





Product Range

TP fittings and valves



	PVC-U Fittings	6
	PVC-U Ball valves	35
	PVC-U Check valves	49
	PVC-U Butterfly valves	54
	PVC-U British standard Inch range	58
	Index	67
	Back cover	74

PVC-U Fittings

Applications

TP (formerly known as Tecno Plastic) is a dedicated brand of PVC fittings and valves for water piping systems. Each TP product is designed to meet the demands of the customers in specific application areas such as distribution, treatment and sewage water, public and private swimming pools, thermal pools and spas, aquariums and aquaculture, irrigation and fountains.

Range

TP full range of fittings is available in following ranges: metric for solvent cement from 16 mm to 225 mm, BSP threaded from 3/8" to 6", adapt or set from 16x3/8" to 160x6".

MECHANICAL PROPERTIES

Max working pressure in Bar

Series	Dimensions	PN
Solvent jointing	from d 16 to d 200	16
	from d 225 to d 315	10
Threaded	from 3/8" to 6"	16
Adapt or range	from D 16 to D 160	16

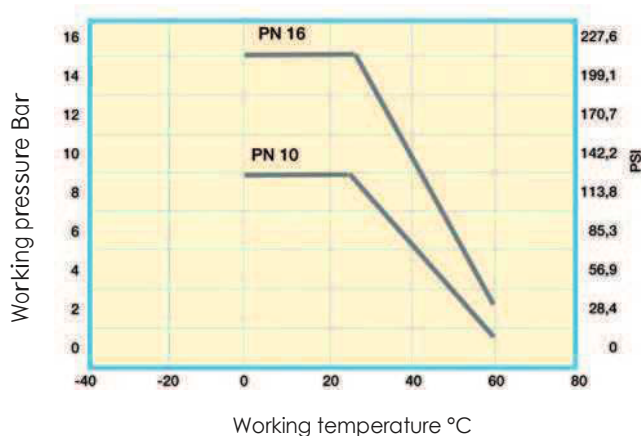
Sanitary regulations

Our fittings, as well as applied raw material, are suitable for drinkable water and foodstuff fluids in accordance either to the Italian National Authorities laws (D.M.174, 6th april 2004), or other international organizations.

Materials

The PVC-U compound used by TP is stabilised unplasticized polyvinyl chloride. Material chemical resistances according to ISO/TR 10358.

PRESSURE-TEMPERATURE RELATIONSHIP ACCORDING TO DIN 3441 BLATT 1 AND EN 145£/3/5



Standards

The raw material applied for TP products is in compliance with international standards mentioned in the table "PHYSICAL PROPERTIES OF PVC-U".

TP fittings are in compliance with the main international standards too, like ISO EN 1452-3, NF & KIW A, so that they can be combined with pipes according to the main international standards.

SAFETY FACTORS AT £0°C FOR PN 16 FITTINGS

Working pressure	Hours		Corresponding to 50 years life
	1	1000	
10 Bar	6,7	5,1	4,0
16 Bar DN ≤ 160	4,2	3,2	2,5
16 Bar DN > 160	3,36	2,56	2

Gaskets

Standard Gaskets for unions and stubs are in EPDM (ethylene - polypropylene rubber).

PHYSICAL PROPERTIES OF PVC-U

Characteristics	Standard	Units	PVC
Density	ISO 1183	kg/dm ³	1,40
Elongation	ISO R527	%	154
Modulus of elasticity	ISO R527	MPa	2.600
Resistance to traction	ISO R527	MPa	40
Tensile strength	ISO R527	MPa	44
Vicat softening point with 5 Kg	ISO 306	°C	> 76
Thermal conductivity 23°C	ASTM C177	$\frac{w}{mk}$	0,13±0,19
Coefficient of linear expansion	ASTM D696 UNI 6061	$\frac{mm}{mm°C}$	5÷8x10 ⁻⁵
Water absorption	UNI 7449-75	mg/cm ²	< 0,1
Meets fire regulations	UL94		V-O
Ash content	UNI 7449-75	%	< 3
Colour			9735

PVC-U Fittings

PIPE-FITTINGS TOLLERANCES FOR SOLVENT JOINTING ACCORDING TO:

Fittings: ISO 727 - EN 1452/2/3 - DIN 8063 - KIWA 54
NFT54-028

Pipes: ISO 161 - EN 1452/2 - DIN 8062 - KIWA 49
NFT54-016

Nominal DN	D	male fittings outside diam.		female fittings inside diam.	
		Min.	Max.	Min.	Max.
10	16	16	16,20	16,10	16,30
15	20	20	20,20	20,10	20,30
20	25	25	25,20	25,10	25,30
25	32	32	32,20	32,10	32,30
32	40	40	40,20	40,10	40,30
40	50	50	50,20	50,10	50,30
50	63	63	63,20	63,10	63,30
65	75	75	75,30	75,10	75,30
80	90	90	90,30	90,10	90,30
100	110	110	110,30	110,10	110,40
110	125	125	125,30	125,10	125,40
125	140	140	140,40	140,20	140,50
150	160	160	160,40	160,20	160,50
200	200	200	200,50	200,20	200,60
200	225	225	225,50	225,30	225,70

DIMENSIONS OF THREAD ACCORDING TO:

UNI ISO 7-1 - BS 21 - DIN 2999
(parallel threaded sockets)

Nominal diameter G	Outside thread diameter	Pitch	Thread depth	Thread assembling length	
		n° of threads/1" mm			
3/8"	16,66	19	1,337	0,856	11,4
1/2"	20,95	14	1,814	1,162	15,0
3/4"	26,44	14	1,814	1,162	16,3
1"	33,25	11	2,309	1,479	19,1
1 1/4"	41,91	11	2,309	1,479	21,4
1 1/2"	47,80	11	2,309	1,479	21,4
2"	59,61	11	2,309	1,479	25,7
2 1/4"	65,71	11	2,309	1,479	-
2 1/2"	75,18	11	2,309	1,479	30,2
2 3/4"	81,53	11	2,309	1,479	-
3"	87,88	11	2,309	1,479	33,3
4"	113,03	11	2,309	1,479	39,3
5"	138,43	11	2,309	1,479	43,6
6"	163,83	11	2,309	1,479	43,6

Assembly instructions

METRIC SET FOR SOLVENT CEMENT JOINTINS

TP fittings in rigid PVC-U of metric range can be glued to each other and with pipes of same material provided that the pipe dimension and tolerances are in accordance with the mentioned standard. A strong dense-type glue is recommended, especially for glueing large diameters, where the clearance may be high due to the ovalization effect; such clearance, anyhow, in order to guarantee a perfect seal, should never exceed 0,6 mm with a dense type glue and 0,3 mm with a fluid-type glue.

In order to obtain a perfect gluing it is recommended that the glue manufacturer's instructions be strictly followed. These instructions can be summarized as follows:

- remove all traces of grease, oil or simply dust from both the pipe (properly cut at 90° and beveled at the top) and the fitting by means of a clean cloth soaked in diluent;
- apply, by a suitable brush, a uniform layer of glue, both to the fitting and to the pipe, and cover the entire surface to be glued;
- immediately (in 1 to 2 minutes) insert the part to be glued in the female fitting;
- it is recommended that all glue in excess, which flows out of the coupling, to be quickly removed.

It is also recommended that freshly glued parts should not be submitted to mechanical stresses.

