|
| 1/2 | 50 | 57 | 27 | 95 | 77 | 56 | 25 | 32 | 45 | M6 | 64 |
| 3/4 | 58 | 67 | 30 | 110 | 97 | 65 | 25 | 39 | 58 | M6 | 72 |
| 1 | 68 | 73 | 36 | 123 | 97 | 71 | 25 | 39 | 58 | M6 | 79 |
| 1 1/4 | 84 | 90 | 44 | 146 | 128 | 85 | 45 | 54 | 74 | M8 | 94 |
| 1 1/2 | 97 | 97 | 51 | 157 | 128 | 89 | 45 | 54 | 74 | M8 | 95 |
| 2 | 124 | 116 | 64 | 183 | 152 | 101 | 45 | 66 | 87 | M8 | 107 |
| 2 1/2 | 166 | 149 | 85 | 233 | 270 | 136 | 70 | 64 | 206 | M8 | 144 |
| 3 | 200 | 161 | 105 | 254 | 270 | 141 | 70 | 64 | 206 | M8 | 151 |
| 4 | 238 | 178 | 123 | 301 | 320 | 164 | 120 | 64 | 256 | M12 | 174 |

Ball valves electric type 127



Ball valve type 127 PVC-C 100-230V
With manual emergency override
With solvent cement sockets JIS

Model:

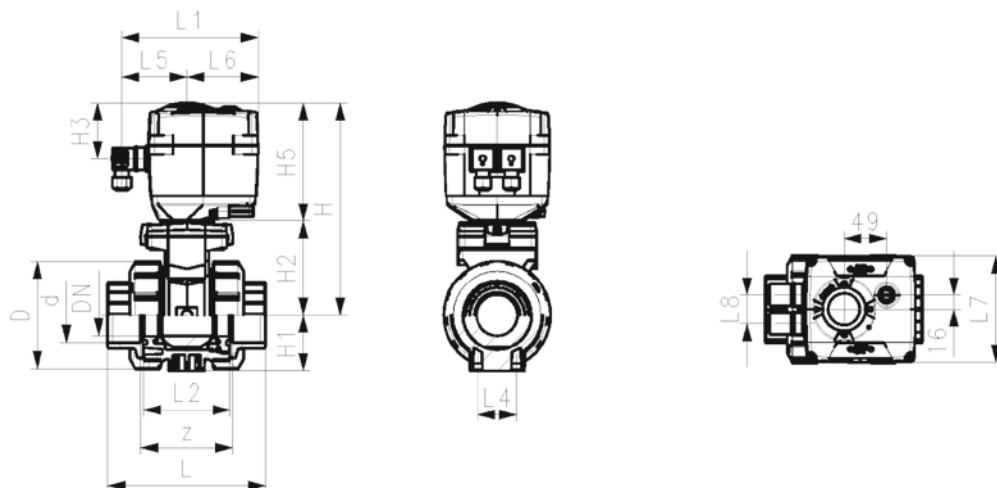
- Built on with electric actuator EA15
- Voltage 100-230V, 50-60Hz
- Factory set control range 90°<
- Heating element, position feedback (Open/Close)
- Integrated stainless steel mounting inserts

Option:

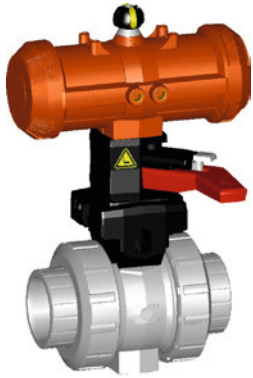
- Other valve and actuator configurations available
- Optional accessories: Fail-safe return unit

| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | Weight (kg) | FKM Code | Weight (kg) |
|----------------|------------|-------------|--|--------------|----------------|-------------|----------------|
| 3/8 | 10 | 10 | 70 | 199 127 882 | 2.100 | 199 127 892 | 2.100 |
| 1/2 | 15 | 10 | 185 | 199 127 883 | 2.100 | 199 127 893 | 2.100 |
| 3/4 | 20 | 10 | 350 | 199 127 884 | 2.200 | 199 127 894 | 2.200 |
| 1 | 25 | 10 | 700 | 199 127 885 | 2.300 | 199 127 895 | 2.300 |
| 1 1/4 | 32 | 10 | 1000 | 199 127 886 | 2.600 | 199 127 896 | 2.600 |
| 1 1/2 | 40 | 10 | 1600 | 199 127 887 | 3.000 | 199 127 897 | 3.000 |
| 2 | 50 | 10 | 3100 | 199 127 888 | 3.800 | 199 127 898 | 3.800 |

| Size (inch) | D (mm) | H (mm) | H1 (mm) | H2 (mm) | H3 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | L8 (mm) | z (mm) |
|----------------|-----------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|
| 3/8 | 50 | 200 | 27 | 64 | 64 | 137 | 95 | 161 | 56 | 25 | 79 | 83 | 122 | 33 | 64 |
| 1/2 | 50 | 200 | 27 | 64 | 64 | 137 | 95 | 161 | 56 | 25 | 79 | 83 | 122 | 33 | 64 |
| 3/4 | 58 | 209 | 30 | 73 | 64 | 137 | 110 | 161 | 65 | 25 | 79 | 83 | 122 | 33 | 72 |
| 1 | 68 | 209 | 36 | 73 | 64 | 137 | 123 | 161 | 71 | 25 | 79 | 83 | 122 | 33 | 79 |
| 1 1/4 | 84 | 220 | 44 | 64 | 64 | 137 | 146 | 161 | 85 | 45 | 79 | 83 | 122 | 33 | 94 |
| 1 1/2 | 97 | 220 | 51 | 84 | 64 | 137 | 157 | 161 | 89 | 45 | 79 | 83 | 122 | 33 | 95 |
| 2 | 124 | 243 | 64 | 106 | 64 | 137 | 183 | 161 | 101 | 45 | 79 | 83 | 122 | 33 | 107 |



Ball valves pneumatic type 235



DN10/15 - 50

Ball valve type 235 PVC-C
FC (fail safe to close)
With manual override
With solvent cement sockets JIS

Model:

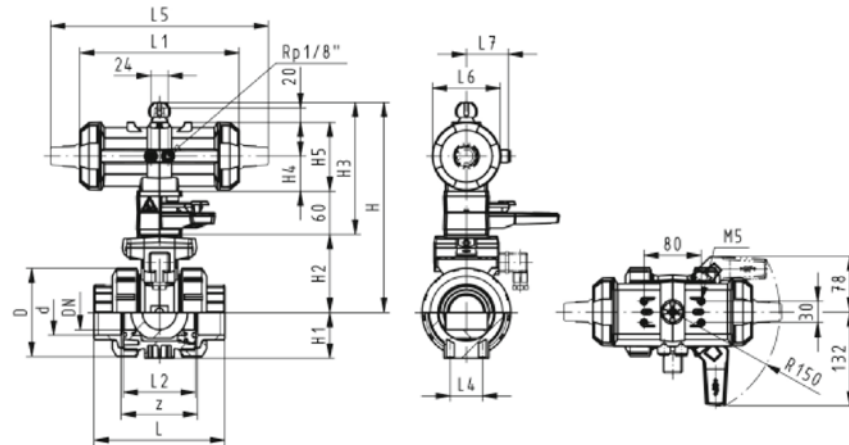
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°< 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts

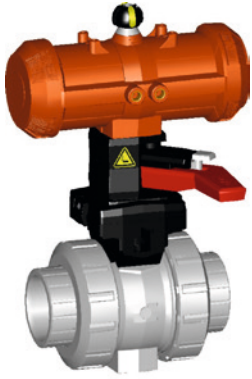
Option:

- Individual configuration of the valve

| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP Weight (kg) | FKM Code | SP Weight (kg) |
|------------|----------------|-------------|--|--------------|----------------------|-------------|----------------------|
| 15 | ½ | 10 | 185 | 199 235 243 | 1 | 1.500 | 199 235 253 |
| 20 | ¾ | 10 | 350 | 199 235 244 | 1 | 1.600 | 199 235 254 |
| 25 | 1 | 10 | 700 | 199 235 245 | 1 | 1.700 | 199 235 255 |
| 32 | 1 ¼ | 10 | 1000 | 199 235 246 | 1 | 2.800 | 199 235 256 |
| 40 | 1 ½ | 10 | 1600 | 199 235 247 | 1 | 3.100 | 199 235 257 |
| 50 | 2 | 10 | 3100 | 199 235 248 | 1 | 4.000 | 199 235 258 |

| D | H | H1 | H2 | H3 | H4 | H5 | L | L1 | L2 | L4 | L5 | L6 | L7 | z |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 27 | 62 | 168 | 40 | 77 | 95 | 194 | 56 | 25 | 261 | 76 | 48 | 64 |
| 58 | 168 | 30 | 71 | 168 | 40 | 77 | 110 | 194 | 65 | 25 | 261 | 76 | 48 | 72 |
| 68 | 168 | 36 | 71 | 168 | 40 | 77 | 123 | 194 | 71 | 25 | 261 | 76 | 48 | 79 |
| 84 | 202 | 44 | 84 | 187 | 51 | 99 | 146 | 224 | 85 | 45 | 305 | 95 | 59 | 94 |
| 97 | 202 | 51 | 84 | 187 | 51 | 99 | 157 | 224 | 89 | 45 | 305 | 95 | 59 | 95 |
| 124 | 225 | 64 | 106 | 187 | 51 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |





DN10/15 - 50

Ball valve type 235 PVC-C
FO (Fail safe to open)
With manual override
With solvent cement sockets JIS

Model:

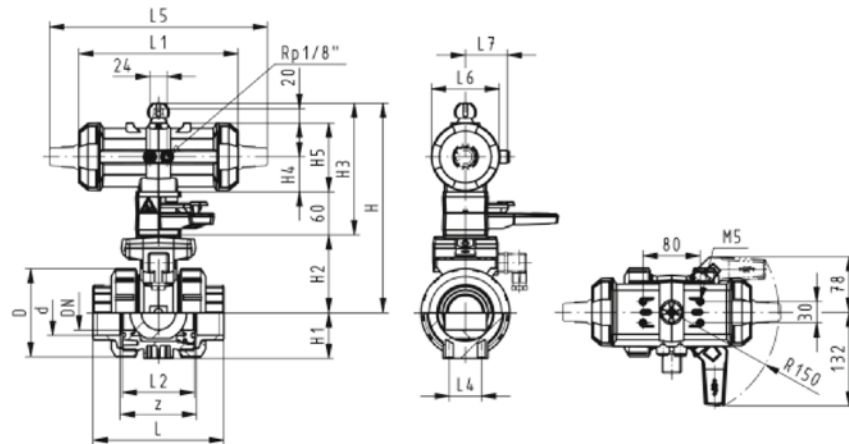
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90° < 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts

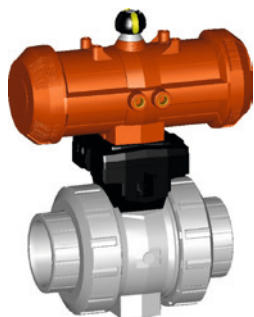
Option:

- Individual configuration of the valve

| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 15 | ½ | 10 | 185 | 199 235 263 | 1 | 1.500 | 199 235 273 | 1 | 1.500 |
| 20 | ¾ | 10 | 350 | 199 235 264 | 1 | 1.600 | 199 235 274 | 1 | 1.600 |
| 25 | 1 | 10 | 700 | 199 235 265 | 1 | 1.700 | 199 235 275 | 1 | 1.700 |
| 32 | 1 ¼ | 10 | 1000 | 199 235 266 | 1 | 2.800 | 199 235 276 | 1 | 2.800 |
| 40 | 1 ½ | 10 | 1600 | 199 235 267 | 1 | 3.100 | 199 235 277 | 1 | 3.100 |
| 50 | 2 | 10 | 3100 | 199 235 268 | 1 | 4.000 | 199 235 278 | 1 | 4.000 |

| D | H | H1 | H2 | H3 | H4 | H5 | L | L1 | L2 | L4 | L5 | L6 | L7 | z |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 27 | 62 | 168 | 40 | 77 | 95 | 194 | 56 | 25 | 261 | 76 | 48 | 64 |
| 58 | 168 | 30 | 71 | 168 | 40 | 77 | 110 | 194 | 65 | 25 | 261 | 76 | 48 | 72 |
| 68 | 168 | 36 | 71 | 168 | 40 | 77 | 123 | 194 | 71 | 25 | 261 | 76 | 48 | 79 |
| 84 | 202 | 44 | 84 | 187 | 51 | 99 | 146 | 224 | 85 | 45 | 305 | 95 | 59 | 94 |
| 97 | 202 | 51 | 84 | 187 | 51 | 99 | 157 | 224 | 89 | 45 | 305 | 95 | 59 | 95 |
| 124 | 225 | 64 | 106 | 187 | 51 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |





DN10/15 - 50



**Ball valve type 235 PVC-C
DA (Double acting)
Without manual override
With solvent cement sockets JIS**

Model:

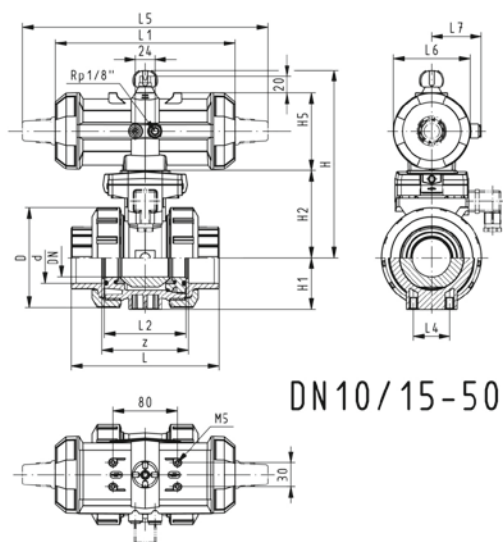
- Control time 90° < 1-2s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

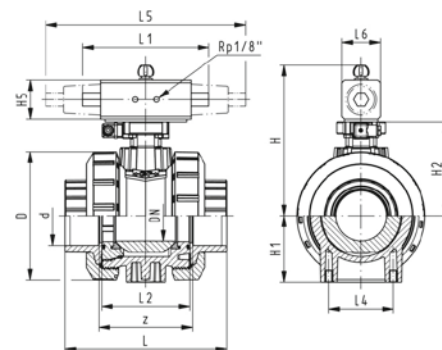
- Individual configuration of the valve

| DN (mm) | Size (inch) | PN (bar) | kv-value (Δp=1 bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|-----------------------------------|--------------------|----|----------------|--------------------|----|----------------|
| 15 | ½ | 10 | 185 | 199 235 343 | 1 | 1.200 | 199 235 353 | 1 | 1.200 |
| 20 | ¾ | 10 | 350 | 199 235 344 | 1 | 1.300 | 199 235 354 | 1 | 1.300 |
| 25 | 1 | 10 | 700 | 199 235 345 | 1 | 1.400 | 199 235 355 | 1 | 1.400 |
| 32 | 1 ¼ | 10 | 1000 | 199 235 346 | 1 | 2.500 | 199 235 356 | 1 | 2.500 |
| 40 | 1 ½ | 10 | 1600 | 199 235 347 | 1 | 2.800 | 199 235 357 | 1 | 2.800 |
| 50 | 2 | 10 | 3100 | 199 235 348 | 1 | 3.700 | 199 235 358 | 1 | 3.700 |
| 65 | 2 ½ | 10 | 5000 | 199 235 349 | | 7.000 | 199 235 359 | | 7.000 |
| 80 | 3 | 10 | 7000 | 199 235 350 | | 10.200 | 199 235 360 | | 10.200 |
| 100 | 4 | 10 | 11000 | 199 235 351 | | 14.600 | 199 235 361 | | 14.600 |

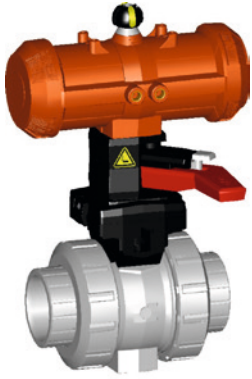
| D (mm) | H (mm) | H1 (mm) | H2 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | z (mm) |
|-----------|-----------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|-----------|
| 50 | 159 | 27 | 62 | 77 | 95 | 194 | 56 | 25 | 261 | 76 | 48 | 64 |
| 58 | 168 | 30 | 71 | 77 | 110 | 194 | 65 | 25 | 261 | 76 | 48 | 72 |
| 68 | 168 | 36 | 71 | 77 | 123 | 194 | 71 | 25 | 261 | 76 | 48 | 79 |
| 84 | 202 | 44 | 84 | 99 | 146 | 224 | 85 | 45 | 305 | 95 | 59 | 94 |
| 97 | 202 | 51 | 84 | 99 | 157 | 224 | 89 | 45 | 305 | 95 | 59 | 95 |
| 124 | 225 | 64 | 106 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |
| 166 | 257 | 85 | 156 | 66 | 233 | 144 | 136 | 70 | | 60 | | 144 |
| 200 | 274 | 105 | 168 | 70 | 254 | 152 | 141 | 70 | | 65 | | 151 |
| 238 | 273 | 123 | 175 | 78 | 301 | 169 | 164 | 120 | | 72 | | 174 |



DN10/15-50



DN65-100



DN10/15 - 50

Ball valve type 235 PVC-C
DA (Double acting)
With manual override
With solvent cement sockets JIS

Model:

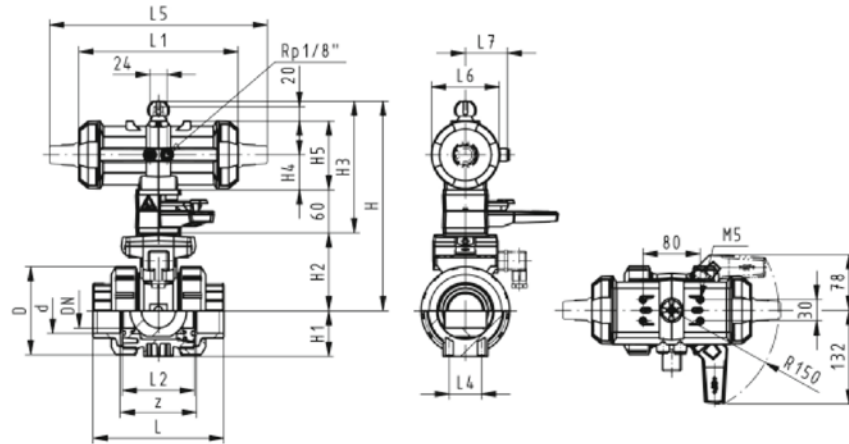
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°<) 1-2s
- For easy installation and removal
- Integrated stainless steel mounting inserts

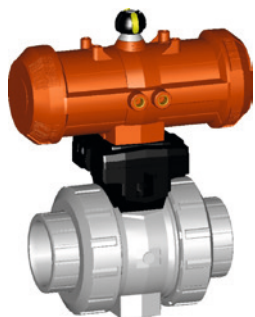
Option:

- Individual configuration of the valve

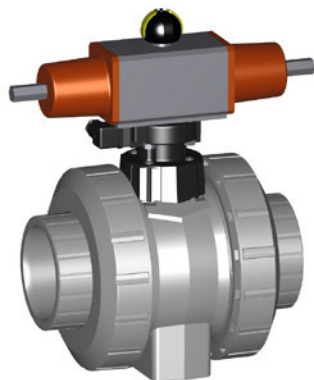
| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 15 | ½ | 10 | 185 | 199 235 283 | 1 | 1.500 | 199 235 293 | 1 | 1.500 |
| 20 | ¾ | 10 | 350 | 199 235 284 | 1 | 1.600 | 199 235 294 | 1 | 1.600 |
| 25 | 1 | 10 | 700 | 199 235 285 | 1 | 1.700 | 199 235 295 | 1 | 1.700 |
| 32 | 1 ¼ | 10 | 1000 | 199 235 286 | 1 | 2.800 | 199 235 296 | 1 | 2.800 |
| 40 | 1 ½ | 10 | 1600 | 199 235 287 | 1 | 3.100 | 199 235 297 | 1 | 3.100 |
| 50 | 2 | 10 | 3100 | 199 235 288 | 1 | 4.000 | 199 235 298 | 1 | 4.000 |

| D | H | H1 | H2 | H3 | H4 | H5 | L | L1 | L2 | L4 | L5 | L6 | L7 | z |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 50 | 159 | 27 | 62 | 168 | 40 | 77 | 95 | 194 | 56 | 25 | 261 | 76 | 48 | 64 |
| 58 | 168 | 30 | 71 | 168 | 40 | 77 | 110 | 194 | 65 | 25 | 261 | 76 | 48 | 72 |
| 68 | 168 | 36 | 71 | 168 | 40 | 77 | 123 | 194 | 71 | 25 | 261 | 76 | 48 | 79 |
| 84 | 202 | 44 | 84 | 187 | 51 | 99 | 146 | 224 | 85 | 45 | 305 | 95 | 59 | 94 |
| 97 | 202 | 51 | 84 | 187 | 51 | 99 | 157 | 224 | 89 | 45 | 305 | 95 | 59 | 95 |
| 124 | 225 | 64 | 106 | 187 | 51 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |





DN10/15 - 50



**Ball valve type 235 PVC-C
FC (Fail safe to close)
Without manual override
With solvent cement sockets JIS**

Model:

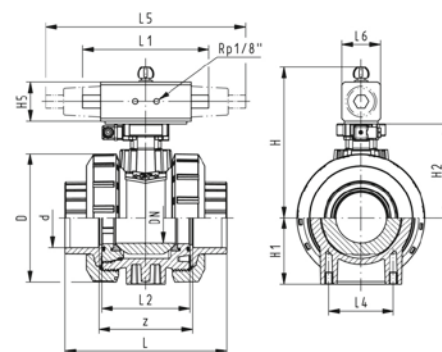
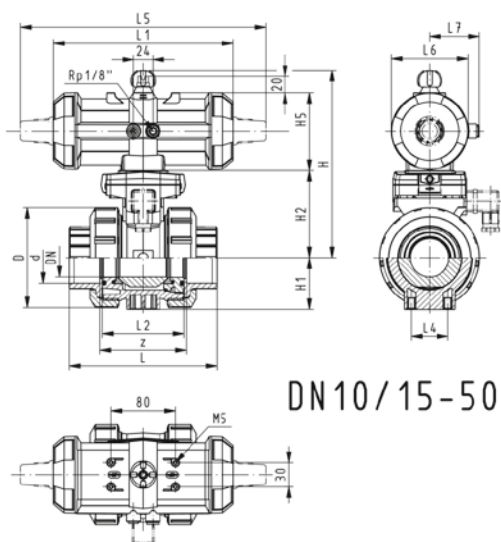
- Control time 90° < 1-2s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts

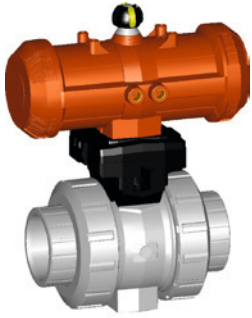
Option:

- Individual configuration of the valve

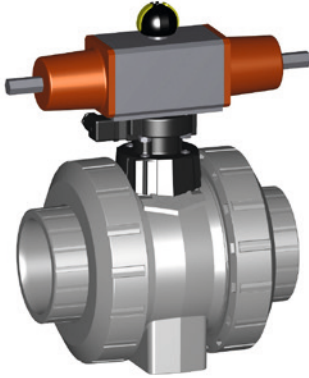
| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 15 | ½ | 10 | 185 | 199 235 303 | 1 | 1.200 | 199 235 313 | 1 | 1.200 |
| 20 | ¾ | 10 | 350 | 199 235 304 | 1 | 1.300 | 199 235 314 | 1 | 1.300 |
| 25 | 1 | 10 | 700 | 199 235 305 | 1 | 1.400 | 199 235 315 | 1 | 1.400 |
| 32 | 1 ¼ | 10 | 1000 | 199 235 306 | 1 | 2.500 | 199 235 316 | 1 | 2.500 |
| 40 | 1 ½ | 10 | 1600 | 199 235 307 | 1 | 2.800 | 199 235 317 | 1 | 2.800 |
| 50 | 2 | 10 | 3100 | 199 235 308 | 1 | 3.700 | 199 235 318 | 1 | 3.700 |
| 65 | 2 ½ | 10 | 5000 | 199 235 309 | | 8.100 | 199 235 319 | | 8.100 |
| 80 | 3 | 10 | 7000 | 199 235 310 | 1 | 10.900 | 199 235 320 | 1 | 10.900 |
| 100 | 4 | 10 | 11000 | 199 235 311 | | 16.400 | 199 235 321 | | 16.400 |

| D (mm) | H (mm) | H1 (mm) | H2 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | z (mm) |
|-----------|-----------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|-----------|
| 50 | 159 | 27 | 62 | 77 | 95 | 194 | 56 | 25 | 261 | 76 | 48 | 64 |
| 58 | 168 | 30 | 71 | 77 | 110 | 194 | 65 | 25 | 261 | 76 | 48 | 72 |
| 68 | 168 | 36 | 71 | 77 | 123 | 194 | 71 | 25 | 261 | 76 | 48 | 79 |
| 84 | 202 | 44 | 84 | 99 | 146 | 224 | 85 | 45 | 305 | 95 | 59 | 94 |
| 97 | 202 | 51 | 84 | 99 | 157 | 224 | 89 | 45 | 305 | 95 | 59 | 95 |
| 124 | 225 | 64 | 106 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |
| 166 | 262 | 85 | 156 | 70 | 233 | | 136 | 70 | 276 | 65 | | 144 |
| 200 | 281 | 105 | 168 | 78 | 254 | | 141 | 70 | 341 | 72 | | 151 |
| 238 | 292 | 123 | 175 | 86 | 301 | | 164 | 120 | 369 | 80 | | 174 |





DN10/15 - 50



Ball valve type 235 PVC-C
FO (Fail safe to open)
Without manual override
With solvent cement sockets JIS

Model:

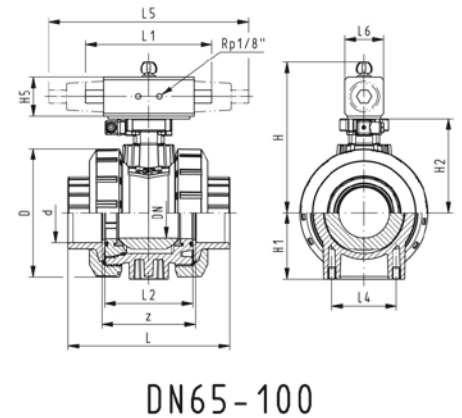
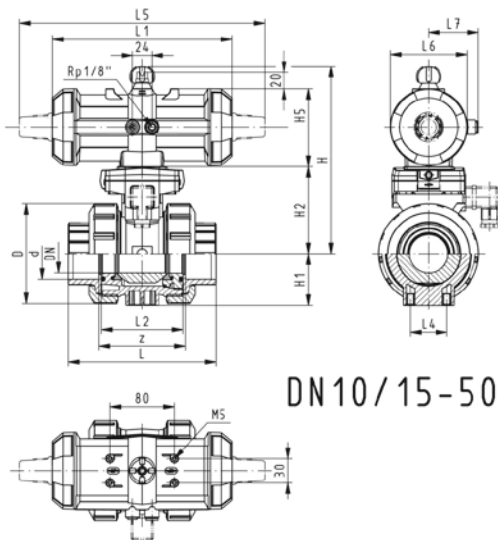
- Control time 90° < 1-2s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

- Individual configuration of the valve

| DN (mm) | Size (inch) | PN (bar) | kv-value ($\Delta p=1$ bar) (L/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|------------|----------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 15 | ½ | 10 | 185 | 199 235 323 | 1 | 1.200 | 199 235 333 | 1 | 1.200 |
| 20 | ¾ | 10 | 350 | 199 235 324 | 1 | 1.300 | 199 235 334 | 1 | 1.300 |
| 25 | 1 | 10 | 700 | 199 235 325 | 1 | 1.400 | 199 235 335 | 1 | 1.400 |
| 32 | 1 ¼ | 10 | 1000 | 199 235 326 | 1 | 2.500 | 199 235 336 | 1 | 2.500 |
| 40 | 1 ½ | 10 | 1600 | 199 235 327 | 1 | 2.800 | 199 235 337 | 1 | 2.800 |
| 50 | 2 | 10 | 3100 | 199 235 328 | 1 | 3.700 | 199 235 338 | 1 | 3.700 |
| 65 | 2 ½ | 10 | 5000 | 199 235 329 | | 8.100 | 199 235 339 | | 8.100 |
| 80 | 3 | 10 | 7000 | 199 235 330 | 1 | 10.900 | 199 235 340 | 1 | 10.900 |
| 100 | 4 | 10 | 11000 | 199 235 331 | | 16.400 | 199 235 341 | | 16.400 |

| D (mm) | H (mm) | H1 (mm) | H2 (mm) | H5 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | z (mm) |
|-----------|-----------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|-----------|
| 50 | 159 | 27 | 62 | 77 | 95 | 194 | 56 | 25 | 261 | 76 | 48 | 64 |
| 58 | 168 | 30 | 71 | 77 | 110 | 194 | 65 | 25 | 261 | 76 | 48 | 72 |
| 68 | 168 | 36 | 71 | 77 | 123 | 194 | 71 | 25 | 261 | 76 | 48 | 79 |
| 84 | 202 | 44 | 84 | 99 | 146 | 224 | 85 | 45 | 305 | 95 | 59 | 94 |
| 97 | 202 | 51 | 84 | 99 | 157 | 224 | 89 | 45 | 305 | 95 | 59 | 95 |
| 124 | 225 | 64 | 106 | 99 | 183 | 224 | 101 | 45 | 305 | 95 | 59 | 107 |
| 166 | 262 | 85 | 156 | 70 | 233 | | 136 | 70 | 276 | 65 | | 144 |
| 200 | 281 | 105 | 168 | 78 | 254 | | 141 | 70 | 341 | 72 | | 151 |
| 238 | 292 | 123 | 175 | 86 | 301 | | 164 | 120 | 369 | 80 | | 174 |

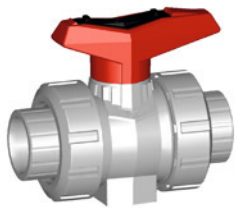


PVC-C JIS oil free

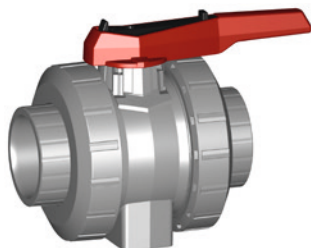


PVC-C - JIS - oil free

Ball valves type 546



DN10/15 - 50



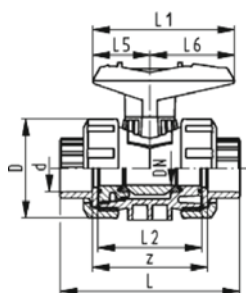
Ball valve type 546 PVC-C OF With mounting inserts With solvent cement sockets JIS

Model:

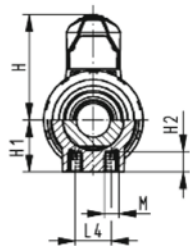
- Oil free
- For easy installation and removal
- Ball seat PTFE
- Integrated stainless steel mounting inserts
- Valve end and union nut are **not compatible** with type 346 (DN10/15-50) and type 370 (DN65-100)

Option:

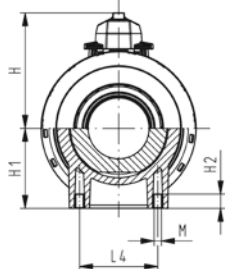
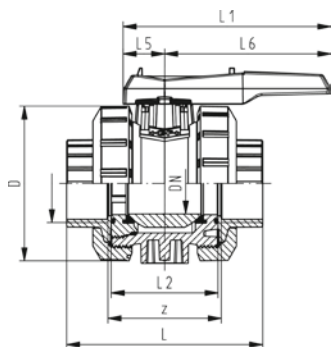
- Individual configuration of the valve
- Multifunctional module with integrated limit switches



| Size (inch) | DN (mm) | PN (bar) | kv-value ($\Delta p=1$ bar) (l/min) | EPDM Code | SP | Weight (kg) | FKM Code | SP | Weight (kg) |
|----------------|------------|-------------|--|--------------|----|----------------|-------------|----|----------------|
| 1/2 | 15 | 16 | 185 | 163 546 902 | 1 | 0.160 | 163 546 912 | 1 | 0.160 |
| 3/4 | 20 | 16 | 350 | 163 546 903 | 1 | 0.245 | 163 546 913 | 1 | 0.245 |
| 1 | 25 | 16 | 700 | 163 546 904 | 1 | 0.257 | 163 546 914 | 1 | 0.375 |
| 1 1/4 | 32 | 16 | 1000 | 163 546 905 | 1 | 0.659 | 163 546 915 | 1 | 0.660 |
| 1 1/2 | 40 | 16 | 1600 | 163 546 906 | 1 | 0.890 | 163 546 916 | 1 | 0.890 |
| 2 | 50 | 16 | 3100 | 163 546 907 | 1 | 1.688 | 163 546 917 | 1 | 1.650 |
| 2 1/2 | 65 | 16 | 5000 | 163 546 908 | 1 | 5.300 | 163 546 918 | 1 | 5.300 |
| 3 | 80 | 16 | 7000 | 163 546 909 | 1 | 8.000 | 163 546 919 | 1 | 8.000 |
| 4 | 100 | 16 | 11000 | 163 546 910 | 1 | 12.500 | 163 546 920 | 1 | 12.500 |



| Size (inch) | D (mm) | H (mm) | H1 (mm) | L (mm) | L1 (mm) | L2 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | M | z (mm) |
|----------------|-----------|-----------|------------|-----------|------------|------------|------------|------------|------------|-----|-----------|
| 1/2 | 50 | 57 | 27 | 95 | 77 | 56 | 25 | 32 | 45 | M6 | 64 |
| 3/4 | 58 | 67 | 30 | 110 | 97 | 65 | 25 | 39 | 58 | M6 | 72 |
| 1 | 68 | 73 | 36 | 123 | 97 | 71 | 25 | 39 | 58 | M6 | 79 |
| 1 1/4 | 84 | 90 | 44 | 146 | 128 | 85 | 45 | 54 | 74 | M8 | 94 |
| 1 1/2 | 97 | 97 | 51 | 157 | 128 | 89 | 45 | 54 | 74 | M8 | 95 |
| 2 | 124 | 116 | 64 | 183 | 152 | 101 | 45 | 66 | 87 | M8 | 107 |
| 2 1/2 | 166 | 149 | 85 | 233 | 270 | 136 | 70 | 64 | 206 | M8 | 144 |
| 3 | 200 | 161 | 105 | 254 | 270 | 141 | 70 | 64 | 206 | M8 | 151 |
| 4 | 238 | 178 | 123 | 301 | 320 | 164 | 120 | 64 | 256 | M12 | 174 |



Electric & pneumatic actuators

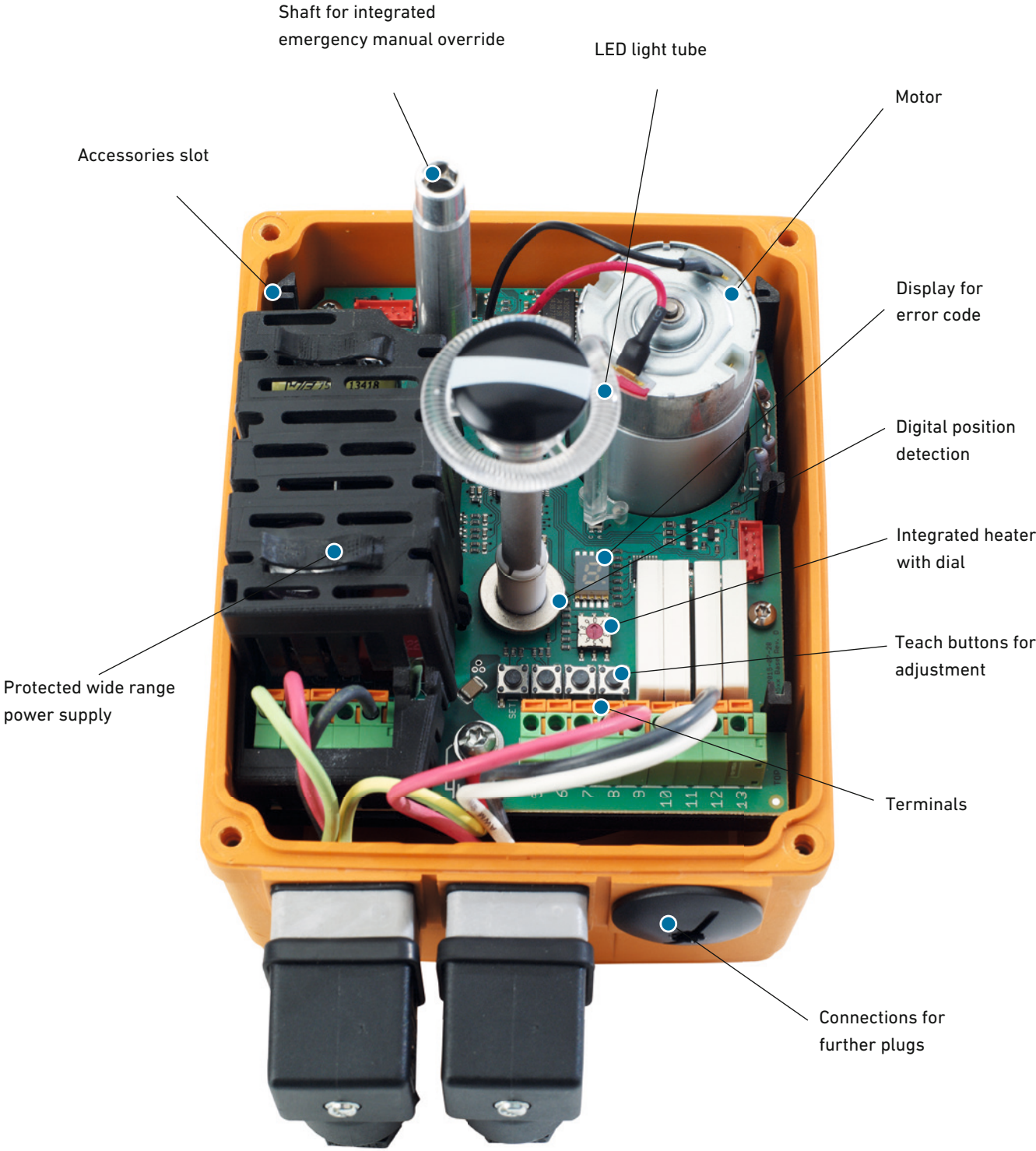


Electric & pneumatic actuators

| | |
|-------------------------------|-----|
| Electric actuators | 320 |
| Pneumatic rotary actuators PA | 324 |

Small & Light

Electric actuators type EA15-250



Smart functions for easy operation

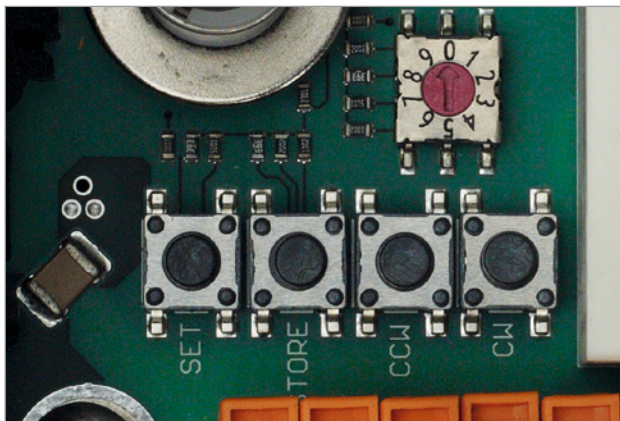
The new series of electric actuators from GF Piping Systems provides the highest reliability and ease of use. With smart additional functions, these actuators are ahead of their time.

+ Features & benefits



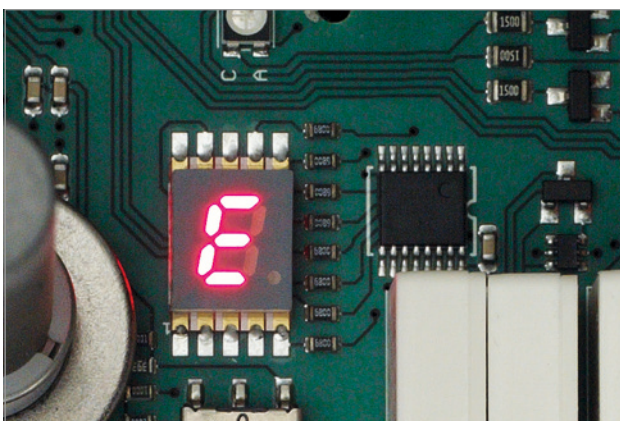
Clear display

In addition to the standard display, there is colour LED feedback. This enables easy and fast detection of the operating status at a glance – whether in low light conditions or from a distance. The different colours show the respective position of the actuator. The integrated relays allow feedback from up to three different actuating positions.



Easy set-up

Digital 360° position detection is used to clearly identify the actuating position. Ex factory, the actuator is adjusted to 0° and 90°. Readjustment by the user is possible at any time on site via four buttons. The buttons are easy to operate without any additional tools.



Intelligent feedback

The 7-segment error display ensures the highest level of security in case of a problem. Through various error codes, the cause of a problem can be clearly identified. A time and labour-intensive search is no longer necessary. Whether it's undervoltage, a position error or use of the emergency manual override – the display facilitates the identification of disruptions. The 'ready-to-operate' signal gives feedback on the process control system. The signal will drop in case of failure.