The glue manufacturer's instructions concerning how long to wait before handling, sticking and pressure testing the system should be carefully followed.

Generally speaking, none of these operations should take place in the 24 hours following the gluing.

THREADED SERIES

TP fittings in rigid PV C-U of the threaded series or of the adaptor series can be screwed to each other or to pipe and other threaded parts in other materials in accordance with the rules given.

In order to obtain easy screwing and perfect sealing, the use of high quality PTFE tape is recommended in quantity sufficient to avoid clearance without causing too tight shutting.

The use of hemp, tow and lint, usually employed for metal fittings, should be avoided.

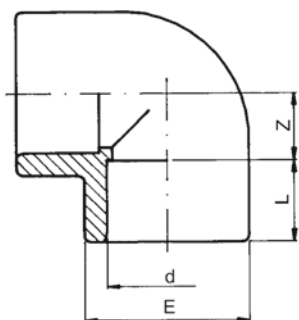
Such materials, contrary to what happens with PTFE, are not rejected by the coupling even when used in excess, making the female fitting expand in such a way as to cause breakages both during the assembly stage and later, during operation.

The information set forth are purely indicative, we therefore recommend to comply to laws and regulations relating to the various countries (ex: UNI 11242 Jointing by cementing pipes, fittings and valves PVC-U).

PVC-U fittings solvent cement jointing

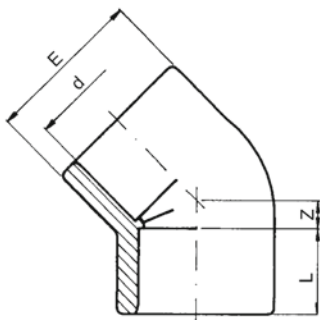
Metric range

TP Elbow 90° PVC-U metric



d (mm)	PN (bar)	Code	SP	GP	Weight (kg)	L (mm)	Z (mm)	E (mm)
16	16	RV0GOI160	10	320	0.010	14	9	22
20	16	RV0GOI200	10	250	0.015	16	11	26
25	16	RV0GOI250	10	160	0.024	19	14	32
32	16	RV0GOI320	10	80	0.040	22	17	40
40	16	RV0GOI400	1	65	0.093	26	21	51
50	16	RV0GOI500	1	80	0.121	31	26	61
63	16	RV0GOI630	1	40	0.205	38	33	75
75	16	RV0GOI750	1	50	0.383	44	39	89
90	16	RV0GOI900	1	30	0.609	51	47	106
110	16	RV0GOI910	1	17	1.078	61	57	129
125	16	RV0GOI920	1	12	1.518	69	66	145
140	16	RV0GOI930	1	8	2.009	76	72	163
160	16	RV0GOI940	1	5	3.050	86	82	190
200	16	RV0GOI960	1	28	4.973	106	102	228
225	10	RV0GOI970	1	18	6.600	119	115	255
250	10	RV0GOI980	1	10	12.077	131	188	286
315	10	RV0GOI991	1	5	19.017	164	239	358

TP Elbow 45° PVC-U metric

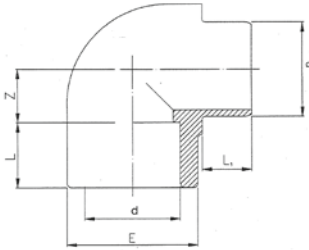


d (mm)	d (inch)	PN (bar)	Code	SP	GP	Weight (kg)	Z (mm)	E (mm)	L (mm)
16		16	RV0GYI160	10	400	0.011	5	23	14
20		16	RV0GYI200	10	300	0.017	5	28	16
25		16	RV0GYI250	10	200	0.029	6	34	19
32		16	RV0GYI320	10	100	0.045	8	42	22
40		16	RV0GYI400	1	80	0.076	10	51	26
50		16	RV0GYI500	1	100	0.110	12	61	31
63		16	RV0GYI630	1	50	0.193	14	75	38
75	2 1/2	16	RV0GYI750	1	65	0.312	17	89	44
90		16	RV0GYI900	1	40	0.485	20	106	51
110		16	RV0GYI910	1	22	0.846	24	129	61
125		16	RV0GYI920	1	14	1.095	27	145	69
140	5	16	RV0GYI930	1	8	1.570	31	163	76
160		16	RV0GYI940	1	6	2.216	35	185	86
200		16	RV0GYI960	1	30	3.780	43	228	106
225		10	RV0GYI970	1	24	5.030	49	255	119
250		10	RV0GYI980	1	16	7.685	58	287	131
315		10	RV0GYI991	1	8	14.474	66	360	164

TP Elbow 90° M/F PVC-U metric



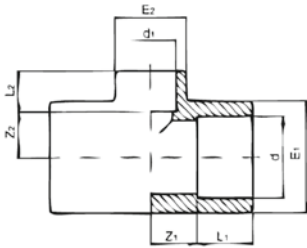
d (mm)	PN (bar)	Code	SP	GP	Weight (kg)	L1 (mm)	E (mm)	L (mm)	Z (mm)
50	16	RV0GPI500	1	75	0.155	31	61	31	26
63	16	RV0GPI630	1	40	0.236	38	75	38	33



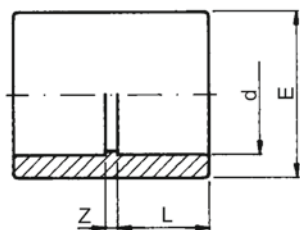
TP Reduced tee 90° PVC-U metric



d - d1 (mm)	PN (bar)	Code	SP	GP	Weight (kg)	Z1 (mm)	Z2 (mm)	L1 (mm)	L2 (mm)	E2 (mm)	E1 (mm)
25 - 20	16	RV0TRI25B	10	120	0.040	14	14	19	16	28	34
32 - 20	16	RV0TRI32B	10	140	0.068	17	17	22	16	28	42
32 - 25	16	RV0TRI32C	10	140	0.068	17	17	22	19	34	42
40 - 20	16	RV0TRI40B	1	100	0.107	21	21	26	16	28	51
40 - 25	16	RV0TRI40C	1	100	0.108	21	21	26	19	34	51
40 - 32	16	RV0TRI40D	1	100	0.112	21	21	26	22	42	51
50 - 20	16	RV0TRI50B	1	50	0.155	26	26	31	16	28	61
50 - 25	16	RV0TRI50C	1	50	0.160	26	26	31	19	34	61
50 - 32	16	RV0TRI50D	1	50	0.161	26	26	31	22	42	61
50 - 40	16	RV0TRI50E	1	50	0.173	26	26	31	26	51	61
63 - 25	16	RV0TRI63C	1	30	0.262	33	33	38	19	34	75
63 - 32	16	RV0TRI63D	1	30	0.274	33	33	38	22	42	75
63 - 40	16	RV0TRI63E	1	30	0.270	33	33	38	26	51	75
63 - 50	16	RV0TRI63F	1	30	0.278	33	33	38	31	61	75
75 - 32	16	RV0TRI75D	1	18	0.455	39	39	44	22	42	89
75 - 40	16	RV0TRI75E	1	45	0.460	39	39	44	26	51	89
75 - 50	16	RV0TRI75F	1	18	0.458	39	39	44	31	61	89
75 - 63	16	RV0TRI75G	1	30	0.471	39	39	44	38	75	89
90 - 40	16	RV0TRI90E	1	30	0.692	47	47	51	26	61	106
90 - 50	16	RV0TRI90F	1	28	0.703	47	47	51	31	61	106
90 - 63	16	RV0TRI90G	1	24	0.707	47	47	51	38	75	106
90 - 75	16	RV0TRI90H	1	24	0.731	47	47	51	44	89	106
110 - 50	16	RV0TRI91F	1	16	1.228	57	57	61	31	61	129
110 - 63	16	RV0TRI91G	1	16	1.231	57	57	61	38	75	129
110 - 75	16	RV0TRI91H	1	16	1.245	57	57	61	44	89	129
110 - 90	16	RV0TRI91I	1	14	1.302	57	57	61	51	106	129
125 - 63	16	RV0TRI92G	1	9	1.955	66	66	69	38	75	148
125 - 90	16	RV0TRI92I	1	9	1.737	66	66	69	51	106	148
160 - 90	16	RV0TRI94I	1	4	3.771	82	82	86	51	106	190
160 - 110	16	RV0TRI94L	1	4	3.819	82	82	86	61	129	190

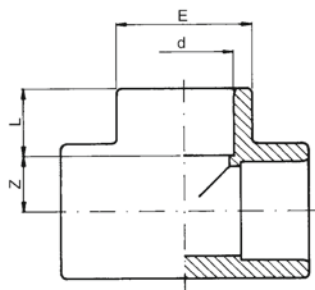


TP Double socket PVC-U metric

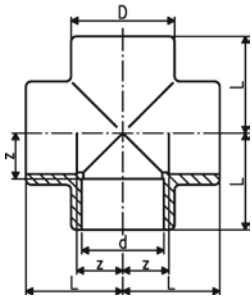


d (mm)	d (inch)	PN (bar)	Code	SP	GP	Weight (kg)	Z (mm)	L (mm)	E (mm)
16		16	RV0MAI160	10		0.006	3	14	22
20		16	RV0MAI200	10		0.010	3	16	26
25		16	RV0MAI250	10	200	0.016	3	19	32
32		16	RV0MAI320	10	130	0.026	3	22	40
40		16	RV0MAI400	1	100	0.056	3	26	48
50		16	RV0MAI500	1	60	0.075	3	31	60
63		16	RV0MAI630	1	70	0.121	3	38	74
75	2 ½	16	RV0MAI750	1	48	0.226	4	44	89
90		16	RV0MAI900	1	50	0.361	5	51	106
110		16	RV0MAI910	1	36	0.584	6	61	129
125		16	RV0MAI920	1	24	0.840	7	69	145
140	5	16	RV0MAI930	1	14	1.100	8	76	162
160		16	RV0MAI940	1	9	1.380	8	86	184
200		16	RV0MAI960	1	4	2.560	10	106	227
225		10	RV0MAI970	1	2	3.540	10	119	252
250		10	RV0MAI980	1	22	5.250	10	131	287
315		10	RV0MAI991	1	1	9.760	12	164	355

TP Tee 90° PVC-U metric

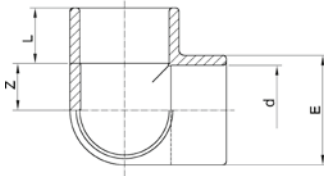


d (mm)	d (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L (mm)	E (mm)	Z (mm)
16		16	RV0TII160	10	300	0.014	14	22	9
20		16	RV0TII200	10	200	0.029	16	26	11
25		16	RV0TII250	10	100	0.032	19	32	14
32		16	RV0TII320	10	130	0.051	22	40	17
40		16	RV0TII400	1	45	0.127	26	51	21
50		16	RV0TII500	1	50	0.176	31	61	26
63		16	RV0TII630	1	25	0.344	38	75	33
75	2 ½	16	RV0TII750	1	35	0.523	44	89	39
90		16	RV0TII900	1	20	0.830	51	106	47
110		16	RV0TII910	1	14	1.419	61	129	57
125		16	RV0TII920	1	8	1.960	69	148	66
140	5	16	RV0TII930	1	6	2.650	76	163	72
160		16	RV0TII940	1	4	4.192	86	190	82
200		16	RV0TII960	1	20	6.540	106	228	102
225		10	RV0TII970	1	15	8.752	119	255	115
250		10	RV0TII980	1	10	12.600	131	286	128
315		10	RV0TII991	1	4	23.400	161	360	162



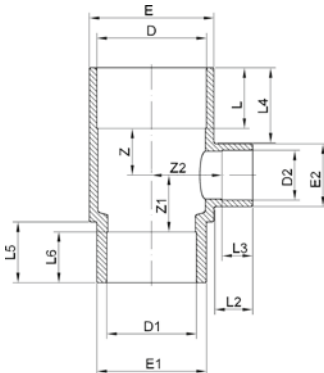
TP Cross 90° PVC-U metric

d (mm)	PN (bar)	Code	SP	GP	Weight (kg)	D (mm)	Z (mm)	L (mm)
20	16	RV0CRI200	10	120	0.036	27.5	11	16
25	16	RV0CRI250	10	80	0.049	33.5	14	19
32	16	RV0CRI320	10	130	0.087	42.0	17	22
40	16	RV0CRI400	1		0.142	51.0	21	26
50	16	RV0CRI500	1		0.259	61.0	26	31
63	16	RV0CRI630	1		0.505	75.0	33	38
75	10	RV0CRI750	1		0.567	91.0	40	44
90	10	RV0CRI900	1		1.180	106.0	46	51
110	10	RV0CRI910	1		1.609	129.5	56	61



TP Three way elbow PVC-U metric

d (mm)	PN (bar)	Code	SP	Weight (kg)	Z (mm)	L (mm)	E (mm)
50	16	RV0GTI500	1	0.171	26	31	61
63	16	RV0GTI630	1	0.250	33	38	75



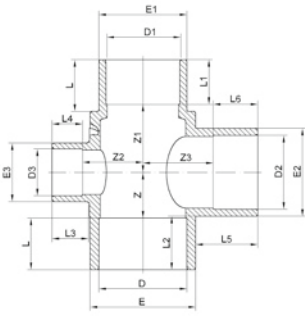
TP Manifold tee PVC-U metric

E x D1 x D2 (mm)	PN (bar)	Code	SP	Weight (kg)
90 - 63 - 40	16	RV0TDI900	1	0.494
140 - 110 - 50	16	RV0TDI930	1	1.000

E x D1 x D2 (mm)	D1 (mm)	D2 (mm)	Z1 (mm)	Z2 (mm)	E2 (mm)	E1 (mm)	L2 (mm)	L3 (mm)	D (mm)	L (mm)	L6 (mm)	E (mm)	L4 (mm)	L5 (mm)
90 - 63 - 40	63	40	58	51	50	75	31	26	75	44	38	90	46	44
140 - 110 - 50	110	50	47	79	63	125	38	31	125	61	61	140	75	61

E x D1 x D2 (mm)	Z (mm)
90 - 63 - 40	39
140 - 110 - 50	47

TP Adaptor cross PVC-U metric



E x D2 x D3 (mm)	PN (bar)	Code	SP	Weight (kg)
90 - 63 - 40	16	RV0TCI900	1	0.570

E x D2 x D3 (mm)	E (mm)	Z1 (mm)	D1 (mm)	D2 (mm)	L3 (mm)	L4 (mm)	L5 (mm)	L6 (mm)	D (mm)	L (mm)	L2 (mm)	Z3 (mm)	L1 (mm)	E3 (mm)
90 - 63 - 40	90	58	63	63	31	26	53	38	75	44	46	60	38	50