Technical details

EA15, EA25, EA45, EA120, EA250

| | |
|----------------------------------|--|
| Nominal voltage | AC: 100 – 230 V, 50/60 Hz AC/DC: 24 V, 50/60 Hz |
| Nominal voltage tolerance | ± 15% |
| Protection class | IP 65 according to EN 60529 |
| Pollution degree | 2 according to EN 61010-1 |
| Overload protection | Current/time dependent, resetting |
| Overvoltage category | II |
| Ambient temperature | -10 ° to +50 °C |
| Allowable humidity | Max. 90 % relative humidity, non condensing |
| Housing material | PP-GF for very good chemical resistance |

| | EA15 | EA25 | EA45 | EA120 | EA250 |
|---|--|--|--|--|--|
| Nominal power | AC: 30 VA at 100–230 V AC/DC: 35 VA at 24 V | AC: 35 VA at 100–230 V AC/DC: 40 VA at 24 V | AC: 55 VA at 100–230 V AC/DC: 60 VA at 24 V | AC: 50 VA at 100–230 V AC/DC: 55 VA at 24 V | AC: 60 VA at 100–230 V AC/DC: 65 VA at 24 V |
| Nominal power | 0.3A at 100V 0.13A at 230V 1.5A at 24V | 0.35A at 100V 0.15A at 230V 1.7A at 24V | 0.55A at 100V 0.24A at 230V 2.5A at 24V | 0.5A at 100V 0.22A at 230V 2.3A at 24V | 0.55A at 100V 0.26A at 230V 2.7A at 24V |
| Nominal torque Mdn (peak) | 10 (20) Nm | 10 (25) Nm | 20 (45) Nm | 60 (120) Nm | 100 (250) Nm |
| Duty cycle | 40% @ 25°C/15min | 100% | 50% | 50% | 35% |
| Cycle time s/90° at Mdn. | 5 s | 5 s | 6 s | 15 s | 20 s |
| Flange fitting | F05 | F05 | F05 | F07 | F07 |
| Tested cycles (at 20 °C and Mdn) | 150 000 | 250 000 | 100 000 | 100 000 | 75 000 |
| Weight | 1.85 kg | 2,1 kg | 2,2 kg | 3,6 kg | 5,0 kg |
| Actuating angle | Max. 355°, set to 90° | | | | |



Electric actuators



Electric actuator type EA15/25/45/120/250

Model:

- Heating element, position feedback (Open/Close/ Middle)
- All: Adjustable heater and 7-segment error LED included
- EA15: control and position feedback open/close
- EA25 - 250: control open/close/middle; position feedback open/close/middle ready to operate
- cUL E247458
- IP68 Rating

Option:

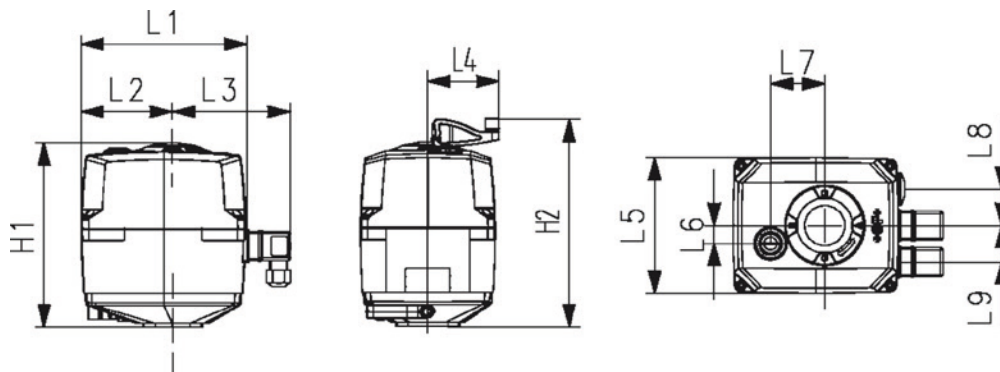
- All: Fail-safe return unit
- EA25-250: Monitoring board, Positioner, Profibus DP board, Modbus TCP EA 25-250 Ethernet Interface Card

*with adapter 198 000 587 F05 / SW 11, 198 204 057 F05 / SW 14

| Type of actuator | Tension | Torque nominal | Torque maximal | Interfaces | Code |
|------------------|-------------|----------------|----------------|-----------------|--------------------|
| EA15 | 100-230V AC | 10 Nm | 20 Nm | F05 (SW 11/14)* | 198 153 180 |
| EA15 | 24V AC/DC | 10 Nm | 20 Nm | F05 (SW 11/14)* | 198 153 181 |
| EA25 | 100-230V AC | 10 Nm | 25 Nm | F05 (SW 11/14)* | 198 153 182 |
| EA25 | 24V AC/DC | 10 Nm | 25 Nm | F05 (SW 11/14)* | 198 153 183 |
| EA45 | 100-230V AC | 20 Nm | 45 Nm | F05 (SW 11/14)* | 198 153 184 |
| EA45 | 24V AC/DC | 20 Nm | 45 Nm | F05 (SW 11/14)* | 198 153 185 |
| EA120 | 100-230V AC | 60 Nm | 120 Nm | F07 (SW17) | 198 153 186 |
| EA120 | 24V AC/DC | 60 Nm | 120 Nm | F07 (SW17) | 198 153 187 |
| EA250 | 100-230V AC | 100 Nm | 250 Nm | F07 (SW22) | 198 153 188 |
| EA250 | 24V AC/DC | 100 Nm | 250 Nm | F07 (SW22) | 198 153 189 |
| EA15 cUL marked | 100-230V AC | 10 Nm | 20 Nm | F05 (SW 11/14)* | 198153200 |
| EA15 cUL marked | 24V AC/DC | 10 Nm | 20 Nm | F05 (SW 11/14)* | 198 153 201 |
| EA25 UL marked | 100-230V AC | 10 Nm | 25 Nm | F05 (SW 11/14)* | 198 153 202 |
| EA25 cUL marked | 24V AC/DC | 10 Nm | 25 Nm | F05 (SW 11/14)* | 198 153 203 |
| EA45 cUL marked | 100-230V AC | 20 Nm | 45 Nm | F05 (SW 11/14)* | 198 153 204 |
| EA45 cUL marked | 24V AC/DC | 20 Nm | 45 Nm | F05 (SW 11/14)* | 198 153 205 |
| EA120 cUL marked | 100-230V AC | 60 Nm | 120 Nm | F07 (SW17) | 198 153 206 |
| EA120 cUL marked | 24V AC/DC | 60 Nm | 120 Nm | F07 (SW17) | 198 153 207 |
| EA250 cUL marked | 100-230V AC | 100 Nm | 250 Nm | F07 (SW22) | 198 153 208 |
| EA250 cUL marked | 24V AC/DC | 100 Nm | 250 Nm | F07 (SW22) | 198 153 209 |

| Type of actuator | H1 (mm) | H2 (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | L8 (mm) | L9 (mm) |
|------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| EA15 | 137 | 158 | 122 | 83.0 | 77 | 64.3 | 122 | 16 | 49 | | 33 |
| EA15 | 137 | 158 | 122 | 83.0 | 77 | 64.3 | 122 | 16 | 49 | | 33 |
| EA25 | 167 | 188 | 150 | 82.5 | 107 | 64.3 | 122 | 16 | 49 | 33 | 33 |
| EA25 | 167 | 188 | 150 | 82.5 | 107 | 64.3 | 122 | 16 | 49 | 33 | 33 |
| EA45 | 167 | 188 | 150 | 82.5 | 107 | 64.3 | 122 | 16 | 49 | 33 | 33 |
| EA45 | 167 | 188 | 150 | 82.5 | 107 | 64.3 | 122 | 16 | 49 | 33 | 33 |
| EA120 | 190 | 212 | 150 | 82.5 | 107 | 64.3 | 122 | 16 | 49 | 33 | 33 |
| EA120 | 190 | 212 | 150 | 82.5 | 107 | 64.3 | 122 | 16 | 49 | 33 | 33 |
| EA250 | 200 | 221 | 150 | 82.5 | 107 | 64.3 | 122 | 16 | 49 | 33 | 33 |
| EA250 | 200 | 221 | 150 | 82.5 | 107 | 64.3 | 122 | 16 | 49 | 33 | 33 |
| EA15 cUL marked | 167 | 189 | 150 | 78.0 | 108 | 64.0 | 122 | 16 | 49 | 33 | 33 |
| EA15 cUL marked | 167 | 189 | 150 | 78.0 | 108 | 64.0 | 122 | 16 | 49 | 33 | 33 |
| EA25 UL marked | 167 | 189 | 150 | 83.0 | 98 | 64.0 | 122 | 16 | 49 | 33 | 33 |
| EA25 cUL marked | 167 | 189 | 150 | 83.0 | 98 | 64.0 | 122 | 16 | 49 | 33 | 33 |
| EA45 cUL marked | 167 | 189 | 150 | 83.0 | 98 | 64.0 | 122 | 16 | 49 | 33 | 33 |
| EA45 cUL marked | 167 | 189 | 150 | 83.0 | 98 | 64.0 | 122 | 16 | 49 | 33 | 33 |

| Type of actuator | H1 (mm) | H2 (mm) | L1 (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | L6 (mm) | L7 (mm) | L8 (mm) | L9 (mm) |
|------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| EA120 cUL marked | 190 | 212 | 150 | 83.0 | 98 | 64.0 | 122 | 16 | 49 | 33 | 33 |
| EA120 cUL marked | 190 | 212 | 150 | 83.0 | 98 | 64.0 | 122 | 16 | 49 | 33 | 33 |
| EA250 cUL marked | 200 | 221 | 150 | 83.0 | 98 | 64.0 | 122 | 16 | 49 | 33 | 33 |
| EA250 cUL marked | 200 | 221 | 150 | 83.0 | 98 | 64.0 | 122 | 16 | 49 | 33 | 33 |



Accessory for electric actuators type EA15/25/45/120/250

Model:

- All accessory can be retrofitted to installed actuators of the same generation
- Accessory works with 100-230V and 24V version

| Material | Description | EA25-250 Code | EA15 Code | EA15-250 Code |
|----------------------------------|---|------------------|--------------|------------------|
| Fail-safe return unit integrated | Moves actuator in pre-defined safe position upon power loss, integrated battery pack | 199 190 601 | 199 190 610 | |
| Fail-safe return unit external | Moves actuator in pre-defined safe position upon power loss, voltage supply implemented externally | 199 190 604 | 199 190 611 | |
| Positioner | Continuous actuator control. 4-20mA or 0-10 V Input and 4-20 mA Feedback | 199 190 603 | | |
| Monitoring | Parameter monitoring. Generates alarm upon reaching its set limitations. Prevents water hammers or indicates maintenance need for valve | 199 190 602 | | |
| Profibus DP | Enables the actuator to be connected to a Profibus DP-V0 network | 199 190 605 | | |
| Diagnostic Tool | Enables to read from the actuator main board and check configurations | | | 199 190 600 |
| EA Demobox | Demo Box for electric actuators type EA15/25/45/120/250 as well as for types EA11/21/31/42 Suitable for 24V & 100-230V Control Open/ Close/ Middle; Display for feedback end positions and ready to operate | | | 199 190 607 |
| Modbus RTU via RS485 | Modbus RTU Interface Module for EA 25 - 250 to integrate GF actuators into Modbus systems which are based on RS-485. | 199 190 617 | | |



 **Modbus**
over RS485



Electric actuator type EA04

| Type of actuator | Tension | Code | Weight (kg) |
|------------------|----------|--------------------|-------------|
| 10Nm | 100-230V | 198 151 480 | 0.900 |
| 10Nm | 24V | 198 151 481 | 0.900 |
| 20Nm | 24-240V | 198 151 492 | 1.500 |

Product Configurator

Create your own actuator

Electric Actuator

- T01 EA 1124V with Cable Plug
- T02 EA 11 100-230V with Cable Plug
- T07 EA 25 24V with Cable Plug
- T08 EA 25 100-230V with Cable Plug
- T09 EA 120 24V with Cable Plug
- T10 EA 120 100-230V with Cable Plug
- T11 EA 250 24V with Cable Plug
- T12 EA 250 100-230V with Cable Plug



Angle (Open/ Close)

- W45 45°
- W90 90°
- W180 180°

Middle Position

- W17 No
- W18 Yes

Colour Assignment Feedback

- W20 Open = rot
- W21 Open = grün

Position Feedback

- W23 Open/ Close
- W24 Open/ Close/ Middle
- W25 Middle

Wiring Feedback

- W26 NC
- W28 NO

Heating Threshold

- W29 5°
- ... [5°steps]
- W37 45°

Failsafe Return uni

- W39 Integrated (Battery powered)
- W40 External (no Battery - 24V needed)

Accessory

- W42 Positioner
- W43 Monitoring
- W44 Profibus

Setting Positioner

- W46 BCD = 0
- ...
- W55 BCD = 9

Setting Motor Current

- W56 BCD = 0
- ...
- W65 BCD = 9

Setting Cycle Time

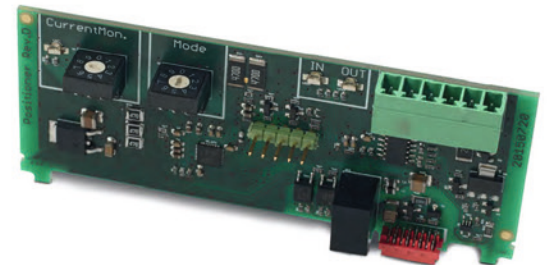
- W66 BCD = 0
- ...
- W75 BCD = 9

Setting Cycle Time monitoring

- W76 BCD = 0
- ...
- W85 BCD = 9

Setting Cycle Counter

- W86 BCD = 0
- ...
- W96 BCD = 9



T08 W90 W17 W20 W23 W26 W29 W39 W42 W46 W65 - - - =

Pneumatic rotary actuators PA

Type PA11 / PA21



Pneumatic actuator type PA11/PA21
Fail safe to close (FC)

| Inch (inch) | Type | DN-DN (mm) | Code | Weight (kg) |
|----------------|----------|---------------|--------------------|----------------|
| 3/8 - 1 | PA 11 FC | 10 - 25 | 198 150 127 | 0.769 |
| 1 1/4 - 2 | PA 21 FC | 32 - 50 | 198 150 130 | 1.445 |



Pneumatic actuator type PA11/PA21
Fail safe to open (FO)

| Inch (inch) | Type | DN-DN (mm) | Code | Weight (kg) |
|----------------|----------|---------------|--------------------|----------------|
| 3/8 - 1 | PA 11 FO | 10 - 25 | 198 150 128 | 0.775 |
| 1 1/4 - 2 | PA 21 FO | 32 - 50 | 198 150 131 | 1.419 |



Pneumatic actuator type PA11/PA21
Double action (DA)

| Inch (inch) | Type | DN-DN (mm) | Code | Weight (kg) |
|----------------|----------|---------------|--------------------|----------------|
| 3/8 - 1 | PA 11 DA | 10 - 25 | 198 150 129 | 0.542 |
| 1 1/4 - 2 | PA 21 DA | 32 - 50 | 198 150 132 | 0.995 |



Pneumatic actuator type PA11/PA21
Fail safe to close (FC) with stroke limiter

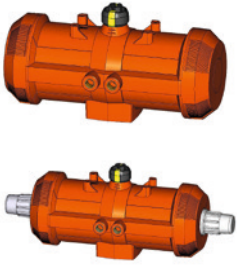
| Inch (inch) | Type | DN-DN (mm) | Code | Weight (kg) |
|----------------|----------|---------------|--------------------|----------------|
| 3/8 - 1 | PA 11 FC | 10 - 25 | 198 150 144 | 0.854 |
| 1 1/4 - 2 | PA 21 FC | 32 - 50 | 198 150 147 | 1.609 |



Pneumatic actuator type PA11/PA21
Fail safe to open (FO) with stroke limiter

| Inch (inch) | Type | DN-DN (mm) | Code | Weight (kg) |
|----------------|----------|---------------|--------------------|----------------|
| 3/8 - 1 | PA 11 FO | 10 - 25 | 198 150 145 | 0.837 |
| 1 1/4 - 2 | PA 21 FO | 32 - 50 | 198 150 148 | 1.609 |





**Pneumatic actuator type PA11/PA21
Double action (DA) with stroke limiter**

| Type | Inch (inch) | DN-DN (mm) | Code | Weight (kg) |
|----------|----------------|---------------|--------------------|----------------|
| PA 11 DA | 3/8 - 1 | 10 - 25 | 198 150 146 | 0.647 |
| PA 21 DA | 1 1/4 - 2 | 32 - 50 | 198 150 149 | 1.185 |

Type PA30 / PA90



**Pneumatic actuator type PA30 - PA90
Fail safe to close/fail safe to open (FC/FO)**

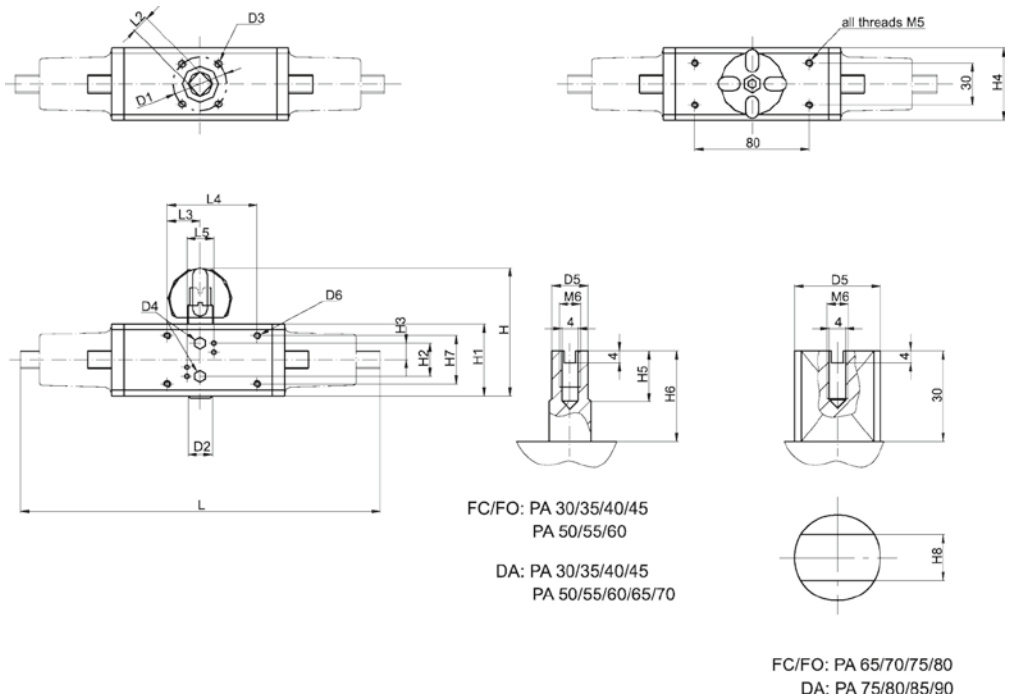
* Only valid for butterfly valve type 240, 241, 242 and ball valve type 230 - 235

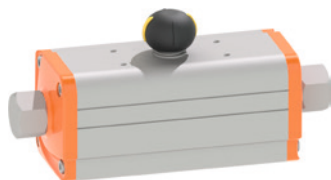
| Type | hard anodized Code | Weight (kg) | nickel plated Code | Weight (kg) | hard anodized with stroke limiter Code | Weight (kg) |
|-------------|--------------------------|----------------|--------------------------|----------------|--|----------------|
| PA 30 FC/FO | 198 800 757 | 2.022 | 198 800 034 | 2.400 | | |
| * PA 30 FO | 198 811 025 | 2.020 | | | | |
| PA 35 FC/FO | 198 800 037 | 2.673 | 198 800 052 | 2.400 | | |
| * PA 35 FO | 198 811 026 | 2.675 | | | | |
| PA 40 FC/FO | 198 800 728 | 3.602 | 198 800 004 | 3.598 | 198 800 017 | 3.598 |
| * PA 40 FO | 198 811 027 | 3.623 | | | | |
| PA 45 FC/FO | 198 800 039 | 4.962 | 198 800 054 | 4.600 | | |
| * PA45 FO | 198 811 028 | 4.944 | | | | |
| PA 50 FC/FO | 198 800 729 | 6.921 | 198 800 005 | 6.921 | 198 800 018 | 6.921 |
| * PA50 FO | 198 811 029 | 6.819 | | | | |
| PA 55 FC/FO | 198 800 041 | 9.354 | 198 800 056 | 9.400 | | |
| * PA 55 FO | 198 811 030 | 9.203 | | | | |
| PA 60 FC/FO | 198 800 730 | 11.371 | 198 800 006 | 12.895 | 198 800 019 | 12.895 |
| PA 65 FC/FO | 198 800 043 | 15.900 | 198 800 058 | 15.900 | | |
| PA 70 FC/FO | 198 800 731 | 18.758 | 198 800 007 | 19.496 | 198 800 020 | 19.496 |
| * PA 70 FO | 198 811 198 | 18.750 | | | | |

| Type | epoxy coated Code | Weight (kg) |
|-------------|-------------------------|----------------|
| PA 30 FC/FO | 198 811 194 | 2.400 |
| * PA 30 FO | | |
| PA 35 FC/FO | 198 800 029 | 2.400 |
| * PA 35 FO | | |
| PA 40 FC/FO | 198 800 025 | 3.598 |
| * PA 40 FO | | |
| PA 45 FC/FO | | |
| * PA45 FO | | |
| PA 50 FC/FO | 198 800 026 | 6.921 |
| * PA50 FO | | |
| PA 55 FC/FO | 198 811 190 | 9.424 |
| * PA 55 FO | | |
| PA 60 FC/FO | | |
| PA 65 FC/FO | | |
| PA 70 FC/FO | 198 800 028 | 19.496 |
| * PA 70 FO | | |

| Type | D1 (mm) | D2 (mm) | D3[M] (mm) | D4 (inch) | D5 (mm) | L (mm) | L2 (mm) | L3 (mm) | L4 (mm) | L5 (mm) | H (mm) | |
|-------------|------------|------------|---------------|--------------|------------|-----------|------------|------------|------------|------------|-----------|-----|
| PA 30 FC/FO | F04 | 42 | 30 | M5x9 | 10 | 272 | 11 | 35 | 70 | 32 | 102 | |
| * PA 30 FO | F04 | 42 | 30 | M5x9 | 1/8 | 10 | 272 | 11 | 35 | 70 | 32 | 102 |
| PA 35 FC/FO | F05 | 50 | 35 | M6x11 | 12 | 336 | 14 | 35 | 70 | 32 | 111 | |
| * PA 35 FO | F05 | 50 | 35 | M6x11 | 1/8 | 12 | 336 | 14 | 35 | 70 | 32 | 111 |
| PA 40 FC/FO | F05 | 50 | 35 | M6x11 | 12 | 364 | 14 | 35 | 70 | 32 | 129 | |
| * PA 40 FO | F05 | 50 | 35 | M6x11 | 1/8 | 12 | 364 | 14 | 35 | 70 | 32 | 129 |
| PA 45 FC/FO | F07 | 70 | 55 | M8x15 | 1/8 | 15 | 403 | 17 | 35 | 70 | 32 | 139 |
| * PA45 FO | F07 | 70 | 55 | M8x15 | 1/8 | 15 | 403 | 17 | 35 | 70 | 32 | 139 |
| PA 50 FC/FO | F07 | 70 | 55 | M8x15 | 15 | 418 | 17 | 35 | 70 | 32 | 149 | |
| * PA50 FO | F07 | 70 | 55 | M8x15 | 1/8 | 15 | 418 | 17 | 35 | 70 | 32 | 149 |
| PA 55 FC/FO | F10 | 102 | 70 | M10x17 | 19 | 478 | 22 | 35 | 70 | 32 | 161 | |
| * PA 55 FO | F10 | 102 | 70 | M10x17 | 1/8 | 19 | 478 | 22 | 35 | 70 | 32 | 161 |
| PA 60 FC/FO | F10 | 102 | 70 | M10x17 | 1/8 | 19 | 497 | 22 | 35 | 70 | 32 | 173 |
| PA 65 FC/FO | F12 | 125 | 85 | M12x21 | 1/4 | 617 | 27 | | | 32 | 191 | |
| PA 70 FC/FO | F12 | 125 | 85 | M12x21 | | 652 | 27 | | | 32 | 196 | |
| * PA 70 FO | F12 | 125 | 85 | M12x21 | 1/4 | 652 | 27 | | | 32 | 196 | |

| Type | H1 (mm) | H2 (mm) | H3 (mm) | H4 (mm) | H5 (mm) | H6 (mm) | H7 (mm) | H8 |
|-------------|------------|------------|------------|------------|------------|------------|------------|----|
| PA 30 FC/FO | 70 | 21 | 18 | 65 | 13 | 20 | 36 | |
| * PA 30 FO | 70 | 21 | 18 | 65 | 13 | 20 | 36 | |
| PA 35 FC/FO | 78 | 21 | 18 | 72 | 13 | 20 | 36 | |
| * PA 35 FO | 78 | 21 | 18 | 72 | 13 | 20 | 36 | |
| PA 40 FC/FO | 86 | 25 | 21 | 80 | 13 | 30 | 36 | |
| * PA 40 FO | 86 | 25 | 21 | 80 | 13 | 30 | 36 | |
| PA 45 FC/FO | 96 | 25 | 21 | 90 | 16 | 30 | 36 | |
| * PA45 FO | 96 | 25 | 21 | 90 | 16 | 30 | 36 | |
| PA 50 FC/FO | 106 | 25 | 26 | 100 | 17 | 30 | 36 | |
| * PA50 FO | 106 | 25 | 26 | 100 | 17 | 30 | 36 | |
| PA 55 FC/FO | 118 | 25 | 25 | 112 | 19 | 30 | 36 | |
| * PA 55 FO | 118 | 25 | 25 | 112 | 19 | 30 | 36 | |
| PA 60 FC/FO | 130 | 25 | 32 | 124 | 19 | 30 | 36 | |
| PA 65 FC/FO | 148 | 24 | 34 | 137 | | | | 22 |
| PA 70 FC/FO | 153 | 24 | 38 | 145 | | | | 24 |
| * PA 70 FO | 153 | 24 | 38 | 145 | | | | 24 |





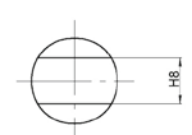
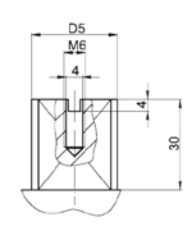
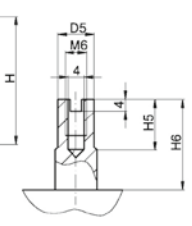
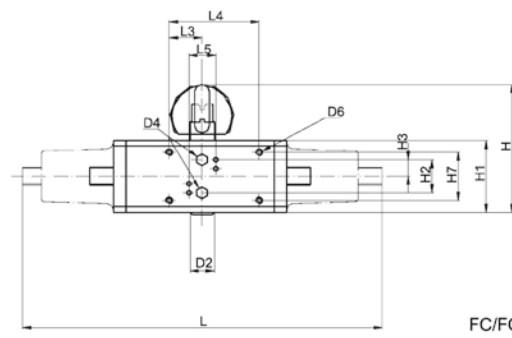
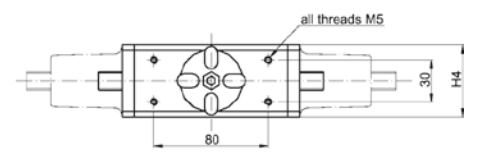
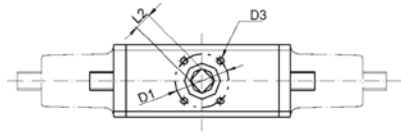
Pneumatic actuator type PA30 - PA90
Double acting (DA)

| Type | hard anodized Code | Weight (kg) |
|----------|--------------------|-------------|
| PA 30 DA | 198 800 737 | 1.004 |
| PA 35 DA | 198 800 758 | 1.346 |
| PA 40 DA | 198 800 759 | 1.731 |
| PA 45 DA | 198 800 040 | 2.155 |
| PA 50 DA | 198 800 733 | 2.981 |
| PA 55 DA | 198 800 042 | 3.892 |
| PA 60 DA | 198 800 734 | 5.647 |
| PA 65 DA | 198 800 044 | 7.293 |
| PA 70 DA | 198 800 735 | 9.008 |
| PA 75 DA | 198 800 046 | 12.000 |
| PA 80 DA | 198 800 048 | 14.000 |
| PA 85 DA | 198 800 050 | 21.527 |
| PA 90 DA | 198 800 051 | 25.400 |

| H7 | D5 | H6 | L4 | L3 | H5 | D3[M] | D1 | D2 | D4 | L1 | L2 | L5 | H | H1 |
|------|------|------|------|------|------|--------|------|------|--------|------|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (inch) | (mm) | (mm) | (mm) | (mm) | (mm) |
| 36 | 9 | 20 | 70 | 35 | 10 | M5x9 | F03 | 36 | 25 | 1/8 | 169 | 9 | 92 | 60 |
| 36 | 10 | 20 | 70 | 35 | 13 | M5x9 | F03 | 42 | 30 | 1/8 | 183 | 11 | 98 | 66 |
| 36 | 10 | 20 | 70 | 35 | 13 | M5x9 | F05 | 42 | 30 | 1/8 | 190 | 11 | 102 | 70 |
| 36 | 12 | 20 | 70 | 35 | 13 | M6x11 | F05 | 50 | 35 | 1/8 | 225 | 14 | 111 | 78 |
| 36 | 12 | 30 | 70 | 35 | 13 | M6x11 | F05 | 50 | 35 | 1/8 | 240 | 14 | 129 | 86 |
| 36 | 15 | 30 | 70 | 35 | 16 | M8x15 | F07 | 70 | 55 | 1/8 | 269 | 17 | 139 | 96 |
| 36 | 15 | 30 | 70 | 35 | 17 | M8x15 | F07 | 70 | 55 | 1/8 | 314 | 17 | 149 | 106 |
| 36 | 19 | 30 | 70 | 35 | 19 | M10x17 | F10 | 102 | 70 | 1/8 | 336 | 22 | 161 | 118 |
| 36 | 19 | 30 | 70 | 35 | 19 | M10x17 | F10 | 102 | 70 | 1/8 | 365 | 22 | 173 | 130 |
| | | | | | | M12x21 | F12 | 125 | 85 | 1/8 | 402 | 27 | 191 | 148 |
| | | | | | | M12x21 | F12 | 125 | 85 | 1/8 | 445 | 27 | 197 | 153 |
| | | | | | | M16x25 | F14 | 140 | 100 | 1/8 | 529 | 36 | 229 | 186 |
| | | | | | | M16x25 | F14 | 140 | 100 | 1/8 | 581 | 36 | 241 | 198 |

| H2 | H3 | H4 | H8 |
|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) |
| 25 | 12 | 55 | |
| 25 | 13 | 60 | |
| 21 | 18 | 65 | |
| 21 | 18 | 72 | |
| 25 | 21 | 80 | |
| 25 | 21 | 90 | |
| 25 | 26 | 100 | |
| 25 | 25 | 112 | |
| 25 | 32 | 124 | |

| H2 | H3 | H4 | H8 |
|------|------|------|------|
| (mm) | (mm) | (mm) | (mm) |
| 24 | 34 | 137 | 22 |
| 24 | 38 | 145 | 24 |
| 24 | 43 | 166 | 27 |
| 24 | 44 | 180 | 32 |



FC/FO: PA 30/35/40/45
 PA 50/55/60
 DA: PA 30/35/40/45
 PA 50/55/60/65/70

FC/FO: PA 65/70/75/80
 DA: PA 75/80/85/90

Tangit Rapid solvent free adhesive for PVC-U and PVC-C



Tangit Rapid cartridges kit

- 2-Component-Adhesive
- For PVC-U and PVC-C
- Tangit Rapid Kit consists of 6 cartridges, 12 mixers and 2 plastic brushes
- Tool needed: Tangit Rapid dispenser and mixers
- Check chemical resistance list (www.gfps.com)

| Language | description | Code | Weight (kg) |
|----------------------------|-------------|--------------------|----------------|
| DE, FR | 50 ml | 799 302 005 | 0.566 |
| FR, NL | 50 ml | 799 302 041 | 0.566 |
| DK, SE | 50 ml | 799 302 042 | 0.566 |
| GB, IT | 50 ml | 799 302 043 | 0.566 |
| FI, NO | 50 ml | 799 302 044 | 0.566 |
| DE, ES, FR, GB, IT, NL, PT | 400 ml | 799 302 007 | 3.700 |
| DK, FI, NO, SE | 400 ml | 799 302 047 | 3.700 |



Tangit Rapid dispenser

- For Tangit Rapid cartridges

| d-d (mm) | description | Code | SP | Weight (kg) |
|-------------|-------------|--------------------|----|----------------|
| 16 - 140 | 50ml | 799 302 011 | 1 | 0.185 |
| 110 - 400 | 400ml | 799 302 013 | 1 | 1.100 |



Tangit Rapid plastic brush

| Dimension | Code | SP | Weight (kg) |
|-----------|--------------------|-----|----------------|
| 3/8" | 799 302 021 | 100 | 0.006 |
| 1" | 799 302 022 | 100 | 0.008 |
| 2" | 799 302 023 | 100 | 0.010 |



Tangit Rapid mixer set

- For Tangit Rapid cartridges
- Bag with 30 pieces for 50ml and 15 pieces for 400ml

| description | Code | SP | Weight (kg) |
|-------------|--------------------|----|----------------|
| 50ml | 799 302 032 | 1 | 0.160 |
| 400ml | 799 302 033 | 1 | 0.190 |



Tangit Ruler with marking for insertion depth

| d-d (mm) | Code | SP | Weight (kg) |
|-------------|--------------------|----|----------------|
| 16 - 400 | 799 302 036 | 50 | 0.044 |



Tangit Rapid pneumatic dispenser

- For Tangit Rapid cartridges
- Air Supply 8 bar (110/116 PSI), Air Consumption max. 40 litres/min

| d-d (mm) | Code | SP | Weight (kg) | description |
|-------------|--------------------|----|----------------|-------------|
| 16 - 140 | 799 302 014 | 1 | 0.730 | 50ml |
| 110 - 400 | 799 302 015 | 1 | 1.920 | 400ml |



Tangit Rapid battery operated dispenser

- For Tangit Rapid cartridges
- Speed 4.5 mm/s, Battery 18V 2 Ah Li-Ion, including toolbox, one battery, charger 240V

| d-d (mm) | Code | SP | Weight (kg) | description |
|-------------|--------------------|----|----------------|-------------|
| 110 - 400 | 799 302 016 | 1 | 7.841 | 400ml |

Solvent cement



Tangit PVC-C solvent cement

- 0,65 kg can (net)

| Code | SP | Weight (kg) |
|-------------|----|----------------|
| 799 298 027 | 6 | 0.700 |



GF Dytex special solvent cement

- For PVC-U, PVC-C

Model:

- Special solvent cement for sulphuric acid >93% - 96%
- Not gap filling
- 0,65 kg can (net)

| Code | Weight (kg) |
|-------------|----------------|
| 799 298 116 | 0.769 |



Tangit DTX special solvent cement

- Special solvent cement for critical media (see online tool ,chemical resistance')
- For PVC-U, PVC-C
- Max. PN10/d140
- Use cleaner for PVC-U/C, ABS
- Tin à 0.500 kg

| Language | Code | SP | Weight (kg) |
|----------------|-------------|----|----------------|
| DE, FR, GB, NL | 799 298 031 | 6 | 0.586 |
| DK, FI, NO, SE | 200 119 366 | | 0.500 |
| NL | 200 155 054 | | 0.586 |



Tangit PVC-U/PVC-C/ABS cleaner/primer

Model:

- For PVC-U, PVC-C, ABS
- 1 litre tin

| Code | SP | Weight (kg) |
|-------------|----|----------------|
| 799 298 010 | 12 | 0.900 |



GF Dytex special cleaner/dissolvent

- For PVC-U, PVC-C

Model:

- To be used with GF Dytex special solvent cement
- 0,5 l can (net)

| Code | Weight (kg) |
|--------------------|----------------|
| 799 298 117 | 0.718 |



Cap for cement

- Cap prevents the evaporation of the solvent whilst using the Tangit cement

| Code | SP | Weight (kg) |
|--------------------|-----|----------------|
| 799 298 028 | 500 | 0.030 |

Brushes and Tools



Round brush

| d-d (mm) | | Code | SP | Weight (kg) | Closest inch (inch) |
|-------------|-----------------------------|--------------------|----|----------------|------------------------|
| 6 - 10 | 4 mm (for Fittings 6-10mm) | 799 299 001 | 12 | 0.004 | 1/8 |
| 12 - 32 | 8 mm (for Fittings 12-32mm) | 799 299 002 | 12 | 0.006 | 1/4 - 1 |



Flat brush

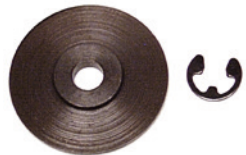
| d-d (mm) | | Code | SP | Weight (kg) | Closest inch (inch) |
|-------------|----------------------------------|--------------------|----|----------------|------------------------|
| 40 - 63 | 25x3 mm (for Fittings 40-63mm) | 799 299 003 | 12 | 0.015 | 1 1/4 - 2 |
| 75 - 225 | 50x5 mm (for Fittings 75-225mm) | 799 299 004 | 12 | 0.035 | 2 1/2 - 8 |
| 250 - 400 | 75x6 mm (for Fittings 250-400mm) | 799 299 005 | 12 | 0.053 | 9 - 16 |



PPC Plastic pipe cutter

For cutting plastic pipes d10 - d160

| d (mm) | Article | Code | Weight (kg) | Closest inch (inch) |
|-----------|--------------------------|--------------------|----------------|------------------------|
| 10 - 63 | PPC 63, s max. = 7.2mm | 790 109 001 | 0.865 | 1/8 - 2 |
| 50 - 110 | PPC 110, s max. = 12.7mm | 790 109 002 | 1.624 | 1 1/2 - 4 |
| 110 - 160 | PPC 160, s max. = 19.0mm | 790 109 003 | 2.212 | 4 - 6 |



Replacement cutting wheels

For plastic pipe cutter

| d-d (mm) | Article | Code | SP | Weight (kg) |
|-------------|---------------------------|--------------------|----|----------------|
| 10 - 63 | SR 63 max. s=7,2 mm | 790 109 011 | 1 | 0.004 |
| 50 - 110 | SR 110/160 max. s=12,7 mm | 790 109 012 | 1 | 0.015 |
| 110 - 160 | SR 160 max. s=19,0 mm | 790 109 013 | 1 | 0.023 |



Alignment Tool

- To align and position pipes in the dimension range d 110 - 400 mm. The pipes are clamped in the vice, the axial movement takes place by a chain drive. The chain is totated by the ratched (square 19 mm).

| Article | Code | Weight (kg) |
|----------------|--------------------|----------------|
| Alignment Tool | 790 109 108 | 15.000 |
| Ratch | 790 109 107 | 1.220 |



Chamfering tool

| d-d (mm) | Size (mm) | Code | SP | Weight (kg) | Closest inch (inch) |
|-------------|--------------|--------------------|----|----------------|---------------------------------|
| 16 - 75 | 1 | 799 495 145 | 0 | 0.720 | $\frac{3}{8}$ - 2 $\frac{1}{2}$ |
| 32 - 200 | 2 | 799 495 146 | 0 | 0.992 | 1 - 8 |

Marker



| Type | Code | Weight (kg) |
|--------|--------------------|----------------|
| silver | 799 350 364 | 0.010 |



Timer with 2 stop times

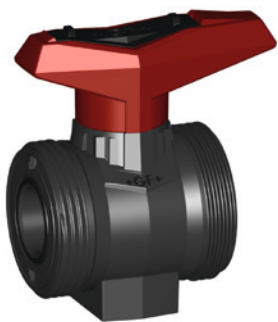
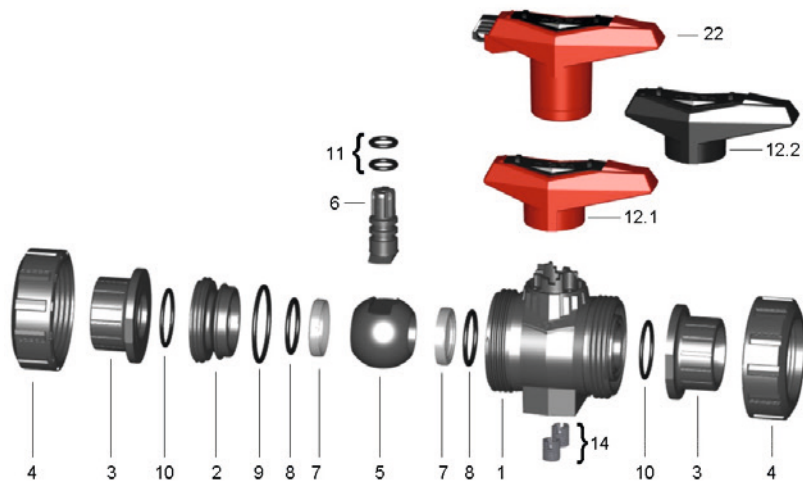
| Code | SP | Weight (kg) |
|--------------------|----|----------------|
| 790 114 028 | 1 | 0.088 |

Spare parts

| | |
|------------------------------------|-----|
| Spare parts ball valves | 337 |
| Spare parts diaphragm valves | 343 |
| Spare parts butterfly valves | 350 |
| Spare parts process control valves | 353 |
| Spare parts cone check valves | 358 |
| Spare parts and accessories | 361 |

Spare parts ball valves

Spare parts ball valve type 546

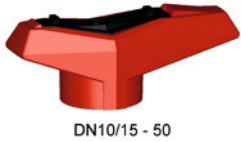


Central part

Model:

- Every connecting pieces and union nuts are listed on product range industry valves
- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)

| d (mm) | Size (inch) | DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|
| 16 | 3/8 | 10 | 163 481 251 | 163 481 263 |
| 20 | 1/2 | 15 | 163 481 251 | 163 481 263 |
| 25 | 3/4 | 20 | 163 481 252 | 163 481 264 |
| 32 | 1 | 25 | 163 481 253 | 163 481 265 |
| 40 | 1 1/4 | 32 | 163 481 254 | 163 481 266 |
| 50 | 1 1/2 | 40 | 163 481 255 | 163 481 267 |
| 63 | 2 | 50 | 163 481 256 | 163 481 268 |
| 75 | 2 1/2 | 65 | 163 481 257 | 163 481 269 |
| 90 | 3 | 80 | 163 481 258 | 163 481 270 |
| 110 | 4 | 100 | 163 481 259 | 163 481 271 |



DN10/15 - 50



DN10/15 - 50



Lever 546

| d (mm) | Size (inch) | DN (mm) | Standard lever red Code | Standard lever black Code | Multifunctional lever Code |
|-----------|----------------|------------|-------------------------------|---------------------------------|----------------------------------|
| 16 | ¾ | 10 | 167 484 088 | 167 484 076 | 167 484 100 |
| 20 | ½ | 15 | 167 484 088 | 167 484 076 | 167 484 100 |
| 25 | ¾ | 20 | 167 484 089 | 167 484 077 | 167 484 101 |
| 32 | 1 | 25 | 167 484 090 | 167 484 078 | 167 484 102 |
| 40 | 1 ¼ | 32 | 167 484 091 | 167 484 079 | 167 484 103 |
| 50 | 1 ½ | 40 | 167 484 092 | 167 484 080 | 167 484 104 |
| 63 | 2 | 50 | 167 484 093 | 167 484 081 | 167 484 105 |
| 75 | 2 ½ | 65 | 167 484 094 | 167 484 082 | 161 486 689 |
| 90 | 3 | 80 | 167 484 095 | 167 484 083 | 161 486 690 |
| 110 | 4 | 100 | 167 484 096 | 167 484 084 | 161 486 691 |



Face seal

Model:

- Face seal no. 10

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | ¾ | 10 | 748 410 059 | 749 410 059 |
| 20 | ½ | 15 | 748 410 059 | 749 410 059 |
| 25 | ¾ | 20 | 748 410 106 | 749 410 106 |
| 32 | 1 | 25 | 748 410 151 | 749 410 151 |
| 40 | 1 ¼ | 32 | 748 410 062 | 749 410 062 |
| 50 | 1 ½ | 40 | 748 410 003 | 749 410 003 |
| 63 | 2 | 50 | 748 410 231 | 749 410 231 |
| 75 | 2 ½ | 65 | 748 410 119 | 749 410 119 |
| 90 | 3 | 80 | 748 410 023 | 749 410 023 |
| 110 | 4 | 100 | 748 410 254 | 749 410 254 |



Seal set for ball valve 546 (Pro)

Model:

- Seal set consisting of: backing-, body-, face- and stem seal (8-11)

| d (mm) | Size (inch) | DN (mm) | DN (mm) | EPDM Code | FKM Code | KALREZ Code |
|-----------|----------------|------------|------------|--------------|-------------|----------------|
| 16 - 20 | ½ | 15 | 10 - 15 | 161 486 400 | 161 486 410 | 161 488 280 |
| 25 | ¾ | 20 | 20 | 161 486 401 | 161 486 411 | 161 488 281 |
| 32 | 1 | 25 | 25 | 161 486 402 | 161 486 412 | 161 488 282 |
| 40 | 1 ¼ | 32 | 32 | 161 486 403 | 161 486 413 | 161 488 283 |
| 50 | 1 ½ | 40 | 40 | 161 486 404 | 161 486 414 | 161 488 284 |
| 63 | 2 | 50 | 50 | 161 486 405 | 161 486 415 | 161 488 285 |
| 75 | 2 ½ | 65 | 65 | 161 486 406 | 161 486 416 | |
| 90 | 3 | 80 | 80 | 161 486 407 | 161 486 417 | |
| 110 | 4 | 100 | 100 | 161 486 408 | 161 486 418 | |



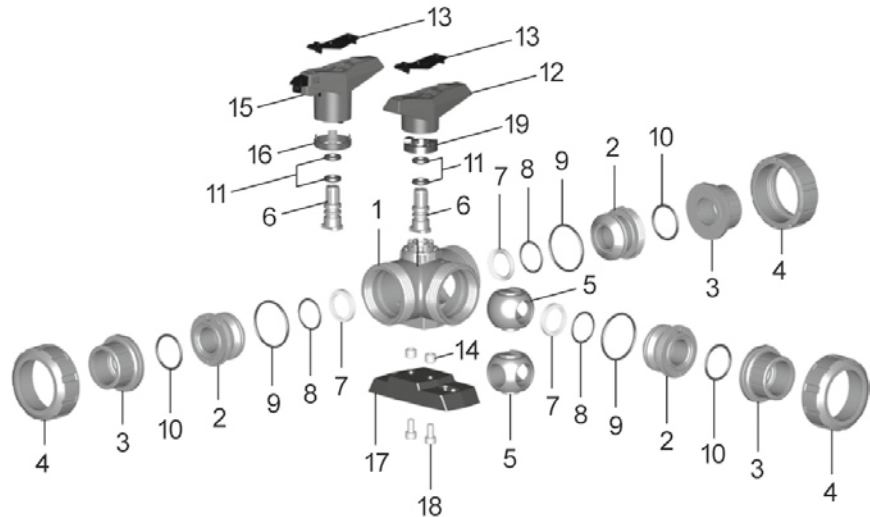
Ball set

Model:

- Ball seals standard in PTFE
- Ball set consisting of: ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)

| d (mm) | Size (inch) | DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|
| 16 | ⅝ | 10 | 163 481 375 | 163 481 385 |
| 20 | ⅜ | 15 | 163 481 375 | 163 481 385 |
| 25 | ⅜ | 20 | 163 481 376 | 163 481 386 |
| 32 | 1 | 25 | 163 481 377 | 163 481 387 |
| 40 | 1 ¼ | 32 | 163 481 378 | 163 481 388 |
| 50 | 1 ½ | 40 | 163 481 379 | 163 481 389 |
| 63 | 2 | 50 | 163 481 380 | 163 481 390 |
| 75 | 2 ½ | 65 | 163 481 381 | 163 481 391 |
| 90 | 3 | 80 | 163 481 382 | 163 481 392 |
| 110 | 4 | 100 | 163 481 383 | 163 481 393 |

Spare parts ball valve type 543 horizontal



Central part L-port

Model:

- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)
- Every connecting pieces and union nuts are listed on product range industry valves

| d (mm) | Size (inch) | DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|
| 16 | ¾ | 10 | 163 481 902 | 163 481 912 |
| 20 | ½ | 15 | 163 481 902 | 163 481 912 |
| 25 | ¾ | 20 | 163 481 903 | 163 481 913 |
| 32 | 1 | 25 | 163 481 904 | 163 481 914 |
| 40 | 1 ¼ | 32 | 163 481 905 | 163 481 915 |
| 50 | 1 ½ | 40 | 163 481 906 | 163 481 916 |
| 63 | 2 | 50 | 163 481 907 | 163 481 917 |

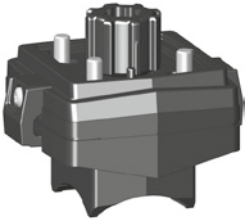


Central part T-port

Model:

- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)

| d (mm) | Size (inch) | DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|
| 16 | ¾ | 10 | 163 481 922 | 163 481 932 |
| 20 | ½ | 15 | 163 481 922 | 163 481 932 |
| 25 | ¾ | 20 | 163 481 923 | 163 481 933 |
| 32 | 1 | 25 | 163 481 924 | 163 481 934 |
| 40 | 1 ¼ | 32 | 163 481 925 | 163 481 935 |
| 50 | 1 ½ | 40 | 163 481 926 | 163 481 936 |
| 63 | 2 | 50 | 163 481 927 | 163 481 937 |



Assembly kit

Model:

- Intermediate element for ball valve type 543 horizontal and electric or pneumatic actuators EA21; PA11/21
- Including screws and position indicator for actuators

| d (mm) | Inch (inch) | DN (mm) | Code |
|-----------|----------------|------------|--------------------|
| 16 - 20 | ¾ - ½ | 10 - 15 | 167 484 941 |
| 25 - 32 | ¾ - 1 | 20 - 25 | 167 484 942 |
| 40 - 50 | 1 ¼ - 1 ½ | 32 - 40 | 167 484 943 |
| 63 | 2 | 50 | 167 484 944 |



Turn limiter 90°

| d (mm) | Size (inch) | DN (mm) | Code |
|-----------|----------------|------------|--------------------|
| 16 | ¾ | 10 | 167 482 479 |
| 20 | ½ | 15 | 167 482 479 |
| 25 | ¾ | 20 | 167 482 480 |
| 32 | 1 | 25 | 167 482 480 |
| 40 | 1 ¼ | 32 | 167 482 481 |
| 50 | 1 ½ | 40 | 167 482 481 |
| 63 | 2 | 50 | 167 482 482 |



Face seal

Model:

- Face seal no. 10

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------------|--------------------|
| 16 | ¾ | 10 | 748 410 059 | 749 410 059 |
| 20 | ½ | 15 | 748 410 059 | 749 410 059 |
| 25 | ¾ | 20 | 748 410 106 | 749 410 106 |
| 32 | 1 | 25 | 748 410 151 | 749 410 151 |
| 40 | 1 ¼ | 32 | 748 410 062 | 749 410 062 |
| 50 | 1 ½ | 40 | 748 410 003 | 749 410 003 |
| 63 | 2 | 50 | 748 410 231 | 749 410 231 |
| 75 | 2 ½ | 65 | 748 410 119 | 749 410 119 |
| 90 | 3 | 80 | 748 410 023 | 749 410 023 |
| 110 | 4 | 100 | 748 410 254 | 749 410 254 |



Lever

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ¾ | 10 |
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |

| d (mm) | Standard lever L-port red Code | Standard lever L-port black Code | Standard lever T-port red Code | Standard lever T-port black Code | Multifunctional-lever L-port red Code |
|-----------|---|---|---|---|---|
| 16 | 167 484 488 | 167 484 376 | 167 484 588 | 167 484 576 | 167 484 442 |
| 20 | 167 484 488 | 167 484 376 | 167 484 588 | 167 484 576 | 167 484 442 |
| 25 | 167 484 489 | 167 484 377 | 167 484 589 | 167 484 577 | 167 484 443 |
| 32 | 167 484 490 | 167 484 378 | 167 484 590 | 167 484 578 | 167 484 444 |
| 40 | 167 484 491 | 167 484 379 | 167 484 591 | 167 484 579 | 167 484 445 |
| 50 | 167 484 492 | 167 484 380 | 167 484 592 | 167 484 580 | 167 484 446 |
| 63 | 167 484 493 | 167 484 381 | 167 484 593 | 167 484 581 | 167 484 447 |

**d Multifunctional-lever
(mm) T-port red
Code**

| | |
|----|-------------|
| 16 | 167 484 542 |
| 20 | 167 484 542 |
| 25 | 167 484 543 |
| 32 | 167 484 544 |
| 40 | 167 484 545 |
| 50 | 167 484 546 |
| 63 | 167 484 547 |



Ball set L-port

Model:

- Ball set consisting of: lever (12), ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)
- Ball seals standard in PTFE

| d (mm) | Size (inch) | DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|
| 16 | ¾ | 10 | 163 481 982 | 163 481 992 |
| 20 | ½ | 15 | 163 481 982 | 163 481 992 |
| 25 | ¾ | 20 | 163 481 983 | 163 481 993 |
| 32 | 1 | 25 | 163 481 984 | 163 481 994 |
| 40 | 1 ¼ | 32 | 163 481 985 | 163 481 995 |
| 50 | 1 ½ | 40 | 163 481 986 | 163 481 996 |
| 63 | 2 | 50 | 163 481 987 | 163 481 997 |

Spare parts diaphragm valves



Mounting Tool
Type 604/605

Model:

- Hook wrench for easy opening & maintenance

| Code | Weight (kg) |
|--------------------|----------------|
| 700 278 354 | 0.41 |

Spare parts for valve body type 514



O-ring

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------------|--------------------|
| 20 | ½ | 15 | 748 410 006 | 749 410 006 |
| 25 | ¾ | 20 | 748 410 007 | 749 410 007 |
| 32 | 1 | 25 | 748 410 008 | 749 410 008 |
| 40 | 1 ¼ | 32 | 748 410 009 | 749 410 009 |
| 50 | 1 ½ | 40 | 748 410 010 | 749 410 010 |
| 63 | 2 | 50 | 748 410 011 | 749 410 011 |



Union end PVC-U Rc
for diaphragm valves type 514/DIASTAR, pressure regulating valves type 582/586 and variable area flow meters type 123/335/350 (6)

| DN (mm) | d (mm) | Size (inch) | PVC-U Rc Code |
|------------|-----------|----------------|--------------------|
| 15 | 20 | ½ | 721 605 606 |
| 20 | 25 | ¾ | 721 605 607 |
| 25 | 32 | 1 | 721 605 608 |
| 32 | 40 | 1 ¼ | 721 605 609 |
| 40 | 50 | 1 ½ | 721 605 610 |
| 50 | 63 | 2 | 721 605 611 |

Valve body with true union



Model:

- Without connection parts

| d (mm) | Size (inch) | DN (mm) | PVC-C Code | ABS Code |
|-----------|----------------|------------|--------------------|--------------------|
| 20 | ½ | 15 | 163 482 052 | |
| 25 | ¾ | 20 | 163 482 053 | 169 481 323 |
| 32 | 1 | 25 | 163 482 054 | |
| 40 | 1 ¼ | 32 | 163 482 055 | |
| 50 | 1 ½ | 40 | 163 482 056 | 169 481 326 |
| 63 | 2 | 50 | 163 482 057 | 169 481 327 |

Spare parts for valve body type 515

Valve body with spigot ends



| d (mm) | DN (mm) | Size (inch) | PVC-C solvent cement spigot Code |
|-----------|------------|----------------|--|
| 20 | 15 | ½ | 163 482 062 |
| 25 | 20 | ¾ | 163 482 063 |
| 32 | 25 | 1 | 163 482 064 |
| 40 | 32 | 1 ¼ | 163 482 065 |
| 50 | 40 | 1 ½ | 163 482 066 |
| 63 | 50 | 2 | 163 482 067 |



Spare parts for valve body type 517 Flat gasket

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------------|--------------------|
| 20 | ½ | 15 | 748 400 006 | 749 400 006 |
| 25 | ¾ | 20 | 748 400 007 | 749 400 007 |
| 32 | 1 | 25 | 748 400 008 | 749 400 008 |
| 40 | 1 ¼ | 32 | 748 400 009 | 749 400 009 |
| 50 | 1 ½ | 40 | 748 400 010 | 749 400 010 |
| 63 | 2 | 50 | 748 400 011 | 749 400 011 |



**Spare parts diaphragm
For 5 series**

Model:

- For type 514, 515, 517, 519 and Diastar

| d (mm) | Size (inch) | DN (mm) | NBR Code | EPDM Code | FKM Code | PTFE/EPDM Code | PTFE/FKM Code |
|-----------|----------------|------------|-------------|--------------|-------------|-------------------|------------------|
| 20 | ¾ | 15 | 745 500 012 | 748 500 012 | 749 500 012 | 747 502 012 | 747 503 012 |
| 25 | ¾ | 20 | 745 500 013 | 748 500 013 | 749 500 013 | 747 502 013 | 747 503 013 |
| 32 | 1 | 25 | 745 500 014 | 748 500 014 | 749 500 014 | 747 502 014 | 747 503 014 |
| 40 | 1 ¼ | 32 | 745 500 015 | 748 500 015 | 749 500 015 | 747 502 015 | 747 503 015 |
| 50 | 1 ½ | 40 | 745 500 016 | 748 500 016 | 749 500 016 | 747 502 016 | 747 503 016 |
| 63 | 2 | 50 | 745 500 017 | 748 500 017 | 749 500 017 | 747 502 017 | 747 503 017 |

Spare parts for automatic valves Diastar Six/Ten/Sixteen



Actuators

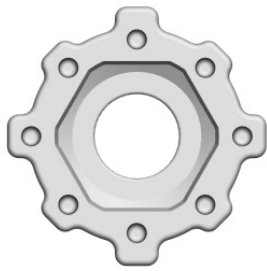
| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |

| d (mm) | DIASTAR Six FC Code | DIASTAR Ten FC Code | Diastar Ten + FC Code | Diastar Sixteen FC Code | Diastar Ten FO Code | Diastar Ten DA Code |
|-----------|---------------------------|---------------------------|-----------------------------|-------------------------------|---------------------------|---------------------------|
| 20 | 198 151 762 | 198 151 772 | 198 153 062 | 198 151 782 | 198 151 792 | 198 151 802 |
| 25 | 198 151 763 | 198 151 773 | 198 153 063 | 198 151 783 | 198 151 793 | 198 151 803 |
| 32 | 198 151 764 | 198 151 774 | 198 153 064 | 198 151 784 | 198 151 794 | 198 151 804 |
| 40 | 198 151 765 | 198 151 775 | 198 153 065 | 198 151 785 | 198 151 795 | 198 151 805 |
| 50 | 198 151 766 | 198 151 776 | 198 153 066 | 198 151 786 | 198 151 796 | 198 151 806 |
| 63 | 198 151 767 | 198 151 777 | 198 153 067 | 198 151 787 | 198 151 797 | 198 151 807 |

Indicator cap



| Size (mm) | Code |
|--------------|-------------|
| 1-2 | 198 806 773 |
| 3-5 | 198 806 774 |



Compressor set

Model:

- Incl. diaphragm holder

| d (mm) | Inch (inch) | DN (mm) | Code |
|-----------|----------------|------------|--------------------|
| 20 | 1/2 | 15 | 198 000 872 |
| 25 | 3/4 | 20 | 198 000 873 |
| 32 | 1 | 25 | 198 000 874 |
| 40 | 1 1/4 | 32 | 198 000 875 |
| 50 | 1 1/2 | 40 | 198 000 876 |
| 63 | 2 | 50 | 198 000 877 |



Seal set for DIASTAR Ten

Model:

- Spindle seal and piston seal

| DN (mm) | Diastar Ten Code |
|------------|---------------------|
| 15 | 198 000 881 |
| 20/25 | 198 000 882 |
| 32 | 198 000 883 |
| 40/50 | 198 000 884 |



Spare parts for hand-operated valves Type 514/515/517/519



Bonnet complete

Model:

- Incl. compressor
- Diaphragm is not included

| d (mm) | Size (inch) | DN (mm) | Standard configuration PN10 Code | For pressure tight housing PN10 Code | Standard configuration PN16 Code | For pressure tight housing PN16 Code |
|-----------|----------------|------------|---|---|---|---|
| 20 | ¾ | 15 | 198 151 742 | 198 151 752 | 198 151 842 | 198 151 852 |
| 25 | 1 | 20 | 198 151 743 | 198 151 753 | 198 151 843 | 198 151 853 |
| 32 | 1 ¼ | 25 | 198 151 744 | 198 151 754 | 198 151 844 | 198 151 854 |
| 40 | 1 ½ | 32 | 198 151 745 | 198 151 755 | 198 151 845 | 198 151 855 |
| 50 | 2 | 40 | 198 151 746 | 198 151 756 | 198 151 846 | 198 151 856 |
| 63 | 2 ½ | 50 | 198 151 747 | 198 151 757 | 198 151 847 | 198 151 857 |

Spindle assembly



Model:

- Incl. compressor
- Position indicator is not included

| DN-DN (mm) | Code |
|---------------|-------------|
| 15 - 20 | 198 204 327 |
| 25 - 32 | 198 204 328 |
| 40 - 50 | 198 204 329 |



Position indicator

| d (mm) | Size (inch) | DN (mm) | Code |
|-----------|----------------|------------|--------------------|
| 20 | ½ | 15 | 167 484 992 |
| 25 | ¾ | 20 | 167 484 993 |
| 32 | 1 | 25 | 167 484 994 |
| 40 | 1 ¼ | 32 | 167 484 995 |
| 50 | 1 ½ | 40 | 167 484 996 |
| 63 | 2 | 50 | 167 484 997 |



Hand wheel

Model:

- Without position indicator

| DN (mm) | Code |
|------------|--------------------|
| 15 - 20 | 198 204 162 |
| 25 - 32 | 198 204 164 |
| 40 - 50 | 198 104 166 |



Seal set

Model:

- For manual valve - pressure tight housing
- Incl. position indicator

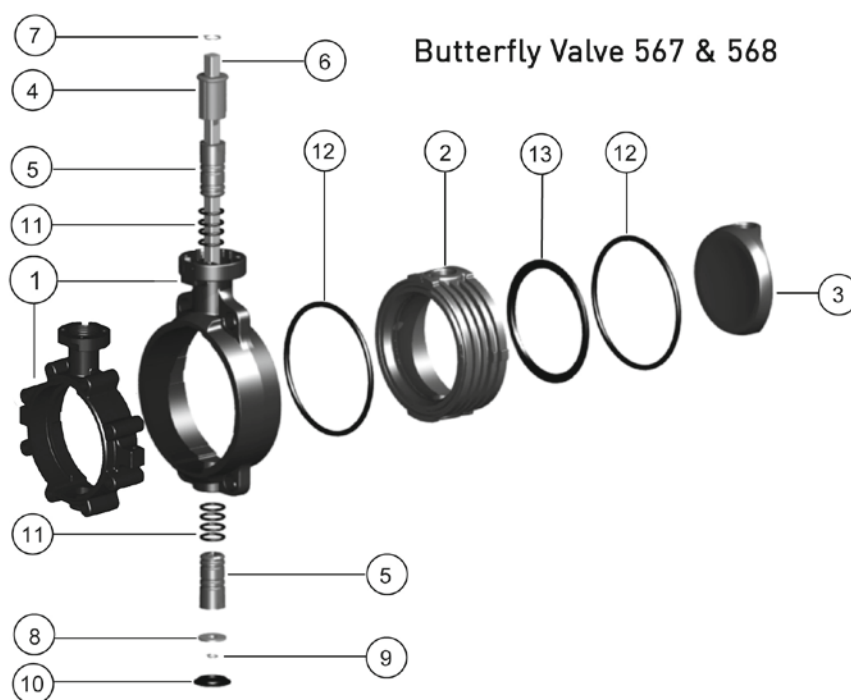
| d (mm) | Size (inch) | DN (mm) | EPDM Code |
|-----------|----------------|------------|--------------------|
| 20 | ½ | 15 | 198 000 892 |
| 25 | ¾ | 20 | 198 000 893 |
| 32 | 1 | 25 | 198 000 894 |
| 40 | 1 ¼ | 32 | 198 000 895 |
| 50 | 1 ½ | 40 | 198 000 896 |
| 63 | 2 | 50 | 198 000 897 |

Special wrench for DV

| d (mm) | DN (mm) | Code |
|-----------|------------|--------------------|
| 20 | 15 | 198 154 012 |
| 25 | 20 | 198 154 013 |
| 32 | 25 | 198 154 014 |
| 40 | 32 | 198 154 015 |
| 50 | 40 | 198 154 016 |
| 63 | 50 | 198 154 017 |

Spare parts butterfly valves

Spare parts butterfly valve type 567/578



Inner body for Butterfly Valve Type 567 and 578

Model:

- Inner body consisting of: inner body (2) and profile seal (13)



| d (mm) | Size (inch) | DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|
| 63 | 2 | 50 | 163 481 591 | 163 481 603 |
| 75 | 2 ½ | 65 | 163 481 592 | 163 481 604 |
| 90 | 3 | 80 | 163 481 593 | 163 481 605 |
| 110 | 4 | 100 | 163 481 594 | 163 481 606 |
| 140 | 5 | 125 | 163 481 595 | 163 481 607 |
| 160 | 6 | 150 | 163 481 596 | 163 481 608 |
| 225 | 8 | 200 | 163 481 597 | 163 481 609 |

Disc for Butterfly Valve Type 567 and 578



| d (mm) | Size (inch) | DN (mm) | PVC-C Code |
|-----------|----------------|------------|---------------|
| 63 | 2 | 50 | 163 481 451 |
| 75 | 2 ½ | 65 | 163 481 452 |
| 90 | 3 | 80 | 163 481 453 |
| 110 | 4 | 100 | 163 481 454 |
| 140 | 5 | 125 | 163 481 455 |
| 160 | 6 | 150 | 163 481 456 |
| 225 | 8 | 200 | 163 481 457 |



Bearing bush for Butterfly Valve Type 567 and 578

Model:

- Included in delivery 2 pcs.
- With o-ring
- Bearing bushes in PP-H are used in PP-H and ABS butterfly valves

| d (mm) | Size (inch) | DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|------------|----------------|------------|-----------------------|--------------------|
| 63, 75, 90 | 2, 2½, 3 | 50, 65, 80 | 163 481 576 | 163 481 582 |
| 110, 140 | 4, 5 | 100, 125 | 163 481 577 | 163 481 583 |
| 160, 225 | 6, 8 | 150, 200 | 163 481 578 | 163 481 584 |



Shaft set for Butterfly Valve Type 567 and 578

Model:

- Shaft set consisting of: shaft chrom steel 1.4404 (SUS316L) (6), retention ring (7, 9) and washer (8)

| d (mm) | Size (inch) | DN (mm) | Code |
|-----------|----------------|------------|--------------------|
| 63 | 2 | 50 | 161 486 899 |
| 75 | 2 ½ | 65 | 161 486 900 |
| 90 | 3 | 80 | 161 486 901 |
| 110 | 4 | 100 | 161 486 902 |
| 140 | 5 | 125 | 161 486 903 |
| 160 | 6 | 150 | 161 486 904 |
| 225 | 8 | 200 | 161 486 905 |
| 280 | 10 | 250 | 161 486 906 |
| 315 | 12 | 300 | 161 486 907 |
| 355 | 14 | 350 | 161 486 908 |
| 400 | 16 | 400 | 161 486 909 |
| 450 | 18 | 450 | 161 486 926 |
| 500 | 20 | 500 | 161 486 927 |
| 630 | 24 | 600 | 161 486 928 |



Hand lever for Butterfly Valve Type 567 and 578

| d (mm) | Size (inch) | DN (mm) | with index plate Code | with fine adjustment Code |
|-----------|----------------|------------|-----------------------------|---------------------------------|
| 63 | 2 | 50 | 161 486 690 | 161 486 325 |
| 75 | 2 ½ | 65 | 161 486 690 | 161 486 325 |
| 90 | 3 | 80 | 161 486 690 | 161 486 325 |
| 110 | 4 | 100 | 161 486 691 | 161 486 326 |
| 140 | 5 | 125 | 161 486 691 | 161 486 326 |
| 160 | 6 | 150 | 161 486 694 | 161 486 327 |
| 225 | 8 | 200 | 161 486 695 | 161 486 328 |
| 280 | 10 | 250 | 161 486 697 | |
| 315 | 12 | 300 | 161 486 697 | |



Reduction gear with handwheel for Butterfly Valve Type 565, 567 and 578

- For valve actuation via a reduction gear with hand wheel. Suitable for all GF butterfly valves.
- Intermediate elements are required.
- This version is not recommended to use in outside or corrosive environment

| d (mm) | DN (mm) | Inch (inch) | Code |
|-----------|------------|----------------|--------------------|
| 63 - 225 | 50 - 200 | 2 - 8 | 161 483 471 |
| 280 - 315 | 250 - 300 | 10 - 12 | 161 483 472 |

Profile seal (13) DN350-600 for Butterfly Valve Type 567

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------------|--------------------|
| 355 | 14 | 350 | 748 440 018 | 749 440 028 |
| 400 | 16 | 400 | 748 440 019 | 749 440 029 |
| 450 | 18 | 450 | 748 440 020 | 749 440 030 |
| 500 | 20 | 500 | 748 440 021 | 749 440 031 |
| 630 | 24 | 600 | 748 440 022 | 749 440 032 |



Intermediate element for Butterfly Valve Type 567 and 578 (reduction gear)

| d (mm) | DN (mm) | Code |
|-----------|------------|--------------------|
| 63 | 50 | 198 000 621 |
| 75 | 65 | 198 000 621 |
| 90 | 80 | 198 000 621 |
| 110 | 100 | 198 000 622 |
| 140 | 125 | 198 000 622 |
| 140 | 150 | 198 000 600 |
| 140 | 150 | 198 000 600 |
| 280 | 250 | 198 000 732 |
| 280 | 250 | 198 000 732 |

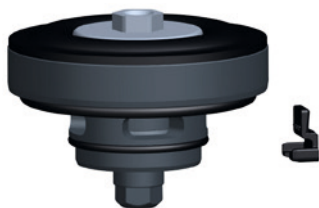
Spare parts process control valves

Pressure regulating valve type 582/586



Cartridge type 582

| DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|------------|-----------------------|-------------------|
| 10-15 | 163 489 131 | 163 489 231 |
| 20-25 | 163 489 133 | 163 489 233 |
| 32-50 | 163 489 136 | 163 489 236 |



Cartridge type 586

| DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|------------|-----------------------|-------------------|
| 10-15 | 163 489 161 | 163 489 261 |
| 20-25 | 163 489 163 | 163 489 263 |
| 32-50 | 163 489 166 | 163 489 266 |

Cover cap

| DN (mm) | Type | Code |
|------------|---------|-------------|
| 10-15 | 582/586 | 198 806 391 |
| 20-25 | 582/586 | 198 806 393 |
| 32-50 | 582/586 | 198 806 396 |



SYGEF Standard Manometer Adapter For pressure regulating valves type 582/586

Model:

- Material: PVDF
- For media separation from pressure gauge to process medium
- PTFE/EPDM Manometer diaphragm
- *EPDM and FKM O-Ring included in Set

| DN (mm) | EPDM/FKM Code |
|------------|------------------|
| 10-50 | 198 806 650 |

Manometer

For pressure regulating valves type 582/586

Model:

- Display with double scale: 0-4 bar / 0-58 psi, size: ø 40mm
- Display with double scale: 0-10bar / 0-150psi, size: ø 40mm
- Connection G 1/4 center back mount

| DN (mm) | Material | EPDM/FKM 0-10bar Code | EPDM/FKM 0-4bar Code |
|------------|-----------------|-----------------------------|----------------------------|
| 10-50 | Brass | 198 806 651 | 198 806 963 |
| 10-50 | Stainless Steel | 198 806 652 | 198 806 962 |

Manometer plug

For pressure regulating valves type 582/586

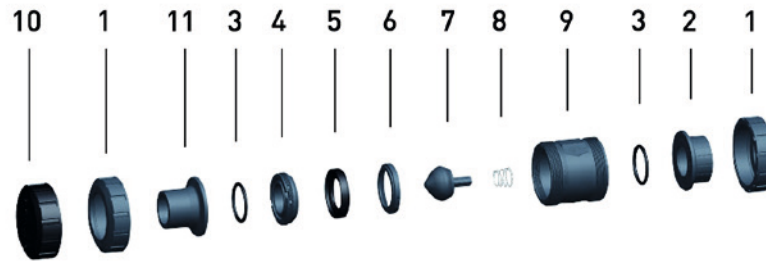
- For maintenance

| DN (mm) | Code |
|------------|--------------------|
| 10-50 | 198 806 653 |

Hook wrench

| DN (mm) | Type | Code |
|------------|---------|--------------------|
| 10-15 | 582/586 | 198 806 451 |
| 20-25 | 582/586 | 198 806 452 |
| 32-50 | 582/586 | 198 806 453 |

Spare parts ventilating- and bleed valve type 591/595



Central part with spring for Bleeding valve type 595

Model:

- Central body consisting of: housing (9), union bush (4), support ring (6), floater (7), spring Ni-monic 90 Halar coated (8), profile seal ring (5) and face seal (3)

| d (mm) | Size (inch) | DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|
| 16 | 3/8 | 10 | 163 485 281 | 163 485 291 |
| 20 | 1/2 | 15 | 163 485 281 | 163 485 291 |
| 25 | 3/4 | 20 | 163 485 282 | 163 485 292 |
| 32 | 1 | 25 | 163 485 283 | 163 485 293 |
| 40 | 1 1/4 | 32 | 163 485 284 | 163 485 294 |
| 50 | 1 1/2 | 40 | 163 485 285 | 163 485 295 |
| 63 | 2 | 50 | 163 485 286 | 163 485 296 |
| 75 | 2 1/2 | 65 | 163 485 287 | 163 485 297 |
| 90 | 3 | 80 | 163 485 288 | 163 485 298 |
| 110 | 4 | 100 | 163 485 289 | 163 485 299 |



Central part without spring for Ventilating and Bleed valve 591

Model:

- Central body consisting of: housing (9), union bush (4), support ring (6), floater PP-H/PVDF (7), profile seal ring (5) and face seal (3)

| d (mm) | Size (inch) | DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|
| 16 | 3/8 | 10 | 163 485 261 | 163 485 271 |
| 20 | 1/2 | 15 | 163 485 261 | 163 485 271 |
| 25 | 3/4 | 20 | 163 485 262 | 163 485 272 |
| 32 | 1 | 25 | 163 485 263 | 163 485 273 |
| 40 | 1 1/4 | 32 | 163 485 264 | 163 485 274 |
| 50 | 1 1/2 | 40 | 163 485 265 | 163 485 275 |
| 63 | 2 | 50 | 163 485 266 | 163 485 276 |
| 75 | 2 1/2 | 65 | 163 485 267 | 163 485 277 |
| 90 | 3 | 80 | 163 485 268 | 163 485 278 |
| 110 | 4 | 100 | 163 485 269 | 163 485 279 |



Cone (7)

Model:

- For type 595

| d (mm) | Size (inch) | DN (mm) | PVC-U Code | PVC-C Code |
|-----------|----------------|------------|---------------|---------------|
| 16 | 3/8 | 10 | | 163 482 151 |
| 25 | 3/4 | 20 | | 163 482 152 |
| 32 | 1 | 25 | 161 491 153 | 163 482 153 |
| 40 | 1 1/4 | 32 | | 163 482 154 |
| 50 | 1 1/2 | 40 | | 163 482 155 |
| 63 | 2 | 50 | | 163 482 156 |
| 75 | 2 1/2 | 65 | | 163 482 157 |
| 90 | 3 | 80 | | 163 482 158 |
| 110 | 4 | 100 | | 163 482 159 |



Floater (7)

Model:

- For type 591

| d (mm) | Size (inch) | DN (mm) | PP-H Code | PVDF Code |
|-----------|----------------|------------|--------------|--------------|
| 16 | 3/8 | 10 | 167 485 151 | 175 484 161 |
| 20 | 1/2 | 15 | 167 485 151 | 175 484 161 |
| 25 | 3/4 | 20 | 167 485 152 | 175 484 162 |
| 32 | 1 | 25 | 167 485 153 | 175 484 163 |
| 40 | 1 1/4 | 32 | 167 485 154 | 175 484 164 |
| 50 | 1 1/2 | 40 | 167 485 155 | 175 484 165 |
| 63 | 2 | 50 | 167 485 156 | 175 484 166 |
| 75 | 2 1/2 | 65 | 167 485 157 | 175 484 167 |
| 90 | 3 | 80 | 167 485 158 | 175 484 168 |
| 110 | 4 | 100 | 167 485 159 | 175 484 169 |



Protective cap (10)

Model:

- Protects the piping system from dirt particles out of the ambient air
Can also be used as tool for opening and closing the valve union bushing

| d (mm) | Size (inch) | DN (mm) | PP-GF Code |
|-----------|----------------|------------|---------------|
| 16 | 3/8 | 10 | 167 485 361 |
| 20 | 1/2 | 15 | 167 485 361 |
| 25 | 3/4 | 20 | 167 485 362 |
| 32 | 1 | 25 | 167 485 363 |
| 40 | 1 1/4 | 32 | 167 485 364 |
| 50 | 1 1/2 | 40 | 167 485 365 |
| 63 | 2 | 50 | 167 485 366 |
| 75 | 2 1/2 | 65 | 167 485 367 |
| 90 | 3 | 80 | 167 485 368 |
| 110 | 4 | 100 | 167 485 369 |

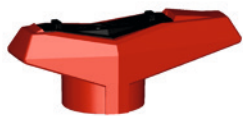


Seal set

Model:

- Seal set consisting of: profile seal ring (5) and face seal (3)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | ⅜ | 10 | 161 485 241 | 161 485 251 |
| 20 | ½ | 15 | 161 485 241 | 161 485 251 |
| 25 | ¾ | 20 | 161 485 242 | 161 485 252 |
| 32 | 1 | 25 | 161 485 243 | 161 485 253 |
| 40 | 1 ¼ | 32 | 161 485 244 | 161 485 254 |
| 50 | 1 ½ | 40 | 161 485 245 | 161 485 255 |
| 63 | 2 | 50 | 161 485 246 | 161 485 256 |
| 75 | 2 ½ | 65 | 161 485 247 | 161 485 257 |
| 90 | 3 | 80 | 161 485 248 | 161 485 258 |
| 110 | 4 | 100 | 161 485 249 | 161 485 259 |



DN10/15 - 50

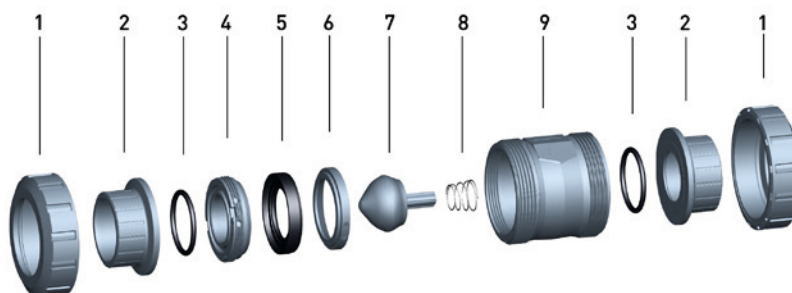


Handle for dismantling

| d (mm) | Size (inch) | DN (mm) | red Code | black Code |
|-----------|----------------|------------|-------------|---------------|
| 16 | ⅜ | 10 | 167 484 088 | 167 484 076 |
| 20 | ½ | 15 | 167 484 088 | 167 484 076 |
| 25 | ¾ | 20 | 167 484 089 | 167 484 077 |
| 32 | 1 | 25 | 167 484 090 | 167 484 078 |
| 40 | 1 ¼ | 32 | 167 484 091 | 167 484 079 |
| 50 | 1 ½ | 40 | 167 484 092 | 167 484 080 |
| 63 | 2 | 50 | 167 484 093 | 167 484 081 |
| 75 | 2 ½ | 65 | 167 484 094 | 167 484 082 |
| 90 | 3 | 80 | 167 484 095 | 167 484 083 |
| 110 | 4 | 100 | 167 484 096 | 167 484 084 |

Spare parts cone check valves

Spare parts cone check valve type 561/562



Central part without spring

Model:

- Central body consisting of: housing (9), union bush (4), support ring (6), cone (7), profile seal ring (5) and face seal (3)

| d (mm) | Size (inch) | DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|
| 16 | ¾ | 10 | 163 485 201 | 163 485 211 |
| 20 | ½ | 15 | 163 485 201 | 163 485 211 |
| 25 | ¾ | 20 | 163 485 202 | 163 485 212 |
| 32 | 1 | 25 | 163 485 203 | 163 485 213 |
| 40 | 1 ¼ | 32 | 163 485 204 | 163 485 214 |
| 50 | 1 ½ | 40 | 163 485 205 | 163 485 215 |
| 63 | 2 | 50 | 163 485 206 | 163 485 216 |
| 75 | 2 ½ | 65 | 163 485 207 | 163 485 217 |
| 90 | 3 | 80 | 163 485 208 | 163 485 218 |
| 110 | 4 | 100 | 163 485 209 | 163 485 219 |



DN10/15 - 50



Handle for dismantling

| d (mm) | Size (inch) | DN (mm) | red Code | black Code |
|-----------|----------------|------------|-------------|---------------|
| 16 | ¾ | 10 | 167 484 088 | 167 484 076 |
| 20 | ½ | 15 | 167 484 088 | 167 484 076 |
| 25 | ¾ | 20 | 167 484 089 | 167 484 077 |
| 32 | 1 | 25 | 167 484 090 | 167 484 078 |
| 40 | 1 ¼ | 32 | 167 484 091 | 167 484 079 |
| 50 | 1 ½ | 40 | 167 484 092 | 167 484 080 |
| 63 | 2 | 50 | 167 484 093 | 167 484 081 |
| 75 | 2 ½ | 65 | 167 484 094 | 167 484 082 |
| 90 | 3 | 80 | 167 484 095 | 167 484 083 |
| 110 | 4 | 100 | 167 484 096 | 167 484 084 |



Face seal (3)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | ¾ | 10 | 748 410 059 | 749 410 059 |
| 20 | ½ | 15 | 748 410 059 | 749 410 059 |
| 25 | ¾ | 20 | 748 410 106 | 749 410 106 |

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 32 | 1 | 25 | 748 410 151 | 749 410 151 |
| 40 | 1 ¼ | 32 | 748 410 062 | 749 410 062 |
| 50 | 1 ½ | 40 | 748 410 003 | 749 410 003 |
| 63 | 2 | 50 | 748 410 231 | 749 410 231 |
| 75 | 2 ½ | 65 | 748 410 119 | 749 410 119 |
| 90 | 3 | 80 | 748 410 023 | 749 410 023 |
| 110 | 4 | 100 | 748 410 254 | 749 410 254 |

Seal set

Model:

- Seal set consisting of: profile seal ring (5) and face seal (3)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | ⅜ | 10 | 161 485 241 | 161 485 251 |
| 20 | ½ | 15 | 161 485 241 | 161 485 251 |
| 25 | ¾ | 20 | 161 485 242 | 161 485 252 |
| 32 | 1 | 25 | 161 485 243 | 161 485 253 |
| 40 | 1 ¼ | 32 | 161 485 244 | 161 485 254 |
| 50 | 1 ½ | 40 | 161 485 245 | 161 485 255 |
| 63 | 2 | 50 | 161 485 246 | 161 485 256 |
| 75 | 2 ½ | 65 | 161 485 247 | 161 485 257 |
| 90 | 3 | 80 | 161 485 248 | 161 485 258 |
| 110 | 4 | 100 | 161 485 249 | 161 485 259 |

Profile seal ring (5)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | ⅜ | 10 | 748 436 001 | 749 436 001 |
| 20 | ½ | 15 | 748 436 001 | 749 436 001 |
| 25 | ¾ | 20 | 748 436 002 | 749 436 002 |
| 32 | 1 | 25 | 748 436 003 | 749 436 003 |
| 40 | 1 ¼ | 32 | 748 436 004 | 749 436 004 |
| 50 | 1 ½ | 40 | 748 436 005 | 749 436 005 |
| 63 | 2 | 50 | 748 436 006 | 749 436 006 |
| 75 | 2 ½ | 65 | 748 436 007 | 749 436 007 |
| 90 | 3 | 80 | 748 436 008 | 749 436 008 |
| 110 | 4 | 100 | 748 436 009 | 749 436 009 |

Cone (7)

| d (mm) | Size (inch) | DN (mm) | PVC-C Code |
|-----------|----------------|------------|---------------|
| 16 | ⅜ | 10 | 163 482 151 |
| 20 | ½ | 15 | 163 482 151 |
| 25 | ¾ | 20 | 163 482 152 |
| 32 | 1 | 25 | 163 482 153 |
| 40 | 1 ¼ | 32 | 163 482 154 |
| 50 | 1 ½ | 40 | 163 482 155 |
| 63 | 2 | 50 | 163 482 156 |
| 75 | 2 ½ | 65 | 163 482 157 |
| 90 | 3 | 80 | 163 482 158 |
| 110 | 4 | 100 | 163 482 159 |



Spring (8)

Model:

- Material: NIMONIC 90, code: 2.4632
- Material: V2A, code: 1.4310, HALAR® coated
- Material: V2A, code: 1.4310

| d (mm) | Size (inch) | DN (mm) | Stainless steel V2A Code | V2A HALAR coated Code | NIMONIC 90 Code |
|-----------|----------------|------------|--------------------------------|-----------------------------|--------------------|
| 16 | ¾ | 10 | 161 485 132 | 161 485 142 | 161 485 152 |
| 20 | ½ | 15 | 161 485 132 | 161 485 142 | 161 485 152 |
| 25 | ¾ | 20 | 161 485 132 | 161 485 142 | 161 485 152 |
| 32 | 1 | 25 | 161 485 133 | 161 485 143 | 161 485 153 |
| 40 | 1 ¼ | 32 | 161 485 134 | 161 485 144 | 161 485 154 |
| 50 | 1 ½ | 40 | 161 485 135 | 161 485 145 | 161 485 155 |
| 63 | 2 | 50 | 161 485 136 | 161 485 146 | 161 485 156 |
| 75 | 2 ½ | 65 | 161 485 137 | 161 485 147 | 161 485 157 |
| 90 | 3 | 80 | 161 485 138 | 161 485 148 | 161 485 158 |
| 110 | 4 | 100 | 161 485 139 | 161 485 149 | 161 485 159 |



Central part with spring

Model:

- Central body consisting of: housing (9), union bush (4), support ring (6), cone (7), spring V2A (8), profile seal ring (5) and face seal (3)

| d (mm) | Size (inch) | DN (mm) | PVC-C EPDM Code | PVC-C FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|
| 16 | ¾ | 10 | 163 485 221 | 163 485 231 |
| 20 | ½ | 15 | 163 485 221 | 163 485 231 |
| 25 | ¾ | 20 | 163 485 222 | 163 485 232 |
| 32 | 1 | 25 | 163 485 223 | 163 485 233 |
| 40 | 1 ¼ | 32 | 163 485 224 | 163 485 234 |
| 50 | 1 ½ | 40 | 163 485 225 | 163 485 235 |
| 63 | 2 | 50 | 163 485 226 | 163 485 236 |
| 75 | 2 ½ | 65 | 163 485 227 | 163 485 237 |
| 90 | 3 | 80 | 163 485 228 | 163 485 238 |
| 110 | 4 | 100 | 163 485 229 | 163 485 239 |

Spare parts and accessories

Accessories for valves

Ball valves



Transparent lever clip for ball valve labelling

Option:

- Component for ball valve Type 546, 543, 523, 547
- Material: SAN
- UV-, weather- and chemical resistant
- Allows valve marking in conjunction with perforated printing sheets
- Perforated printing sheets are not included (depending on dimension see 198 807 231 - 198 807 234)

| Inch (inch) | d-d (mm) | DN-DN (mm) | Code | Quantity |
|----------------|-------------|---------------|--------------------|----------|
| 3/8 - 1/2 | 16 - 20 | 10 - 15 | 198 807 221 | 10 pc's |
| 3/4 - 1 | 25 - 32 | 20 - 25 | 198 807 222 | 10 pc's |
| 1 1/4 - 1 1/2 | 40 - 50 | 32 - 40 | 198 807 223 | 5 pc's |
| 2 | 63 | 50 | 198 807 224 | 5 pc's |



Printing sheets for ball valve labelling

Option:

- Component for ball valve Type 546, 543, 523, 547
- Material: DIN A4 Polymer-sheet
- UV-, weather- and chemical resistant
- Allows valve marking in conjunction with transparent lever clip
- Can be labelled with laser printers or by hand
- Transparent lever clip is not included (depending on dimension see 198 807 221 - 198 807 224)

| Inch (inch) | d-d (mm) | DN-DN (mm) | Code | Quantity |
|----------------|-------------|---------------|--------------------|--------------------------------|
| 3/8 - 1/2 | 16 - 20 | 10 - 15 | 198 807 231 | 25 Sheets with each 48 Labels |
| 3/4 - 1 | 25 - 32 | 20 - 25 | 198 807 232 | 25 Sheets with each 24 Labels |
| 1 1/4 - 1 1/2 | 40 - 50 | 32 - 40 | 198 807 233 | 25 Sheets with each 18 Labels |
| 2 | 63 | 50 | 198 807 234 | 25 Sheets with each 11 Labels |
| 3/8 - 1/2 | 16 - 20 | 10 - 15 | 198 807 241 | 100 Sheets with each 48 Labels |
| 3/4 - 1 | 25 - 32 | 20 - 25 | 198 807 242 | 100 Sheets with each 24 Labels |
| 1 1/4 - 1 1/2 | 40 - 50 | 32 - 40 | 198 807 243 | 100 Sheets with each 18 Labels |
| 2 | 63 | 50 | 198 807 244 | 100 Sheets with each 11 Labels |

Ball valves and check valves

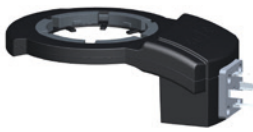
Adapter ring for valves



- Suitable for ball valve type 546/543/523/547 and check valves type 561/591
- Adapter ring enables standard union ends (e.g. metal inserts made of stainless steel, brass or malleable cast iron with R or Rp thread) for use with Ball Valves and Check Valves
- Material: PP-GF (30% glass-fibre reinforced)

| d (mm) | DN (mm) | Code | Weight (kg) |
|-----------|------------|--------------------|----------------|
| 20 | 15 | 167 481 182 | 0.003 |
| 25 | 20 | 167 481 183 | 0.003 |
| 32 | 25 | 167 481 184 | 0.004 |
| 40 | 32 | 167 481 185 | 0.008 |
| 50 | 40 | 167 481 186 | 0.014 |
| 63 | 50 | 167 481 187 | 0.026 |

Diaphragm valves new generation



Electrical feedback module I40/I41 With limit switches Ag Ni or AU

Model:

- No height increase
- Easy, fast and safe installation
- Accessory to hand operated diaphragm valve 514 - 519
- Self adjusting mechanism
- Including plug 3P+E / protection: IP65

| Size | d-d (mm) | DN-DN (mm) | Ag Ni Code | Weight (kg) | AU Code | Weight (kg) |
|------|-------------|---------------|--------------------|----------------|--------------------|----------------|
| 1 | 10 - 25 | 10 - 20 | 198 151 335 | 0.095 | 198 151 336 | 0.120 |
| 2 | 32 - 40 | 25 - 32 | 198 151 337 | 0.101 | 198 151 338 | 0.101 |
| 3 | 50 - 63 | 40 - 50 | 198 151 339 | 0.154 | 198 151 340 | 0.120 |

Spare parts

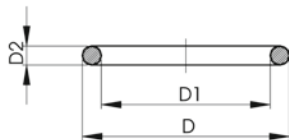
Spare parts Industry



O-Ring Gasket

Model:

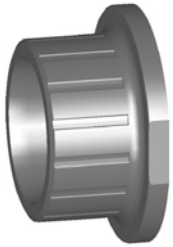
- Suitable for union PP-N 28 51 85
- Hardness approx. 65° Shore



| d (mm) | Size (inch) | DN (mm) | EPDM Code | Weight (kg) | FKM Code | Weight (kg) | D (mm) | D1 (mm) | D2 (mm) |
|-----------|----------------|------------|--------------------|----------------|--------------------|----------------|-----------|------------|------------|
| 20 | ½ | 15 | 748 410 140 | 0.023 | 749 410 140 | 0.020 | 20.32 | 15.08 | 2.62 |
| 25 | ¾ | 20 | 748 410 006 | 0.002 | 749 410 006 | 0.002 | 27.28 | 20.22 | 3.53 |
| 32 | 1 | 25 | 748 410 025 | 0.010 | 749 410 025 | 0.002 | 32.05 | 24.99 | 3.53 |
| 40 | 1 ¼ | 32 | 748 410 152 | 0.005 | 749 410 152 | 0.003 | 41.78 | 31.12 | 5.34 |
| 50 | 1 ½ | 40 | 748 410 009 | 0.003 | 749 410 009 | 0.007 | 51.33 | 40.65 | 5.34 |
| 63 | 2 | 50 | 748 410 171 | 0.005 | 749 410 171 | 0.007 | 60.84 | 50.16 | 5.34 |

Spare parts Industry valves

Connecting parts for
Ball valves 546/543/523
Check valves 561/562
Ventilating & bleed valves 591/595



Solvent cement socket

| d (mm) | Size (inch) | DN (mm) |
|------------------|-----------------------|-------------------|
| 16 | 3/8 | 10 |
| 20 | 1/2 | 15 |
| 25 | 3/4 | 20 |
| 32 | 1 | 25 |
| 40 | 1 1/4 | 32 |
| 50 | 1 1/2 | 40 |
| 63 | 2 | 50 |
| 75 | 2 1/2 | 65 |
| 90 | 3 | 80 |
| 110 | 4 | 100 |