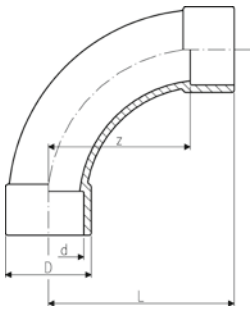
E x D2 x D3 (mm)	Z (mm)	Z2 (mm)	D3 (mm)	E2 (mm)	E1 (mm)
90 - 63 - 40	39	52	40	75	75

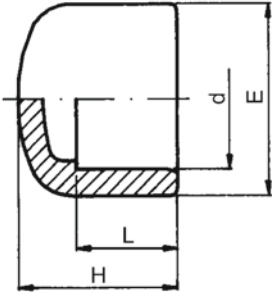


TP Bend 90° PVC-U metric



d (mm)	d (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L (mm)	D (mm)	z (mm)
20		16	RV0CUI200	1	160	0.041	56	27	40
25		16	RV0CUI250	1	100	0.051	69	33	50
32		16	RV0CUI320	1	50	0.073	86	38	64
40		16	RV0CUI400	1	60	0.131	106	47	80
50		16	RV0CUI500	1	60	0.298	131	61	100
63		16	RV0CUI630	1	30	0.516	164	76	126
75	2 1/2	16	RV0CUI750	20		0.797	194	90	150
90		16	RV0CUI900	12		1.334	231	108	180
110		16	RV0CUI910	6		2.728	281	137	220

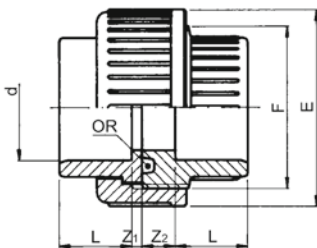




TP Cap PVC-U metric

d (mm)	d (inch)	PN (bar)	Code	SP	GP	Weight (kg)	H (mm)	E (mm)	L (mm)
16		16	RV0CAI160	10	600	0.004	22	22	14
20		16	RV0CAI200	10	500	0.008	26	26	16
25		16	RV0CAI250	10	400	0.013	30	32	19
32		16	RV0CAI320	10	200	0.022	33	40	22
40		16	RV0CAI400	1	100	0.046	41	51	26
50		16	RV0CAI500	1	80	0.068	46	61	31
63		16	RV0CAI630	1	50	0.126	55	75	38
75	2 ½	16	RV0CAI750	1	25	0.180	64	89	44
90		16	RV0CAI900	1	20	0.295	73	106	51
110		16	RV0CAI910	1	25	0.510	87	129	61
125		16	RV0CAI920	1	36	0.642	98	145	69
140	5	16	RV0CAI930	1	12	0.866	108	162	76
160		16	RV0CAI940	1	18	1.170	123	182	86
200		16	RV0CAI960	1	8	2.141	149	228	106
225		10	RV0CAI970	1	6	2.845	165	256	119

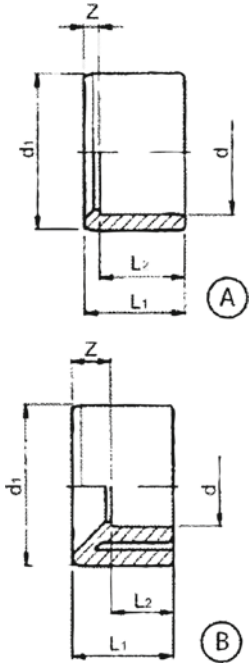
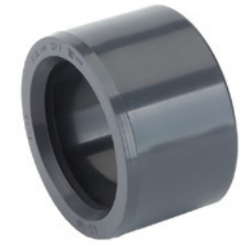
TP Union with o-ring PVC-U metric



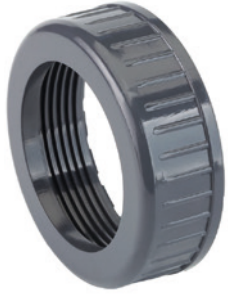
d (mm)	d (inch)	PN (bar)	EPDM Code	SP	GP	Weight (kg)	Z1 (mm)	E (mm)	Z2 (mm)	L (mm)	F (inch)
16		16	RV0BOI160	10	300	0.025	3	34	10	14	¾
20		16	RV0BOI200	10	200	0.040	3	42	10	16	1
25		16	RV0BOI250	10	100	0.066	3	52	10	19	1 ¼
32		16	RV0BOI320	10	60	0.090	3	59	10	22	1 ½
40		16	RV0BOI400	10	100	0.160	3	73	12	26	2
50		16	RV0BOI500	1	60	0.198	3	82	14	31	2 ¼
63		16	RV0BOI630	1	36	0.347	3	100	18	38	2 ¾
75	2 ½	10	RV0BOI750	1	10	0.575	3	119	18	44	3 ½
90		10	RV0BOI900	1	15	0.765	5	134	18	51	4
110		10	RV0BOI910	1	18	1.293	5	163	18	61	5

TP Reducing bush PVC-U metric

• (*) Traded items



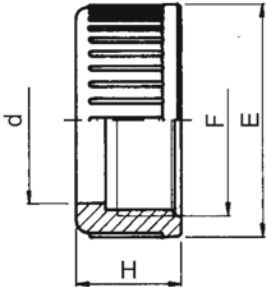
	d1-d (mm)	PN (bar)	Code	SP	GP	Weight (kg)	L2 (mm)	L1 (mm)	Z (mm)
A	20-16	16	RV0RCI20A	10	800	0.002	14	16	2
B	25-16	16	RV0RCI25A	10	600	0.009	14	19	5
A	25-20	16	RV0RCI25B	10	600	0.005	16	19	3
B	32-16	16	RV0RCI32A	10	400	0.014	14	22	8
B	32-20	16	RV0RCI32B	10	400	0.016	16	22	6
A	32-25	16	RV0RCI32C	10	400	0.010	19	22	3
B	40-20	16	RV0RCI40B	10	200	0.025	16	26	10
B	40-25	16	RV0RCI40C	1	200	0.026	19	26	7
A	40-32	16	RV0RCI40D	1	200	0.016	22	26	4
B	50-25	16	RV0RCI50C	1	180	0.043	19	31	12
B	50-32	16	RV0RCI50D	1	180	0.042	22	31	9
A	50-40	16	RV0RCI50E	1	180	0.030	26	31	5
B	63-32	16	RV0RCI63D	1	100	0.082	22	38	16
B	63-40	16	RV0RCI63E	1	100	0.081	26	38	12
A	63-50	16	RV0RCI63F	1	100	0.061	31	38	7
B	75-40	16	RV0RCI75E	1	60	0.118	26	44	18
B	75-50	16	RV0RCI75F	1	60	0.121	31	44	13
A	75-63	16	RV0RCI75G	1	60	0.079	38	44	6
B	90-50	16	RV0RCI90F	1	30	0.210	31	51	20
B	90-63	16	RV0RCI90G	1	30	0.195	38	51	13
A	90-75	16	RV0RCI90H	1	30	0.137	44	51	7
B	110-63	16	RV0RCI91G	1	20	0.364	38	61	23
B	110-75	16	RV0RCI91H	1	20	0.362	44	61	17
A	110-90	16	RV0RCI91I	1	20	0.270	51	61	10
B	125-75	16	RV0RCI92H	1	30	0.405	44	69	25
B	125-90	16	RV0RCI92I	1	30	0.454	51	69	18
A	125-110	16	RV0RCI92L	1	30	0.276	61	69	8
B	140-90	16	RV0RCI93I	1	22	0.571	51	76	25
B	140-110	16	RV0RCI93L	1	22	0.475	61	76	15
A	140-125	16	RV0RCI93M	1	22	0.338	69	76	7
B	160-110	16	RV0RCI94L	1	13	0.795	61	86	25
B	160-125	16	RV0RCI94M	1	13	0.700	69	86	17
A	160-140	16	RV0RCI94N	1	13	0.559	76	86	10
A	180-160	16	RV0RCI95O	1	20	0.702	86	96	10
A	200-160	16	RV0RCI96O	1	15	1.645	86	106	10
A	200-180	16	RV0RCI96P	1	15	0.889	96	106	10
B	225-160	10	RV0RCI97O	1	9	2.288	86	119	33
A	225-200	10	RV0RCI97Q	1	9	1.385	106	119	13
B (*)	250-160	10	RV0RCI98O	1	8	3.300	87	134	47
B (*)	250-200	10	RV0RCI98Q	1	8	2.732	107	134	27
A	250-225	10	RV0RCI98R	1	8	1.700	120	132	12
B	315-200	10	RV0RCI991Q	1	3	5.000	107	165	58
B	315-225	10	RV0RCI991R	1	3	4.500	132	165	33
B	315-250	10	RV0RCI991S	1	3	4.100	132	165	33



TP Nut PVC-U

Suitable for BOI/BOF/BOP

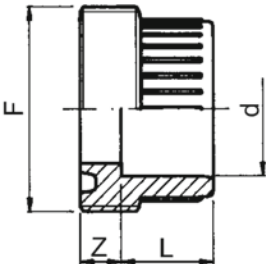
d (mm)	PN (bar)	Code	SP	Weight (kg)	F (inch)	E (mm)	H (mm)
16	16	RV0BGO160	1	0.013	¾	34	21
20	16	RV0BGO200	1	0.017	1	42	23
25	16	RV0BGO250	1	0.024	1 ¼	52	25
32	16	RV0BGO320	1	0.035	1 ½	59	27
40	16	RV0BGO400	1	0.057	2	72	30
50	16	RV0BGO500	1	0.079	2 ¼	79	34
63	16	RV0BGO630	1	0.130	2 ¾	96	38
75	10	RV0BGO750	1	0.200	3 ½	119	45
90	10	RV0BGO900	1	0.279	4	134	52
110	10	RV0BGO910	1	0.455	5	163	60

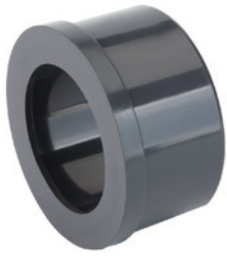


TP Union bush PVC-U

Suitable for BOI

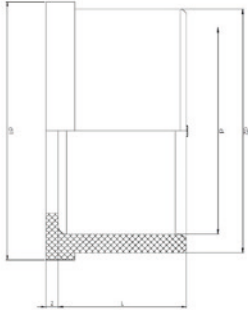
d (mm)	d (inch)	PN (bar)	Code	SP	GP	Weight (kg)	F (inch)	Z (mm)	L (mm)
16		16	RV0BF1160	1	0	0.008	¾	10	14
20		16	RV0BF1200	1		0.015	1	10	16
25		16	RV0BF1250	1		0.015	1 ¼	10	19
32		16	RV0BF1320	1		0.035	1 ½	10	22
40		16	RV0BF1400	75		0.057	2	12	26
50		16	RV0BF1500	1		0.073	2 ¼	14	31
63		16	RV0BF1630	1		0.141	2 ¾	18	38
75	2 ½	10	RV0BF1750	1		0.205	3 ½	18	44
90		10	RV0BF1900	1		0.300	4	18	51
110		10	RV0BF1910	1		0.479	5	18	61



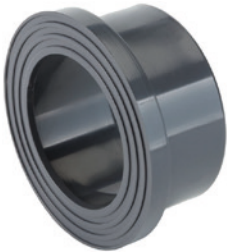


TP Union end PVC-U

Suitable for BOI/BOP

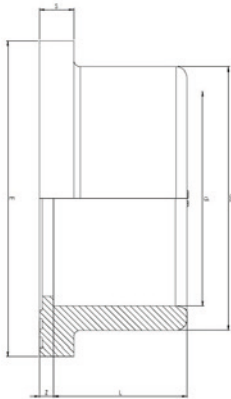


d (mm)	d2 (mm)	PN (bar)	Code	SP	GP	Weight (kg)	Z (mm)	d1 (mm)	L (mm)
16	22	16	RV0BLI160	10	1000	0.005	3	24.0	14
20	27,5	16	RV0BLI200	10	500	0.008	3	30.1	16
25	36	16	RV0BLI250	10	300	0.016	3	38.8	19
32	41,5	16	RV0BLI320	1	215	0.022	3	44.7	22
40	53	16	RV0BLI400	1	120	0.040	3	56.5	26
50	59	16	RV0BLI500	1	110	0.042	3	62.6	31
63	74	16	RV0BLI630	1	130	0.076	3	78.4	38
75	92,5	10	RV0BLI750	1	165	0.148	3	97.2	44
90	105	10	RV0BLI900	1	100	0.190	5	110.0	51
110	129	10	RV0BLI910	1	50	0.350	5	135.4	61



TP Flange adaptor serrated PVC-U metric

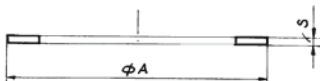
• DN indicates the nominal diameter of the PVC pipe



d (mm)	d2 (mm)	DN (mm)	PN (bar)	Code	SP	GP	Weight (kg)	Z (mm)	L (mm)	E (mm)	S (mm)
20	27	15	16	RV0QRI200	10	360	0.011	3	16	34	6
25	33,2	20	16	RV0QRI250	10	300	0.017	3	19	41	7
32	41	25	16	RV0QRI320	10	200	0.026	3	22	50	7
40	50,5	32	16	RV0QRI400	1	140	0.038	3	26	61	8
50	61,5	40	16	RV0QRI500	1	140	0.059	3	31	73	8
63	76,5	50	16	RV0QRI630	1	90	0.104	3	38	90	9
75	90,5	65	16	RV0QRI750	1	50	0.167	3	44	106	10
90	108,5	80	16	RV0QRI900	1	38	0.274	5	51	125	11
110	131,5	100	16	RV0QRI910	1	24	0.440	5	61	150	12
125	146,5	110	16	RV0QRI920	1	25	0.560	5	69	168	13
140	164,5	125	16	RV0QRI930	1	20	0.793	5	76	188	14
160	187	150	16	RV0QRI940	1	15	1.035	5	86	213	16
200	229	200	16	RV0QRI960	1	8	1.823	7	106	254	18
225	248	200	10	RV0QRI970	6	6	1.762	7	119	274	19
250	273,5	250	10	RV0QRI980	1	4	2.326	10	131	307	20
315	344	300	10	RV0QRI991	1	3	4.834	11	164	379	27