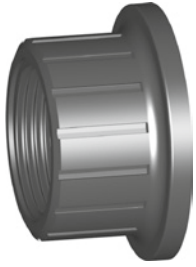
| d (mm) | PVC-U metric (G01) Code | PVC-U BS (G04) Code | PVC-U ASTM (G03) Code | PVC-C metric (G11) Code | PVC-C ASTM (G13) Code | ABS metric (G20) Code |
|------------------|--|------------------------------------|--------------------------------------|--|--------------------------------------|--------------------------------------|
| 16 | 161 490 666 | 161 490 734 | 161 490 712 | 163 481 275 | 163 481 311 | 169 480 775 |
| 20 | 161 490 667 | 161 490 735 | 161 490 713 | 163 481 276 | 163 481 312 | 169 480 776 |
| 25 | 161 490 668 | 161 490 736 | 161 490 714 | 163 481 277 | 163 481 313 | 169 480 777 |
| 32 | 161 490 669 | 161 490 737 | 161 490 715 | 163 481 278 | 163 481 314 | 169 480 778 |
| 40 | 161 490 670 | 161 490 738 | 161 490 716 | 163 481 279 | 163 481 315 | 169 480 779 |
| 50 | 161 490 671 | 161 490 739 | 161 490 717 | 163 481 280 | 163 481 316 | 169 480 780 |
| 63 | 161 490 672 | 161 490 740 | 161 490 718 | 163 481 281 | 163 481 317 | 169 480 781 |
| 75 | 161 490 673 | 161 490 673 | 161 490 719 | 163 481 282 | 163 481 318 | 169 480 782 |
| 90 | 161 490 674 | 161 490 742 | 161 490 720 | 163 481 283 | 163 481 319 | 169 480 783 |
| 110 | 161 490 675 | 161 490 743 | 161 490 721 | 163 481 284 | 163 481 320 | 169 480 784 |

| d (mm) | ABS BS (G21) Code |
|------------------|----------------------------------|
| 16 | 169 480 800 |
| 20 | 169 480 801 |
| 25 | 169 480 802 |
| 32 | 169 480 803 |
| 40 | 169 480 804 |
| 50 | 169 480 805 |
| 63 | 169 480 806 |
| 75 | 169 480 782 |
| 90 | 169 480 808 |
| 110 | 169 480 809 |



Solvent cement spigot

| d (mm) | DN (mm) | PVC-U metric (G05) Code | PVC-C metric (G14) Code |
|------------------|-------------------|--|--|
| 16 | 10 | 161 490 701 | 163 481 300 |
| 20 | 15 | 161 490 702 | 163 481 301 |
| 25 | 20 | 161 490 703 | 163 481 302 |
| 32 | 25 | 161 490 704 | 163 481 303 |
| 40 | 32 | 161 490 705 | 163 481 304 |
| 50 | 40 | 161 490 706 | 163 481 305 |
| 63 | 50 | 161 490 707 | 163 481 306 |
| 75 | 65 | 161 490 708 | 163 481 307 |
| 90 | 80 | 161 490 709 | 163 481 308 |
| 110 | 100 | 161 490 710 | 163 481 309 |

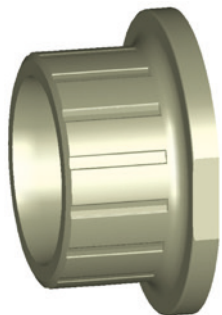


Threaded socket

| Size (inch) | DN (mm) |
|----------------|------------|
| 3/8 | 10 |
| 1/2 | 15 |
| 3/4 | 20 |
| 1 | 25 |
| 1 1/4 | 32 |
| 1 1/2 | 40 |
| 2 | 50 |
| 2 1/2 | 65 |
| 3 | 80 |
| 4 | 100 |

| Size (inch) | PVC-U Rp (G06) Code | PVC-U Rp reinforced (G07) Code | PVC-U NPT (G09) Code | PVC-C Rp (G15) Code | PVC-C Rp reinforced (G16) Code | PVC-C NPT (G17) Code |
|----------------|---------------------------|---|----------------------------|---------------------------|---|----------------------------|
| 3/8 | 161 490 690 | 161 490 825 | 161 490 723 | 163 481 286 | 163 481 400 | 163 481 322 |
| 1/2 | 161 490 691 | 161 490 826 | 161 490 724 | 163 481 287 | 163 481 401 | 163 481 323 |
| 3/4 | 161 490 692 | 161 490 827 | 161 490 725 | 163 481 288 | 163 481 402 | 163 481 324 |
| 1 | 161 490 693 | 161 490 828 | 161 490 726 | 163 481 289 | 163 481 403 | 163 481 325 |
| 1 1/4 | 161 490 694 | 161 490 829 | 161 490 727 | 163 481 290 | 163 481 404 | 163 481 326 |
| 1 1/2 | 161 490 695 | 161 490 830 | 161 490 728 | 163 481 291 | 163 481 405 | 163 481 327 |
| 2 | 161 490 696 | 161 490 831 | 161 490 729 | 163 481 292 | 163 481 406 | 163 481 328 |
| 2 1/2 | 161 490 697 | | 161 490 730 | 163 481 293 | | 163 481 329 |
| 3 | 161 490 698 | | 161 490 731 | 163 481 294 | | 163 481 330 |
| 4 | 161 490 699 | | 161 490 732 | 163 481 295 | | 163 481 331 |

| Size (inch) | ABS Rp (G22) Code | ABS Rp reinforced (G23) Code | PP-H Rp reinforced (G33) Code | PP-H NPT reinforced (G34) Code | PVDF NPT (G53) Code |
|----------------|-------------------------|---------------------------------------|--|---|---------------------------|
| 3/8 | 169 480 786 | 169 480 925 | 167 482 911 | 167 482 966 | 175 483 058 |
| 1/2 | 169 480 787 | 169 480 926 | 167 482 912 | 167 482 967 | 175 483 059 |
| 3/4 | 169 480 788 | 169 480 927 | 167 482 913 | 167 482 968 | 175 483 060 |
| 1 | 169 480 789 | 169 480 928 | 167 482 914 | 167 482 969 | 175 483 061 |
| 1 1/4 | 169 480 790 | 169 480 929 | 167 482 915 | 167 482 970 | 175 483 062 |
| 1 1/2 | 169 480 791 | 169 480 930 | 167 482 916 | 167 482 971 | 175 483 063 |
| 2 | 169 480 792 | 169 480 931 | 167 482 917 | 167 482 972 | 175 483 064 |
| 2 1/2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |



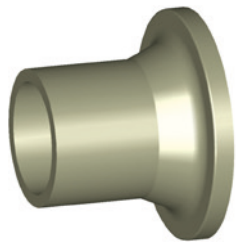
Fusion socket

| d (mm) | DN (mm) | PN (bar) | PP-H metric (G30) Code | PVDF metric (G50) Code | D (mm) | D1 (mm) | L (mm) | L1 (mm) | z (mm) |
|-----------|------------|-------------|------------------------------|------------------------------|-----------|------------|-----------|------------|-----------|
| 16 | 10 | 10 | 167 482 900 | 175 483 025 | 38 | 23 | 19 | 4 | 5 |
| 20 | 15 | 10 | 167 482 901 | 175 483 026 | 38 | 27 | 20 | 4 | 5 |
| 25 | 20 | 10 | 167 482 902 | 175 483 027 | 44 | 33 | 22 | 5 | 6 |
| 32 | 25 | 10 | 167 482 903 | 175 483 028 | 53 | 41 | 24 | 5 | 6 |
| 40 | 32 | 10 | 167 482 904 | 175 483 029 | 65 | 51 | 26 | 5 | 7 |
| 50 | 40 | 10 | 167 482 905 | 175 483 030 | 77 | 62 | 29 | 6 | 8 |
| 63 | 50 | 10 | 167 482 906 | 175 483 031 | 99 | 77 | 34 | 7 | 6 |
| 75 | 65 | 10 | 167 482 907 | 175 483 032 | 125 | 92 | 49 | 9 | 20 |
| 90 | 80 | 10 | 167 482 908 | 175 483 033 | 150 | 110 | 57 | 10 | 24 |
| 110 | 100 | 10 | 167 482 909 | 175 483 034 | 180 | 134 | 69 | 11 | 30 |



Socket fusion spigot IR-Plus®

| d (mm) | DN (mm) | PP-H metric (G32) Code | PVDF metric (G51) Code |
|-----------|------------|------------------------------|------------------------------|
| 16 | 10 | 167 482 922 | 175 483 036 |
| 20 | 15 | 167 482 923 | 175 483 037 |
| 25 | 20 | 167 482 924 | 175 483 038 |
| 32 | 25 | 167 482 925 | 175 483 039 |
| 40 | 32 | 167 482 926 | 175 483 040 |
| 50 | 40 | 167 482 927 | 175 483 041 |
| 63 | 50 | 167 482 928 | 175 483 042 |
| 75 | 65 | 167 482 929 | |
| 90 | 80 | 167 482 930 | |
| 110 | 100 | 167 482 931 | |



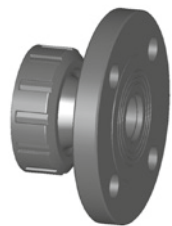
Butt fusion spigot IR-Plus®

| d (mm) | DN (mm) | PP-H metric SDR11 (G35) Code | PP-H metric long SDR11 (G37) Code | PP-N metric SDR11 Code | PVDF metric (G52) Code |
|-----------|------------|---------------------------------------|--|------------------------------|------------------------------|
| 20 | 15 | 167 482 945 | 167 482 956 | 168 480 260 | 175 483 048 |
| 25 | 20 | 167 482 946 | 167 482 957 | 168 480 261 | 175 483 049 |
| 32 | 25 | 167 482 947 | 167 482 958 | 168 480 262 | 175 483 050 |
| 40 | 32 | 167 482 948 | 167 482 959 | 168 480 263 | 175 483 051 |
| 50 | 40 | 167 482 949 | 167 482 960 | 168 480 264 | 175 483 052 |
| 63 | 50 | 167 482 950 | 167 482 961 | 168 480 265 | 175 483 053 |
| 75 | 65 | 167 482 951 | | | 175 483 054 |
| 90 | 80 | 167 482 952 | | | 175 483 055 |
| 110 | 100 | 167 482 953 | | | 175 483 056 |



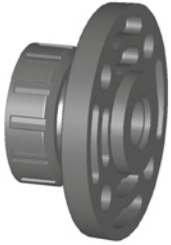
Butt fusion spigot PE100 IR-Plus®

| d (mm) | DN (mm) | metric SDR11 (G41) Code | metric long SDR11 (G43) Code |
|-----------|------------|----------------------------------|---------------------------------------|
| 20 | 15 | 193 480 102 | 193 480 152 |
| 25 | 20 | 193 480 103 | 193 480 153 |
| 32 | 25 | 193 480 104 | 193 480 154 |
| 40 | 32 | 193 480 105 | 193 480 155 |
| 50 | 40 | 193 480 106 | 193 480 156 |
| 63 | 50 | 193 480 107 | 193 480 157 |
| 75 | 65 | | 193 480 158 |
| 90 | 80 | | 193 480 159 |
| 110 | 100 | | 193 480 160 |



Fixed flange

| d (mm) | DN (mm) | PVC-U metric (G60) Code | PP-H metric (G63) Code | PVDF metric (G64) Code |
|-----------|------------|-------------------------------|------------------------------|------------------------------|
| 20 | 15 | 161 486 360 | 167 484 160 | 175 483 285 |
| 25 | 20 | 161 486 361 | 167 484 161 | 175 483 286 |
| 32 | 25 | 161 486 362 | 167 484 162 | 175 483 287 |
| 40 | 32 | 161 486 363 | 167 484 163 | 175 483 288 |
| 50 | 40 | 161 486 364 | 167 484 164 | 175 483 289 |
| 63 | 50 | 161 486 365 | 167 484 165 | 175 483 290 |



Backing flange

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |
| 75 | 2 ½ | 65 |
| 90 | 3 | 80 |
| 110 | 4 | 100 |

| d (mm) | PVC-U metric (G70) Code | PVC-U ANSI (G71) Code | PVC-U PP- St metric (G72) Code | PVC-U PP- St ANSI (G73) Code | PVC-C PP- St metric (G72) Code | PVC-C PP- St ANSI (G73) Code |
|-----------|-------------------------------|-----------------------------|---|---------------------------------------|---|---------------------------------------|
| 20 | 161 486 265 | 161 486 275 | 161 486 285 | 161 486 425 | 163 481 412 | 163 481 425 |
| 25 | 161 486 266 | 161 486 276 | 161 486 286 | 161 486 426 | 163 481 413 | 163 481 426 |
| 32 | 161 486 267 | 161 486 277 | 161 486 287 | 161 486 427 | 163 481 414 | 163 481 427 |
| 40 | 161 486 268 | 161 486 278 | 161 486 288 | 161 486 428 | 163 481 415 | 163 481 428 |
| 50 | 161 486 269 | 161 486 279 | 161 486 289 | 161 486 429 | 163 481 416 | 163 481 429 |
| 63 | 161 486 270 | 161 486 280 | 161 486 290 | 161 486 430 | 163 481 417 | 163 481 430 |
| 75 | 161 486 271 | 161 486 281 | 161 486 291 | 161 486 431 | 163 481 418 | 163 481 431 |
| 90 | 161 486 272 | 161 486 282 | 161 486 292 | 161 486 432 | 163 481 419 | 163 481 432 |
| 110 | 161 486 273 | 161 486 283 | 161 486 293 | 161 486 433 | 163 481 420 | 163 481 433 |

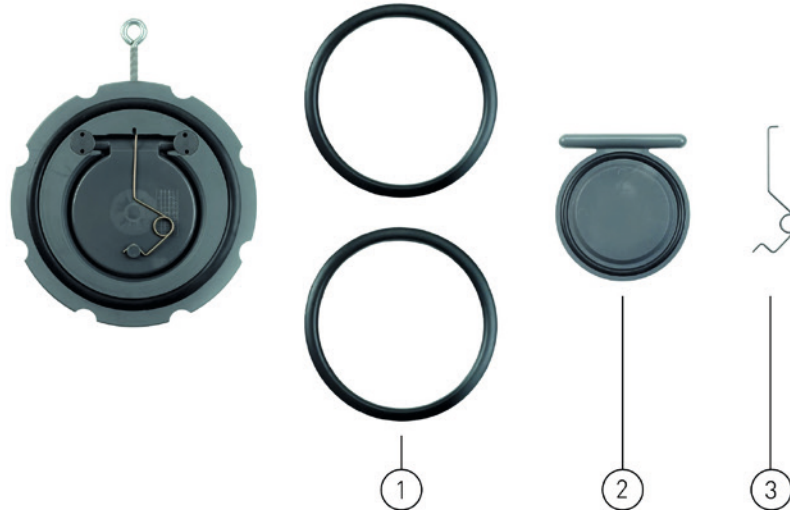
| d (mm) | PP-H PP-St ANSI (G73) Code |
|-----------|----------------------------------|
| 20 | 167 484 065 |
| 25 | 167 484 066 |
| 32 | 167 484 067 |
| 40 | 167 484 068 |
| 50 | 167 484 069 |
| 63 | 167 484 070 |
| 75 | 167 484 071 |
| 90 | 167 484 072 |
| 110 | 167 484 073 |



Union nut

| d (mm) | DN (mm) | PVC-U Code | PVC-C Code | ABS Code | PP-H Code | PVDF Code |
|-----------|------------|---------------|---------------|-------------|--------------|--------------|
| 16 | 10 | 161 490 538 | 163 481 226 | 169 480 713 | 167 482 712 | 175 482 937 |
| 20 | 15 | 161 490 538 | 163 481 226 | 169 480 713 | 167 482 712 | 175 482 937 |
| 25 | 20 | 161 490 539 | 163 481 227 | 169 480 714 | 167 482 713 | 175 482 938 |
| 32 | 25 | 161 490 540 | 163 481 228 | 169 480 715 | 167 482 714 | 175 482 939 |
| 40 | 32 | 161 490 541 | 163 481 229 | 169 480 716 | 167 482 715 | 175 482 940 |
| 50 | 40 | 161 490 542 | 163 481 230 | 169 480 717 | 167 482 716 | 175 482 941 |
| 63 | 50 | 161 490 543 | 163 481 231 | 169 480 718 | 167 482 717 | 175 482 942 |
| 75 | 65 | 161 490 544 | 163 481 232 | 169 480 719 | 167 482 718 | 175 482 943 |
| 90 | 80 | 161 490 545 | 163 481 233 | 169 480 720 | 167 482 719 | 175 482 944 |
| 110 | 100 | 161 490 546 | 163 481 234 | 169 480 721 | 167 482 720 | 175 482 945 |

Spare parts wafer check valve type 369



Seal set (1)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 40 | 1 ¼ | 32 | | 161 484 887 |
| 50 | 1 ½ | 40 | 161 484 876 | 161 484 888 |
| 63 | 2 | 50 | 161 484 877 | 161 484 889 |
| 75 | 2 ½ | 65 | 161 484 878 | 161 484 890 |
| 90 | 3 | 80 | 161 484 879 | 161 484 891 |
| 110 | 4 | 100 | 161 484 880 | 161 484 892 |
| 140 | 5 | 125 | 161 484 881 | 161 484 893 |
| 160 | 6 | 150 | 161 484 882 | 161 484 894 |
| 225 | 8 | 200 | 161 484 883 | 161 484 895 |
| 280 | 10 | 250 | 161 484 884 | 161 484 896 |
| 315 | 12 | 300 | 161 484 885 | 161 484 897 |

Disc set (2)

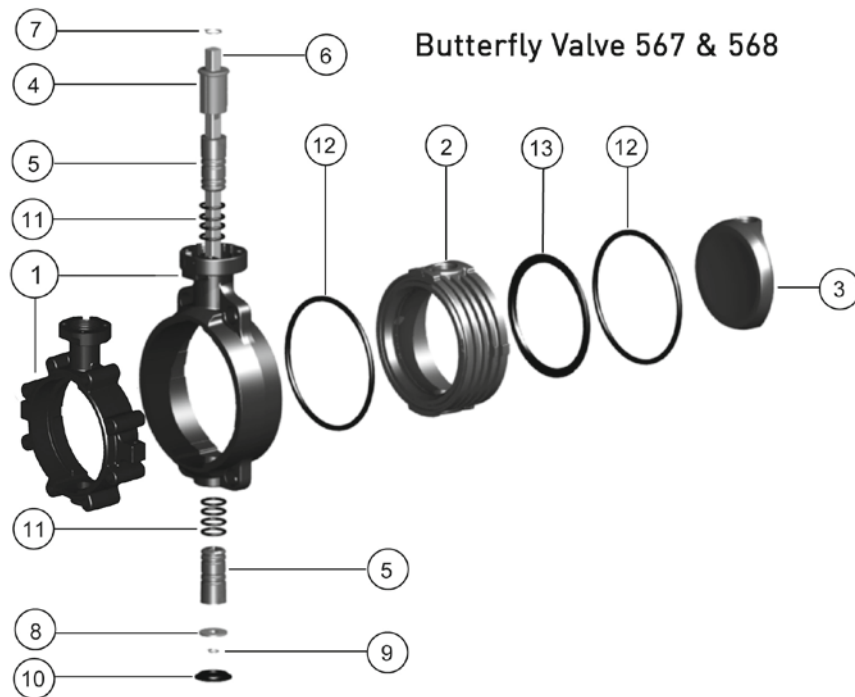
| d (mm) | Size (inch) | DN (mm) | PVC-U EPDM Code | PVC-U FKM Code | PP-H EPDM Code | PP-H FKM Code | PVDF FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|-------------------|------------------|------------------|
| 40 | 1 ¼ | 32 | 161 369 122 | 161 369 142 | 167 369 122 | 167 369 142 | 175 369 142 |
| 50 | 1 ½ | 40 | 161 369 123 | 161 369 143 | 167 369 123 | 167 369 143 | 175 369 143 |
| 63 | 2 | 50 | 161 369 124 | 161 369 144 | 167 369 124 | 167 369 144 | 175 369 144 |
| 75 | 2 ½ | 65 | 161 369 125 | 161 369 145 | 167 369 125 | 167 369 145 | 175 369 145 |
| 90 | 3 | 80 | 161 369 126 | 161 369 146 | 167 369 126 | 167 369 146 | 175 369 146 |
| 110 | 4 | 100 | 161 369 127 | 161 369 147 | 167 369 127 | 167 369 147 | 175 369 147 |
| 140 | 5 | 125 | 161 369 128 | 161 369 148 | 167 369 128 | 167 369 148 | 175 369 148 |
| 160 | 6 | 150 | 161 369 129 | 161 369 149 | 167 369 129 | 167 369 149 | 175 369 149 |
| 225 | 8 | 200 | 161 369 130 | 161 369 150 | 167 369 130 | 167 369 150 | 175 369 150 |
| 280 | 10 | 250 | 161 369 131 | 161 369 151 | 167 369 131 | 167 369 151 | 175 369 151 |
| 315 | 12 | 300 | 161 369 132 | 161 369 152 | 167 369 132 | 167 369 152 | 175 369 152 |



Spring (3)

| d (mm) | Size (inch) | DN (mm) | V4A Code | Hastelloy C Code |
|-----------|----------------|------------|-------------|---------------------|
| 40 | 1 ¼ | 32 | 161 484 900 | 161 484 912 |
| 50 | 1 ½ | 40 | 161 484 901 | 161 484 913 |
| 63 | 2 | 50 | 161 484 902 | 161 484 914 |
| 75 | 2 ½ | 65 | 161 484 903 | 161 484 915 |
| 90 | 3 | 80 | 161 484 904 | 161 484 916 |
| 110 | 4 | 100 | 161 484 905 | 161 484 917 |
| 140 | 5 | 125 | 161 484 905 | 161 484 917 |
| 160 | 6 | 150 | 161 484 907 | 161 484 919 |
| 225 | 8 | 200 | 161 484 908 | 161 484 920 |
| 280 | 10 | 250 | 161 484 909 | 161 484 921 |
| 315 | 12 | 300 | 161 484 910 | 161 484 922 |

Spare parts butterfly valve type 567/578



Inner body for Butterfly Valve Type 567 and 578

Model:

- Inner body consisting of: inner body (2) and profile seal (13)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 63 | 2 | 50 |
| 75 | 2 ½ | 65 |
| 90 | 3 | 80 |
| 110 | 4 | 100 |
| 140 | 5 | 125 |
| 160 | 6 | 150 |
| 225 | 8 | 200 |
| 280 | 10 | 250 |
| 315 | 12 | 300 |



| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 63 | 161 486 861 | 161 486 873 | 163 481 591 | 163 481 603 | 169 481 067 | 167 484 271 |
| 75 | 161 486 862 | 161 486 874 | 163 481 592 | 163 481 604 | 169 481 068 | 167 484 272 |
| 90 | 161 486 863 | 161 486 875 | 163 481 593 | 163 481 605 | 169 481 069 | 167 484 273 |
| 110 | 161 486 864 | 161 486 876 | 163 481 594 | 163 481 606 | 169 481 070 | 167 484 274 |
| 140 | 161 486 865 | 161 486 877 | 163 481 595 | 163 481 607 | 169 481 071 | 167 484 275 |
| 160 | 161 486 866 | 161 486 878 | 163 481 596 | 163 481 608 | 169 481 072 | 167 484 276 |
| 225 | 161 486 867 | 161 486 879 | 163 481 597 | 163 481 609 | 169 481 073 | 167 484 277 |
| 280 | 161 486 868 | 161 486 880 | 163 481 598 | 163 481 610 | | 167 484 278 |
| 315 | 161 486 869 | 161 486 881 | 163 481 599 | 163 481 611 | | 167 484 279 |

| d (mm) | PP-H FKM Code | PVDF FKM Code | PVDF PTFE Code |
|-----------|------------------|------------------|-------------------|
| 63 | 167 484 286 | 175 483 413 | 175 483 752 |
| 75 | 167 484 287 | 175 483 414 | 175 483 753 |
| 90 | 167 484 288 | 175 483 415 | 175 483 754 |
| 110 | 167 484 289 | 175 483 416 | 175 483 755 |
| 140 | 167 484 290 | 175 483 417 | 175 483 756 |
| 160 | 167 484 291 | 175 483 418 | 175 483 757 |
| 225 | 167 484 292 | 175 483 419 | 175 483 758 |
| 280 | 167 484 293 | 175 483 420 | 175 483 759 |
| 315 | 167 484 294 | 175 483 421 | 175 483 760 |



Disc for Butterfly Valve Type 567 and 578

| d (mm) | Size (inch) | DN (mm) | PVC-U Code | PVC-C Code | ABS Code | PP-H Code | PVDF Code |
|-----------|----------------|------------|---------------|---------------|-------------|--------------|--------------|
| 63 | 2 | 50 | 161 490 889 | 163 481 451 | 169 480 951 | 167 483 226 | 175 483 251 |
| 75 | 2 ½ | 65 | 161 490 890 | 163 481 452 | 169 480 952 | 167 483 227 | 175 483 252 |
| 90 | 3 | 80 | 161 490 891 | 163 481 453 | 169 480 953 | 167 483 228 | 175 483 253 |
| 110 | 4 | 100 | 161 490 892 | 163 481 454 | 169 480 954 | 167 483 229 | 175 483 254 |
| 140 | 5 | 125 | 161 490 893 | 163 481 455 | 169 480 955 | 167 483 230 | 175 483 255 |
| 160 | 6 | 150 | 161 490 894 | 163 481 456 | 169 480 956 | 167 483 231 | 175 483 256 |
| 225 | 8 | 200 | 161 490 895 | 163 481 457 | 169 480 957 | 167 483 232 | 175 483 257 |
| 280 | 10 | 250 | 161 490 896 | 163 481 458 | 169 480 958 | 167 483 233 | 175 483 258 |
| 315 | 12 | 300 | 161 490 897 | 163 481 459 | 169 480 959 | 167 483 234 | 175 483 259 |
| 355 | 14 | 350 | | | | 167 483 235 | |
| 400 | 16 | 400 | | | | 167 483 236 | |
| 450 | 18 | 450 | | | | 167 483 237 | |
| 500 | 20 | 500 | | | | 167 483 238 | |
| 630 | 24 | 600 | | | | 167 483 239 | |



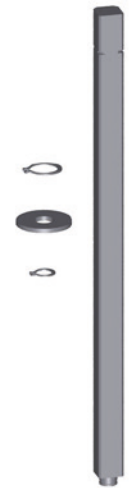
Bearing bush for Butterfly Valve Type 567 and 578

Model:

- Included in delivery 2 pcs.
- With o-ring
- Bearing bushes in PP-H are used in PP-H and ABS butterfly valves

| d (mm) | Size (inch) | DN (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code |
|------------|----------------|------------|-----------------------|-------------------|-----------------------|-------------------|
| 63, 75, 90 | 2, 2½, 3 | 50, 65, 80 | 161 486 886 | 161 486 892 | 163 481 576 | 163 481 582 |
| 110, 140 | 4, 5 | 100, 125 | 161 486 887 | 161 486 893 | 163 481 577 | 163 481 583 |
| 160, 225 | 6, 8 | 150, 200 | 161 486 888 | 161 486 894 | 163 481 578 | 163 481 584 |
| 280, 315 | 10, 12 | 250, 300 | 161 486 889 | 161 486 895 | 163 481 579 | 163 481 585 |
| 355 | 14 | 350 | | | | |
| 400 | 16 | 400 | | | | |
| 450 | 18 | 450 | | | | |
| 500 | 20 | 500 | | | | |
| 630 | 24 | 600 | | | | |

| d (mm) | Size (inch) | DN (mm) | PP-H EPDM Code | PP-H FKM Code | PVDF FKM Code |
|------------|----------------|------------|-------------------|------------------|------------------|
| 63, 75, 90 | 2, 2½, 3 | 50, 65, 80 | 167 484 259 | 167 484 265 | 175 483 426 |
| 110, 140 | 4, 5 | 100, 125 | 167 484 260 | 167 484 266 | 175 483 427 |
| 160, 225 | 6, 8 | 150, 200 | 167 484 261 | 167 484 267 | 175 483 428 |
| 280, 315 | 10, 12 | 250, 300 | 167 484 262 | 167 484 268 | 175 483 429 |
| 355 | 14 | 350 | 167 484 263 | 167 484 269 | |
| 400 | 16 | 400 | 167 484 264 | 167 484 270 | |
| 450 | 18 | 450 | 167 484 280 | 167 484 283 | |
| 500 | 20 | 500 | 167 484 281 | 167 484 284 | |
| 630 | 24 | 600 | 167 484 282 | 167 484 285 | |



Shaft set for Butterfly Valve Type 567 and 578

Model:

- Shaft set consisting of: shaft chrom steel 1.4404 (SUS316L) (6), retention ring (7, 9) and washer (8)

| d (mm) | Size (inch) | DN (mm) | Code |
|-----------|----------------|------------|-------------|
| 63 | 2 | 50 | 161 486 899 |
| 75 | 2½ | 65 | 161 486 900 |
| 90 | 3 | 80 | 161 486 901 |
| 110 | 4 | 100 | 161 486 902 |
| 140 | 5 | 125 | 161 486 903 |
| 160 | 6 | 150 | 161 486 904 |
| 225 | 8 | 200 | 161 486 905 |
| 280 | 10 | 250 | 161 486 906 |
| 315 | 12 | 300 | 161 486 907 |
| 355 | 14 | 350 | 161 486 908 |
| 400 | 16 | 400 | 161 486 909 |
| 450 | 18 | 450 | 161 486 926 |
| 500 | 20 | 500 | 161 486 927 |
| 630 | 24 | 600 | 161 486 928 |



Hand lever for Butterfly Valve Type 567 and 578

| d (mm) | Size (inch) | DN (mm) | with index plate Code | with fine adjustment Code |
|-----------|----------------|------------|-----------------------------|---------------------------------|
| 63 | 2 | 50 | 161 486 690 | 161 486 325 |
| 75 | 2½ | 65 | 161 486 690 | 161 486 325 |
| 90 | 3 | 80 | 161 486 690 | 161 486 325 |

| d (mm) | Size (inch) | DN (mm) | with index plate Code | with fine adjustment Code |
|-----------|----------------|------------|-----------------------------|---------------------------------|
| 110 | 4 | 100 | 161 486 691 | 161 486 326 |
| 140 | 5 | 125 | 161 486 691 | 161 486 326 |
| 160 | 6 | 150 | 161 486 694 | 161 486 327 |
| 225 | 8 | 200 | 161 486 695 | 161 486 328 |
| 280 | 10 | 250 | 161 486 697 | |
| 315 | 12 | 300 | 161 486 697 | |



Reduction gear with handwheel for Butterfly Valve Type 565, 567 and 578

- For valve actuation via a reduction gear with hand wheel. Suitable for all GF butterfly valves.
- Intermediate elements are required.
- This version is not recommended to use in outside or corrosive environment

| d (mm) | DN (mm) | Inch (inch) | Code |
|-----------|------------|----------------|-------------|
| 63 - 225 | 50 - 200 | 2 - 8 | 161 483 471 |
| 280 - 315 | 250 - 300 | 10 - 12 | 161 483 472 |

Snap ring DN350-600 for Butterfly Valve Type 567

- For fixation of profile seal in body

| d (mm) | Size (inch) | DN (mm) | PP-H Code |
|-----------|----------------|------------|--------------|
| 355 | 14 | 350 | 167 484 295 |
| 400 | 16 | 400 | 167 484 296 |
| 450 | 18 | 450 | 167 484 297 |
| 500 | 20 | 500 | 167 484 298 |
| 630 | 24 | 600 | 167 484 299 |

Profile seal (13) DN350-600 for Butterfly Valve Type 567

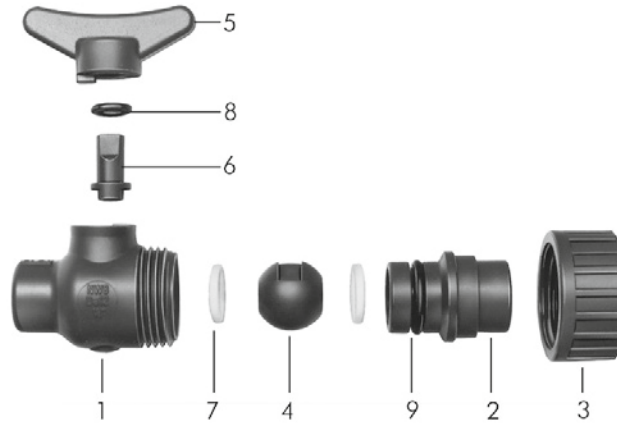
| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 355 | 14 | 350 | 748 440 018 | 749 440 028 |
| 400 | 16 | 400 | 748 440 019 | 749 440 029 |
| 450 | 18 | 450 | 748 440 020 | 749 440 030 |
| 500 | 20 | 500 | 748 440 021 | 749 440 031 |
| 630 | 24 | 600 | 748 440 022 | 749 440 032 |



Intermediate element for Butterfly Valve Type 567 and 578 (reduction gear)

| d (mm) | DN (mm) | Code |
|-----------|------------|-------------|
| 63 | 50 | 198 000 621 |
| 75 | 65 | 198 000 621 |
| 90 | 80 | 198 000 621 |
| 110 | 100 | 198 000 622 |
| 140 | 125 | 198 000 622 |
| 140 | 150 | 198 000 600 |
| 140 | 150 | 198 000 600 |
| 280 | 250 | 198 000 732 |
| 280 | 250 | 198 000 732 |

Spare parts laboratory ball valve type 322



Ball set

Model:

- Ball seals standard in PTFE
- Ball set consisting of: ball (4), stem (6), ball- and stem seal (7-8)

| d (mm) | Inch (inch) | DN (mm) | PVC-U EPDM Code | PVC-U FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|
| 10 | 1/8 | 6 | 161 482 978 | 161 482 980 |
| 12 | 1/4 | 8 | 161 482 978 | 161 482 980 |



Lever

| d (mm) | Inch (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 10 | 1/8 | 6 | 161 322 205 |
| 12 | 1/4 | 8 | 161 322 205 |



Seal set

Model:

- Seal set consisting of: stem- and body seal (8-9)

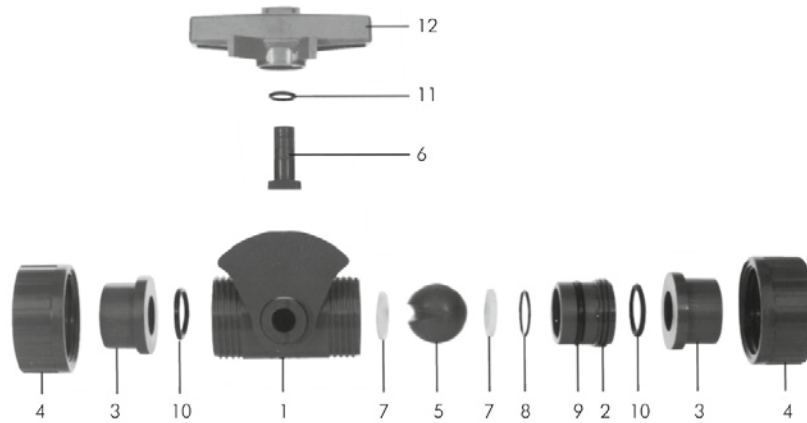
| d (mm) | Inch (inch) | DN (mm) | EPDM Code |
|-----------|----------------|------------|--------------|
| 10 | 1/8 | 6 | 161 482 982 |
| 12 | 1/4 | 8 | 161 482 982 |



Valve end with socket metric

| d (mm) | Inch (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 10 | 1/8 | 6 | 161 322 152 |
| 12 | 1/4 | 8 | 161 322 202 |

Spare parts metering ball valve type 323



Threaded bush Rc/NPT

| Size (inch) | DN (mm) | PVC-U NPT Code | PVDF NPT Code |
|----------------|------------|-------------------|------------------|
| 3/8 | 10 | 161 482 389 | 175 480 727 |
| 1/2 | 15 | 161 482 390 | 175 480 728 |



Threaded bush Rp

| DN (mm) | Rp (inch) | PVC-U Code | PVC-C Code | ABS Code | PP-H Code |
|------------|--------------|---------------|---------------|-------------|--------------|
| 10 | 3/8 | 161 480 550 | 163 480 832 | 169 480 120 | 167 480 166 |
| 15 | 1/2 | 161 480 551 | 163 480 833 | 169 480 121 | 167 480 167 |



Spare parts ball valve type 355



Lever PP

| Size (inch) | DN (mm) | blue Code |
|----------------|------------|--------------|
| 1/2 | 15 | 167 481 090 |
| 3/4 | 20 | 167 481 091 |
| 1 | 25 | 167 481 091 |
| 1 1/4 | 32 | 167 481 092 |
| 1 1/2 | 40 | 167 481 092 |
| 2 | 50 | 167 481 093 |

Spare parts ball valve type 354



Union nut

| d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 20 | ¾ | 15 | 721 690 006 |
| 25 | 1 | 20 | 721 690 007 |
| 32 | 1 ¼ | 25 | 721 690 008 |
| 40 | 1 ½ | 32 | 721 690 009 |
| 50 | 2 | 40 | 721 690 010 |
| 63 | 2 ½ | 50 | 721 690 011 |



Face seal

| d (mm) | Size (inch) | DN (mm) | EPDM Code |
|-----------|----------------|------------|--------------|
| 20 | ¾ | 15 | 748 410 042 |
| 25 | 1 | 20 | 748 410 116 |
| 32 | 1 ¼ | 25 | 748 410 103 |
| 40 | 1 ½ | 32 | 748 410 027 |
| 50 | 2 | 40 | 748 410 010 |
| 63 | 2 ½ | 50 | 748 410 011 |

Spare parts ball valve type 355

Central part

| d (mm) | Size (inch) | DN (mm) | EPDM Code |
|-----------|----------------|------------|--------------|
| 20 | ¾ | 15 | 161 483 837 |
| 25 | 1 | 20 | 161 483 838 |
| 32 | 1 ¼ | 25 | 161 483 839 |
| 40 | 1 ½ | 32 | 161 483 840 |
| 50 | 2 | 40 | 161 483 841 |
| 63 | 2 ½ | 50 | 161 483 842 |

Spare parts metering ball valve type 523



Central part For Ball valve type 523

Model:

- Every connecting pieces and union nuts are listed on product range industry valves
- Ball seals standard in PTFE
- Central part consisting of: body, union bush, ball, stem, ball-, backing-, body-, face- and stem seal, standard lever and threaded inserts stainless steel

| d (mm) | Size (inch) | DN (mm) | PVC-U EPDM Code | PVC-U FKM Code | PP-H EPDM Code | PP-H FKM Code |
|-----------|----------------|------------|-----------------------|-------------------|-------------------|------------------|
| 16 | ¾ | 10 | 161 485 351 | 161 485 361 | 167 485 371 | 167 485 381 |
| 20 | 1 | 15 | 161 485 353 | 161 485 363 | 167 485 373 | 167 485 383 |

Spare parts shipbuilding ball valve type 547

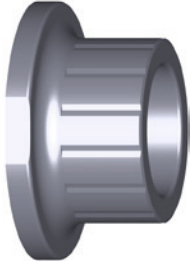


Service housing kit

Model:

- With integrated check valve and filter

| D | Size | DN | Code |
|------|--------|------|--------------------|
| (mm) | (inch) | (mm) | |
| 16 | 3/8 | 10 | 167 547 905 |



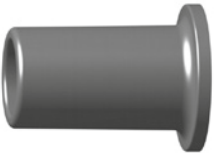
Valve end fusion socket PB

| d | Size | DN | Code |
|------|--------|------|--------------------|
| (mm) | (inch) | (mm) | |
| 16 | 3/8 | 10 | 167 547 441 |
| 20 | 1/2 | 15 | 167 547 442 |



Valve end iFIT

| D | Size | DN | Code |
|------|--------|------|--------------------|
| (mm) | (inch) | (mm) | |
| 20 | 1/2 | 15 | 167 547 112 |



Service housing end connector kit With fusion socket PB

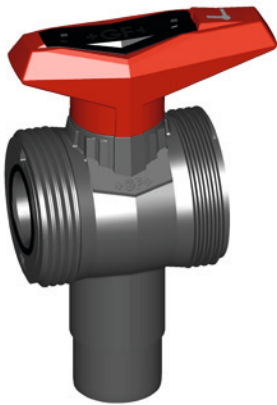
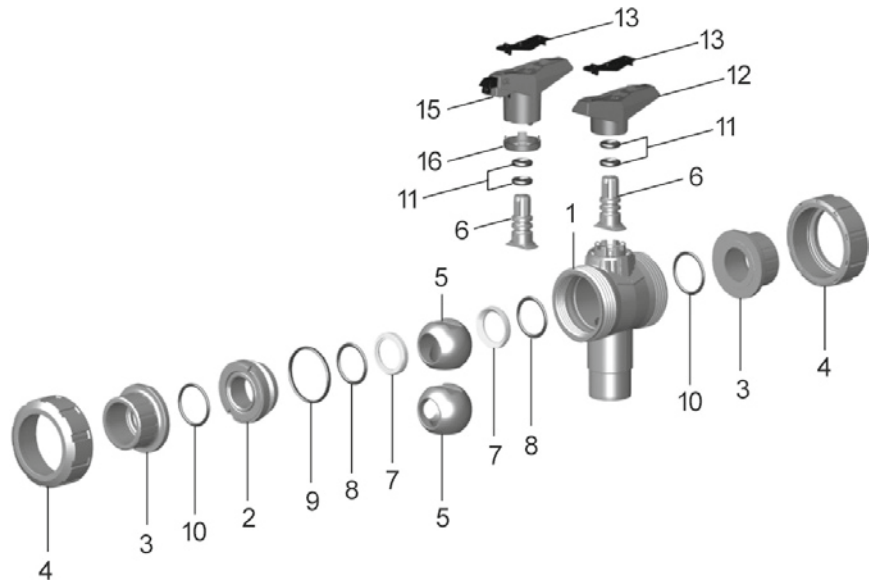
| d | Size | DN | Code |
|------|--------|------|--------------------|
| (mm) | (inch) | (mm) | |
| 16 | 3/8 | 10 | 167 547 931 |
| 20 | 1/2 | 15 | 167 547 932 |



Service housing end connector kit with iFIT connector

| d | Size | DN | Code |
|------|--------|------|--------------------|
| (mm) | (inch) | (mm) | |
| 20 | 1/2 | 15 | 167 547 902 |

Spare parts ball valve type 543 vertical

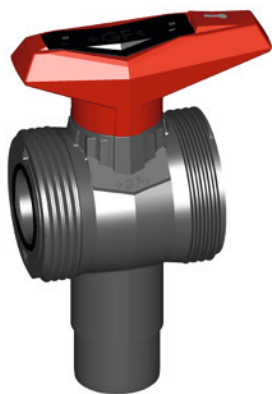


Central part diverter ball

Model:

- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11) and standard lever (12)

| d (mm) | Size (inch) | DN (mm) | PVC-U EPDM Code | PVC-U FKM Code | ABS EPDM Code |
|-----------|----------------|------------|-----------------------|-------------------|------------------|
| 16 | ¾ | 10 | 161 488 061 | 161 488 071 | 169 481 231 |
| 20 | ½ | 15 | 161 488 062 | 161 488 072 | 169 481 232 |
| 25 | ¾ | 20 | 161 488 063 | 161 488 073 | 169 481 233 |
| 32 | 1 | 25 | 161 488 064 | 161 488 074 | 169 481 234 |
| 40 | 1 ¼ | 32 | 161 488 065 | 161 488 075 | 169 481 235 |
| 50 | 1 ½ | 40 | 161 488 066 | 161 488 076 | 169 481 236 |
| 63 | 2 | 50 | 161 488 067 | 161 488 077 | 169 481 237 |

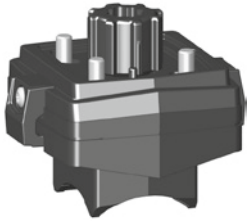


Central part L-port

Model:

- Every connecting pieces and union nuts are listed on product range industry valves
- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11) and standard lever (12)

| d (mm) | Size (inch) | DN (mm) | PVC-U EPDM Code | PVC-U FKM Code | ABS EPDM Code |
|-----------|----------------|------------|-----------------------|-------------------|------------------|
| 16 | ¾ | 10 | 161 488 041 | 161 488 051 | 169 481 221 |
| 20 | ¾ | 15 | 161 488 042 | 161 488 052 | 169 481 222 |
| 25 | ¾ | 20 | 161 488 043 | 161 488 053 | 169 481 223 |
| 32 | 1 | 25 | 161 488 044 | 161 488 054 | 169 481 224 |
| 40 | 1 ¼ | 32 | 161 488 045 | 161 488 055 | 169 481 225 |
| 50 | 1 ½ | 40 | 161 488 046 | 161 488 056 | 169 481 226 |
| 63 | 2 | 50 | 161 488 047 | 161 488 057 | 169 481 227 |



Assembly kit

Model:

- Intermediate element for ball valve type 543 vertical and electric or pneumatic actuators EA21; PA11/21
- Including screws

| d (mm) | Inch (inch) | DN (mm) | Code |
|-----------|----------------|------------|--------------------|
| 16 - 20 | ¾ - ½ | 10 - 15 | 167 484 945 |
| 25 - 32 | ¾ - 1 | 20 - 25 | 167 484 946 |
| 40 - 50 | 1 ¼ - 1 ½ | 32 - 40 | 167 484 947 |
| 63 | 2 | 50 | 167 484 948 |



Face seal

Model:

- Face seal no. 10

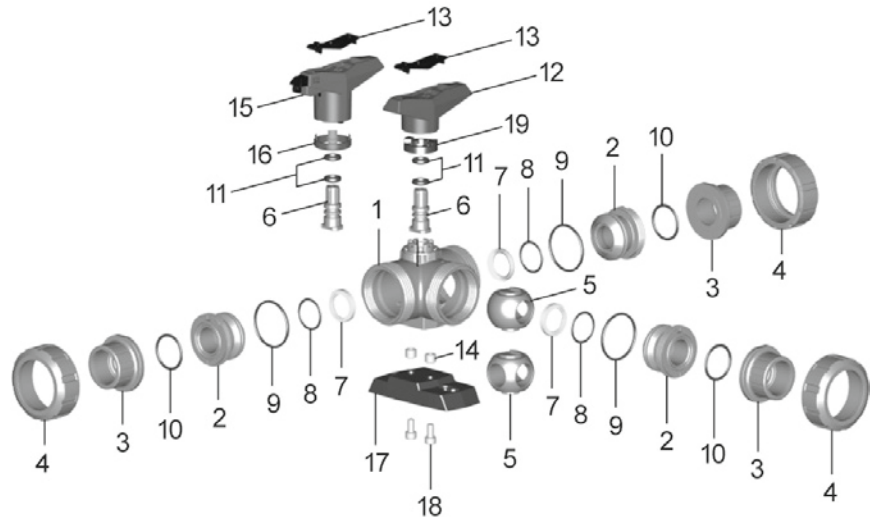
| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------------|--------------------|
| 16 | ¾ | 10 | 748 410 059 | 749 410 059 |
| 20 | ½ | 15 | 748 410 059 | 749 410 059 |
| 25 | ¾ | 20 | 748 410 106 | 749 410 106 |
| 32 | 1 | 25 | 748 410 151 | 749 410 151 |
| 40 | 1 ¼ | 32 | 748 410 062 | 749 410 062 |
| 50 | 1 ½ | 40 | 748 410 003 | 749 410 003 |
| 63 | 2 | 50 | 748 410 231 | 749 410 231 |



Lever

| d (mm) | Size (inch) | DN (mm) | Standard lever L-port red Code | Standard lever diverter ball red Code | Multifunctional-lever L-port red Code | Multifunctional-lever diverter ball red Code |
|-----------|----------------|------------|---|---|---|--|
| 16 | ¾ | 10 | 167 484 688 | 167 484 788 | 167 484 642 | 167 484 742 |
| 20 | ½ | 15 | 167 484 688 | 167 484 788 | 167 484 642 | 167 484 742 |
| 25 | ¾ | 20 | 167 484 689 | 167 484 789 | 167 484 643 | 167 484 743 |
| 32 | 1 | 25 | 167 484 690 | 167 484 790 | 167 484 644 | 167 484 744 |
| 40 | 1 ¼ | 32 | 167 484 691 | 167 484 791 | 167 484 645 | 167 484 745 |
| 50 | 1 ½ | 40 | 167 484 692 | 167 484 792 | 167 484 646 | 167 484 746 |
| 63 | 2 | 50 | 167 484 693 | 167 484 793 | 167 484 647 | 167 484 747 |

Spare parts ball valve type 543 horizontal



Central part L-port

Model:

- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)
- Every connecting pieces and union nuts are listed on product range industry valves

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ¾ | 10 |
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 16 | 161 488 002 | 161 488 012 | 163 481 902 | 163 481 912 | 169 481 202 | 167 484 802 |
| 20 | 161 488 002 | 161 488 012 | 163 481 902 | 163 481 912 | 169 481 202 | 167 484 802 |
| 25 | 161 488 003 | 161 488 013 | 163 481 903 | 163 481 913 | 169 481 203 | 167 484 803 |
| 32 | 161 488 004 | 161 488 014 | 163 481 904 | 163 481 914 | 169 481 204 | 167 484 804 |
| 40 | 161 488 005 | 161 488 015 | 163 481 905 | 163 481 915 | 169 481 205 | 167 484 805 |
| 50 | 161 488 006 | 161 488 016 | 163 481 906 | 163 481 916 | 169 481 206 | 167 484 806 |
| 63 | 161 488 007 | 161 488 017 | 163 481 907 | 163 481 917 | 169 481 207 | 167 484 807 |

| d (mm) | PP-H FKM Code | PVDF FKM Code |
|-----------|------------------|------------------|
| 16 | 167 484 812 | 175 483 602 |
| 20 | 167 484 812 | 175 483 602 |
| 25 | 167 484 813 | 175 483 603 |
| 32 | 167 484 814 | 175 483 604 |
| 40 | 167 484 815 | 175 483 605 |
| 50 | 167 484 816 | 175 483 606 |
| 63 | 167 484 817 | 175 483 607 |



Central part T-port

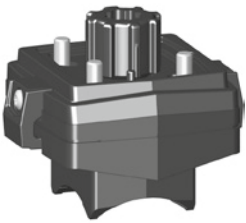
Model:

- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ¾ | 10 |
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 16 | 161 488 022 | 161 488 032 | 163 481 922 | 163 481 932 | 169 481 212 | 167 484 822 |
| 20 | 161 488 022 | 161 488 032 | 163 481 922 | 163 481 932 | 169 481 212 | 167 484 822 |
| 25 | 161 488 023 | 161 488 033 | 163 481 923 | 163 481 933 | 169 481 213 | 167 484 823 |
| 32 | 161 488 024 | 161 488 034 | 163 481 924 | 163 481 934 | 169 481 214 | 167 484 824 |
| 40 | 161 488 025 | 161 488 035 | 163 481 925 | 163 481 935 | 169 481 215 | 167 484 825 |
| 50 | 161 488 026 | 161 488 036 | 163 481 926 | 163 481 936 | 169 481 216 | 167 484 826 |
| 63 | 161 488 027 | 161 488 037 | 163 481 927 | 163 481 937 | 169 481 217 | 167 484 827 |

| d (mm) | PP-H FKM Code | PVDF FKM Code |
|-----------|------------------|------------------|
| 16 | 167 484 832 | 175 483 612 |
| 20 | 167 484 832 | 175 483 612 |
| 25 | 167 484 833 | 175 483 613 |
| 32 | 167 484 834 | 175 483 614 |
| 40 | 167 484 835 | 175 483 615 |
| 50 | 167 484 836 | 175 483 616 |
| 63 | 167 484 837 | 175 483 617 |



Assembly kit

Model:

- Intermediate element for ball valve type 543 horizontal and electric or pneumatic actuators EA21; PA11/21
- Including screws and position indicator for actuators

| d (mm) | Inch (inch) | DN (mm) | Code |
|-----------|----------------|------------|-------------|
| 16 - 20 | ¾ - ½ | 10 - 15 | 167 484 941 |
| 25 - 32 | ¾ - 1 | 20 - 25 | 167 484 942 |
| 40 - 50 | 1 ¼ - 1 ½ | 32 - 40 | 167 484 943 |
| 63 | 2 | 50 | 167 484 944 |



Turn limiter 90°

| d (mm) | Size (inch) | DN (mm) | Code |
|-----------|----------------|------------|-------------|
| 16 | ¾ | 10 | 167 482 479 |
| 20 | ½ | 15 | 167 482 479 |
| 25 | ¾ | 20 | 167 482 480 |

| d (mm) | Size (inch) | DN (mm) | Code |
|-----------|----------------|------------|-------------|
| 32 | 1 | 25 | 167 482 480 |
| 40 | 1 ¼ | 32 | 167 482 481 |
| 50 | 1 ½ | 40 | 167 482 481 |
| 63 | 2 | 50 | 167 482 482 |



Face seal

Model:

- Face seal no. 10

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | ¾ | 10 | 748 410 059 | 749 410 059 |
| 20 | ½ | 15 | 748 410 059 | 749 410 059 |
| 25 | ¾ | 20 | 748 410 106 | 749 410 106 |
| 32 | 1 | 25 | 748 410 151 | 749 410 151 |
| 40 | 1 ¼ | 32 | 748 410 062 | 749 410 062 |
| 50 | 1 ½ | 40 | 748 410 003 | 749 410 003 |
| 63 | 2 | 50 | 748 410 231 | 749 410 231 |
| 75 | 2 ½ | 65 | 748 410 119 | 749 410 119 |
| 90 | 3 | 80 | 748 410 023 | 749 410 023 |
| 110 | 4 | 100 | 748 410 254 | 749 410 254 |



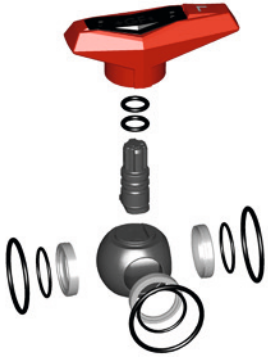
Lever

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ¾ | 10 |
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |

| d (mm) | Standard lever L-port red Code | Standard lever L-port black Code | Standard lever T-port red Code | Standard lever T-port black Code | Multifunctional-lever L-port red Code |
|-----------|---|---|---|---|---|
| 16 | 167 484 488 | 167 484 376 | 167 484 588 | 167 484 576 | 167 484 442 |
| 20 | 167 484 488 | 167 484 376 | 167 484 588 | 167 484 576 | 167 484 442 |
| 25 | 167 484 489 | 167 484 377 | 167 484 589 | 167 484 577 | 167 484 443 |
| 32 | 167 484 490 | 167 484 378 | 167 484 590 | 167 484 578 | 167 484 444 |
| 40 | 167 484 491 | 167 484 379 | 167 484 591 | 167 484 579 | 167 484 445 |
| 50 | 167 484 492 | 167 484 380 | 167 484 592 | 167 484 580 | 167 484 446 |
| 63 | 167 484 493 | 167 484 381 | 167 484 593 | 167 484 581 | 167 484 447 |

d Multifunctional-lever T-port red Code

| | |
|----|-------------|
| 16 | 167 484 542 |
| 20 | 167 484 542 |
| 25 | 167 484 543 |
| 32 | 167 484 544 |
| 40 | 167 484 545 |
| 50 | 167 484 546 |
| 63 | 167 484 547 |



Ball set L-port

Model:

- Ball set consisting of: lever (12), ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)
- Ball seals standard in PTFE

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | 3/8 | 10 |
| 20 | 1/2 | 15 |
| 25 | 3/4 | 20 |
| 32 | 1 | 25 |
| 40 | 1 1/4 | 32 |
| 50 | 1 1/2 | 40 |
| 63 | 2 | 50 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 16 | 161 488 162 | 161 488 172 | 163 481 982 | 163 481 992 | 169 481 282 | 167 484 882 |
| 20 | 161 488 162 | 161 488 172 | 163 481 982 | 163 481 992 | 169 481 282 | 167 484 882 |
| 25 | 161 488 163 | 161 488 173 | 163 481 983 | 163 481 993 | 169 481 283 | 167 484 883 |
| 32 | 161 488 164 | 161 488 174 | 163 481 984 | 163 481 994 | 169 481 284 | 167 484 884 |
| 40 | 161 488 165 | 161 488 175 | 163 481 985 | 163 481 995 | 169 481 285 | 167 484 885 |
| 50 | 161 488 166 | 161 488 176 | 163 481 986 | 163 481 996 | 169 481 286 | 167 484 886 |
| 63 | 161 488 167 | 161 488 177 | 163 481 987 | 163 481 997 | 169 481 287 | 167 484 887 |

| d (mm) | PP-H FKM Code | PVDF FKM Code |
|-----------|------------------|------------------|
| 16 | 167 484 892 | 175 483 642 |
| 20 | 167 484 892 | 175 483 642 |
| 25 | 167 484 893 | 175 483 643 |
| 32 | 167 484 894 | 175 483 644 |
| 40 | 167 484 895 | 175 483 645 |
| 50 | 167 484 896 | 175 483 646 |
| 63 | 167 484 897 | 175 483 647 |

Spare parts ball valve type 370



Lever

| d-d (mm) | Inch (inch) | DN-DN (mm) | PVC-U orange Code | PVC-U black Code |
|-------------|----------------|---------------|-------------------------|---------------------|
| -- 75 | 2 1/2 | -- 65 | 161 480 763 | 161 481 260 |
| -- 90 | 3 | -- 80 | 161 480 764 | 161 481 261 |
| 110 - 160 | 4 - 6 | 100 - 150 | 161 480 420 | 161 481 262 |



Seal set

Model:

- Seal set consisting of: backing-, body- and stem seal (3-5)

| d-d (mm) | Inch (inch) | DN-DN (mm) | EPDM Code | FKM Code |
|-------------|----------------|---------------|--------------------|--------------------|
| -- 75 | 2 ½ | -- 65 | | 161 482 974 |
| -- 90 | 3 | -- 80 | 161 482 969 | 161 482 975 |
| 110 - 160 | 4 - 6 | 100 - 150 | 161 482 970 | 161 482 976 |



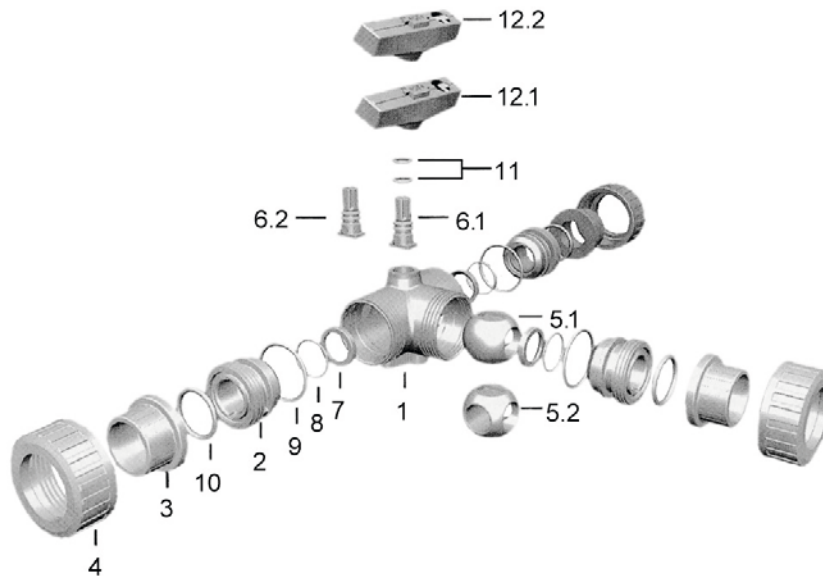
Face seal

Model:

- Face seal no. 9

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------------|--------------------|
| 75 | 2 ½ | 65 | 748 410 119 | 749 410 119 |
| 90 | 3 | 80 | 748 410 112 | 749 410 112 |
| 110 | 4 | 100 | 748 410 099 | 749 410 099 |

Spare parts ball valve type 343 horizontal

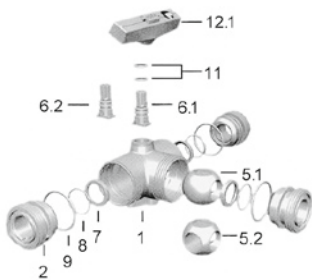


Central part T-port

Model:

- Central part consisting of: lever (12.1), body (1), union bush (2), ball (5.2), stem (6.2), ball-, backing-, body- and stem seal (7-9,11)
- Ball seals standard in PTFE

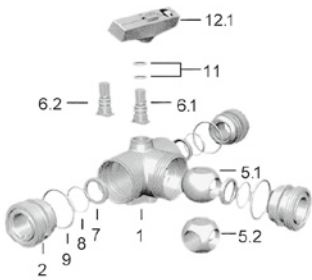
| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ¾ | 10 |
| 20 | ½ | 15 |
| 25 | ¾ | 20 |



| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 16 | 161 490 461 | 161 490 472 | 163 480 935 | 163 480 946 | 169 480 490 | 167 482 159 |
| 20 | 161 490 461 | 161 490 472 | 163 480 935 | 163 480 946 | 169 480 490 | 167 482 159 |
| 25 | 161 490 462 | 161 490 473 | 163 480 936 | 163 480 947 | 169 480 491 | 167 482 160 |
| 32 | 161 490 463 | 161 490 474 | 163 480 937 | 163 480 948 | 169 480 492 | 167 482 161 |
| 40 | 161 490 464 | 161 490 475 | 163 480 938 | 163 480 949 | 169 480 493 | 167 482 162 |
| 50 | 161 490 465 | 161 490 476 | 163 480 939 | 163 480 950 | 169 480 494 | 167 482 163 |
| 63 | 161 490 466 | 161 490 477 | 163 480 940 | 163 480 951 | 169 480 495 | 167 482 164 |

| d (mm) | PP-H FKM Code | PVDF FKM Code |
|-----------|------------------|------------------|
| 16 | 167 482 170 | 175 482 620 |
| 20 | 167 482 170 | 175 482 620 |
| 25 | 167 482 171 | 175 482 621 |
| 32 | 167 482 172 | 175 482 622 |
| 40 | 167 482 173 | 175 482 623 |
| 50 | 167 482 174 | 175 482 624 |
| 63 | 167 482 175 | 175 482 625 |



Central part L-port

Model:

- Ball seals standard in PTFE
- Central part consisting of: lever (12.1), body (1), union bush (2), ball (5.1), stem (6.1), ball-, backing-, body- and stem seal (7-9,11)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ¾ | 10 |
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 16 | 161 490 439 | 161 490 450 | 163 480 913 | 163 480 924 | 169 480 468 | 167 482 137 |
| 20 | 161 490 439 | 161 490 450 | 163 480 913 | 163 480 924 | 169 480 468 | 167 482 137 |
| 25 | 161 490 440 | 161 490 451 | 163 480 914 | 163 480 925 | 169 480 469 | 167 482 138 |
| 32 | 161 490 441 | 161 490 452 | 163 480 915 | 163 480 926 | 169 480 470 | 167 482 139 |
| 40 | 161 490 442 | 161 490 453 | 163 480 916 | 163 480 927 | 169 480 471 | 167 482 140 |
| 50 | 161 490 443 | 161 490 454 | 163 480 917 | 163 480 928 | 169 480 472 | 167 482 141 |
| 63 | 161 490 444 | 161 490 455 | 163 480 918 | 163 480 929 | 169 480 473 | 167 482 142 |

| d (mm) | PP-H FKM Code | PVDF FKM Code |
|-----------|------------------|------------------|
| 16 | 167 482 148 | 175 482 593 |
| 20 | 167 482 148 | 175 482 593 |
| 25 | 167 482 149 | 175 482 594 |

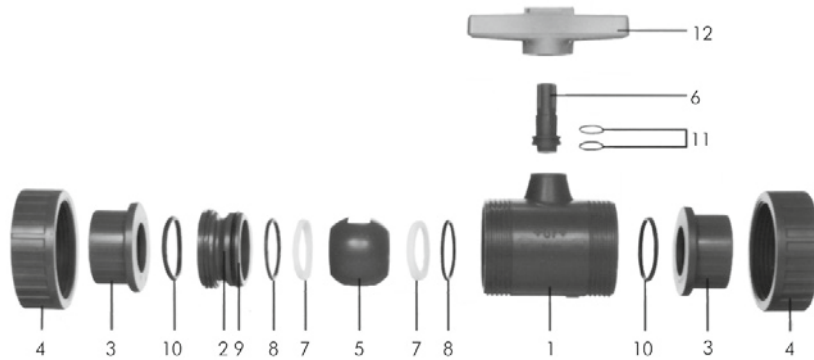
| d (mm) | PP-H FKM Code | PVDF FKM Code |
|-----------|------------------|------------------|
| 32 | 167 482 150 | 175 482 595 |
| 40 | 167 482 151 | 175 482 596 |
| 50 | 167 482 152 | 175 482 597 |
| 63 | 167 482 153 | 175 482 598 |



Lever

| d (mm) | Size (inch) | DN (mm) | L-port Code | T-port Code |
|-----------|----------------|------------|----------------|----------------|
| 16 | 3/8 | 10 | 161 482 151 | 161 486 175 |
| 20 | 1/2 | 15 | 161 482 151 | 161 486 175 |
| 25 | 3/4 | 20 | 161 482 152 | 161 486 176 |
| 32 | 1 | 25 | 161 482 153 | 161 486 177 |
| 40 | 1 1/4 | 32 | 161 482 154 | 161 486 178 |
| 50 | 1 1/2 | 40 | 161 482 155 | 161 486 179 |
| 63 | 2 | 50 | 161 482 156 | 161 486 180 |

Spare parts ball valve type 346



Central part

Model:

- Ball seals standard in PTFE
- Central part consisting of: lever red (12), body (1), union bush (2), ball (5), stem (6), ball-, back- ing-, body- and stem seal (7-9,11)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | 3/8 | 10 |
| 20 | 1/2 | 15 |
| 25 | 3/4 | 20 |
| 32 | 1 | 25 |
| 40 | 1 1/4 | 32 |
| 50 | 1 1/2 | 40 |
| 63 | 2 | 50 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 16 | 161 483 930 | 161 483 940 | 163 480 620 | 163 480 630 | 169 480 301 | 167 480 806 |
| 20 | 161 483 931 | 161 483 941 | 163 480 621 | 163 480 631 | 169 480 301 | 167 480 807 |
| 25 | 161 483 932 | 161 483 942 | 163 480 622 | 163 480 632 | 169 480 302 | 167 480 808 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 32 | 161 483 933 | 161 483 943 | 163 480 623 | 163 480 633 | 169 480 303 | 167 480 809 |
| 40 | 161 483 934 | 161 483 944 | 163 480 624 | 163 480 634 | 169 480 304 | 167 480 810 |
| 50 | 161 483 935 | 161 483 945 | 163 480 625 | 163 480 635 | 169 480 305 | 167 480 811 |
| 63 | 161 483 936 | 161 483 946 | 163 480 626 | 163 480 636 | 169 480 306 | 167 480 812 |

| d (mm) | PP-H FKM Code | PVDF FKM Code |
|-----------|------------------|------------------|
| 16 | 167 480 813 | 175 480 825 |
| 20 | 167 480 814 | 175 480 826 |
| 25 | 167 480 815 | 175 480 827 |
| 32 | 167 480 816 | 175 480 828 |
| 40 | 167 480 817 | 175 480 829 |
| 50 | 167 480 818 | 175 480 830 |
| 63 | 167 480 819 | 175 480 831 |



Lever

| d (mm) | Size (inch) | DN (mm) | PVC-U orange Code | ASA black Code |
|-----------|----------------|------------|-------------------------|-------------------|
| 16 | 3/8 | 10 | 161 480 725 | 160 480 115 |
| 20 | 1/2 | 15 | 161 480 725 | 160 480 115 |
| 25 | 3/4 | 20 | 161 480 726 | 160 480 116 |
| 32 | 1 | 25 | 161 480 727 | 160 480 117 |
| 40 | 1 1/4 | 32 | 161 480 728 | 160 480 118 |
| 50 | 1 1/2 | 40 | 161 480 729 | 160 480 119 |
| 63 | 2 | 50 | 161 480 730 | 160 480 120 |



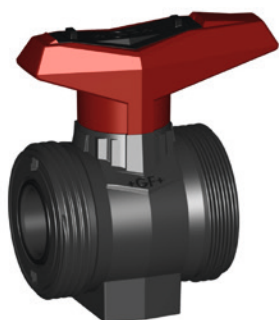
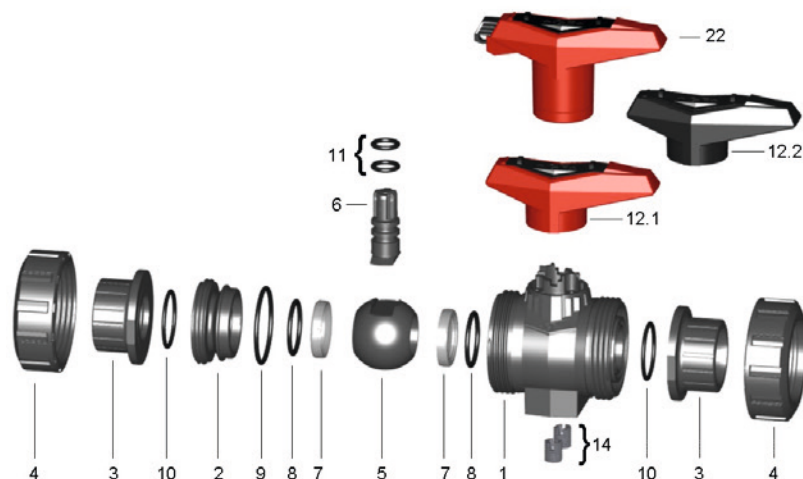
Face seal

Model:

- Face seal no. 10

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | 3/8 | 10 | 748 410 042 | 749 410 042 |
| 20 | 1/2 | 15 | 748 410 042 | 749 410 042 |
| 25 | 3/4 | 20 | 748 410 116 | 749 410 116 |
| 32 | 1 | 25 | 748 410 103 | 749 410 103 |
| 40 | 1 1/4 | 32 | 748 410 027 | 749 410 027 |
| 50 | 1 1/2 | 40 | 748 410 010 | 749 410 010 |
| 63 | 2 | 50 | 748 410 011 | 749 410 011 |

Spare parts ball valve type 546



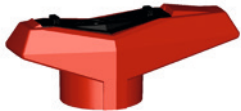
Central part

Model:

- Every connecting pieces and union nuts are listed on product range industry valves
- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)

| d (mm) | Size (inch) | DN (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code |
|-----------|----------------|------------|-----------------------|-------------------|-----------------------|-------------------|------------------|
| 16 | ¾ | 10 | 161 486 151 | 161 486 163 | 163 481 251 | 163 481 263 | 169 480 751 |
| 20 | ½ | 15 | 161 486 151 | 161 486 163 | 163 481 251 | 163 481 263 | 169 480 751 |
| 25 | ¾ | 20 | 161 486 152 | 161 486 164 | 163 481 252 | 163 481 264 | 169 480 752 |
| 32 | 1 | 25 | 161 486 153 | 161 486 165 | 163 481 253 | 163 481 265 | 169 480 753 |
| 40 | 1 ¼ | 32 | 161 486 154 | 161 486 166 | 163 481 254 | 163 481 266 | 169 480 754 |
| 50 | 1 ½ | 40 | 161 486 155 | 161 486 167 | 163 481 255 | 163 481 267 | 169 480 755 |
| 63 | 2 | 50 | 161 486 156 | 161 486 168 | 163 481 256 | 163 481 268 | 169 480 756 |
| 75 | 2 ½ | 65 | 161 486 157 | 161 486 169 | 163 481 257 | 163 481 269 | 169 480 757 |
| 90 | 3 | 80 | 161 486 158 | 161 486 170 | 163 481 258 | 163 481 270 | 169 480 758 |
| 110 | 4 | 100 | 161 486 159 | 161 486 171 | 163 481 259 | 163 481 271 | 169 480 759 |

| d (mm) | Size (inch) | DN (mm) | PP-H EPDM Code | PP-H FKM Code | PVDF FKM Code |
|-----------|----------------|------------|-------------------|------------------|------------------|
| 16 | ¾ | 10 | 167 482 876 | 167 482 888 | 175 482 963 |
| 20 | ½ | 15 | 167 482 876 | 167 482 888 | 175 482 963 |
| 25 | ¾ | 20 | 167 482 877 | 167 482 889 | 175 482 964 |
| 32 | 1 | 25 | 167 482 878 | 167 482 890 | 175 482 965 |
| 40 | 1 ¼ | 32 | 167 482 879 | 167 482 891 | 175 482 966 |
| 50 | 1 ½ | 40 | 167 482 880 | 167 482 892 | 175 482 967 |
| 63 | 2 | 50 | 167 482 881 | 167 482 893 | 175 482 968 |
| 75 | 2 ½ | 65 | 167 482 882 | 167 482 894 | 175 482 969 |
| 90 | 3 | 80 | 167 482 883 | 167 482 895 | 175 482 970 |
| 110 | 4 | 100 | 167 482 884 | 167 482 896 | 175 482 971 |



DN10/15 - 50



DN10/15 - 50



Lever 546

| d (mm) | Size (inch) | DN (mm) | Standard lever red Code | Standard lever black Code | Multifunctional lever Code |
|-----------|----------------|------------|-------------------------------|---------------------------------|----------------------------------|
| 16 | 3/8 | 10 | 167 484 088 | 167 484 076 | 167 484 100 |
| 20 | 1/2 | 15 | 167 484 088 | 167 484 076 | 167 484 100 |
| 25 | 3/4 | 20 | 167 484 089 | 167 484 077 | 167 484 101 |
| 32 | 1 | 25 | 167 484 090 | 167 484 078 | 167 484 102 |
| 40 | 1 1/4 | 32 | 167 484 091 | 167 484 079 | 167 484 103 |
| 50 | 1 1/2 | 40 | 167 484 092 | 167 484 080 | 167 484 104 |
| 63 | 2 | 50 | 167 484 093 | 167 484 081 | 167 484 105 |
| 75 | 2 1/2 | 65 | 167 484 094 | 167 484 082 | 161 486 689 |
| 90 | 3 | 80 | 167 484 095 | 167 484 083 | 161 486 690 |
| 110 | 4 | 100 | 167 484 096 | 167 484 084 | 161 486 691 |



Face seal

Model:

- Face seal no. 10

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | 3/8 | 10 | 748 410 059 | 749 410 059 |
| 20 | 1/2 | 15 | 748 410 059 | 749 410 059 |
| 25 | 3/4 | 20 | 748 410 106 | 749 410 106 |
| 32 | 1 | 25 | 748 410 151 | 749 410 151 |
| 40 | 1 1/4 | 32 | 748 410 062 | 749 410 062 |
| 50 | 1 1/2 | 40 | 748 410 003 | 749 410 003 |
| 63 | 2 | 50 | 748 410 231 | 749 410 231 |
| 75 | 2 1/2 | 65 | 748 410 119 | 749 410 119 |
| 90 | 3 | 80 | 748 410 023 | 749 410 023 |
| 110 | 4 | 100 | 748 410 254 | 749 410 254 |



Seal set for ball valve 546 (Pro)

Model:

- Seal set consisting of: backing-, body-, face- and stem seal (8-11)

| d (mm) | Size (inch) | DN (mm) | DN (mm) | EPDM Code | FKM Code | KALREZ Code |
|-----------|----------------|------------|------------|--------------|-------------|----------------|
| 16 - 20 | 1/2 | 15 | 10 - 15 | 161 486 400 | 161 486 410 | 161 488 280 |
| 25 | 3/4 | 20 | 20 | 161 486 401 | 161 486 411 | 161 488 281 |
| 32 | 1 | 25 | 25 | 161 486 402 | 161 486 412 | 161 488 282 |
| 40 | 1 1/4 | 32 | 32 | 161 486 403 | 161 486 413 | 161 488 283 |
| 50 | 1 1/2 | 40 | 40 | 161 486 404 | 161 486 414 | 161 488 284 |
| 63 | 2 | 50 | 50 | 161 486 405 | 161 486 415 | 161 488 285 |
| 75 | 2 1/2 | 65 | 65 | 161 486 406 | 161 486 416 | |
| 90 | 3 | 80 | 80 | 161 486 407 | 161 486 417 | |
| 110 | 4 | 100 | 100 | 161 486 408 | 161 486 418 | |



Ball set

Model:

- Ball seals standard in PTFE
- Ball set consisting of: ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)

| d (mm) | Size (inch) | DN (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code |
|-----------|----------------|------------|-----------------------|-------------------|-----------------------|-------------------|------------------|
| 16 | ¾ | 10 | 161 486 375 | 161 486 385 | 163 481 375 | 163 481 385 | 169 480 900 |
| 20 | ½ | 15 | 161 486 375 | 161 486 385 | 163 481 375 | 163 481 385 | 169 480 900 |
| 25 | ¾ | 20 | 161 486 376 | 161 486 386 | 163 481 376 | 163 481 386 | 169 480 901 |
| 32 | 1 | 25 | 161 486 377 | 161 486 387 | 163 481 377 | 163 481 387 | 169 480 902 |
| 40 | 1 ¼ | 32 | 161 486 378 | 161 486 388 | 163 481 378 | 163 481 388 | 169 480 903 |
| 50 | 1 ½ | 40 | 161 486 379 | 161 486 389 | 163 481 379 | 163 481 389 | 169 480 904 |
| 63 | 2 | 50 | 161 486 380 | 161 486 390 | 163 481 380 | 163 481 390 | 169 480 905 |
| 75 | 2 ½ | 65 | 161 486 381 | 161 486 391 | 163 481 381 | 163 481 391 | 169 480 906 |
| 90 | 3 | 80 | 161 486 382 | 161 486 392 | 163 481 382 | 163 481 392 | 169 480 907 |
| 110 | 4 | 100 | 161 486 383 | 161 486 393 | 163 481 383 | 163 481 393 | 169 480 908 |

| d (mm) | Size (inch) | DN (mm) | PP-H EPDM Code | PP-H FKM Code | PVDF FKM Code |
|-----------|----------------|------------|-------------------|------------------|------------------|
| 16 | ¾ | 10 | 167 484 125 | 167 484 135 | 175 483 275 |
| 20 | ½ | 15 | 167 484 125 | 167 484 135 | 175 483 275 |
| 25 | ¾ | 20 | 167 484 126 | 167 484 136 | 175 483 276 |
| 32 | 1 | 25 | 167 484 127 | 167 484 137 | 175 483 277 |
| 40 | 1 ¼ | 32 | 167 484 128 | 167 484 138 | 175 483 278 |
| 50 | 1 ½ | 40 | 167 484 129 | 167 484 139 | 175 483 279 |
| 63 | 2 | 50 | 167 484 130 | 167 484 140 | 175 483 280 |
| 75 | 2 ½ | 65 | 167 484 131 | 167 484 141 | 175 483 281 |
| 90 | 3 | 80 | 167 484 132 | 167 484 142 | 175 483 282 |
| 110 | 4 | 100 | 167 484 133 | 167 484 143 | 175 483 283 |

Spare parts for valve body type 519

Valve body with butt fusion spigot



| d (mm) | Size (inch) | PP-H Code | PP-Natur Code | PVDF HP Code | Weight (kg) |
|-----------|----------------|--------------|------------------|-----------------|----------------|
| 20 - 20 | ½ | 167 485 911 | 168 480 601 | 180 001 101 | 0.171 |
| 25 - 20 | ¾ | 167 485 912 | 168 480 602 | 180 001 102 | 0.236 |
| 25 - 25 | ¾ | 167 485 913 | 168 480 603 | 180 001 103 | 0.239 |
| 32 - 20 | 1 | 167 485 914 | 168 480 604 | 180 001 104 | 0.289 |
| 32 - 25 | 1 | 167 485 915 | 168 480 605 | 180 001 105 | 0.293 |
| 32 - 32 | 1 | 167 485 916 | 168 480 606 | 180 001 106 | 0.334 |
| 40 - 20 | 1 ¼ | 167 485 917 | 168 480 607 | 180 001 107 | 0.388 |
| 40 - 25 | 1 ¼ | | | 180 001 108 | 0.392 |
| 40 - 32 | 1 ¼ | | | 180 001 109 | 0.410 |
| 40 - 40 | 1 ¼ | | | 180 001 110 | 0.439 |
| 50 - 20 | 1 ½ | 167 485 922 | 168 480 611 | 180 001 111 | 0.408 |
| 50 - 25 | 1 ½ | 167 485 923 | 168 480 612 | 180 001 112 | 0.478 |
| 50 - 32 | 1 ½ | 167 485 924 | 168 480 613 | 180 001 113 | 0.483 |
| 50 - 40 | 1 ½ | | | 180 001 114 | 1.101 |
| 50 - 50 | 1 ½ | | | 180 001 115 | 1.111 |
| 63 - 20 | 2 | 167 485 927 | 168 480 616 | 180 001 116 | 0.485 |
| 63 - 25 | 2 | 167 485 928 | 168 480 617 | 180 001 117 | 0.563 |
| 63 - 32 | 2 | 167 485 929 | 168 480 618 | 180 001 118 | 0.569 |
| 63 - 40 | 2 | | | 180 001 119 | 1.278 |
| 63 - 50 | 2 | | | 180 001 120 | 1.343 |
| 63 - 63 | 2 | | | 180 001 121 | 1.356 |
| 90 - 25 | 3 | | | 180 001 126 | 0.855 |
| 90 - 32 | 3 | | | 180 001 127 | 0.871 |
| 90 - 50 | 3 | | | 180 001 128 | 1.796 |

| d (mm) | Size (inch) | PP-H Code | PP-Natur Code | PVDF HP Code | Weight (kg) |
|-----------|----------------|--------------|------------------|--------------------|----------------|
| 90 - 63 | 3 | | | 180 001 129 | 1.824 |
| 110 - 20 | 4 | | | 180 001 130 | 1.118 |
| 110 - 25 | 4 | | | 180 001 131 | 1.124 |
| 110 - 32 | 4 | | | 180 001 132 | 1.141 |
| 110 - 50 | 4 | | | 180 001 133 | 2.212 |
| 110 - 63 | 4 | | | 180 001 134 | 2.242 |

Spare parts for valve body type 515

Valve body with spigot ends



| d (mm) | DN (mm) | Size (inch) | PVC-U solvent cement spigot Code | Weight (kg) |
|-----------|------------|----------------|--|----------------|
| 20 | 15 | ½ | 161 492 072 | 0.115 |
| 25 | 20 | ¾ | 161 492 073 | 0.183 |
| 32 | 25 | 1 | 161 492 074 | 0.246 |
| 40 | 32 | 1 ¼ | 161 492 075 | 0.379 |
| 50 | 40 | 1 ½ | 161 492 076 | 0.602 |
| 63 | 50 | 2 | 161 492 077 | 1.055 |



| d (mm) | PVC-C solvent cement spigot Code | ABS solvent cement spigot Code | PP-H socket fusion spigot Code | PP-H butt fusion spigot IR Code | PP-N butt fusion spigot IR Code | PVDF socket fusion spigot Code |
|-----------|--|---|---|--|--|--|
| 20 | 163 482 062 | 169 481 862 | 167 483 342 | 167 483 882 | 168 480 462 | 175 483 692 |
| 25 | 163 482 063 | 169 481 863 | 167 483 343 | 167 483 883 | 168 480 463 | 175 483 693 |
| 32 | 163 482 064 | 169 481 864 | 167 483 344 | 167 483 884 | 168 480 464 | 175 483 694 |
| 40 | 163 482 065 | 169 481 865 | 167 483 345 | 167 483 885 | 168 480 465 | 175 483 695 |
| 50 | 163 482 066 | 169 481 866 | 167 483 346 | 167 483 886 | 168 480 466 | 175 483 696 |
| 63 | 163 482 067 | 169 481 867 | 167 483 347 | 167 483 887 | 168 480 467 | 175 483 697 |



| d (mm) | PVDF butt fusion spigot IR Code | PVDF HP butt fusion spigot IR Code |
|-----------|--|---|
| 20 | 175 483 742 | 180 001 012 |
| 25 | 175 483 743 | 180 001 013 |
| 32 | 175 483 744 | 180 001 014 |
| 40 | 175 483 745 | 180 001 015 |
| 50 | 175 483 746 | 180 001 016 |
| 63 | 175 483 747 | 180 001 017 |



Mounting Tool Type 604/605

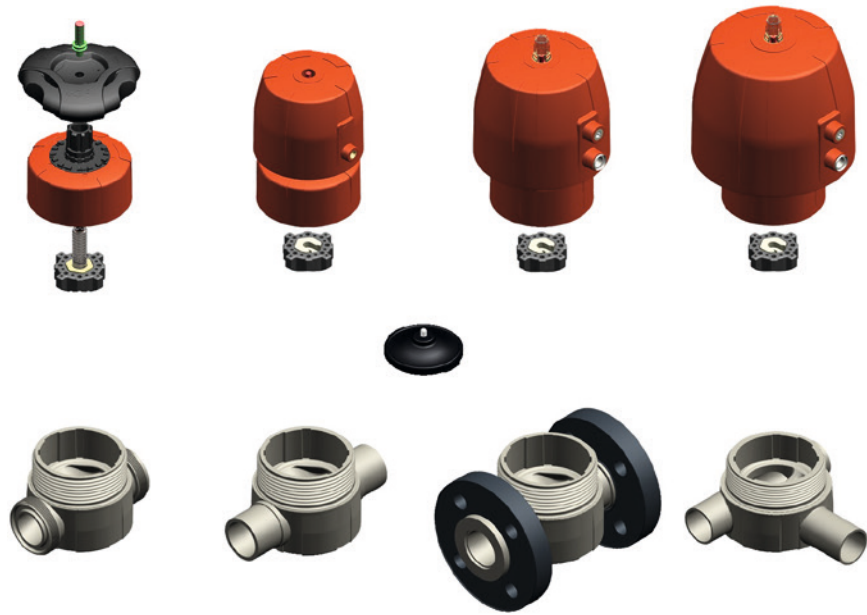
Model:

- Hook wrench for easy opening & maintenance

| Code | Weight (kg) |
|--------------------|----------------|
| 700 278 354 | 0.41 |

Spare parts for automatic valves

Diastar Six/Ten/Sixteen



Actuators

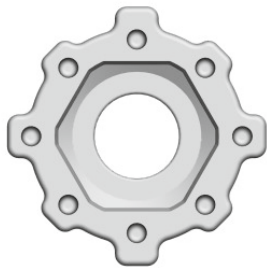
| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |

| d (mm) | DIASTAR Six FC Code | DIASTAR Ten FC Code | Diastar Ten + FC Code | Diastar Sixteen FC Code | Diastar Ten FO Code | Diastar Ten DA Code |
|-----------|---------------------------|---------------------------|-----------------------------|-------------------------------|---------------------------|---------------------------|
| 20 | 198 151 762 | 198 151 772 | 198 153 062 | 198 151 782 | 198 151 792 | 198 151 802 |
| 25 | 198 151 763 | 198 151 773 | 198 153 063 | 198 151 783 | 198 151 793 | 198 151 803 |
| 32 | 198 151 764 | 198 151 774 | 198 153 064 | 198 151 784 | 198 151 794 | 198 151 804 |
| 40 | 198 151 765 | 198 151 775 | 198 153 065 | 198 151 785 | 198 151 795 | 198 151 805 |
| 50 | 198 151 766 | 198 151 776 | 198 153 066 | 198 151 786 | 198 151 796 | 198 151 806 |
| 63 | 198 151 767 | 198 151 777 | 198 153 067 | 198 151 787 | 198 151 797 | 198 151 807 |

Indicator cap



| Size (mm) | Code |
|--------------|-------------|
| 1-2 | 198 806 773 |
| 3-5 | 198 806 774 |



Compressor set

Model:

- Incl. diaphragm holder

| d (mm) | Inch (inch) | DN (mm) | Code |
|-----------|----------------|------------|--------------------|
| 20 | 1/2 | 15 | 198 000 872 |
| 25 | 3/4 | 20 | 198 000 873 |
| 32 | 1 | 25 | 198 000 874 |
| 40 | 1 1/4 | 32 | 198 000 875 |
| 50 | 1 1/2 | 40 | 198 000 876 |
| 63 | 2 | 50 | 198 000 877 |



Seal set for DIASTAR Ten

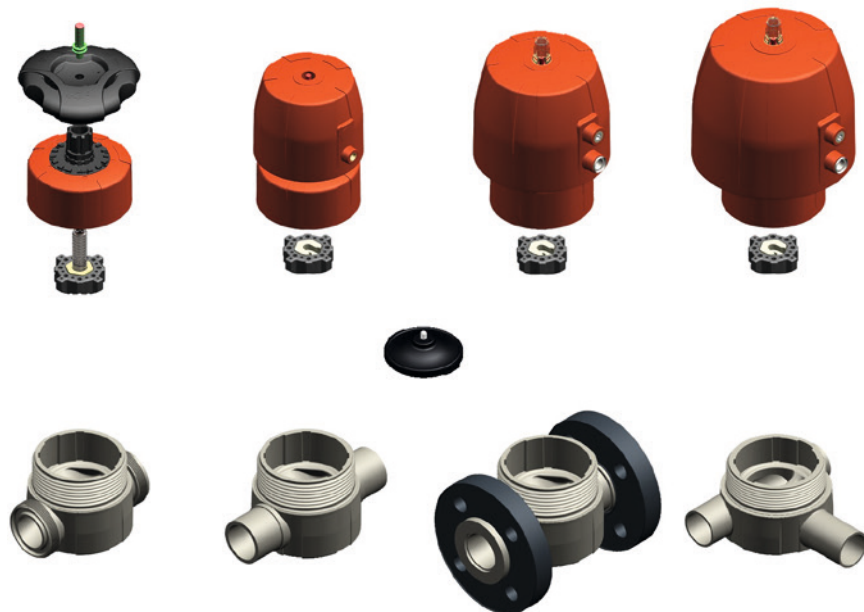
Model:

- Spindle seal and piston seal

| DN (mm) | Diastar Ten Code |
|------------|---------------------|
| 15 | 198 000 881 |
| 20/25 | 198 000 882 |
| 32 | 198 000 883 |
| 40/50 | 198 000 884 |



Spare parts for hand-operated valves Type 514/515/517/519





Bonnet complete

Model:

- Incl. compressor
- Diaphragm is not included

| d (mm) | Size (inch) | DN (mm) | Standard configuration PN10 Code | For pressure tight housing PN10 Code | Standard configuration PN16 Code | For pressure tight housing PN16 Code |
|-----------|----------------|------------|---|---|---|---|
| 20 | ½ | 15 | 198 151 742 | 198 151 752 | 198 151 842 | 198 151 852 |
| 25 | ¾ | 20 | 198 151 743 | 198 151 753 | 198 151 843 | 198 151 853 |
| 32 | 1 | 25 | 198 151 744 | 198 151 754 | 198 151 844 | 198 151 854 |
| 40 | 1 ¼ | 32 | 198 151 745 | 198 151 755 | 198 151 845 | 198 151 855 |
| 50 | 1 ½ | 40 | 198 151 746 | 198 151 756 | 198 151 846 | 198 151 856 |
| 63 | 2 | 50 | 198 151 747 | 198 151 757 | 198 151 847 | 198 151 857 |



Spindle assembly

Model:

- Incl. compressor
- Position indicator is not included

| DN-DN (mm) | Code |
|---------------|-------------|
| 15 - 20 | 198 204 327 |
| 25 - 32 | 198 204 328 |
| 40 - 50 | 198 204 329 |



Position indicator

| d (mm) | Size (inch) | DN (mm) | Code |
|-----------|----------------|------------|-------------|
| 20 | ½ | 15 | 167 484 992 |
| 25 | ¾ | 20 | 167 484 993 |
| 32 | 1 | 25 | 167 484 994 |
| 40 | 1 ¼ | 32 | 167 484 995 |
| 50 | 1 ½ | 40 | 167 484 996 |
| 63 | 2 | 50 | 167 484 997 |



Hand wheel

Model:

- Without position indicator

| DN (mm) | Code |
|------------|-------------|
| 15 - 20 | 198 204 162 |
| 25 - 32 | 198 204 164 |
| 40 - 50 | 198 104 166 |

Seal set



Model:

- For manual valve - pressure tight housing
- Incl. position indicator

| d (mm) | Size (inch) | DN (mm) | EPDM Code |
|-----------|----------------|------------|--------------|
| 20 | ½ | 15 | 198 000 892 |
| 25 | ¾ | 20 | 198 000 893 |
| 32 | 1 | 25 | 198 000 894 |
| 40 | 1 ¼ | 32 | 198 000 895 |
| 50 | 1 ½ | 40 | 198 000 896 |
| 63 | 2 | 50 | 198 000 897 |

Spare parts for valve body type 514



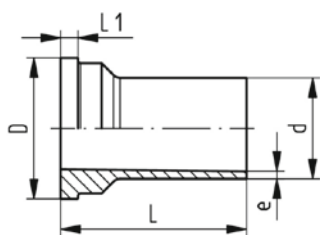
O-ring

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code | FKM for PVDF standard Code | FKM for PVDF-HP Code |
|-----------|----------------|------------|--------------|-------------|-------------------------------------|----------------------------|
| 20 | ½ | 15 | 748 410 006 | 749 410 006 | 749 410 005 | 749 411 005 |
| 25 | ¾ | 20 | 748 410 007 | 749 410 007 | 749 410 006 | 749 411 006 |
| 32 | 1 | 25 | 748 410 008 | 749 410 008 | 749 410 120 | 749 411 120 |
| 40 | 1 ¼ | 32 | 748 410 009 | 749 410 009 | 749 410 062 | 749 411 062 |
| 50 | 1 ½ | 40 | 748 410 010 | 749 410 010 | 749 410 172 | 749 411 172 |
| 63 | 2 | 50 | 748 410 011 | 749 410 011 | 749 410 054 | 749 411 054 |

SYGEF Standard Union end SDR21/PN16

Model:

- Material: PVDF



| d (mm) | FM | PVDF Code | D (mm) | L (mm) | L1 (mm) | e (mm) |
|-----------|---------|--------------|-----------|-----------|------------|-----------|
| 20 | BCF, IR | 735 608 606 | 30 | 53 | 5 | 1.9 |
| 25 | BCF, IR | 735 608 607 | 39 | 56 | 5 | 1.9 |
| 32 | BCF, IR | 735 608 608 | 45 | 59 | 6 | 2.4 |
| 40 | BCF, IR | 735 608 609 | 57 | 62 | 6 | 2.4 |
| 50 | BCF, IR | 735 608 610 | 63 | 65 | 7 | 3.0 |
| 63 | BCF, IR | 735 608 611 | 78 | 68 | 8 | 3.0 |
| 75 | BCF, IR | 735 608 612 | 101 | 66 | 9 | 3.6 |
| 90 | BCF, IR | 735 608 613 | 101 | 65 | 9 | 4.3 |
| 110 | BCF, IR | 735 608 614 | 121 | 65 | 10 | 5.3 |



Union end PVC-U Rc
for diaphragm valves type 514/DIASTAR, pressure regulating valves type 582/586 and variable area flow meters type 123/335/350 (6)

| DN (mm) | d (mm) | Size (inch) | PVC-U Rc Code |
|------------|-----------|----------------|--------------------|
| 15 | 20 | ½ | 721 605 606 |
| 20 | 25 | ¾ | 721 605 607 |
| 25 | 32 | 1 | 721 605 608 |
| 32 | 40 | 1 ¼ | 721 605 609 |
| 40 | 50 | 1 ½ | 721 605 610 |
| 50 | 63 | 2 | 721 605 611 |

Valve body with true union



Model:

- Without connection parts

| d (mm) | Size (inch) | DN (mm) | PVC-U Code | PVC-C Code | ABS Code | PP-H Code | PVDF Code |
|-----------|----------------|------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 20 | ½ | 15 | 161 492 062 | 163 482 052 | 169 481 322 | 167 483 522 | 175 483 682 |
| 25 | ¾ | 20 | 161 492 063 | 163 482 053 | 169 481 323 | 167 483 523 | 175 483 683 |
| 32 | 1 | 25 | 161 492 064 | 163 482 054 | 169 481 334 | 167 483 524 | 175 483 684 |
| 40 | 1 ¼ | 32 | 161 492 065 | 163 482 055 | 169 481 325 | 167 483 525 | 175 483 685 |
| 50 | 1 ½ | 40 | 161 492 066 | 163 482 056 | 169 481 326 | 167 483 526 | 175 483 686 |
| 63 | 2 | 50 | 161 492 067 | 163 482 057 | 169 481 327 | 167 483 527 | 175 483 687 |

| d (mm) | Size (inch) | DN (mm) | PVDF HP Code |
|-----------|----------------|------------|--------------------|
| 20 | ½ | 15 | 180 001 002 |
| 25 | ¾ | 20 | 180 001 003 |
| 32 | 1 | 25 | 180 001 004 |
| 40 | 1 ¼ | 32 | 180 001 005 |
| 50 | 1 ½ | 40 | 180 001 006 |
| 63 | 2 | 50 | 180 001 007 |

Special wrench for DV

| d (mm) | DN (mm) | Code |
|-----------|------------|--------------------|
| 20 | 15 | 198 154 012 |
| 25 | 20 | 198 154 013 |
| 32 | 25 | 198 154 014 |
| 40 | 32 | 198 154 015 |
| 50 | 40 | 198 154 016 |
| 63 | 50 | 198 154 017 |



Spare parts diaphragm For 5 series

Model:

- For type 514, 515, 517, 519 and Diastar

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 20 | ¾ | 15 |
| 25 | 1 | 20 |
| 32 | 1 ¼ | 25 |
| 40 | 1 ½ | 32 |
| 50 | 2 | 40 |
| 63 | 2 ½ | 50 |

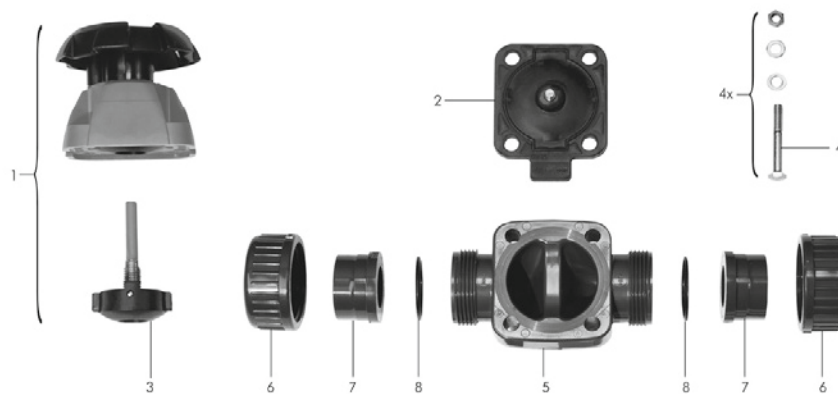
| d (mm) | NBR Code | EPDM Code | FKM Code | PTFE/EPDM Code | PTFE/EPDM HP Code | PTFE/FKM Code |
|-----------|-------------|--------------|-------------|-------------------|-------------------------|------------------|
| 20 | 745 500 012 | 748 500 012 | 749 500 012 | 747 502 012 | 747 502 032 | 747 503 012 |
| 25 | 745 500 013 | 748 500 013 | 749 500 013 | 747 502 013 | 747 502 033 | 747 503 013 |
| 32 | 745 500 014 | 748 500 014 | 749 500 014 | 747 502 014 | 747 502 034 | 747 503 014 |
| 40 | 745 500 015 | 748 500 015 | 749 500 015 | 747 502 015 | 747 502 035 | 747 503 015 |
| 50 | 745 500 016 | 748 500 016 | 749 500 016 | 747 502 016 | 747 502 036 | 747 503 016 |
| 63 | 745 500 017 | 748 500 017 | 749 500 017 | 747 502 017 | 747 502 037 | 747 503 017 |



Spare parts for valve body type 517 Flat gasket

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 20 | ¾ | 15 | 748 400 006 | 749 400 006 |
| 25 | 1 | 20 | 748 400 007 | 749 400 007 |
| 32 | 1 ¼ | 25 | 748 400 008 | 749 400 008 |
| 40 | 1 ½ | 32 | 748 400 009 | 749 400 009 |
| 50 | 2 | 40 | 748 400 010 | 749 400 010 |
| 63 | 2 ½ | 50 | 748 400 011 | 749 400 011 |

Spare parts diaphragm valve type 314





Bonnet complete

Model:

- Without diaphragm (1, 3)

| d (mm) | Size (inch) | DN (mm) | elastomer diaphragm Code | PTFE diaphragm Code |
|-----------|----------------|------------|--------------------------------|---------------------------|
| 20 | ½ | 15 | 161 484 625 | 161 484 632 |
| 25 | ¾ | 20 | 161 484 626 | 161 484 633 |
| 32 | 1 | 25 | 161 484 627 | 161 484 634 |
| 40 | 1 ¼ | 32 | 161 484 628 | 161 484 635 |
| 50 | 1 ½ | 40 | 161 484 629 | 161 484 636 |
| 63 | 2 | 50 | 161 484 630 | 161 484 637 |



Union end seal for PP-H and PVDF valves

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 20 | ½ | 15 | 748 410 006 | 749 410 006 |
| 25 | ¾ | 20 | 748 410 007 | 749 410 007 |
| 32 | 1 | 25 | 748 410 008 | 749 410 008 |
| 40 | 1 ¼ | 32 | 748 410 009 | 749 410 009 |
| 50 | 1 ½ | 40 | 748 410 010 | 749 410 010 |
| 63 | 2 | 50 | 748 410 011 | 749 410 011 |



Union end seal for PVC-U valves

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 20 | ½ | 15 | 748 410 038 | 749 410 038 |
| 25 | ¾ | 20 | 748 410 044 | 749 410 044 |
| 32 | 1 | 25 | 748 410 195 | 749 410 195 |
| 40 | 1 ¼ | 32 | 748 410 052 | 749 410 052 |
| 50 | 1 ½ | 40 | 748 410 134 | 749 410 134 |
| 63 | 2 | 50 | 748 410 135 | 749 410 135 |



Fastening set (4)

Model:

- * with support plate

| d (mm) | Size (inch) | DN (mm) | for PVC-U PVC-C ABS Code | for PP PVDF * Code |
|-----------|----------------|------------|--------------------------------|--------------------------|
| 20 | ½ | 15 | 161 484 704 | 198 000 650 |
| 25 | ¾ | 20 | 161 484 705 | 198 000 651 |
| 32 | 1 | 25 | 161 484 706 | 198 000 652 |
| 40 | 1 ¼ | 32 | 161 484 707 | 198 000 653 |
| 50 | 1 ½ | 40 | 161 484 708 | 198 000 654 |
| 63 | 2 | 50 | 161 484 709 | 198 000 655 |



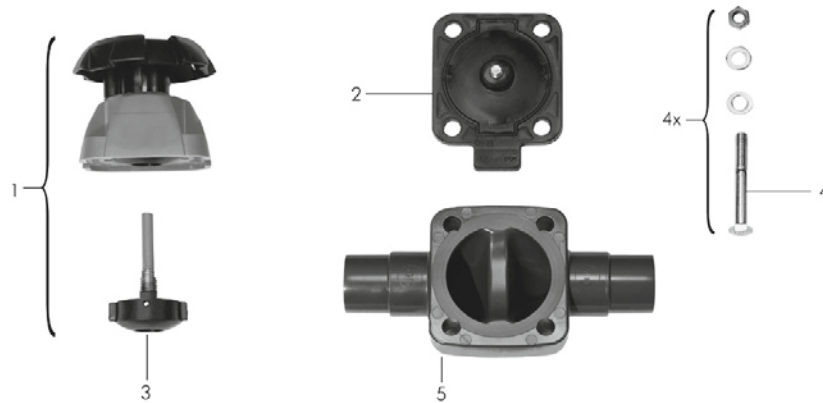
Diaphragm (2)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |

| d (mm) | NBR Code | EPDM Code | FKM Code | PTFE/EPDM Code | PTFE/FKM Code | CSM Code |
|-----------|-------------|--------------|-------------|-------------------|------------------|-------------|
| 20 | 161 311 710 | 161 481 022 | 161 481 092 | 161 311 698 | 161 481 926 | 161 311 728 |
| 25 | 161 311 711 | 161 481 023 | 161 481 093 | 161 311 699 | 161 481 927 | 161 311 729 |
| 32 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 40 | 161 311 713 | 161 481 025 | 161 481 095 | 161 311 701 | 161 481 929 | 161 311 731 |
| 50 | 161 311 714 | 161 481 026 | 161 481 096 | 161 311 702 | 161 481 930 | 161 311 732 |
| 63 | 161 311 715 | 161 481 027 | 161 481 097 | 161 311 703 | 161 481 931 | 161 311 733 |

| d (mm) | PTFE/EPDM SYGEF PLUS HP Code |
|-----------|---------------------------------------|
| 20 | 161 484 452 |
| 25 | 161 484 453 |
| 32 | 161 484 454 |
| 40 | 161 484 455 |
| 50 | 161 484 456 |
| 63 | 161 484 457 |

Spare parts diaphragm valve type 315



Bonnet complete

Model:

- Without diaphragm (1, 3)

| d (mm) | Size (inch) | DN (mm) | elastomer diaphragm Code | PTFE diaphragm Code |
|-----------|----------------|------------|--------------------------------|---------------------------|
| 20 | ½ | 15 | 161 484 625 | 161 484 632 |
| 25 | ¾ | 20 | 161 484 626 | 161 484 633 |
| 32 | 1 | 25 | 161 484 627 | 161 484 634 |
| 40 | 1 ¼ | 32 | 161 484 628 | 161 484 635 |
| 50 | 1 ½ | 40 | 161 484 629 | 161 484 636 |
| 63 | 2 | 50 | 161 484 630 | 161 484 637 |





Diaphragm (2)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |

| d (mm) | NBR Code | EPDM Code | FKM Code | PTFE/EPDM Code | PTFE/FKM Code | CSM Code |
|-----------|-------------|--------------|-------------|-------------------|------------------|-------------|
| 20 | 161 311 710 | 161 481 022 | 161 481 092 | 161 311 698 | 161 481 926 | 161 311 728 |
| 25 | 161 311 711 | 161 481 023 | 161 481 093 | 161 311 699 | 161 481 927 | 161 311 729 |
| 32 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 40 | 161 311 713 | 161 481 025 | 161 481 095 | 161 311 701 | 161 481 929 | 161 311 731 |
| 50 | 161 311 714 | 161 481 026 | 161 481 096 | 161 311 702 | 161 481 930 | 161 311 732 |
| 63 | 161 311 715 | 161 481 027 | 161 481 097 | 161 311 703 | 161 481 931 | 161 311 733 |

| d (mm) | PTFE/EPDM SYGEF PLUS HP Code |
|-----------|---------------------------------------|
| 20 | 161 484 452 |
| 25 | 161 484 453 |
| 32 | 161 484 454 |
| 40 | 161 484 455 |
| 50 | 161 484 456 |
| 63 | 161 484 457 |



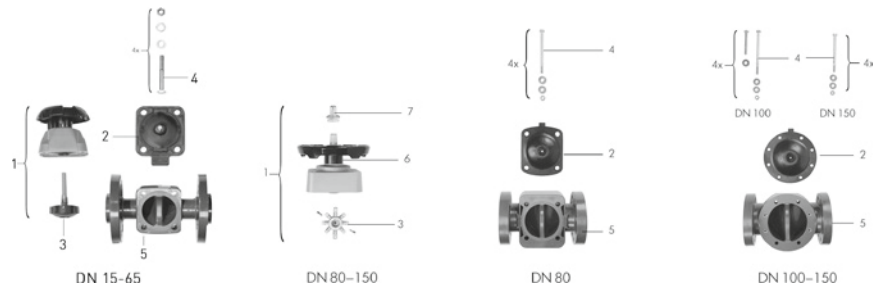
Fastening set (4)

Model:

- * with support plate

| d (mm) | Size (inch) | DN (mm) | for PVC-U PVC-C Code | for PP PVDF Code * |
|-----------|----------------|------------|----------------------------|-----------------------|
| 20 | ½ | 15 | 161 484 704 | 198 000 650 |
| 25 | ¾ | 20 | 161 484 705 | 198 000 651 |
| 32 | 1 | 25 | 161 484 706 | 198 000 652 |
| 40 | 1 ¼ | 32 | 161 484 707 | 198 000 653 |
| 50 | 1 ½ | 40 | 161 484 708 | 198 000 654 |
| 63 | 2 | 50 | 161 484 709 | 198 000 655 |

Spare parts diaphragm valve type 317





Bonnet complete

Model:

- Without diaphragm (1, 3)

| d (mm) | Size (inch) | DN (mm) | elastomer diaphragm Code | PTFE diaphragm Code |
|-----------|----------------|------------|--------------------------------|---------------------------|
| 20 | ½ | 15 | 161 484 625 | 161 484 632 |
| 25 | ¾ | 20 | 161 484 626 | 161 484 633 |
| 32 | 1 | 25 | 161 484 627 | 161 484 634 |
| 40 | 1 ¼ | 32 | 161 484 628 | 161 484 635 |
| 50 | 1 ½ | 40 | 161 484 629 | 161 484 636 |
| 63 | 2 | 50 | 161 484 630 | 161 484 637 |
| 75 | 2 ½ | 65 | 161 484 631 | 161 484 638 |
| 90 | 3 | 80 | 161 482 514 | 161 482 516 |
| 110 | 4 | 100 | 161 482 515 | 161 482 517 |
| 160 | 6 | 150 | 161 482 901 | 161 482 906 |



Diaphragm (2)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |
| 75 | 2 ½ | 65 |
| 90 | 3 | 80 |
| 110 | 4 | 100 |
| 160 | 6 | 150 |

| d (mm) | NBR Code | EPDM Code | FKM Code | PTFE/EPDM Code | PTFE/FKM Code | PTFE/EPDM HP Code |
|-----------|-------------|--------------|-------------|-------------------|------------------|-------------------------|
| 20 | 161 311 710 | 161 481 022 | 161 481 092 | 161 311 698 | 161 481 926 | 161 484 452 |
| 25 | 161 311 711 | 161 481 023 | 161 481 093 | 161 311 699 | 161 481 927 | 161 484 453 |
| 32 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 484 454 |
| 40 | 161 311 713 | 161 481 025 | 161 481 095 | 161 311 701 | 161 481 929 | 161 484 455 |
| 50 | 161 311 714 | 161 481 026 | 161 481 096 | 161 311 702 | 161 481 930 | 161 484 456 |
| 63 | 161 311 715 | 161 481 027 | 161 481 097 | 161 311 703 | 161 481 931 | 161 484 457 |
| 75 | 161 480 231 | 161 481 028 | 161 481 098 | 161 480 240 | 161 481 932 | 161 484 458 |
| 90 | 161 480 232 | 161 481 029 | 161 481 099 | 161 480 241 | | 161 484 459 |
| 110 | 161 480 233 | 161 481 030 | 161 481 100 | 161 480 242 | | 161 484 460 |
| 160 | 161 482 751 | 161 482 754 | 161 481 102 | 161 482 760 | | 161 482 760 |

| d (mm) | CSM Code |
|-----------|-------------|
| 20 | 161 311 728 |
| 25 | 161 311 729 |
| 32 | 161 311 730 |
| 40 | 161 311 731 |
| 50 | 161 311 732 |
| 63 | 161 311 733 |
| 75 | 161 480 237 |
| 90 | 161 480 238 |
| 110 | 161 480 239 |
| 160 | 161 482 757 |



Fastening set (4)

Model:

- * with support plate

| d (mm) | Size (inch) | DN (mm) | for PVC-U PVC-C ABS Code | for PP PVDF * Code |
|-----------|----------------|------------|--------------------------------|--------------------------|
| 20 | ½ | 15 | 161 484 704 | 198 000 650 |
| 25 | ¾ | 20 | 161 484 705 | 198 000 651 |
| 32 | 1 | 25 | 161 484 706 | 198 000 652 |
| 40 | 1 ¼ | 32 | 161 484 707 | 198 000 653 |
| 50 | 1 ½ | 40 | 161 484 708 | 198 000 654 |
| 63 | 2 | 50 | 161 484 709 | 198 000 655 |
| 75 | 2 ½ | 65 | 161 483 032 | 161 483 032 |
| 90 | 3 | 80 | 161 483 033 | 161 483 033 |
| 110 | 4 | 100 | 161 483 034 | 161 483 034 |
| 160 | 6 | 150 | 161 483 037 | 161 483 037 |



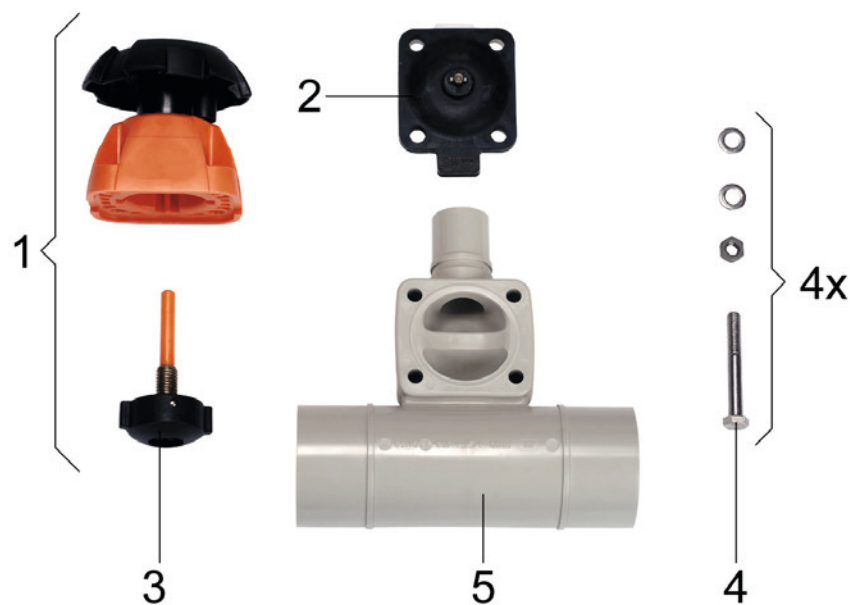
O-ring seal (6)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | NBR Code |
|-----------|----------------|------------|--------------|-------------|
| 90 | 3 | 80 | | 745 410 107 |
| 110 | 4 | 100 | | 745 410 107 |
| 160 | 6 | 150 | 748 410 121 | |

Indicator cap (7)

| d (mm) | Size (inch) | DN (mm) | PVC-U SAN Code |
|-----------|----------------|------------|-------------------|
| 90 | 3 | 80 | 161 481 759 |
| 110 | 4 | 100 | 161 481 760 |
| 160 | 6 | 150 | 161 482 744 |

Spare parts diaphragm valve type 319





Bonnet complete

Model:

- Without diaphragm (1, 3)

| d (mm) | Size (inch) | elastomer diaphragm Code | PTFE diaphragm Code |
|-----------|----------------|--------------------------------|---------------------------|
| 20-20 | 1/2 | 161 484 625 | 161 484 632 |
| 25-20 | 3/4 | 161 484 626 | 161 484 633 |
| 25-25 | 3/4 | 161 484 626 | 161 484 633 |
| 32-20 | 1 | 161 484 627 | 161 484 634 |
| 32-25 | 1 | 161 484 627 | 161 484 634 |
| 32-32 | 1 | 161 484 627 | 161 484 634 |
| 40-20 | 1 1/4 | 161 484 627 | 161 484 634 |
| 40-25 | 1 1/4 | 161 484 627 | 175 481 860 |
| 40-32 | 1 1/4 | 161 484 627 | 175 481 860 |
| 40-40 | 1 1/4 | 161 484 628 | 175 481 861 |
| 50-20 | 1 1/2 | 161 484 627 | 161 484 634 |
| 50-25 | 1 1/2 | 161 484 627 | 161 484 634 |
| 50-32 | 1 1/2 | 161 484 627 | 161 484 634 |
| 50-40 | 1 1/2 | 161 484 629 | 175 481 862 |
| 50-50 | 1 1/2 | 161 484 629 | 175 481 862 |
| 63-20 | 2 | 161 484 627 | 161 484 634 |
| 63-25 | 2 | 161 484 627 | 161 484 634 |
| 63-32 | 2 | 161 484 627 | 161 484 634 |
| 63-40 | 2 | 161 484 630 | 175 481 863 |
| 63-50 | 2 | 161 484 630 | 175 481 863 |
| 63-63 | 2 | 161 484 630 | 175 481 863 |
| 75-40 | 2 1/2 | 161 484 628 | 175 481 861 |
| 75-50 | 2 1/2 | 161 484 630 | 175 481 863 |
| 75-63 | 2 1/2 | 161 484 630 | 175 481 863 |
| 90-20 | 3 | 161 484 627 | 161 484 634 |
| 90-25 | 3 | 161 484 627 | 161 484 634 |
| 90-32 | 3 | 161 484 627 | 161 484 634 |
| 90-50 | 3 | 161 484 630 | 161 484 636 |
| 90-63 | 3 | 161 484 630 | 161 484 636 |
| 110-20 | 4 | 161 484 627 | 161 484 634 |
| 110-25 | 4 | 161 484 627 | 161 484 634 |
| 110-32 | 4 | 161 484 627 | 161 484 634 |
| 110-50 | 4 | 161 484 630 | 161 484 636 |
| 110-63 | 4 | 161 484 630 | 161 484 636 |



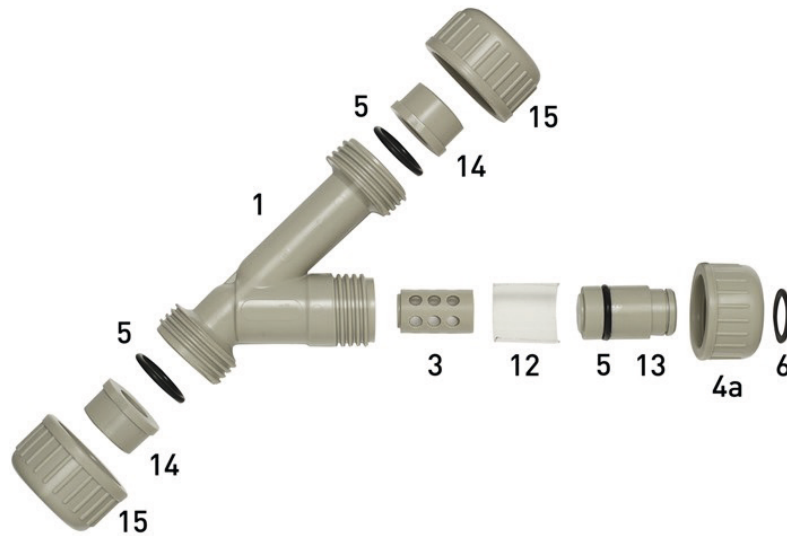
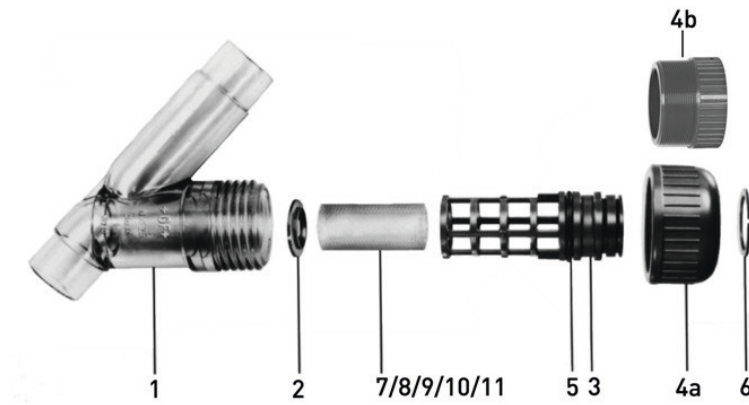
Diaphragm (2)

| d (mm) | NBR Code | EPDM Code | FKM Code | PTFE/EPDM Code | PTFE/FKM Code | CSM Code |
|-----------|-------------|--------------|-------------|-------------------|------------------|-------------|
| 20-20 | 161 311 710 | 161 481 022 | 161 481 092 | 161 311 698 | 161 481 926 | 161 311 728 |
| 25-20 | 161 311 711 | 161 481 023 | 161 481 093 | 161 311 699 | 161 481 927 | 161 311 729 |
| 25-25 | 161 311 711 | 161 481 023 | 161 481 093 | 161 311 699 | 161 481 927 | 161 311 729 |
| 32-20 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 32-25 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 32-32 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 40-20 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 40-25 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 40-32 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 40-40 | 161 311 713 | 161 481 025 | 161 481 095 | 161 311 701 | 161 481 929 | 161 311 731 |
| 50-20 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 50-25 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 50-32 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 50-40 | 161 311 714 | 161 481 026 | 161 481 096 | 161 311 702 | 161 481 930 | 161 311 732 |
| 50-50 | 161 311 714 | 161 481 026 | 161 481 096 | 161 311 702 | 161 481 930 | 161 311 732 |
| 63-20 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 63-25 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |

| d (mm) | NBR Code | EPDM Code | FKM Code | PTFE/EPDM Code | PTFE/FKM Code | CSM Code |
|------------------|---------------------------|----------------------------|---------------------------|---------------------------------|--------------------------------|---------------------------|
| 63-32 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 63-40 | 161 311 715 | 161 481 027 | 161 481 097 | 161 311 703 | 161 481 931 | 161 311 733 |
| 63-50 | 161 311 715 | 161 481 027 | 161 481 097 | 161 311 703 | 161 481 931 | 161 311 733 |
| 63-63 | 161 311 715 | 161 481 027 | 161 481 097 | 161 311 703 | 161 481 931 | 161 311 733 |
| 75-40 | 161 311 715 | 161 481 025 | 161 481 095 | 161 311 701 | 161 481 929 | 161 311 731 |
| 75-50 | 161 311 715 | 161 481 027 | 161 481 095 | 161 311 703 | 161 481 931 | 161 311 733 |
| 75-63 | 161 311 715 | 161 481 027 | 161 481 097 | 161 311 703 | 161 481 931 | 161 311 733 |
| 90-20 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 90-25 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 90-32 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 90-50 | 161 311 715 | 161 481 027 | 161 481 097 | 161 311 703 | 161 481 931 | 161 311 733 |
| 90-63 | 161 311 715 | 161 481 027 | 161 481 097 | 161 311 703 | 161 481 931 | 161 311 733 |
| 110-20 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 110-25 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 110-32 | 161 311 712 | 161 481 024 | 161 481 094 | 161 311 700 | 161 481 928 | 161 311 730 |
| 110-50 | 161 311 715 | 161 481 027 | 161 481 097 | 161 311 703 | 161 481 931 | 161 311 733 |
| 110-63 | 161 311 715 | 161 481 027 | 161 481 097 | 161 311 703 | 161 481 931 | 161 311 733 |

| d (mm) | PTFE/EPDM SYGEF PLUS Code |
|------------------|--|
| 20-20 | 161 484 452 |
| 25-20 | 161 484 453 |
| 25-25 | 161 484 453 |
| 32-20 | 161 484 454 |
| 32-25 | 161 484 454 |
| 32-32 | 161 484 454 |
| 40-20 | 161 484 454 |
| 40-25 | 161 484 454 |
| 40-32 | 161 484 454 |
| 40-40 | 161 484 455 |
| 50-20 | 161 484 454 |
| 50-25 | 161 484 454 |
| 50-32 | 161 484 454 |
| 50-40 | 161 484 456 |
| 50-50 | 161 484 456 |
| 63-20 | 161 484 454 |
| 63-25 | 161 484 454 |
| 63-32 | 161 484 454 |
| 63-40 | 161 484 457 |
| 63-50 | 161 484 457 |
| 63-63 | 161 484 457 |
| 75-40 | 161 484 455 |
| 75-50 | 161 484 457 |
| 75-63 | 161 484 457 |
| 90-20 | 161 484 454 |
| 90-25 | 161 484 454 |
| 90-32 | 161 484 454 |
| 90-50 | 161 484 457 |
| 90-63 | 161 484 457 |
| 110-20 | 161 484 454 |
| 110-25 | 161 484 454 |
| 110-32 | 161 484 454 |
| 110-50 | 161 484 457 |
| 110-63 | 161 484 457 |

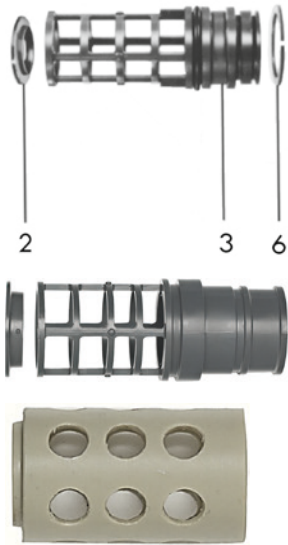
Spare parts line strainer type 305/306



Body (1)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |
| 75 | 2 ½ | 65 |
| 90 | 3 | 80 |

| d (mm) | PVC-U transparent Code | PVC-U transparent ASTM Code | PVC-C Code | ABS Code | PP-H Code | PVC-U metric Code |
|-----------|------------------------------|--------------------------------------|---------------|-------------|--------------|-------------------------|
| 20 | 192 300 301 | 192 480 001 | 163 481 075 | 169 480 600 | 167 305 010 | 161 300 301 |
| 25 | 192 300 351 | 192 480 002 | 163 481 076 | 169 480 601 | 167 305 011 | 161 300 351 |
| 32 | 192 300 401 | 192 301 401 | 163 481 077 | 169 480 602 | 167 305 012 | 161 300 401 |
| 40 | 192 300 451 | 192 301 451 | 163 481 078 | 169 480 603 | 167 305 013 | 161 300 451 |
| 50 | 192 300 501 | 192 301 501 | 163 481 079 | 169 480 604 | 167 305 014 | 161 300 501 |
| 63 | 192 300 551 | 192 301 551 | 163 481 080 | 169 480 605 | 167 305 015 | 161 300 551 |
| 75 | 192 300 601 | | | | | 161 300 601 |
| 90 | 192 300 651 | | | | | 161 300 651 |



Screen set

Model:

- Screen set PVC-U and PVC-C DN15-DN50 consisting of: screen (3), screen support ring (2) and circlip (6), without o-ring. PVC-U DN65-DN80: screen (3) and screen support ring (2), without o-ring. PP-H DN15-DN50: screen cage (3), circlip (6), screen perforation (12) and screen cage bracket incl. o-ring (13).

| d (mm) | Size (inch) | DN (mm) | PVC-U Code | PP-H EPDM Code | PP-H FKM Code | PVC-C Code |
|-----------|----------------|------------|---------------|-------------------|------------------|---------------|
| 20 | ½ | 15 | 161 483 126 | 167 305 280 | 167 305 290 | 163 305 330 |
| 25 | ¾ | 20 | 161 483 127 | 167 305 281 | 167 305 291 | 163 305 331 |
| 32 | 1 | 25 | 161 483 128 | 167 305 282 | 167 305 292 | 163 305 332 |
| 40 | 1 ¼ | 32 | 161 483 129 | 167 305 283 | 167 305 293 | 163 305 333 |
| 50 | 1 ½ | 40 | 161 483 130 | 167 305 284 | 167 305 294 | 163 305 334 |
| 63 | 2 | 50 | 161 483 131 | 167 305 285 | 167 305 295 | 163 305 335 |
| 75 | 2 ½ | 65 | 161 483 132 | | | |
| 90 | 3 | 80 | 161 483 133 | | | |



Screen perforation (7-11)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |
| 75 | 2 ½ | 65 |
| 90 | 3 | 80 |

| d (mm) | PVC-U 0.5mm (7) Code | PVC-U 0.8mm (8) Code | PVC-U 1.4mm (9) Code | PVC-U 2.2mm (10) Code | PP-H 0.5mm (12) Code | stainless steel 0.5mm AISI 316 (11) Code |
|-----------|----------------------------|----------------------------|----------------------------|-----------------------------|----------------------------|--|
| 20 | 161 305 339 | 161 305 338 | 161 305 337 | 161 305 336 | 167 305 030 | 161 486 100 |
| 25 | 161 305 389 | 161 305 388 | 161 305 387 | 161 305 386 | 167 305 031 | 161 486 101 |
| 32 | 161 305 439 | 161 305 438 | 161 305 437 | 161 305 436 | 167 305 032 | 161 486 102 |
| 40 | 161 305 489 | 161 305 488 | 161 305 487 | 161 305 486 | 167 305 033 | 161 486 103 |
| 50 | 161 305 539 | 161 305 538 | 161 305 537 | 161 305 536 | 167 305 034 | 161 486 104 |
| 63 | 161 305 589 | 161 305 588 | 161 305 587 | 161 305 586 | 167 305 035 | 161 486 105 |
| 75 | 161 305 639 | 161 305 638 | 161 305 637 | 161 305 636 | | 161 486 106 |
| 90 | 161 305 689 | 161 305 688 | 161 305 687 | 161 305 686 | | 161 486 107 |



Screen cage bracket (13)

Model:

- Only available for PP-H version
- With o-ring (5)

| d (mm) | Size (inch) | DN (mm) | PP-H EPDM Code | PP-H FKM Code |
|-----------|----------------|------------|-------------------|------------------|
| 20 | ½ | 15 | 167 305 260 | 167 305 270 |
| 25 | ¾ | 20 | 167 305 261 | 167 305 271 |
| 32 | 1 | 25 | 167 305 262 | 167 305 272 |
| 40 | 1 ¼ | 32 | 167 305 263 | 167 305 273 |
| 50 | 1 ½ | 40 | 167 305 264 | 167 305 274 |
| 63 | 2 | 50 | 167 305 265 | 167 305 275 |



Screen cage (3)

Model:

- Screen cage in PVC-U, PVC-C and PP-H

| d (mm) | Size (inch) | DN (mm) | PVC-U Code | PVC-C Code | PP-H Code |
|-----------|----------------|------------|---------------|---------------|--------------|
| 20 | ½ | 15 | 161 305 303 | 163 481 102 | 167 305 020 |
| 25 | ¾ | 20 | 161 305 353 | 163 481 103 | 167 305 021 |
| 32 | 1 | 25 | 161 305 403 | 163 481 104 | 167 305 022 |
| 40 | 1 ¼ | 32 | 161 305 453 | 163 481 105 | 167 305 023 |
| 50 | 1 ½ | 40 | 161 305 503 | 163 481 106 | 167 305 024 |
| 63 | 2 | 50 | 161 305 553 | 163 481 107 | 167 305 025 |
| 75 | 2 ½ | 65 | 161 305 603 | | |
| 90 | 3 | 80 | 161 305 653 | | |



Circlip (6 + 7)

| Description | d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-------------|-----------|----------------|------------|---------------|
| | 16 | ⅝ | 10 | 161 482 076 |
| PP-H | 20 | ½ | 15 | 161 482 017 |
| PP-H | 25 | ¾ | 20 | 161 482 018 |
| PP-H | 32 | 1 | 25 | 161 482 019 |
| PP-H | 40 | 1 ¼ | 32 | 161 482 020 |
| PP-H | 50 | 1 ½ | 40 | 161 482 021 |
| PP-H | 63 | 2 | 50 | 161 482 022 |



Plug (4b)

Model:

- Only for PVC-U DN65-DN80

| d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 75 | 2 ½ | 65 | 161 305 604 |
| 90 | 3 | 80 | 161 305 654 |



Body seal (5)

Model:

- Body seal vor PVC-U and PP-H

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 20 | ½ | 15 | 748 410 006 | 749 410 006 |
| 25 | ¾ | 20 | 748 410 001 | 749 410 001 |
| 32 | 1 | 25 | 748 410 007 | 749 410 007 |
| 40 | 1 ¼ | 32 | 748 410 002 | 749 410 002 |
| 50 | 1 ½ | 40 | 748 410 003 | 749 410 003 |
| 63 | 2 | 50 | 748 410 012 | 749 410 012 |
| 75 | 2 ½ | 65 | 748 410 013 | 749 410 013 |
| 90 | 3 | 80 | 748 410 014 | 749 410 014 |



Valve nut (4a/15)

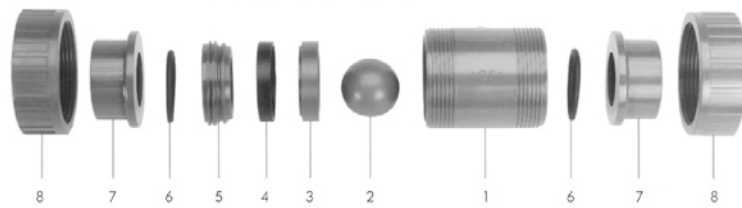
Model:

- Union nut PVC-U DN15-DN50, PP-H

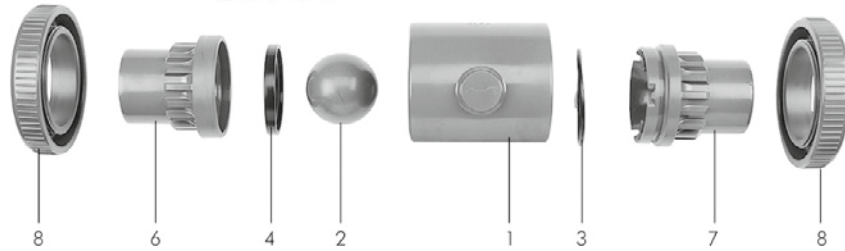
| d (mm) | Size (inch) | DN (mm) | PVC-U (4a) Code | PVC-C (4a) Code | ABS (4a) Code | PP-H (4a) Code | PP-H (15) Code |
|-----------|----------------|------------|--------------------|--------------------|------------------|-------------------|-------------------|
| 20 | ¾ | 15 | 161 300 308 | 163 481 084 | 169 480 609 | 167 305 060 | 167 305 070 |
| 25 | ¾ | 20 | 161 300 358 | 163 481 085 | 169 480 610 | 167 305 061 | 167 305 071 |
| 32 | 1 | 25 | 161 300 408 | 163 481 086 | 169 480 611 | 167 305 062 | 167 305 072 |
| 40 | 1 ¼ | 32 | 161 300 458 | 163 481 087 | 169 480 612 | 167 305 063 | 167 305 073 |
| 50 | 1 ½ | 40 | 161 300 508 | 163 481 088 | 169 480 613 | 167 305 064 | 167 305 074 |
| 63 | 2 | 50 | 161 300 558 | 163 481 089 | 169 480 614 | 167 305 065 | 167 305 075 |

Spare parts ball check valves type 360

DN 10-50



DN 80



Central part

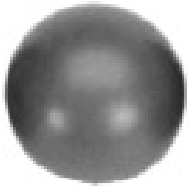
Model:

- Central part consisting of: body (1), ball (2), support ring (3), sealing ring (4) and union bush (5)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ¾ | 10 |
| 20 | ¾ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 16 | 161 483 851 | 161 483 861 | 163 480 645 | 163 480 655 | 169 480 250 | 167 481 125 |
| 20 | 161 483 852 | 161 483 862 | 163 480 646 | 163 480 656 | 169 480 251 | 167 481 126 |
| 25 | 161 483 853 | 161 483 863 | 163 480 647 | 163 480 657 | 169 480 252 | 167 481 127 |
| 32 | 161 483 854 | 161 483 864 | 163 480 648 | 163 480 658 | 169 480 253 | 167 481 128 |
| 40 | 161 483 855 | 161 483 865 | 163 480 649 | 163 480 659 | 169 480 254 | 167 481 129 |
| 50 | 161 483 856 | 161 483 866 | 163 480 650 | 163 480 660 | 169 480 255 | 167 481 130 |
| 63 | 161 483 857 | 161 483 867 | 163 480 651 | 163 480 661 | 169 480 256 | 167 481 131 |

| d (mm) | PP-H FKM Code |
|-----------|------------------|
| 16 | 167 481 135 |
| 20 | 167 481 136 |
| 25 | 167 481 137 |
| 32 | 167 481 138 |
| 40 | 167 481 139 |
| 50 | 167 481 140 |
| 63 | 167 481 141 |



Ball (2)