Flat gasket

• (*) Traded items
Suitable for flange adaptor RV0QRI



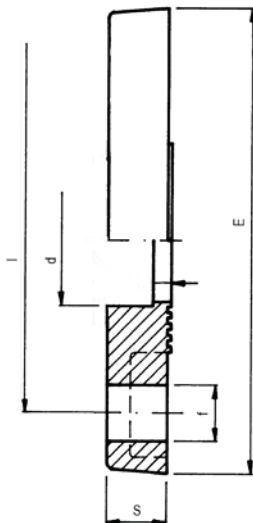
	d (mm)	A (mm)	S (mm)	EPDM Code	SP	GP	Weight (kg)
*	16	25	2	2GRNPD160	1	10	0.005
*	20	31	2	2GRNPD200	1	10	0.010
*	25	40	2	2GRNPD250	1	10	0.020
*	32	46	2	2GRNPD320	1	10	0.025
*	40	58	2	2GRNPD400	1	10	0.030
*	50	64	2	2GRNPD500	1	10	0.035
*	63	80	2	2GRNPD630	1	10	0.040

	d (mm)	A (mm)	S (mm)	EPDM Code	SP	GP	Weight (kg)
*	75	99	2	2GRNPD750	1	10	0.045
*	90	120	2	2GRNPD900	1	10	0.050
*	110	137	3	2GRNPD910	1	10	0.055
*	125	167	3	2GRNPD920	1	10	0.060
*	140	186	3	2GRNPD930	1	10	0.065
*	160	211	3	2GRNPD940	1	10	0.070
*	200	252	4	2GRNPD960	1	10	0.075
*	225	275	4	2GRNPD970	1	6	0.080
*	250			2GRNPD980	1		0.115

TP Backing flange PVC-U metric



- (**) Special flange with bolt holes for DN 140
- **DN** indicates the nominal diameter of the PVC pipe
Bolt holes PN10
- Maximum medium- or ambient temperature 45°

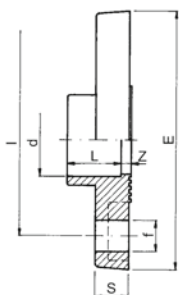


d (mm)	DN (mm)	PN (bar)	Code	SP	GP	Weight (kg)	E (mm)	I (mm)	S (mm)	f (mm)	
20	15	10	RV0FLI200	1	120	0.070	95	65	11	14	
25	20	10	RV0FLI250	1	100	0.090	105	75	12	14	
32	25	10	RV0FLI320	1	50	0.120	115	85	14	14	
40	32	10	RV0FLI400	1	50	0.180	140	100	15	18	
50	40	10	RV0FLI500	1	70	0.210	150	110	16	18	
63	50	10	RV0FLI630	1	45	0.270	165	125	18	18	
75	65	10	RV0FLI750	1	50	0.350	185	145	19	18	
90	80	10	RV0FLI900	1	38	0.430	200	160	20	18	
110	100	10	RV0FLI910	1	24	0.512	220	180	22	18	
125	110	10	RV0FLI920	1	25	0.570	230	190	24	18	
**	125	125	10	RV0FAI920	1	20	0.819	250	210	26	18
140	125	10	RV0FLI930	1	20	0.676	250	210	26	18	
160	150	10	RV0FLI940	1	15	0.950	285	240	28	22	
200	200	10	RV0FLI960	1	8	1.400	340	295	30	22	
225	200	10	RV0FLI970	1	6	1.280	340	295	30	22	
250	250	6	RV0FLI980	1	8	1.800	395	350	34	22	
315	300	6	RV0FLI991	1	4	3.180	445	400	31	22	

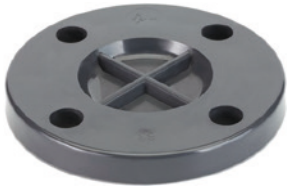
TP Fixed flange PVC-U metric



- **DN** indicates the nominal diameter of the PVC pipe
Bolt holes PN10
- Maximum medium- or ambient temperature 45°



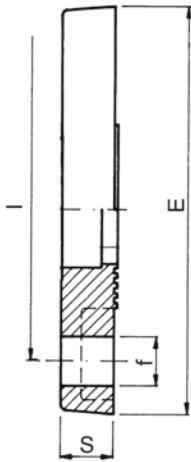
d (mm)	d (inch)	DN (mm)	PN (bar)	Code	SP	GP	Weight (kg)	L (mm)	S (mm)	f (mm)	E (mm)	I (mm)	Z (mm)
63		50	10	RV0FFI630	1	40	0.368	38	18	18	165	125	4.5
75	2 1/2	65	10	RV0FFI750	1	20	0.501	44	19	18	185	145	6.0
90		80	10	RV0FFI900	1	15	0.687	51	20	18	200	160	7.0
110		100	10	RV0FFI910	1	10	0.940	61	22	18	220	180	8.0
125		110	10	RV0FFI920	1	6	1.032	69	24	18	230	190	7.0
140	5	125	10	RV0FFI930	1	6	1.335	76	26	18	250	210	7.0
160		140	10	RV0FFI940	1	5	1.835	86	28	18	285	240	7.0



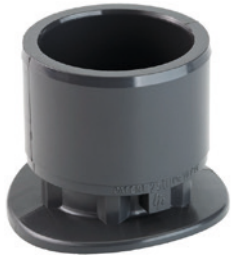
TP Blind flange PVC-U metric

Bolt holes PN10

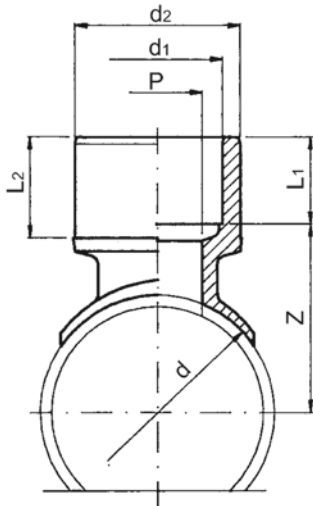
- DN indicates the nominal diameter of the PVC pipe
- Maximum medium- or ambient temperature 45°



d (mm)	DN (mm)	PN (bar)	Code	SP	GP	Weight (kg)	f (mm)	S (mm)	I (mm)	E (mm)
63	50	10	RV0FCI630	50	50	0.348	18	18	125	165
75	65	10	RV0FCI750	25	25	0.503	18	19	145	185
90	80	10	RV0FCI900	20	20	0.625	18	20	160	200
110	100	10	RV0FCI910	25	25	0.828	18	22	180	220
125	110	10	RV0FCI920	20	20	0.940	18	24	190	230
140	125	10	RV0FCI930	18	18	1.173	18	26	210	250
160	150	10	RV0FCI940	14	14	1.609	22	28	240	285
200	200	10	RV0FCI960	8	8	2.480	22	30	295	340
225	200	10	RV0FCI970	8	8	2.430	22	30	295	340

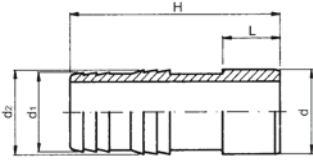


TP Saddle socket M/F PVC-U metric



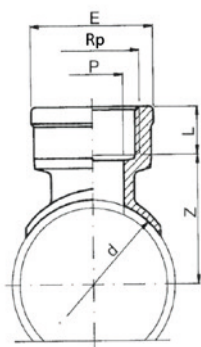
d (mm)	d1 (mm)	d2 (mm)	PN (bar)	Code	SP	GP	Weight (kg)	Z (mm)	L2 (mm)	P (mm)	L1 (mm)
50	20	25	10	DV0DEI50B	15	150	0.012	43	19	14	16
50	32	40	10	DV0DEI50D	10	50	0.035	45	26	24	22
63	20	25	10	DV0DEI63B	15	150	0.012	49	19	14	16
63	25	32	10	DV0DEI63C	10	100	0.021	50	22	19	19
63	32	40	10	DV0DEI63D	10	50	0.035	51	26	24	22
75	50	63	10	DV0DEI75F	1	12	0.101	63	38	38	31
90	50	63	10	DV0DEI90F	1	12	0.108	71	38	38	31
90	63	75	10	DV0DEI90G	1	12	0.140	70	44	48	38
110	40	50	10	DV0DEI91E	1	30	0.058	78	31	30	26
110	50	63	10	DV0DEI91F	1	12	0.105	81	38	38	31
110	63	75	10	DV0DEI91G	1	12	0.136	80	44	48	38
125	50	63	10	DV0DEI92F	1	12	0.105	88	38	38	31
140	40	50	10	DV0DEI93E	1	30	0.059	93	31	30	26
140	63	75	10	DV0DEI93G	1	30	0.136	95	44	48	38
160	63	75	10	DV0DEI94G	1	12	0.133	105	44	48	38
200	63	75	10	DV0DEI96G	1	12	0.133	125	44	48	38
225	63	75	10	DV0DEI97G	1	12	0.137	138	44	48	38

TP Solvent cement hose adaptor PVC-U



d-d2-d1 (mm)	PN (bar)	Code	SP	GP	Weight (kg)	d2 (mm)	d1 (mm)	H (mm)	L (mm)
16 - 18 - 16	16	RV0PGI160	10	400	0.007	18	16	60	14
20 - 22 - 20	16	RV0PGI200	10	300	0.013	22	20	67	16
25 - 27 - 25	16	RV0PGI250	10	200	0.020	27	25	74	19
32 - 32 - 30	16	RV0PGI320	10	130	0.029	32	30	80	22
40 - 42 - 40	16	RV0PGI400	1	100	0.049	42	40	92	26
50 - 52 - 50	16	RV0PGI500	1		0.079	52	50	101	31
63 - 64 - 60	16	RV0PGI630	1		0.138	64	60	111	38

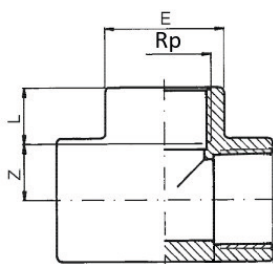
PVC-U fittings B.S.P. threaded range



TP Saddle with female thread Rp PVC-U

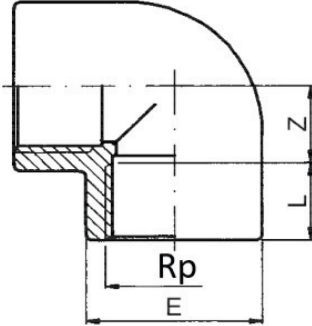
d (mm)	Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	P (mm)	E (mm)	L (mm)	Z (mm)
32	1/4	10	DV0DEF32Z	15	150	0.010	11	24.2	12.9	28.9
40	3/8	10	DV0DEF40A	15	150	0.009	11	24.2	14.0	32.0
50	1/4	10	DV0DEF50Z	15	150	0.011	11	24.2	12.9	37.9
50	3/8	10	DV0DEF50A	15	150	0.010	11	24.2	14.0	37.0
50	1/2	10	DV0DEF50B	15	150	0.015	14	30.0	15.0	42.0
50	3/4	10	DV0DEF50C	10	100	0.023	19	36.0	16.3	43.0
63	3/8	10	DV0DEF63A	15	150	0.009	11	24.2	14.0	43.5
63	1/2	10	DV0DEF63B	10	150	0.015	14	30.0	15.0	48.0
63	3/4	10	DV0DEF63C	10	100	0.020	19	36.0	16.3	49.0
75	3/8	10	DV0DEF75A	15	150	0.009	11	24.2	14.0	49.5
75	3/4	10	DV0DEF75C	10	100	0.022	19	36.0	16.3	55.0
75	1	10	DV0DEF75D	10	50	0.039	24	45.0	19.1	56.0
90	1/2	10	DV0DEF90B	15	150	0.015	14	30.0	15.0	62.0
90	1	10	DV0DEF90D	10	50	0.036	24	45.0	19.1	64.0
90	1 1/2	10	DV0DEF90F	1	24	0.090	38	64.0	21.4	66.0
110	1/2	10	DV0DEF91B	15	150	0.015	14	30.0	15.0	72.0

TP Threaded tee 90° Rp PVC-U



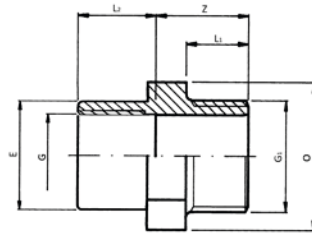
Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L (mm)	Z (mm)	E (mm)
3/8	16	RV0TIF160	10	280	0.018	11.4	11.6	23
1/2	16	RV0TIF200	10	150	0.028	15.0	12.0	28
3/4	16	RV0TIF250	10	100	0.046	16.3	16.7	34
1	16	RV0TIF320	10	130	0.078	19.1	19.9	42
1 1/4	16	RV0TIF400	1	90	0.125	21.4	25.6	51
1 1/2	16	RV0TIF500	1	50	0.236	21.4	35.6	61
2	16	RV0TIF630	1	25	0.411	25.7	45.3	75
2 1/2	16	RV0TIF750	1	35	0.549	30.2	52.8	89
3	16	RV0TIF900	1	24	0.934	33.3	64.7	106
4	16	RV0TIF910	1	14	1.384	39.3	75.7	129

TP Threaded elbow 90° Rp PVC-U



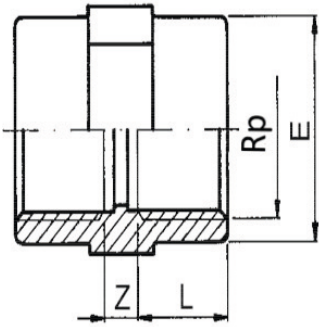
Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	E (mm)	Z (mm)	L (mm)
3/8	16	RV0GOF160	10	360	0.013	23	44.6	11.4
1/2	16	RV0GOF200	10	200	0.021	28	12.0	15.0
3/4	16	RV0GOF250	10	160	0.034	34	16.7	16.3
1	16	RV0GOF320	10	80	0.058	42	19.9	19.1
1 1/4	16	RV0GOF400	1	130	0.090	51	25.6	21.4
1 1/2	16	RV0GOF500	1	80	0.180	61	35.6	21.4
2	16	RV0GOF630	1	40	0.312	75	45.3	25.7
2 1/2	16	RV0GOF750	1	50	0.431	89	52.8	30.2
3	16	RV0GOF900	1	30	0.741	106	64.7	33.3
4	16	RV0GOF910	1	17	1.050	129	78.7	39.3