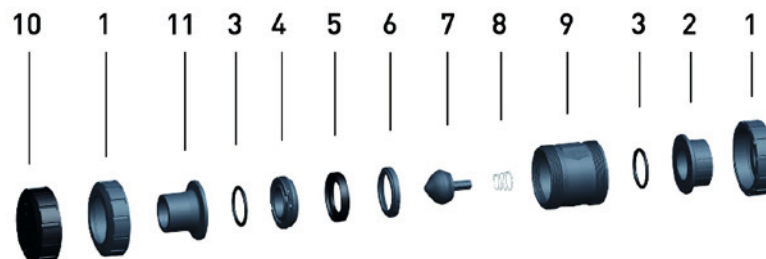
| d (mm) | Size (inch) | DN (mm) | PVC-U Code | PP-H with talc density 1.24 Code | PP-H 100% Code | PVDF Code |
|-----------|----------------|------------|---------------|---|-------------------|--------------|
| 16 | 3/8 | 10 | 161 330 304 | 167 481 165 | 167 480 024 | 175 480 153 |
| 20 | 1/2 | 15 | 161 330 304 | 167 481 165 | 167 480 024 | 175 480 153 |
| 25 | 3/4 | 20 | 161 330 354 | 167 481 166 | 167 480 025 | 175 480 154 |
| 32 | 1 | 25 | 161 330 404 | 167 481 167 | 167 480 026 | 175 480 155 |
| 40 | 1 1/4 | 32 | 161 330 454 | 167 481 168 | 167 480 027 | 175 480 156 |
| 50 | 1 1/2 | 40 | 161 330 504 | 167 481 169 | 167 480 028 | 175 480 157 |
| 63 | 2 | 50 | 161 330 554 | 167 481 170 | 167 480 029 | 175 480 158 |
| 90 | 3 | 80 | 161 330 654 | | | |



Seal set (4, 6)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | 3/8 | 10 | 161 482 910 | 161 482 920 |
| 20 | 1/2 | 15 | 161 482 910 | 161 482 920 |
| 25 | 3/4 | 20 | 161 482 911 | 161 482 921 |
| 32 | 1 | 25 | 161 482 912 | 161 482 922 |
| 40 | 1 1/4 | 32 | 161 482 913 | 161 482 923 |
| 50 | 1 1/2 | 40 | 161 482 914 | 161 482 924 |
| 63 | 2 | 50 | 161 482 915 | 161 482 925 |

Spare parts ventilating- and bleed valve type 591/595





Central part with spring for Bleeding valve type 595

Model:

- Central body consisting of: housing (9), union bush (4), support ring (6), floater (7), spring Ni-monic 90 Halar coated (8), profile seal ring (5) and face seal (3)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ¾ | 10 |
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |
| 75 | 2 ½ | 65 |
| 90 | 3 | 80 |
| 110 | 4 | 100 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 16 | 161 485 281 | 161 485 291 | 163 485 281 | 163 485 291 | 169 485 281 | 167 485 281 |
| 20 | 161 485 281 | 161 485 291 | 163 485 281 | 163 485 291 | 169 485 281 | 167 485 281 |
| 25 | 161 485 282 | 161 485 292 | 163 485 282 | 163 485 292 | 169 485 282 | 167 485 282 |
| 32 | 161 485 283 | 161 485 293 | 163 485 283 | 163 485 293 | 169 485 283 | 167 485 283 |
| 40 | 161 485 284 | 161 485 294 | 163 485 284 | 163 485 294 | 169 485 284 | 167 485 284 |
| 50 | 161 485 285 | 161 485 295 | 163 485 285 | 163 485 295 | 169 485 285 | 167 485 285 |
| 63 | 161 485 286 | 161 485 296 | 163 485 286 | 163 485 296 | 169 485 286 | 167 485 286 |
| 75 | 161 485 287 | 161 485 297 | 163 485 287 | 163 485 297 | 169 485 287 | 167 485 287 |
| 90 | 161 485 288 | 161 485 298 | 163 485 288 | 163 485 298 | 169 485 288 | 167 485 288 |
| 110 | 161 485 289 | 161 485 299 | 163 485 289 | 163 485 299 | 169 485 289 | 167 485 289 |

| d (mm) | PP-H FKM Code | PVDF FKM Code |
|-----------|------------------|------------------|
| 16 | 167 485 291 | 175 485 291 |
| 20 | 167 485 291 | 175 485 291 |
| 25 | 167 485 292 | 175 485 292 |
| 32 | 167 485 293 | 175 485 293 |
| 40 | 167 485 294 | 175 485 294 |
| 50 | 167 485 295 | 175 485 295 |
| 63 | 167 485 296 | 175 485 296 |
| 75 | 167 485 297 | 175 485 297 |
| 90 | 167 485 298 | 175 485 298 |
| 110 | 167 485 299 | 175 485 299 |



Central part without spring for Ventilating and Bleed valve 591

Model:

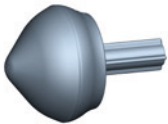
- Central body consisting of: housing (9), union bush (4), support ring (6), floater PP-H/PVDF (7), profile seal ring (5) and face seal (3)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ¾ | 10 |
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 63 | 2 | 50 |
| 75 | 2 ½ | 65 |
| 90 | 3 | 80 |
| 110 | 4 | 100 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 16 | 161 485 261 | 161 485 271 | 163 485 261 | 163 485 271 | 169 485 261 | 167 485 261 |
| 20 | 161 485 261 | 161 485 271 | 163 485 261 | 163 485 271 | 169 485 261 | 167 485 261 |
| 25 | 161 485 262 | 161 485 272 | 163 485 262 | 163 485 272 | 169 485 262 | 167 485 262 |
| 32 | 161 485 263 | 161 485 273 | 163 485 263 | 163 485 273 | 169 485 263 | 167 485 263 |
| 40 | 161 485 264 | 161 485 274 | 163 485 264 | 163 485 274 | 169 485 264 | 167 485 264 |
| 50 | 161 485 265 | 161 485 275 | 163 485 265 | 163 485 275 | 169 485 265 | 167 485 265 |
| 63 | 161 485 266 | 161 485 276 | 163 485 266 | 163 485 276 | 169 485 266 | 167 485 266 |
| 75 | 161 485 267 | 161 485 277 | 163 485 267 | 163 485 277 | 169 485 267 | 167 485 267 |
| 90 | 161 485 268 | 161 485 278 | 163 485 268 | 163 485 278 | 169 485 268 | 167 485 268 |
| 110 | 161 485 269 | 161 485 279 | 163 485 269 | 163 485 279 | 169 485 269 | 167 485 269 |

| d (mm) | PP-H FKM Code | PVDF FKM Code |
|-----------|------------------|------------------|
| 16 | 167 485 271 | 175 485 271 |
| 20 | 167 485 271 | 175 485 271 |
| 25 | 167 485 272 | 175 485 272 |
| 32 | 167 485 273 | 175 485 273 |
| 40 | 167 485 274 | 175 485 274 |
| 50 | 167 485 275 | 175 485 275 |
| 63 | 167 485 276 | 175 485 276 |
| 75 | 167 485 277 | 175 485 277 |
| 90 | 167 485 278 | 175 485 278 |
| 110 | 167 485 279 | 175 485 279 |

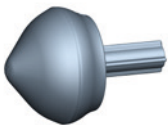


Cone (7)

Model:

- For type 595

| d (mm) | Size (inch) | DN (mm) | PVC-U Code | PVC-C Code | ABS Code | PP-H Code | PVDF Code |
|-----------|----------------|------------|---------------|---------------|-------------|--------------|--------------|
| 16 | ¾ | 10 | 161 491 151 | 163 482 151 | 169 482 151 | 167 485 151 | 175 484 151 |
| 25 | ¾ | 20 | 161 491 152 | 163 482 152 | 169 482 152 | 167 485 152 | 175 484 152 |
| 32 | 1 | 25 | 161 491 153 | 163 482 153 | 169 482 153 | 167 485 153 | 175 484 153 |
| 40 | 1 ¼ | 32 | 161 491 154 | 163 482 154 | 169 482 154 | 167 485 154 | 175 484 154 |
| 50 | 1 ½ | 40 | 161 491 155 | 163 482 155 | 169 482 155 | 167 485 155 | 175 484 155 |
| 63 | 2 | 50 | 161 491 156 | 163 482 156 | 169 482 156 | 167 485 156 | 175 484 156 |
| 75 | 2 ½ | 65 | 161 491 157 | 163 482 157 | 169 482 157 | 167 485 157 | 175 484 157 |
| 90 | 3 | 80 | 161 491 158 | 163 482 158 | 169 482 158 | 167 485 158 | 175 484 158 |
| 110 | 4 | 100 | 161 491 159 | 163 482 159 | 169 482 159 | 167 485 159 | 175 484 159 |



Floater (7)

Model:

- For type 591

| d (mm) | Size (inch) | DN (mm) | PP-H Code | PVDF Code |
|-----------|----------------|------------|--------------|--------------|
| 16 | ¾ | 10 | 167 485 151 | 175 484 161 |
| 20 | ½ | 15 | 167 485 151 | 175 484 161 |
| 25 | ¾ | 20 | 167 485 152 | 175 484 162 |
| 32 | 1 | 25 | 167 485 153 | 175 484 163 |

| d (mm) | Size (inch) | DN (mm) | PP-H Code | PVDF Code |
|-----------|----------------|------------|--------------|--------------|
| 40 | 1 ¼ | 32 | 167 485 154 | 175 484 164 |
| 50 | 1 ½ | 40 | 167 485 155 | 175 484 165 |
| 63 | 2 | 50 | 167 485 156 | 175 484 166 |
| 75 | 2 ½ | 65 | 167 485 157 | 175 484 167 |
| 90 | 3 | 80 | 167 485 158 | 175 484 168 |
| 110 | 4 | 100 | 167 485 159 | 175 484 169 |



Protective cap (10)

Model:

- Protects the piping system from dirt particles out of the ambient air. Can also be used as tool for opening and closing the valve union bushing.

| d (mm) | Size (inch) | DN (mm) | PP-GF Code |
|-----------|----------------|------------|---------------|
| 16 | ¾ | 10 | 167 485 361 |
| 20 | ½ | 15 | 167 485 361 |
| 25 | ¾ | 20 | 167 485 362 |
| 32 | 1 | 25 | 167 485 363 |
| 40 | 1 ¼ | 32 | 167 485 364 |
| 50 | 1 ½ | 40 | 167 485 365 |
| 63 | 2 | 50 | 167 485 366 |
| 75 | 2 ½ | 65 | 167 485 367 |
| 90 | 3 | 80 | 167 485 368 |
| 110 | 4 | 100 | 167 485 369 |



Seal set

Model:

- Seal set consisting of: profile seal ring (5) and face seal (3)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | ¾ | 10 | 161 485 241 | 161 485 251 |
| 20 | ½ | 15 | 161 485 241 | 161 485 251 |
| 25 | ¾ | 20 | 161 485 242 | 161 485 252 |
| 32 | 1 | 25 | 161 485 243 | 161 485 253 |
| 40 | 1 ¼ | 32 | 161 485 244 | 161 485 254 |
| 50 | 1 ½ | 40 | 161 485 245 | 161 485 255 |
| 63 | 2 | 50 | 161 485 246 | 161 485 256 |
| 75 | 2 ½ | 65 | 161 485 247 | 161 485 257 |
| 90 | 3 | 80 | 161 485 248 | 161 485 258 |
| 110 | 4 | 100 | 161 485 249 | 161 485 259 |

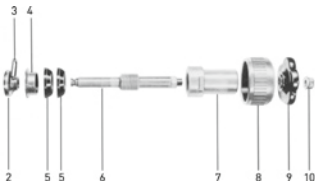
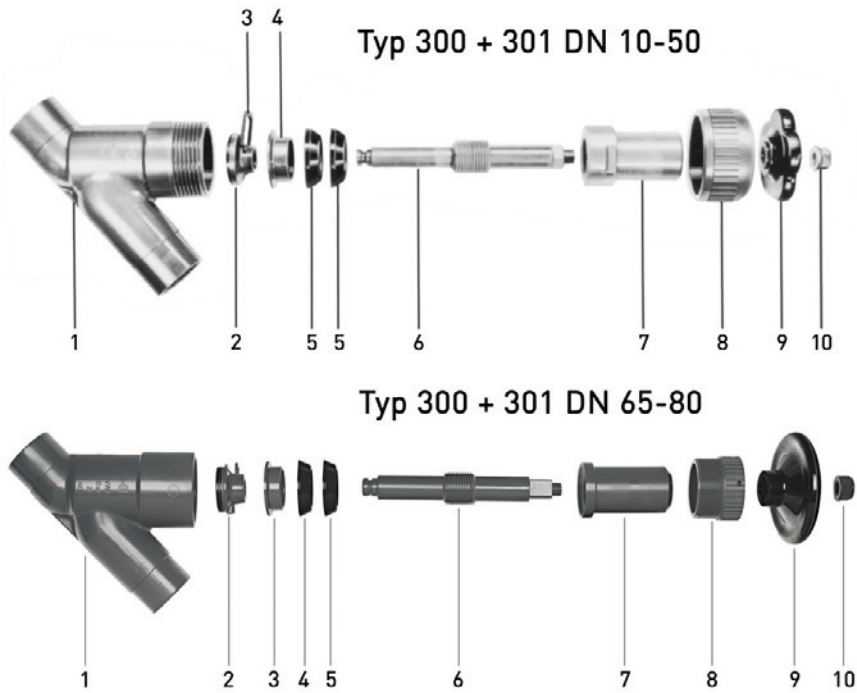


Handle for dismantling

| d (mm) | Size (inch) | DN (mm) | red Code | black Code |
|-----------|----------------|------------|-------------|---------------|
| 16 | ¾ | 10 | 167 484 088 | 167 484 076 |
| 20 | ½ | 15 | 167 484 088 | 167 484 076 |
| 25 | ¾ | 20 | 167 484 089 | 167 484 077 |
| 32 | 1 | 25 | 167 484 090 | 167 484 078 |
| 40 | 1 ¼ | 32 | 167 484 091 | 167 484 079 |
| 50 | 1 ½ | 40 | 167 484 092 | 167 484 080 |

| d (mm) | Size (inch) | DN (mm) | red Code | black Code |
|-----------|----------------|------------|-------------|---------------|
| 63 | 2 | 50 | 167 484 093 | 167 484 081 |
| 75 | 2 ½ | 65 | 167 484 094 | 167 484 082 |
| 90 | 3 | 80 | 167 484 095 | 167 484 083 |
| 110 | 4 | 100 | 167 484 096 | 167 484 084 |

Spare parts angel seat valves type 300/301



Bonnet complete

Model:

- Bonnet complete consisting of: seal element PVC-U and seating PE, retaining pin, seal support ring, stem, threaded bush, union nut and handwheel nut in PVC-U, cup seal and handwheel in PE (2 -10)

| d (mm) | Size (inch) | DN (mm) | PVC-U/PE Code |
|-----------|----------------|------------|------------------|
| 63 | 2 | 50 | 161 482 256 |
| 75 | 2 ½ | 65 | 161 482 257 |
| 90 | 3 | 80 | 161 482 258 |



Body (1)

| d (mm) | Size (inch) | DN (mm) | PVC-U metric Code | PVC-U transparent ASTM Code |
|-----------|----------------|------------|-------------------------|--------------------------------------|
| 16 | ¾ | 10 | 161 300 251 | |
| 20 | ½ | 15 | 161 300 301 | 192 480 001 |
| 25 | ¾ | 20 | 161 300 351 | 192 480 002 |
| 32 | 1 | 25 | 161 300 401 | 192 301 401 |
| 40 | 1 ¼ | 32 | 161 300 451 | 192 301 451 |

| d (mm) | Size (inch) | DN (mm) | PVC-U metric Code | PVC-U transparent ASTM Code |
|-----------|----------------|------------|-------------------------|--------------------------------------|
| 50 | 1 ½ | 40 | 161 300 501 | 192 301 501 |
| 63 | 2 | 50 | 161 300 551 | 192 301 551 |
| 75 | 2 ½ | 65 | 161 300 601 | |
| 90 | 3 | 80 | 161 300 651 | 192 301 651 |



Plug

Model:

- DN65-DN80 (8)

| d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 75 | 2 ½ | 65 | 161 300 608 |
| 90 | 3 | 80 | 161 300 658 |



Handwheel (9)

| d (mm) | Size (inch) | DN (mm) | Code |
|-----------|----------------|------------|-------------|
| 16 | ¾ | 10 | 161 300 259 |
| 20 | ½ | 15 | 161 300 309 |
| 25 | ¾ | 20 | 161 300 309 |
| 32 | 1 | 25 | 161 300 409 |
| 40 | 1 ¼ | 32 | 161 300 459 |
| 50 | 1 ½ | 40 | 161 300 509 |
| 63 | 2 | 50 | 161 300 559 |
| 75 | 2 ½ | 65 | 161 300 609 |
| 90 | 3 | 80 | 161 300 659 |



Handwheel nut (10)

| d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 16 | ¾ | 10 | 161 300 260 |
| 20 | ½ | 15 | 721 960 603 |
| 25 | ¾ | 20 | 721 960 603 |
| 32 | 1 | 25 | 721 960 603 |
| 40 | 1 ¼ | 32 | 721 960 604 |
| 50 | 1 ½ | 40 | 721 960 604 |
| 63 | 2 | 50 | 721 960 605 |
| 75 | 2 ½ | 65 | 721 960 606 |
| 90 | 3 | 80 | 721 960 607 |



Stem set

Model:

- Stem set consisting of: stem and threaded bush (6, 7)

| d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 16 | ¾ | 10 | 161 483 062 |
| 20 | ½ | 15 | 161 483 063 |
| 25 | ¾ | 20 | 161 483 064 |
| 32 | 1 | 25 | 161 483 065 |
| 40 | 1 ¼ | 32 | 161 483 066 |

| d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 50 | 1 ½ | 40 | 161 483 067 |
| 63 | 2 | 50 | 161 483 068 |
| 75 | 2 ½ | 65 | 161 483 069 |
| 90 | 3 | 80 | 161 483 070 |



Union nut

Model:

- DN10-DN50 (8)

| d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 16 | ¾ | 10 | 161 300 258 |
| 20 | ½ | 15 | 161 300 308 |
| 25 | ¾ | 20 | 161 300 358 |
| 32 | 1 | 25 | 161 300 408 |
| 40 | 1 ¼ | 32 | 161 300 458 |
| 50 | 1 ½ | 40 | 161 300 508 |
| 63 | 2 | 50 | 161 300 558 |



Disc retaining pin set

Model:

- Disc retaining pin set consisting of: seal element and seating, retaining pin, screen support and cup seal (2-5)

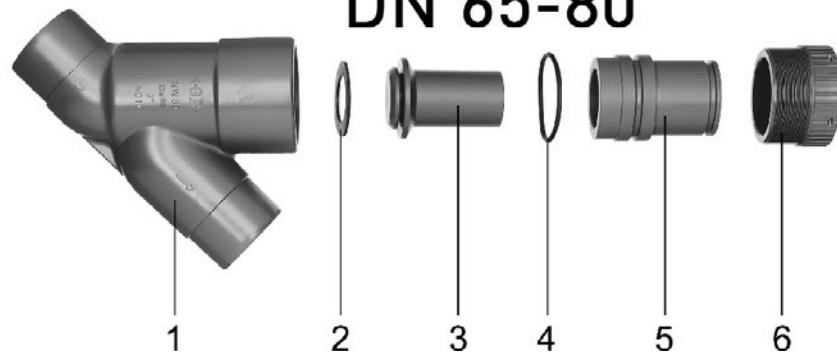
| d (mm) | Size (inch) | DN (mm) | PE Code | PTFE Code |
|-----------|----------------|------------|-------------|--------------|
| 16 | ¾ | 10 | 161 483 076 | 161 483 089 |
| 20 | ½ | 15 | 161 483 077 | 161 483 090 |
| 25 | ¾ | 20 | 161 483 078 | 161 483 091 |
| 32 | 1 | 25 | 161 483 079 | 161 483 092 |
| 40 | 1 ¼ | 32 | 161 483 080 | 161 483 093 |
| 50 | 1 ½ | 40 | 161 483 081 | 161 483 094 |
| 63 | 2 | 50 | 161 483 082 | 161 483 095 |
| 75 | 2 ½ | 65 | 161 483 083 | 161 483 096 |
| 90 | 3 | 80 | 161 483 084 | 161 483 097 |

Spare parts angle seat valve type 303/304

DN 10-50



DN 65-80



Body (1)

| d (mm) | Size (inch) | DN (mm) | PVC-U Code | PVC-U transparent ASTM Code |
|-----------|----------------|------------|---------------|--------------------------------------|
| 16 | ¾ | 10 | 161 480 699 | |
| 20 | ½ | 15 | 161 480 700 | 192 480 001 |
| 25 | ¾ | 20 | 161 480 701 | 192 480 002 |
| 32 | 1 | 25 | 161 300 401 | 192 301 401 |
| 40 | 1 ¼ | 32 | 161 300 451 | 192 301 451 |
| 50 | 1 ½ | 40 | 161 300 501 | 192 301 501 |
| 63 | 2 | 50 | 161 300 551 | 192 301 551 |
| 75 | 2 ½ | 65 | 161 300 601 | |
| 90 | 3 | 80 | 161 300 651 | 192 301 651 |



Closure plug (5)

| d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 16 | 3/8 | 10 | 161 480 648 |
| 20 | 1/2 | 15 | 161 480 649 |
| 25 | 3/4 | 20 | 161 480 650 |
| 32 | 1 | 25 | 161 480 651 |
| 40 | 1 1/4 | 32 | 161 480 652 |
| 50 | 1 1/2 | 40 | 161 480 653 |
| 63 | 2 | 50 | 161 480 654 |
| 75 | 2 1/2 | 65 | 161 490 412 |
| 90 | 3 | 80 | 161 490 413 |



Plug

Model:

- DN65-DN80 (6)

| d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 75 | 2 1/2 | 65 | 161 305 604 |
| 90 | 3 | 80 | 161 305 654 |



Flat gasket (2)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | 3/8 | 10 | 161 480 664 | 161 480 673 |
| 20 | 1/2 | 15 | 161 480 665 | 161 480 674 |
| 25 | 3/4 | 20 | 161 480 666 | 161 480 675 |
| 32 | 1 | 25 | 161 480 667 | 161 480 676 |
| 40 | 1 1/4 | 32 | 161 480 668 | 161 480 677 |
| 50 | 1 1/2 | 40 | 161 480 669 | 161 480 678 |
| 63 | 2 | 50 | 161 480 670 | 161 480 679 |
| 75 | 2 1/2 | 65 | 161 480 671 | 161 480 680 |
| 90 | 3 | 80 | 161 480 672 | 161 480 681 |



Union nut

Model:

- DN10-DN50 (6)

| d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 16 | 3/8 | 10 | 161 300 258 |
| 20 | 1/2 | 15 | 161 300 308 |
| 25 | 3/4 | 20 | 161 300 358 |
| 32 | 1 | 25 | 161 300 408 |
| 40 | 1 1/4 | 32 | 161 300 458 |
| 50 | 1 1/2 | 40 | 161 300 508 |
| 63 | 2 | 50 | 161 300 558 |



O-ring (4)

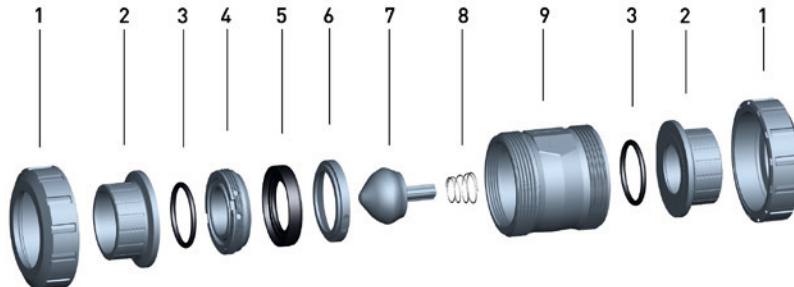
| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | ¾ | 10 | 748 410 059 | 749 410 059 |
| 20 | ½ | 15 | 748 410 106 | 749 410 106 |
| 25 | ¾ | 20 | 748 410 001 | 749 410 001 |
| 32 | 1 | 25 | 748 410 007 | 749 410 007 |
| 40 | 1 ¼ | 32 | 748 410 002 | 749 410 002 |
| 50 | 1 ½ | 40 | 748 410 102 | 749 410 102 |
| 63 | 2 | 50 | 748 410 101 | 749 410 101 |
| 75 | 2 ½ | 65 | 748 410 119 | 749 410 119 |
| 90 | 3 | 80 | 748 410 014 | 749 410 014 |



Piston (3)

| d (mm) | Size (inch) | DN (mm) | PVC-U Code |
|-----------|----------------|------------|---------------|
| 16 | ¾ | 10 | 161 480 682 |
| 20 | ½ | 15 | 161 480 683 |
| 25 | ¾ | 20 | 161 480 684 |
| 32 | 1 | 25 | 161 480 685 |
| 40 | 1 ¼ | 32 | 161 480 686 |
| 50 | 1 ½ | 40 | 161 480 687 |
| 63 | 2 | 50 | 161 480 688 |
| 75 | 2 ½ | 65 | 161 480 689 |
| 90 | 3 | 80 | 161 480 690 |

Spare parts cone check valve type 561/562



Central part without spring

Model:

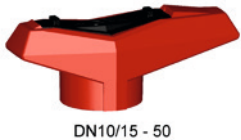
- Central body consisting of: housing (9), union bush (4), support ring (6), cone (7), profile seal (5) and face seal (3)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ¾ | 10 |
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 63 | 2 | 50 |
| 75 | 2 ½ | 65 |
| 90 | 3 | 80 |
| 110 | 4 | 100 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 16 | 161 485 201 | 161 485 211 | 163 485 201 | 163 485 211 | 169 485 201 | 167 485 201 |
| 20 | 161 485 201 | 161 485 211 | 163 485 201 | 163 485 211 | 169 485 201 | 167 485 201 |
| 25 | 161 485 202 | 161 485 212 | 163 485 202 | 163 485 212 | 169 485 202 | 167 485 202 |
| 32 | 161 485 203 | 161 485 213 | 163 485 203 | 163 485 213 | 169 485 203 | 167 485 203 |
| 40 | 161 485 204 | 161 485 214 | 163 485 204 | 163 485 214 | 169 485 204 | 167 485 204 |
| 50 | 161 485 205 | 161 485 215 | 163 485 205 | 163 485 215 | 169 485 205 | 167 485 205 |
| 63 | 161 485 206 | 161 485 216 | 163 485 206 | 163 485 216 | 169 485 206 | 167 485 206 |
| 75 | 161 485 207 | 161 485 217 | 163 485 207 | 163 485 217 | 169 485 207 | 167 485 207 |
| 90 | 161 485 208 | 161 485 218 | 163 485 208 | 163 485 218 | 169 485 208 | 167 485 208 |
| 110 | 161 485 209 | 161 485 219 | 163 485 209 | 163 485 219 | 169 485 209 | 167 485 209 |

| d (mm) | PP-H FKM Code | PVDF FKM Code |
|-----------|------------------|------------------|
| 16 | 167 485 211 | 175 485 211 |
| 20 | 167 485 211 | 175 485 211 |
| 25 | 167 485 212 | 175 485 212 |
| 32 | 167 485 213 | 175 485 213 |
| 40 | 167 485 214 | 175 485 214 |
| 50 | 167 485 215 | 175 485 215 |
| 63 | 167 485 216 | 175 485 216 |
| 75 | 167 485 217 | 175 485 217 |
| 90 | 167 485 218 | 175 485 218 |
| 110 | 167 485 219 | 175 485 219 |



DN10/15 - 50



Handle for dismantling

| d (mm) | Size (inch) | DN (mm) | red Code | black Code |
|-----------|----------------|------------|-------------|---------------|
| 16 | ¾ | 10 | 167 484 088 | 167 484 076 |
| 20 | ½ | 15 | 167 484 088 | 167 484 076 |
| 25 | ¾ | 20 | 167 484 089 | 167 484 077 |
| 32 | 1 | 25 | 167 484 090 | 167 484 078 |
| 40 | 1 ¼ | 32 | 167 484 091 | 167 484 079 |
| 50 | 1 ½ | 40 | 167 484 092 | 167 484 080 |
| 63 | 2 | 50 | 167 484 093 | 167 484 081 |
| 75 | 2 ½ | 65 | 167 484 094 | 167 484 082 |
| 90 | 3 | 80 | 167 484 095 | 167 484 083 |
| 110 | 4 | 100 | 167 484 096 | 167 484 084 |



Face seal (3)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | ¾ | 10 | 748 410 059 | 749 410 059 |
| 20 | ½ | 15 | 748 410 059 | 749 410 059 |
| 25 | ¾ | 20 | 748 410 106 | 749 410 106 |
| 32 | 1 | 25 | 748 410 151 | 749 410 151 |
| 40 | 1 ¼ | 32 | 748 410 062 | 749 410 062 |
| 50 | 1 ½ | 40 | 748 410 003 | 749 410 003 |

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 63 | 2 | 50 | 748 410 231 | 749 410 231 |
| 75 | 2 ½ | 65 | 748 410 119 | 749 410 119 |
| 90 | 3 | 80 | 748 410 023 | 749 410 023 |
| 110 | 4 | 100 | 748 410 254 | 749 410 254 |



Seal set

Model:

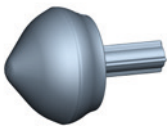
- Seal set consisting of: profile seal ring (5) and face seal (3)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | ¾ | 10 | 161 485 241 | 161 485 251 |
| 20 | ½ | 15 | 161 485 241 | 161 485 251 |
| 25 | ¾ | 20 | 161 485 242 | 161 485 252 |
| 32 | 1 | 25 | 161 485 243 | 161 485 253 |
| 40 | 1 ¼ | 32 | 161 485 244 | 161 485 254 |
| 50 | 1 ½ | 40 | 161 485 245 | 161 485 255 |
| 63 | 2 | 50 | 161 485 246 | 161 485 256 |
| 75 | 2 ½ | 65 | 161 485 247 | 161 485 257 |
| 90 | 3 | 80 | 161 485 248 | 161 485 258 |
| 110 | 4 | 100 | 161 485 249 | 161 485 259 |



Profile seal ring (5)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------|-------------|
| 16 | ¾ | 10 | 748 436 001 | 749 436 001 |
| 20 | ½ | 15 | 748 436 001 | 749 436 001 |
| 25 | ¾ | 20 | 748 436 002 | 749 436 002 |
| 32 | 1 | 25 | 748 436 003 | 749 436 003 |
| 40 | 1 ¼ | 32 | 748 436 004 | 749 436 004 |
| 50 | 1 ½ | 40 | 748 436 005 | 749 436 005 |
| 63 | 2 | 50 | 748 436 006 | 749 436 006 |
| 75 | 2 ½ | 65 | 748 436 007 | 749 436 007 |
| 90 | 3 | 80 | 748 436 008 | 749 436 008 |
| 110 | 4 | 100 | 748 436 009 | 749 436 009 |



Cone (7)

| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ¾ | 10 |
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |
| 75 | 2 ½ | 65 |
| 90 | 3 | 80 |
| 110 | 4 | 100 |

| d (mm) | PVC-U Code | PVC-C Code | ABS Code | PP-H Code | PP-Talkum 20% Code | PVDF Code |
|-----------|---------------|---------------|-------------|--------------|--------------------------|--------------|
| 16 | 161 491 151 | 163 482 151 | 169 482 151 | 167 485 151 | 167 485 351 | 175 484 151 |
| 20 | 161 491 151 | 163 482 151 | 169 482 151 | 167 485 151 | 167 485 351 | 175 484 151 |
| 25 | 161 491 152 | 163 482 152 | 169 482 152 | 167 485 152 | 167 485 352 | 175 484 152 |

| d (mm) | PVC-U Code | PVC-C Code | ABS Code | PP-H Code | PP-Talkum 20% Code | PVDF Code |
|-----------|---------------|---------------|-------------|--------------|--------------------------|--------------|
| 32 | 161 491 153 | 163 482 153 | 169 482 153 | 167 485 153 | 167 485 353 | 175 484 153 |
| 40 | 161 491 154 | 163 482 154 | 169 482 154 | 167 485 154 | 167 485 354 | 175 484 154 |
| 50 | 161 491 155 | 163 482 155 | 169 482 155 | 167 485 155 | 167 485 355 | 175 484 155 |
| 63 | 161 491 156 | 163 482 156 | 169 482 156 | 167 485 156 | 167 485 356 | 175 484 156 |
| 75 | 161 491 157 | 163 482 157 | 169 482 157 | 167 485 157 | 167 485 357 | 175 484 157 |
| 90 | 161 491 158 | 163 482 158 | 169 482 158 | 167 485 158 | 167 485 358 | 175 484 158 |
| 110 | 161 491 159 | 163 482 159 | 169 482 159 | 167 485 159 | 167 485 359 | 175 484 159 |



Spring (8)

Model:

- Material: NIMONIC 90, code: 2.4632
- Material: V2A, code: 1.4310, HALAR® coated
- Material: V2A, code: 1.4310

| d (mm) | Size (inch) | DN (mm) | Stainless steel V2A Code | V2A HALAR coated Code | NIMONIC 90 Code |
|-----------|----------------|------------|--------------------------------|-----------------------------|--------------------|
| 16 | ⅜ | 10 | 161 485 132 | 161 485 142 | 161 485 152 |
| 20 | ½ | 15 | 161 485 132 | 161 485 142 | 161 485 152 |
| 25 | ¾ | 20 | 161 485 132 | 161 485 142 | 161 485 152 |
| 32 | 1 | 25 | 161 485 133 | 161 485 143 | 161 485 153 |
| 40 | 1 ¼ | 32 | 161 485 134 | 161 485 144 | 161 485 154 |
| 50 | 1 ½ | 40 | 161 485 135 | 161 485 145 | 161 485 155 |
| 63 | 2 | 50 | 161 485 136 | 161 485 146 | 161 485 156 |
| 75 | 2 ½ | 65 | 161 485 137 | 161 485 147 | 161 485 157 |
| 90 | 3 | 80 | 161 485 138 | 161 485 148 | 161 485 158 |
| 110 | 4 | 100 | 161 485 139 | 161 485 149 | 161 485 159 |



Central part with spring

Model:

- Central body consisting of: housing (9), union bush (4), support ring (6), cone (7), spring V2A (8), profile seal ring (5) and face seal (3)

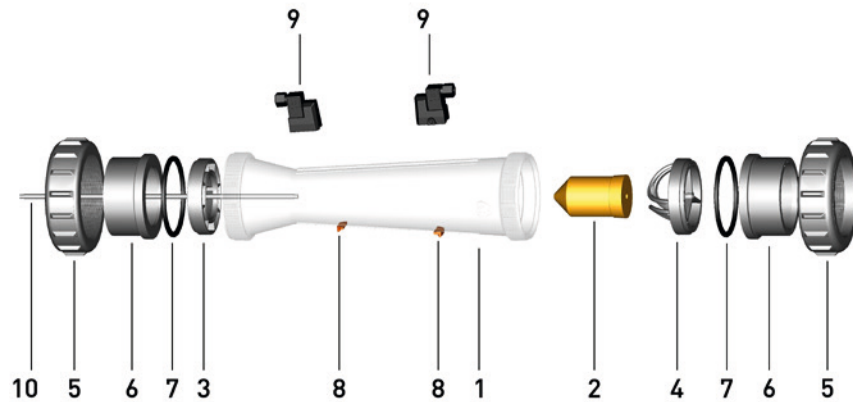
| d (mm) | Size (inch) | DN (mm) |
|-----------|----------------|------------|
| 16 | ⅜ | 10 |
| 20 | ½ | 15 |
| 25 | ¾ | 20 |
| 32 | 1 | 25 |
| 40 | 1 ¼ | 32 |
| 50 | 1 ½ | 40 |
| 63 | 2 | 50 |
| 75 | 2 ½ | 65 |
| 90 | 3 | 80 |
| 110 | 4 | 100 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 16 | 161 485 221 | 161 485 231 | 163 485 221 | 163 485 231 | 169 485 221 | 167 485 231 |
| 20 | 161 485 221 | 161 485 231 | 163 485 221 | 163 485 231 | 169 485 221 | 167 485 231 |
| 25 | 161 485 222 | 161 485 232 | 163 485 222 | 163 485 232 | 169 485 222 | 167 485 232 |
| 32 | 161 485 223 | 161 485 233 | 163 485 223 | 163 485 233 | 169 485 223 | 167 485 233 |
| 40 | 161 485 224 | 161 485 234 | 163 485 224 | 163 485 234 | 169 485 224 | 167 485 234 |
| 50 | 161 485 225 | 161 485 235 | 163 485 225 | 163 485 235 | 169 485 225 | 167 485 235 |

| d (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | ABS EPDM Code | PP-H EPDM Code |
|-----------|-----------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| 63 | 161 485 226 | 161 485 236 | 163 485 226 | 163 485 236 | 169 485 226 | 167 485 236 |
| 75 | 161 485 227 | 161 485 237 | 163 485 227 | 163 485 237 | 169 485 227 | 167 485 237 |
| 90 | 161 485 228 | 161 485 238 | 163 485 228 | 163 485 238 | 169 485 228 | 167 485 238 |
| 110 | 161 485 229 | 161 485 239 | 163 485 229 | 163 485 239 | 169 485 229 | 167 485 239 |

| d (mm) | PP-H FKM Code | PVDF FKM Code |
|-----------|------------------|------------------|
| 16 | 167 485 241 | 175 485 231 |
| 20 | 167 485 241 | 175 485 231 |
| 25 | 167 485 242 | 175 485 232 |
| 32 | 167 485 243 | 175 485 233 |
| 40 | 167 485 244 | 175 485 234 |
| 50 | 167 485 245 | 175 485 235 |
| 63 | 167 485 246 | 175 485 236 |
| 75 | 167 485 247 | 175 485 237 |
| 90 | 167 485 248 | 175 485 238 |
| 110 | 167 485 249 | 175 485 239 |

Variable area flow meter type 350



Taper tube with water scale (1)

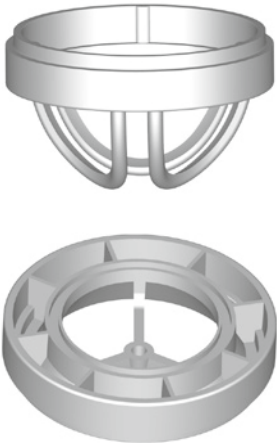


| d (mm) | Size (inch) | DN (mm) | Scale range (l/min) | PVC-U transparent Code | Polyamid Code | Polysulfon Code |
|-----------|----------------|------------|------------------------|------------------------------|------------------|--------------------|
| 32 | 1 | 25 | 50 - 500 | 198 350 055 | 198 350 070 | 198 350 085 |
| 32 | 1 | 25 | 100 - 1000 | 198 350 056 | 198 350 071 | 198 350 086 |
| 40 | 1 ¼ | 32 | 150 - 1500 | 198 350 057 | 198 350 072 | 198 350 087 |
| 40 | 1 ¼ | 32 | 250 - 2500 | 198 350 058 | 198 350 073 | 198 350 088 |
| 50 | 1 ½ | 40 | 200 - 2000 | 198 350 059 | 198 350 074 | 198 350 089 |
| 50 | 1 ½ | 40 | 300 - 3000 | 198 350 060 | 198 350 075 | 198 350 090 |
| 50 | 1 ½ | 40 | 600 - 6000 | 198 350 061 | 198 350 076 | 198 350 091 |
| 63 | 2 | 50 | 600 - 6000 | 198 350 062 | 198 350 077 | 198 350 092 |
| 63 | 2 | 50 | 1000 - 10000 | 198 350 063 | 198 350 078 | 198 350 093 |
| 63 | 2 | 50 | 1500 - 15000 | 198 350 064 | 198 350 079 | 198 350 094 |
| 75 | 2 ½ | 65 | 2000 - 20000 | 198 350 065 | 198 350 080 | 198 350 095 |
| 75 | 2 ½ | 65 | 3000 - 30000 | 198 350 066 | 198 350 081 | 198 350 096 |
| 75 | 2 ½ | 65 | 8000 - 60000 | 198 350 067 | 198 350 082 | 198 350 097 |



Taper tube without scale (1)

| d (mm) | Size (inch) | DN (mm) | Scale range (l/h) | PVC-U transparent Code | Polyamid Code | Polysulfon Code |
|-----------|----------------|------------|----------------------|------------------------------|------------------|--------------------|
| 32 | 1 | 25 | 50 - 500 | 198 350 255 | 198 350 270 | 198 350 285 |
| 32 | 1 | 25 | 100 - 1000 | 198 350 256 | 198 350 271 | 198 350 286 |
| 40 | 1 ¼ | 32 | 150 - 1500 | 198 350 257 | 198 350 272 | 198 350 287 |
| 40 | 1 ¼ | 32 | 250 - 2500 | 198 350 258 | 198 350 273 | 198 350 288 |
| 50 | 1 ½ | 40 | 200 - 2000 | 198 350 259 | 198 350 274 | 198 350 289 |
| 50 | 1 ½ | 40 | 300 - 3000 | 198 350 260 | 198 350 275 | 198 350 290 |
| 50 | 1 ½ | 40 | 600 - 6000 | 198 350 261 | 198 350 276 | 198 350 291 |
| 63 | 2 | 50 | 600 - 6000 | 198 350 262 | 198 350 277 | 198 350 292 |
| 63 | 2 | 50 | 1000 - 10000 | 198 350 263 | 198 350 278 | 198 350 293 |
| 63 | 2 | 50 | 1500 - 15000 | 198 350 264 | 198 350 279 | 198 350 294 |
| 75 | 2 ½ | 65 | 2000 - 20000 | 198 350 265 | 198 350 280 | 198 350 295 |
| 75 | 2 ½ | 65 | 3000 - 30000 | 198 350 266 | 198 350 281 | 198 350 296 |
| 75 | 2 ½ | 65 | 8000 - 60000 | 198 350 267 | 198 350 282 | 198 350 297 |



Insert PVDF (3,4)

| d (mm) | Size (inch) | DN (mm) | Scale range (l/h) | top (4) Code | bottom (3) Code |
|-----------|----------------|------------|----------------------|-----------------|--------------------|
| 32 | 1 | 25 | 50 - 500 | 198 335 970 | 198 335 977 |
| 32 | 1 | 25 | 100 - 1000 | 198 335 970 | 198 335 977 |
| 40 | 1 ¼ | 32 | 150 - 1500 | 198 335 971 | 198 335 978 |
| 40 | 1 ¼ | 32 | 250 - 2500 | 198 335 971 | 198 335 978 |
| 50 | 1 ½ | 40 | 200 - 2000 | 198 335 972 | 198 335 979 |
| 50 | 1 ½ | 40 | 300 - 3000 | 198 335 972 | 198 335 979 |
| 50 | 1 ½ | 40 | 600 - 6000 | 198 335 972 | 198 335 979 |
| 63 | 2 | 50 | 600 - 6000 | 198 335 973 | 198 335 980 |
| 63 | 2 | 50 | 1000 - 10000 | 198 335 973 | 198 335 980 |
| 63 | 2 | 50 | 1500 - 15000 | 198 335 974 | |
| 75 | 2 ½ | 65 | 2000 - 20000 | 198 335 975 | |
| 75 | 2 ½ | 65 | 3000 - 30000 | 198 335 975 | |
| 75 | 2 ½ | 65 | 8000 - 60000 | 198 335 975 | |



Guiding rod (10)

Model:

- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all scale ranges)

| d (mm) | Size (inch) | DN (mm) | Scale range (l/h) | PVDF Code |
|-----------|----------------|------------|----------------------|--------------|
| 63 | 2 | 50 | 1500 - 15000 | 198 350 981 |
| 75 | 2 ½ | 65 | 2000 - 20000 | 198 350 981 |
| 75 | 2 ½ | 65 | 3000 - 30000 | 198 350 981 |
| 75 | 2 ½ | 65 | 8000 - 60000 | 198 350 981 |

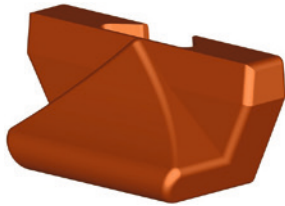


Insert guiding rod PVDF (for 10)

Model:

- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all scale ranges)

| d (mm) | Size (inch) | DN (mm) | Scale range (l/h) | for PEEK and stainless steel Code | for PVDF/ SS Code |
|-----------|----------------|------------|----------------------|---|-------------------------|
| 63 | 2 | 50 | 1500 - 15000 | | 198 335 953 |
| 75 | 2 ½ | 65 | 2000 - 20000 | 198 335 987 | 198 335 954 |
| 75 | 2 ½ | 65 | 3000 - 30000 | 198 335 987 | 198 335 954 |
| 75 | 2 ½ | 65 | 8000 - 60000 | 198 335 987 | 198 335 954 |

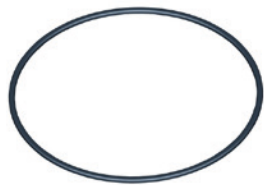


Flow value indicator PS (8)

Model:

- For all dimensions type 335/350

| d (mm) | Size (inch) | DN (mm) | Flow value indicator Code |
|-----------|----------------|------------|---------------------------------|
| 32 | 1 | 25 | 198 335 990 |
| 40 | 1 ¼ | 32 | 198 335 990 |
| 50 | 1 ½ | 40 | 198 335 990 |
| 63 | 2 | 50 | 198 335 990 |
| 75 | 2 ½ | 65 | 198 335 990 |



O-rings (7)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------------|--------------------|
| 32 | 1 | 25 | 748 410 008 | 749 410 008 |
| 40 | 1 ¼ | 32 | 748 410 009 | 749 410 009 |
| 50 | 1 ½ | 40 | 748 410 010 | 749 410 010 |
| 63 | 2 | 50 | 748 410 011 | 749 410 011 |
| 75 | 2 ½ | 65 | 748 410 014 | 749 410 014 |



Union nut PVC-U

*also for diaphragm valves type 514/DIASTAR, pressure regulating valves type 582/586 and variable area flow

**just for variable area flow meter

***for adaptor unions PVC-U / malleable iron only

| | d (mm) | PN (bar) | PVC-U Code | Weight (kg) | Tr | G (inch) | D (mm) | L (mm) |
|-----|-----------|-------------|--------------------|----------------|----------|-------------|-----------|-----------|
| | 10 - 12 | 16 | 721 890 004 | 0.009 | | ¾ | 19 | 19 |
| | 16 | 16 | 721 890 005 | 0.011 | | ¾ | 22 | 21 |
| * | 20 | 16 | 721 890 006 | 0.020 | | 1 | 28 | 23 |
| * | 25 | 16 | 721 890 007 | 0.020 | | 1 ¼ | 36 | 24 |
| * | 32 | 16 | 721 890 008 | 0.030 | | 1 ½ | 41 | 26 |
| * | 40 | 16 | 721 890 009 | 0.049 | | 2 | 53 | 29 |
| * | 50 | 16 | 721 890 010 | 0.087 | | 2 ¼ | 59 | 34 |
| * | 63 | 16 | 721 890 011 | 0.138 | | 2 ¾ | 74 | 38 |
| | 75 | 10 | 721 890 012 | 0.256 | Tr 108x5 | | 92 | 40 |
| | 90 | 10 | 721 890 013 | 0.490 | Tr 128x5 | | 110 | 43 |
| *** | 90 | 10 | 721 890 023 | 0.355 | Tr 128x5 | | 105 | 43 |
| | 110 | 10 | 721 890 014 | 0.574 | Tr 154x6 | | 133 | 48 |
| ** | 75 | | 198 806 429 | 0.200 | | | | |



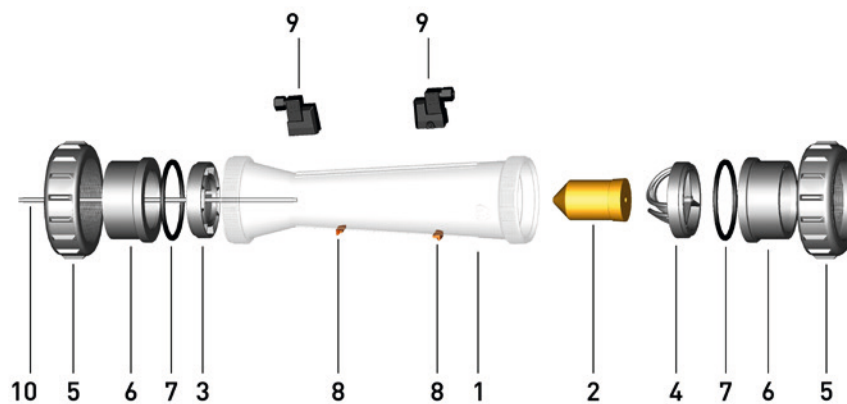
Exchange kit

Model:

- Exchange kit consisting of: guiding rod (PVDF/V4A), insert guiding rod and insert bottom
- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all scale ranges)

| d (mm) | Size (inch) | DN (mm) | Scale range (l/h) | Code |
|-----------|----------------|------------|----------------------|--------------------|
| 63 | 2 | 50 | 1500 - 15000 | 198 350 895 |
| 75 | 2 ½ | 65 | 2000 - 20000 | 198 350 896 |
| 75 | 2 ½ | 65 | 3000 - 30000 | 198 350 896 |
| 75 | 2 ½ | 65 | 8000 - 80000 | 198 350 896 |

Variable area flow meter type 335



Taper tube with water scale (1)

- PVC-U transparent

| d (mm) | Size (inch) | DN (mm) | Scale range (l/h) | PVC-U transparent Code | Polyamid Code | Polysulfon Code |
|-----------|----------------|------------|----------------------|------------------------------|--------------------|--------------------|
| 32 | 1 | 25 | 50 - 500 | 198 335 055 | 198 335 070 | 198 335 085 |
| 32 | 1 | 25 | 100 - 1000 | 198 335 056 | 198 335 071 | 198 335 086 |
| 40 | 1 ¼ | 32 | 150 - 1500 | 198 335 057 | 198 335 072 | 198 335 087 |
| 40 | 1 ¼ | 32 | 250 - 2500 | 198 335 058 | 198 335 073 | 198 335 088 |
| 50 | 1 ½ | 40 | 200 - 2000 | 198 335 059 | 198 335 074 | 198 335 089 |
| 50 | 1 ½ | 40 | 300 - 3000 | 198 335 060 | 198 335 075 | 198 335 090 |
| 50 | 1 ½ | 40 | 600 - 6000 | 198 335 061 | 198 335 076 | 198 335 091 |
| 63 | 2 | 50 | 600 - 6000 | 198 335 062 | 198 335 077 | 198 335 092 |
| 63 | 2 | 50 | 1000 - 10000 | 198 335 063 | 198 335 078 | 198 335 093 |
| 63 | 2 | 50 | 1500 - 15000 | 198 335 064 | 198 335 079 | 198 335 094 |
| 75 | 2 ½ | 65 | 2000 - 20000 | 198 335 065 | 198 335 080 | 198 335 095 |
| 75 | 2 ½ | 65 | 3000 - 30000 | 198 335 066 | 198 335 081 | 198 335 096 |
| 75 | 2 ½ | 65 | 8000 - 60000 | 198 335 067 | 198 335 082 | 198 335 097 |





Taper tube without scale (1)

| Scale range (l/h) | d (mm) | Size (inch) | DN (mm) | PVC-U transparent Code | Polyamid Code | Polysulfone Code |
|----------------------|-----------|----------------|------------|------------------------------|------------------|---------------------|
| 50 - 500 | 32 | 1 | 25 | 198 335 255 | 198 335 270 | 198 335 285 |
| 100 - 1000 | 32 | 1 | 25 | 198 335 256 | 198 335 271 | 198 335 286 |
| 150 - 1500 | 40 | 1 ¼ | 32 | 198 335 257 | 198 335 272 | 198 335 287 |
| 250 - 2500 | 40 | 1 ¼ | 32 | 198 335 258 | 198 335 273 | 198 335 288 |
| 200 - 2000 | 50 | 1 ½ | 40 | 198 335 259 | 198 335 274 | 198 335 289 |
| 300 - 3000 | 50 | 1 ½ | 40 | 198 335 260 | 198 335 275 | 198 335 290 |
| 600 - 6000 | 50 | 1 ½ | 40 | 198 335 261 | 198 335 276 | 198 335 291 |
| 600 - 6000 | 63 | 2 | 50 | 198 335 262 | 198 335 277 | 198 335 292 |
| 1000 - 10000 | 63 | 2 | 50 | 198 335 263 | 198 335 278 | 198 335 293 |
| 1500 - 15000 | 63 | 2 | 50 | 198 335 264 | 198 335 279 | 198 335 294 |
| 2000 - 20000 | 75 | 2 ½ | 65 | 198 335 265 | 198 335 280 | 198 335 295 |
| 3000 - 30000 | 75 | 2 ½ | 65 | 198 335 266 | 198 335 281 | 198 335 296 |
| 8000 - 60000 | 75 | 2 ½ | 65 | 198 335 267 | 198 335 282 | 198 335 297 |

Insert PVDF (3,4)



top



bottom

DN25 - DN40

| d (mm) | Size (inch) | DN (mm) | Scale range (l/h) | top (4) Code | bottom (3) Code |
|-----------|----------------|------------|------------------------------------|-----------------|--------------------|
| 32 | 1 | 25 | 50 - 500 | 198 335 970 | 198 335 977 |
| 40 | 1 ¼ | 32 | 150 - 1500, 250 - 2500 | 198 335 971 | 198 335 978 |
| 50 | 1 ½ | 40 | 200 - 2000, 300 - 3000, 600 - 6000 | 198 335 972 | 198 335 979 |
| 63 | 2 | 50 | 600-6000, 1000-10000, 1500-15000 | 199 335 974 | 198 335 893 |
| 75 | 2 ½ | 65 | 2000-20000, 3000-30000, 8000-60000 | 199 335 975 | 198 335 894 |

Float PVDF (2)



DN40

| d (mm) | Size (inch) | DN (mm) | Scale range (l/h) |
|-----------|----------------|------------|---|
| 32 - 40 | 1 - 1 ¼ | 25 - 32 | 50 - 500 / 100 - 1000 / 150 - 1500 / 250 - 2500 |
| 50 | 1 ½ | 40 | 200 - 2000 / 300 - 3000 / 600 - 6000 |
| 63 | 2 | 50 | 600 - 6000 / 1000 - 10000 / 1500 - 15000 |
| 75 | 2 ½ | 65 | 2000 - 20000 / 3000 - 30000 |
| 75 | 2 ½ | 65 | 8000 - 60000 |



DN50

| Without magnet Code | With magnet (bistabil) Code |
|------------------------|-----------------------------------|
| 198 335 455 | 198 335 470 |
| 198 335 457 | 198 335 471 |
| 198 335 458 | 198 335 472 |
| 198 335 459 | 198 335 473 |
| 199 335 460 | 199 335 474 |



DN65



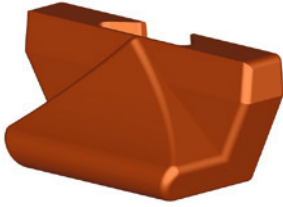
Guiding rod (10)

| d (mm) | Size (inch) | Scale range (l/h) | PVDF Code |
|-----------|----------------|------------------------------------|--------------|
| 63 | 2 | 600-6000, 1000-10000, 1500-15000 | 198 335 984 |
| 75 | 2 ½ | 2000-20000, 3000-30000, 8000-60000 | 198 335 984 |



Insert guiding rod PVDF (for 10)

| d (mm) | Size (inch) | DN (mm) | Scale range (l/h) | Code |
|-----------|----------------|------------|------------------------------------|-------------|
| 63 | 2 | 50 | 600-6000, 1000-10000, 1500-15000 | 198 335 953 |
| 75 | 2 ½ | 65 | 2000-20000, 3000-30000, 8000-60000 | 198 335 954 |



Flow value indicator PS (8)

Model:

- For all dimensions type 335/350

| d (mm) | Size (inch) | DN (mm) | Flow value indicator Code |
|-----------|----------------|------------|---------------------------------|
| 32 | 1 | 25 | 198 335 990 |
| 40 | 1 ¼ | 32 | 198 335 990 |
| 50 | 1 ½ | 40 | 198 335 990 |
| 63 | 2 | 50 | 198 335 990 |
| 75 | 2 ½ | 65 | 198 335 990 |



O-rings (7)

| d (mm) | Size (inch) | DN (mm) | EPDM Code | FKM Code |
|-----------|----------------|------------|--------------------|--------------------|
| 32 | 1 | 25 | 748 410 008 | 749 410 008 |
| 40 | 1 ¼ | 32 | 748 410 009 | 749 410 009 |
| 50 | 1 ½ | 40 | 748 410 010 | 749 410 010 |
| 63 | 2 | 50 | 748 410 011 | 749 410 011 |
| 75 | 2 ½ | 65 | 748 410 014 | 749 410 014 |



Exchange kit

Model:

- Exchange kit consisting of: guiding rod (PVDF/V4A), insert guiding rod and insert bottom
- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all scale ranges)

| d (mm) | Size (inch) | DN (mm) | Scale range (l/h) | Code PVDF Code |
|-----------|----------------|------------|----------------------|--------------------|
| 63 | 2 | 50 | 1500 - 15000 | 198 335 895 |
| 75 | 2 ½ | 65 | 2000 - 20000 | 198 335 896 |
| 75 | 2 ½ | 65 | 3000 - 30000 | 198 335 896 |
| 75 | 2 ½ | 65 | 8000 - 80000 | 198 335 896 |

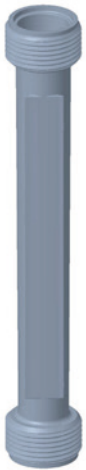
Spare part for variable area flow meter SK50-SK73/SK500-SK730



Short version taper tube Polysulfone

- without scale

| d (mm) | DN (mm) | Type | Code |
|-----------|------------|-------------|--------------------|
| 16 | 10 | SK 50 / 500 | 198 801 341 |
| 16 | 10 | SK 51 / 510 | 198 801 342 |
| 16 | 10 | SK 52 / 520 | 198 801 343 |
| 20 | 15 | SK 60 / 600 | 198 801 449 |
| 20 | 15 | SK 61 / 610 | 198 801 450 |
| 20 | 15 | SK 62 / 620 | 198 801 451 |
| 32 | 25 | SK 70 / 700 | 198 801 445 |
| 32 | 25 | SK 71 / 710 | 198 801 338 |
| 32 | 25 | SK 72 / 720 | 198 801 339 |
| 32 | 25 | SK 73 / 730 | 198 801 340 |



Short version taper tube PVC-U transparent

- without scale

| d (mm) | DN (mm) | Type | Code |
|-----------|------------|-------------|--------------------|
| 16 | 10 | SK 50 / 500 | 198 803 790 |
| 16 | 10 | SK 51 / 510 | 198 803 791 |
| 16 | 10 | SK 52 / 520 | 198 803 792 |
| 20 | 15 | SK 60 / 600 | 198 803 793 |
| 20 | 15 | SK 61 / 610 | 198 803 794 |
| 20 | 15 | SK 62 / 620 | 198 803 795 |
| 32 | 25 | SK 70 / 700 | 198 803 796 |
| 32 | 25 | SK 71 / 710 | 198 803 797 |
| 32 | 25 | SK 72 / 720 | 198 803 798 |
| 32 | 25 | SK 73 / 730 | 198 803 799 |



Short version float PVDF Without magnet

| d (mm) | DN (mm) | Type | Code |
|-----------|------------|----------------------|--------------------|
| 16 | 10 | SK 50 / 51 / 52 | 198 806 219 |
| 20 | 15 | SK 60 / 61 / 62 | 198 806 220 |
| 32 | 25 | SK 70 / 71 / 72 / 73 | 198 806 221 |

**Short version float PVDF
With magnet bistable**



| d (mm) | DN (mm) | Type | Code |
|-----------|------------|--------------------------|--------------------|
| 16 | 10 | SK 500 / 510 / 520 | 198 806 222 |
| 20 | 15 | SK 600 / 610 / 620 | 198 806 223 |
| 32 | 25 | SK 700 / 710 / 720 / 730 | 198 806 224 |

**Short version float PTFE
Without magnet**



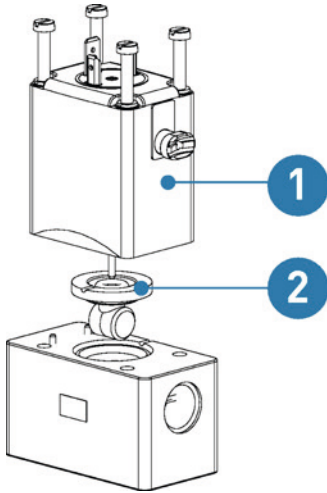
| d (mm) | DN (mm) | Type | Code |
|-----------|------------|-------|--------------------|
| 32 | 25 | SK 73 | 198 807 166 |

Short version top insert PVDF



| d (mm) | DN (mm) | Type | Code |
|-----------|------------|---|--------------------|
| 16 | 10 | SK 50 / 500; 51 / 510; 52 / 520 | 198 807 188 |
| 20 | 15 | SK 60 / 600; 61 / 610; 62 / 620 | 198 807 187 |
| 32 | 25 | SK 70 / 700; 71 / 710; 72 / 720; 73 / 730 | 198 807 182 |

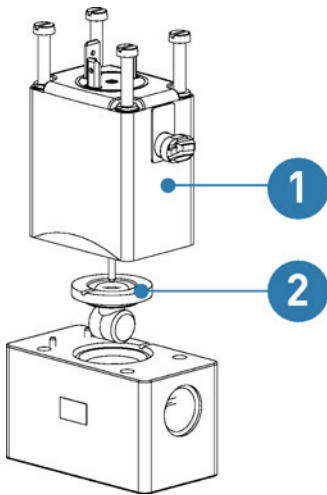
Spare parts solenoid valve type 157



Wear part set (2)
For solenoid valve type 157

e.g. diaphragm

| EPDM Code | FKM Code |
|-------------|-------------|
| 198 808 012 | 198 808 013 |



Coil set (1)
For solenoid valve type 157

| Tension | Function | EPDM Code | FKM Code |
|---------|----------|-------------|-------------|
| 24V DC | A | | 198 808 006 |
| 24V UC | A | 198 808 002 | |
| 230V AC | A | 198 808 004 | |

Spare parts solenoid valve type 160/161



Wear part set (3)
For solenoid valve type 160/161

Model:

- Pre-assembled set with angle flange
- Set already pre-lubricated
- Manual override included

| d (mm) | DN (mm) | EPDM Code | FKM Code |
|--------|---------|-------------|-------------|
| 16 | 10 | 198 808 023 | 198 808 026 |
| 20 | 15 | 198 808 024 | 198 808 027 |
| 25 | 20 | 198 808 025 | 198 808 028 |

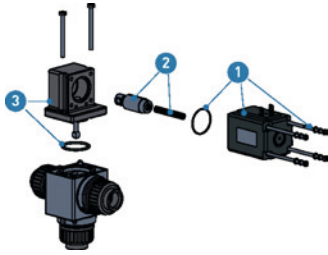


Actuator Set (2)
For solenoid valve type 160/161

Model:

- Including core and pressure spring

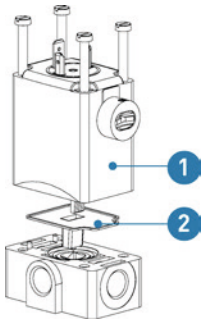
| Function | UC Code | 50Hz Code |
|----------|-------------|-------------|
| A | 198 808 017 | 198 808 021 |
| B | 198 808 018 | |
| E | 198 808 019 | |
| F | 198 808 020 | 198 808 022 |



Coil set (1)
For solenoid valve type 160/161

| 24V UC Code | 230 V UC Code | 230 V/ 50Hz Code |
|-------------|---------------|------------------|
| 198 808 014 | 198 808 015 | 198 808 016 |

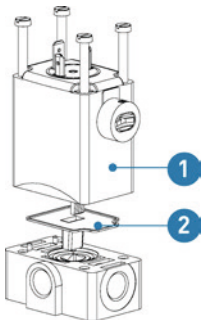
Spare parts solenoid valve type 166



Wear part set (2)
For solenoid valve type 166

e.g. diaphragm

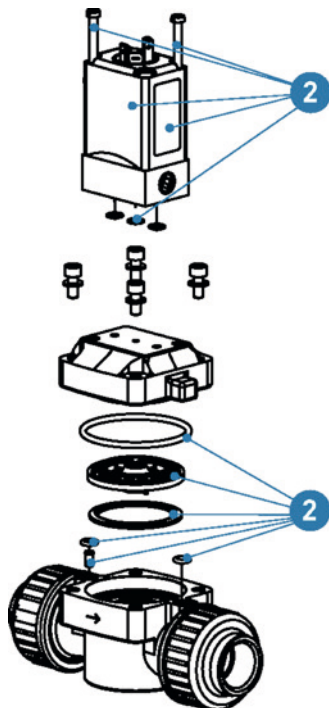
| EPDM Code | FKM Code |
|-------------|-------------|
| 198 808 053 | 198 808 054 |



Coil set (1)
For solenoid valve type 166

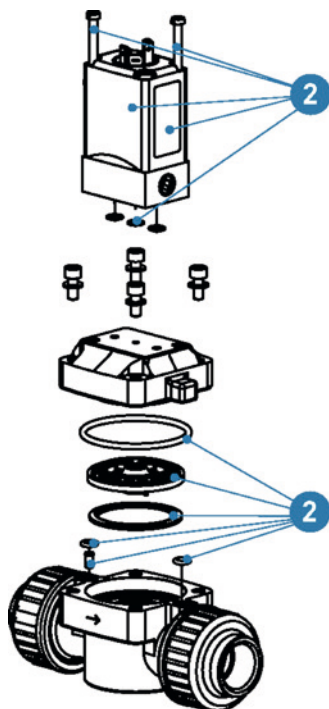
| Function | Tension | FKM Code |
|----------|---------|-------------|
| C | 24V UC | 198 808 049 |

Spare parts solenoid valve type 165



Wear part set (2)
For solenoid valve type 165

| d-d (mm) | DN-DN (mm) | EPDM Code | FKM Code |
|-------------|---------------|--------------|-------------|
| 20 - 25 | 15 - 20 | 198 808 035 | 198 808 038 |
| 32 - 40 | 25 - 32 | 198 808 036 | 198 808 039 |
| 50 - 63 | 40 - 50 | 198 808 037 | 198 808 040 |



Coil set (1)
For solenoid valve type 165

| Tension | EPDM Code | FKM Code |
|---------|--------------|-------------|
| 24V DC | 198 808 029 | 198 808 032 |
| 230V AC | 198 808 030 | 198 808 033 |
| 110V AC | 198 808 031 | 198 808 034 |

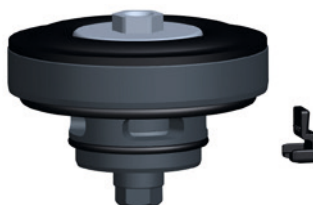
Pressure regulating valve type 582/586



Cartridge type 582

| DN (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | PP-H EPDM Code | PP-H FKM Code |
|------------|-----------------------|-------------------|-----------------------|-------------------|-------------------|------------------|
| 10-15 | 161 489 131 | 161 489 231 | 163 489 131 | 163 489 231 | 167 489 131 | 167 489 231 |
| 20-25 | 161 489 133 | 161 489 233 | 163 489 133 | 163 489 233 | 167 489 133 | 167 489 233 |
| 32-50 | 161 489 136 | 161 489 236 | 163 489 136 | 163 489 236 | 167 489 136 | 167 489 236 |

| DN (mm) | PVDF FKM Code | PVDF HP FKM Code |
|------------|------------------|------------------------|
| 10-15 | 185 489 131 | 180 489 131 |
| 20-25 | 185 489 133 | 180 489 133 |
| 32-50 | 185 489 136 | 180 489 136 |



Cartridge type 586

| DN (mm) | PVC-U EPDM Code | PVC-U FKM Code | PVC-C EPDM Code | PVC-C FKM Code | PP-H EPDM Code | PP-H FKM Code |
|------------|-----------------------|-------------------|-----------------------|-------------------|-------------------|------------------|
| 10-15 | 161 489 161 | 161 489 261 | 163 489 161 | 163 489 261 | 167 489 161 | 167 489 261 |
| 20-25 | 161 489 163 | 161 489 263 | 163 489 163 | 163 489 263 | 167 489 163 | 167 489 263 |
| 32-50 | 161 489 166 | 161 489 266 | 163 489 166 | 163 489 266 | 167 489 166 | 167 489 266 |

| DN (mm) | PVDF FKM Code |
|------------|------------------|
| 10-15 | 185 489 161 |
| 20-25 | 185 489 163 |
| 32-50 | 185 489 166 |

Cover cap

| DN (mm) | Type | Code |
|------------|---------|-------------|
| 10-15 | 582/586 | 198 806 391 |
| 20-25 | 582/586 | 198 806 393 |
| 32-50 | 582/586 | 198 806 396 |



SYGEF Standard Manometer Adapter For pressure regulating valves type 582/586

Model:

- Material: PVDF
- For media separation from pressure gauge to process medium
- PTFE/EPDM Manometer diaphragm
- *EPDM and FKM O-Ring included in Set

| DN (mm) | EPDM/FKM Code | FKM white (HP) Code |
|------------|------------------|---------------------------|
| 10-50 | 198 806 650 | 198 806 654 |

Manometer For pressure regulating valves type 582/586

Model:

- Display with double scale: 0-4 bar / 0-58 psi, size: ø 40mm
- Display with double scale: 0-10bar / 0-150psi, size: ø 40mm
- Connection G 1/4 center back mount

| DN (mm) | Material | EPDM/FKM 0-10bar Code | FKM white (HP) 0-10bar Code | EPDM/FKM 0-4bar Code |
|------------|-----------------|-----------------------------|--------------------------------------|----------------------------|
| 10-50 | Brass | 198 806 651 | 198 806 655 | 198 806 963 |
| 10-50 | Stainless Steel | 198 806 652 | 198 806 656 | 198 806 962 |

Manometer plug For pressure regulating valves type 582/586

- For maintenance

| DN (mm) | Code |
|------------|-------------|
| 10-50 | 198 806 653 |

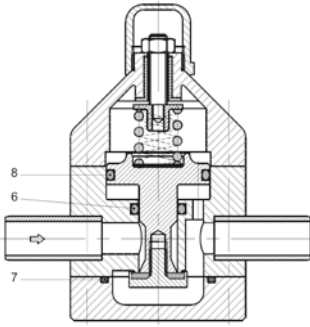
Hook wrench

| DN (mm) | Type | Code |
|------------|---------|-------------|
| 10-15 | 582/586 | 198 806 451 |
| 20-25 | 582/586 | 198 806 452 |
| 32-50 | 582/586 | 198 806 453 |

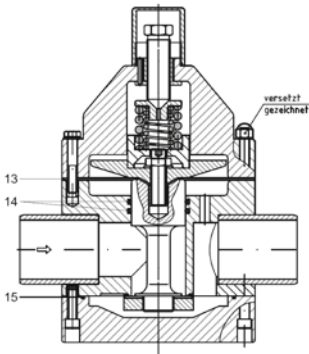
Pressure reducing valve type V182/82

Model:

- Spare part kit contains: diaphragm and o-rings



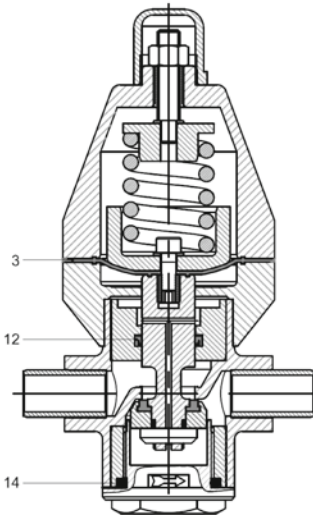
| Type | DN-DN (mm) | EPDM Code | FKM Code | PTFE Code |
|------|---------------|--------------|-------------|--------------|
| V182 | 10 - 15 | 700 254 285 | 700 254 289 | |
| V182 | 20 - 25 | 700 254 286 | 700 254 290 | |
| V182 | 32 - 40 | 700 254 287 | 700 254 291 | |
| V182 | 50 | 700 254 288 | 700 254 292 | |
| V82 | 65 | 700 254 404 | | 700 254 308 |
| V82 | 80 | 700 254 405 | | 700 254 309 |
| V82 | 100 | 700 254 406 | | 700 254 310 |



Pressure reducing valve type V782

Model:

- Spare part kit contains: diaphragm and o-rings



| Type | DN-DN (mm) | EPDM Code | PTFE Code |
|------|---------------|--------------|--------------|
| V782 | 10 - 15 | 700 254 318 | 700 254 321 |
| V782 | 20 - 25 | 700 254 319 | 700 254 322 |
| V782 | 32 - 40 | 700 254 320 | 700 254 323 |

Pressure relief valve type V185/85

Model:

- Spare part kit contains: diaphragm

| Type | DN-DN (mm) | EPDM Code | PTFE Code |
|------|---------------|--------------|--------------|
| V185 | 10 - 20 | 700 254 333 | 700 254 339 |
| V185 | 25 - 32 | 700 254 334 | 700 254 340 |
| V185 | 40 - 50 | 700 254 335 | 700 254 341 |
| V85 | 65 | 700 254 336 | 700 254 342 |
| V85 | 80 | 700 254 337 | 700 254 343 |
| V85 | 100 | 700 254 338 | 700 254 344 |

Pressure retaining valve type V186/86

Model:

- Spare part kit contains: diaphragm

| Type | DN-DN (mm) | EPDM Code | PTFE Code |
|----------|---------------|--------------|--------------|
| V185/186 | 10 - 20 | 700 254 333 | 700 254 339 |
| V185/186 | 25 - 32 | 700 254 334 | 700 254 340 |
| V185/186 | 40 - 50 | 700 254 335 | 700 254 341 |
| V86 | 65 | 700 254 376 | 700 254 379 |
| V86 | 80 | 700 254 377 | 700 254 380 |
| V86 | 100 | 700 254 378 | 700 254 381 |

Pressure retaining valve type V786

Model:

- Spare part kit contains: diaphragm

| Type | DN-DN (mm) | EPDM Code | PTFE Code |
|------|---------------|--------------|--------------|
| V786 | 10 - 15 | 700 254 389 | 700 254 392 |
| V786 | 20 - 25 | 700 254 390 | 700 254 393 |
| V786 | 32 - 40 | 700 254 391 | 700 254 394 |

General Condition of Supply of Georg Fischer Piping Systems Limited, Schaffhausen

1 General

- 1.1 These General Conditions shall apply to all Products supplied by Georg Fischer Piping Systems Limited («Georg Fischer») to the Purchaser. They shall also apply to all future business even when no express reference is made to them.
- 1.2 Any deviating or supplementary conditions especially Purchaser's general conditions of purchase and verbal agreements shall only be applicable if accepted in writing by Georg Fischer.
- 1.3 The written form shall be deemed to be fulfilled by all forms of transmission, evidenced in the form of text, such as telefax, e-mail, etc.

2 Tenders

Tenders shall only be binding if they contain a specifically stated period for acceptance.

3 Scope of Delivery

- 3.1 Georg Fischer's product range is subject to change.
- 3.2 The confirmation of order shall govern the scope and execution of the contract.

4 Data and Documents

- 4.1 Technical documents such as drawings, descriptions, illustrations and data on dimensions, performance and weight as well as the reference to standards are for information purposes only. They are not warranted characteristics and are subject to change.
- 4.2 All technical documents shall remain the exclusive property of Georg Fischer and may only be used for the agreed purposes or as Georg Fischer may consent.

5 Confidentiality, Protection of Personal Data

- 5.1 Each party shall keep in strict confidence all commercial or technical information relating to the business of the other party, of which it has gained knowledge in the course of its dealing with the other party. Such information shall neither be disclosed to third parties nor used for other purposes than those for which the information has been supplied.
- 5.2 In the context of the contractual relation with the Purchaser personal data may be processed. The Purchaser agrees to the disclosure of said data to third parties such as foreign subcontractors and suppliers etc.

6 Local Laws and Regulations, Export Controls

- 6.1 The Purchaser shall bring to the attention of Georg Fischer all local laws and regulations at the place of destination which bear connection with the execution of the contract and the adherence to relevant safety regulations and approval procedures.
- 6.2 In case of re-exports, Purchaser shall be responsible for compliance with pertinent export control regulations.

7 Price

- 7.1 Unless agreed otherwise, the prices shall be deemed quoted net ex works (according to Incoterms 2010 of the ICC, or latest version) including standard packing. All supplementary costs such as the cost of carriage, insurance, export-, transit- and import- licences etc. shall be borne by the Purchaser. The Purchaser shall also bear the costs of all taxes, fees, duties etc. connected with the contract.
- 7.2 If the costs of packing, carriage, insurance, fees and other supplementary costs are included in the tender price or contract price or are referred to specifically in the tender or confirmation of order, Georg Fischer reserve the right to revise their prices accordingly should any change occur in the relevant tariffs.

8 Terms of Payment

- 8.1 The Purchaser shall make payment in the manner agreed by the parties without any deductions such as discounts, costs, taxes or dues.
- 8.2 The Purchaser may only withhold or off-set payments due against counter claims which are either expressly acknowledged by Georg Fischer or finally awarded to the Purchaser. In particular, payment shall still be made when unessential items are still outstanding provided that the Products already delivered are not rendered unusable as a result.

9 Retention of Title

- 9.1 The Products shall remain the property of Georg Fischer until the Purchaser shall have settled all claims, present and future, which Georg Fischer may have against him.
- 9.2 Should the Purchaser resell Products to which title is reserved, in the ordinary course of business, he shall hereby be deemed to have tacitly assigned to Georg Fischer the proceeds deriving from their sale together with all collateral rights, securities and reservations of title until all claims held by Georg Fischer shall have been settled. Until revoked by Georg Fischer, this assignment shall not preclude Purchaser's right to collect the assigned receivables.
- 9.3 To the extent the value of the Products to which title is reserved together with collateral securities exceeds Georg Fischer's claims against the Purchaser by more than 20%, Georg Fischer shall re-assign the above proceeds to Purchaser at his request.

10 Delivery

- 10.1 The term of delivery shall commence as soon as the contract has been entered into, all official formalities such as import and payment permits have been obtained and all essential technical issues have been settled. The term of delivery shall be deemed duly observed when, upon its expiry, the Products are ready for despatch.
- 10.2 Delivery is subject to the following conditions, i.e. the term of delivery shall be reasonably extended:
- a) if Georg Fischer are not supplied in time with the information necessary for the execution of the contract or if subsequent changes causing delays are made by the Purchaser.
- b) if Georg Fischer are prevented from performing the contract by force majeure. Force majeure shall equally be deemed to be any unforeseeable event beyond Georg Fischer's control which renders Georg Fischer's performance commercially impractical or impossible, such as delayed or defective supplies from sub contractors labour disputes, governmental orders or regulations, shortages in materials or energy, serious disturbances in Georg Fischer's works, such as the total or partial destruction of plant and equipment or the breakdown of essential facilities, serious disruptions in transport facilities, e.g. impassable roads. Should the effect of force majeure exceed a period of six (6) months, either party may cancel the contract forthwith. Georg Fischer shall not be liable for any damage or loss of any kind whatsoever resulting from the reform, any suspension or cancellation being without prejudice to Georg Fischer's right to recover all sums due in respect of consignments delivered and costs incurred to date.
- c) if the Purchaser is in delay with the fulfilment of his obligations under the contract, in particular, if he does not adhere to the agreed conditions of payment or if he has failed to timely provide the agreed securities.
- 10.3 If for reasons attributable to Georg Fischer the agreed term of delivery or a reasonable extension thereof is exceeded, Georg Fischer shall not be deemed in default until the Purchaser has granted to Georg Fischer in writing a reasonable extension thereof of not less than one (1) month which equally is not met. The Purchaser shall then be entitled to the remedies provided at law, it being however understood that, subject to limitations of Art. 16, damage claims shall be limited to max. 10% of the price of the delayed delivery.
- 10.4 Part shipments shall be allowed and Georg Fischer shall be entitled to invoice for such partial deliveries.
- 10.5 If the Purchaser fails to take delivery within a reasonable time of Products notified as ready for despatch, Georg Fischer shall be entitled to store the Products at the Purchaser's expense and risk and to invoice them as delivered. If Purchaser fails to effect payment, Georg Fischer shall be entitled to dispose of the Products.
- 10.6 Should Purchaser cancel an order without justification and should Georg Fischer not insist on the performance of the contract, Georg Fischer shall be entitled to a penalty amounting to 10% of the contract price, Georg Fischer's right to prove and claim higher damages remaining reserved.

Purchaser shall be entitled to prove, that Georg Fischer has suffered no or a considerably lower damage than the penalty forfeited.

11 Packing

If the Products are provided with additional packing over and above the standard packing, such packing shall be charged additionally.

12 Passing of Risk

- 12.1 The risk in the Products shall pass to the Purchaser as soon as they have left Georg Fischer's works [EX WORKS, Incoterms 2010 ICC, or latest version], even if delivery is made carriage-paid, under similar clauses or including installation or when carriage is organized and managed by Georg Fischer.
- 12.2 If delivery is delayed for reasons beyond Georg Fischer's control, the risk shall pass to the Purchaser when he is notified that the Products are ready for despatch.

13 Carriage and Insurance

- 13.1 Unless agreed otherwise, the Purchaser shall bear the cost of carriage.
- 13.2 The Purchaser shall be responsible for transport insurance against damage of whatever kind. Even when such insurance is arranged by Georg Fischer it shall be deemed taken out by the order of and for the account of the Purchaser and at his risk.
- 13.3 Special requests regarding carriage and insurance shall be communicated to Georg Fischer in due time. Otherwise carriage shall be arranged by Georg Fischer at their discretion, but without responsibility, by the quickest and cheapest method possible.
- In case of carriage-paid delivery transport arrangements shall be made by Georg Fischer. If the Purchaser specifies particular requirements, any extra costs involved shall be borne by him.
- 13.4 In the event of damage or loss of the Products during carriage the Purchaser shall mark the delivery documents accordingly and immediately have the damage ascertained by the carrier. Not readily ascertainable damages sustained during carriage shall be notified to the carrier within six (6) days after receipt of the Products.

14 Inspection, Notification of Defects and Damages

- 14.1 The Products will be subject to normal inspection by Georg Fischer during manufacture. Additional tests required by the Purchaser shall be agreed upon in writing and shall be charged to the Purchaser.
- 14.2 It shall be a condition of Georg Fischer's obligation under the warranties stated hereinafter that Georg Fischer be notified in writing by the Purchaser of any purported defect immediately upon discovery. Notice concerning weight, numbers or apparent defects is to be given latest within 30 days from receipt of the Products, notice of other defects immediately latest within seven (7) working days after discovery, in any event within the agreed warranty period.
- 14.3 Purchaser shall not dispose of allegedly defective Products until all warranty and/or damage claims are finally settled. At its request, defective Products are to be placed at Georg Fischer's disposal.
- 14.4 At its request, Georg Fischer shall be given the opportunity to inspect the defect and/or damage, prior to commencement of remedial work, either itself or by third party experts.

15 Warranty

- 15.1 At the written request of the Purchaser, Georg Fischer undertakes to repair or replace at its discretion, as quickly as possible and free of charge, all Products supplied which demonstrably suffer from faulty design, materials or workmanship, from faulty operating or installation instructions or which become defective or unusable due to faulty advice. In order to protect employees from toxic or radioactive substances which may have been transported through defective parts returned to Georg Fischer's sales organisation, said parts must be accompanied by a Material Safety Disclosure Form. The form may be obtained from Georg Fischer's local sales company or via www.piping.georgfischer.com. Replaced parts shall become property of Georg Fischer, unless Georg Fischer waives such claim.
- 15.2 For Products which are manufactured to specifications, drawings or patterns supplied by the Purchaser, Georg Fischer's warranty shall be restricted to proper materials and workmanship.
- 15.3 The Purchaser shall be entitled to rescind the contract or to demand a reduction of the contract price if
- the repair or replacement of the defective Product is impossible
 - the defective Product is not repaired or replaced within a reasonable period
 - Georg Fischer refuses the repair or replacement or if for reasons attributable to Georg Fischer the repair or replacement is delayed.
- 15.4 For Products or essential components manufactured by a third party and supplied by Georg Fischer under this contract, Georg Fischer's warranty is limited to the warranty provided by said third party.
- 15.5 This warranty shall not apply to damage resulting from normal wear and tear, improper storage and maintenance, failure to observe the operating instructions, overstressing or overloading, unsuitable operating media, unsuitable construction work or unsuitable building ground, improper repairs or alterations by the Purchaser or third parties, the use of other than original spare parts and other reasons beyond Georg Fischer's control.
- 15.6 No action or claim may be brought by the Purchaser on account of any alleged breach of warranty or any other obligation of Georg Fischer after the expiration of twelve (12) months from receipt of the Products by the end user or at the latest within eighteen (18) months of the Products being despatched by Georg Fischer.
- 15.7 In case of Products for use in domestic installations or in utilities
- Georg Fischer will assume the costs of dismantling the defective Product and restoring the damaged object up to CHF 1'000'000 per occurrence.
 - warranty or damage claims - contrary to Section 15.6 - are time-barred five (5) years from the date of installation or seven (7) years from the production date, whichever is earlier.

16 Limitation of Liability

The rights and remedies of the customer shall be exclusively governed by these General Conditions of Supply and shall be in lieu of any remedies at law. All further claims for damages, reduction of the purchase price, termination or rescission of the contract are excluded. In no case whatsoever shall the customer be entitled to claim damages other than compensation for costs of remedying defects in the supplies. This in particular refers, but shall not be limited, to loss of production, loss of use, loss of orders, loss of profit, third party recovery claims and other direct or indirect or consequential damages. This limitation of liability equally applies to the extent Georg Fischer is liable for acts or omissions of its employees or third parties engaged for the performance of its obligations. It does not apply in case of unlawful intent or gross negligence on the part of Georg Fischer's management and in case of Georg Fischer's statutory liability, in particular under applicable product liability laws.

17 Severability

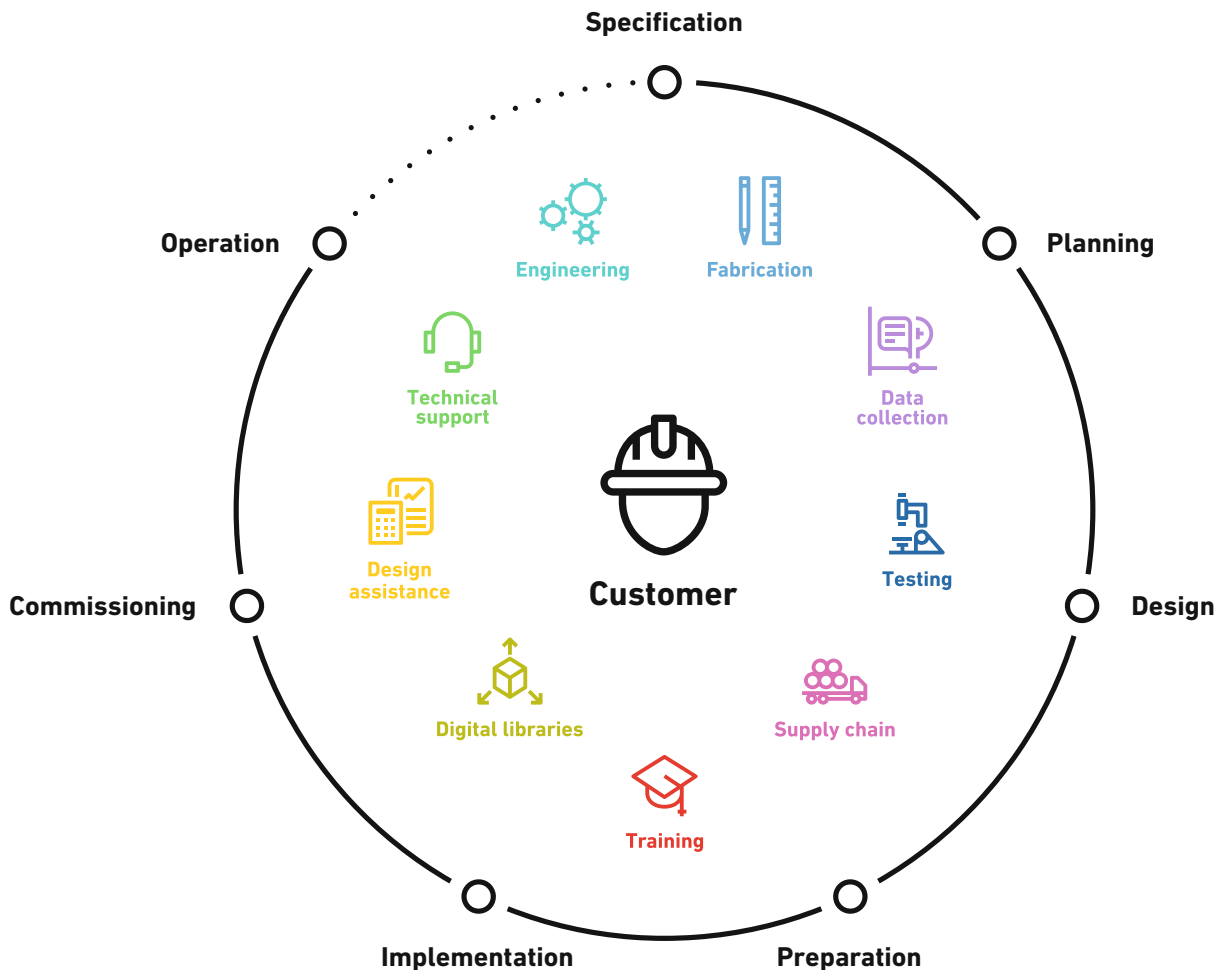
Should any term or clause of these General Conditions in whole or in part be found to be unenforceable or void, all other provisions shall remain in full force and effect and the unenforceable or void provision shall be replaced by a valid provision, which comes closest to the original intention of the unenforceable or invalid provision.

18 Place of Performance and Jurisdiction

- 18.1 Place of performance for the Products shall be the Georg Fischer works from which the Products are despatched.
- 18.2 The contract shall be governed by Swiss law without regard to conflict of law provisions that would require the application of another law.
- 18.3 Any civil action based upon any alleged breach of this contract shall be filed and prosecuted exclusively in the courts of Schaffhausen, Switzerland. Georg Fischer however reserves the right to file actions in any court having jurisdiction over controversies arising out of or in connection with the present contract.

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