Reducer PVC-U Threaded G/G



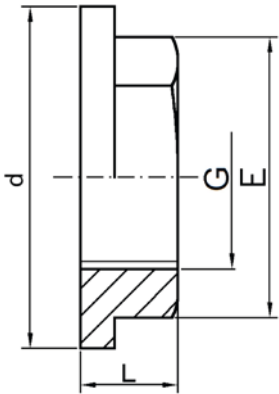
G1 (inch)	G (inch)	PN (bar)	Code	SP	GP	Weight (kg)	O (mm)	Z (mm)	L1 (mm)	L2 (mm)	E (mm)
1/2	3/8	16	RV0RIF20A	10	400	0.012	24	24	15.0	11.4	32
3/4	3/8	16	RV0RIF25A	10	280	0.016	30	25	16.3	11.4	23
3/4	1/2	16	RV0RIF25B	10	280	0.018	30	26	16.3	15.0	28
1	1/2	16	RV0RIF32B	10	160	0.025	36	29	19.1	15.0	28
1	3/4	16	RV0RIF32C	10	160	0.026	36	30	19.1	16.3	34
1 1/4	1/2	16	RV0RIF40B	1	150	0.041	46	33	21.4	15.0	28
1 1/4	1	16	RV0RIF40D	1	150	0.045	46	33	21.4	19.1	42
1 1/2	3/4	16	RV0RIF50C	1	120	0.047	50	34	21.4	16.3	34
1 1/2	1	16	RV0RIF50D	1	100	0.049	50	34	21.4	19.1	42
1 1/2	1 1/4	16	RV0RIF50E	1	100	0.056	55	34	21.4	21.4	51
2	1	16	RV0RIF63D	1	140	0.084	65	37	25.7	19.1	42
2	1 1/4	16	RV0RIF63E	1	140	0.083	65	37	25.7	21.4	51
2	1 1/2	16	RV0RIF63F	1	130	0.091	65	37	25.7	21.4	58
2 1/2	2	16	RV0RIF75G	1	150	0.140	80	43	30.2	25.7	72
3	1 1/2	16	RV0RIF90F	1	150	0.203	95	47	33.3	21.4	58
3	2	16	RV0RIF90G	1	125	0.206	95	47	33.3	25.7	72
3	2 1/2	16	RV0RIF90H	1	115	0.216	95	47	33.3	30.2	89
4	2	16	RV0RIF91G	1	85	0.325	120	53	39.3	25.7	72
4	3	16	RV0RIF91I	1	60	0.342	120	53	39.3	33.3	103

TP Threaded double socket Rp PVC-U



Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	Z (mm)	L (mm)	E (mm)
3/8	16	RV0MAF160	10	500	0.009	6	11.4	23
1/2	16	RV0MAF200	10	250	0.018	7	15.0	28
3/4	16	RV0MAF250	10	180	0.023	7	16.3	34
1	16	RV0MAF320	10	130	0.041	8	19.1	42
1 1/4	16	RV0MAF400	1	220	0.058	8	21.4	51
1 1/2	16	RV0MAF500	1	180	0.067	8	21.4	58
2	16	RV0MAF630	1	100	0.114	8	25.7	72
2 1/2	16	RV0MAF750	1	120	0.191	9	30.2	89
3	16	RV0MAF900	1	84	0.274	10	33.3	103
4	16	RV0MAF910	1	44	0.432	11	39.3	130
6	16	RV0MAF940	1	9	1.400	84	48.0	182

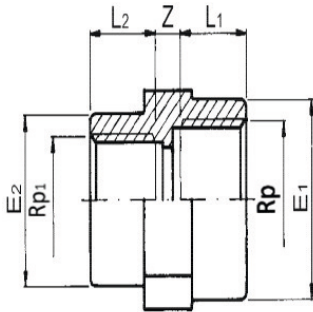
TP Threaded nut G PVC-U



- (*) Traded items

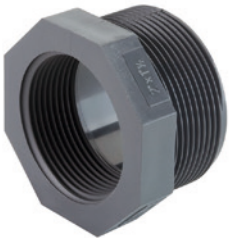
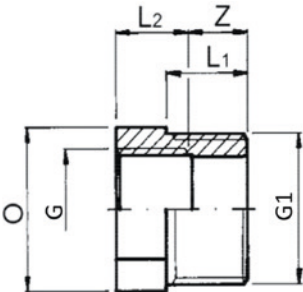
G (inch)	PN (bar)	Code	SP	GP	Weight (kg)	d (mm)	L (mm)	E (mm)
*	1/2	16 RV0DAF200	10	800	0.010	38	13	29
*	3/4	16 RV0DAF250	10	1250	0.011	43	14	34
*	1	16 RV0DAF320	10		0.026	56	16	46
*	1 1/4	16 RV0DAF400	1	450	0.029	65	18	50
*	1 1/2	16 RV0DAF500	1	300	0.044	72	19	60
*	2	16 RV0DAF630	1	150	0.087	94	21	80
*	2 1/2	16 RV0DAF750	1	120	0.095	115	24	94
*	3	16 RV0DAF900	1	80	0.138	130	27	108
*	4	16 RV0DAF910	1	45	0.201	162	30	135

TP Threaded reducing socket Rp-Rp PVC-U



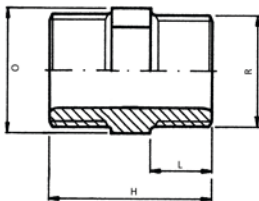
Rp (inch)	Rp1 (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L2 (mm)	L1 (mm)	E1 (mm)	E2 (mm)	Z (mm)
½	¾	16	RV0MRF20A	10	250	0.015	11.4	15.0	28	23	6
¾	1	16	RV0MRF25B	10	200	0.024	15.0	16.3	34	28	7
1	¾	16	RV0MRF32C	10	120	0.038	16.3	19.1	42	34	7
1 ¼	1	16	RV0MRF40D	1	190	0.059	19.1	21.4	51	42	8
1 ½	1 ¼	16	RV0MRF50E	1	165	0.050	21.4	21.4	58	51	8
2	1 ½	16	RV0MRF63F	1	80	0.116	21.4	25.7	72	58	8
2 ½	2	16	RV0MRF75G	1	130	0.200	25.7	30.2	89	72	8
3	2 ½	16	RV0MRF90H	1	80	0.265	30.2	33.3	103	89	9
4	3	16	RV0MRF91I	1	54	0.426	33.3	39.3	130	103	10

Reducing bush PVC-U threaded G/G



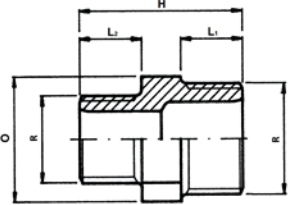
G1 (mm)	G (mm)	PN (bar)	Code	SP	GP	Weight (kg)	O (mm)	L1 (mm)	L2 (mm)	Z (mm)
¾	1	16	RV0RCF25B	10	300	0.012	30	16.3	15.0	13.3
1	¾	16	RV0RCF32C	10	250	0.018	36	19.1	16.3	14.8
1 ¼	1	16	RV0RCF40D	1	200	0.031	46	21.4	19.1	16.3
1 ½	1 ¼	16	RV0RCF50E	1	160	0.028	50	21.4	21.4	14.0
2	1 ½	16	RV0RCF63F	1	200	0.064	65	25.7	21.4	18.3
2 ½	2	16	RV0RCF75G	1	200	0.112	80	30.2	25.7	20.5
3	2 ½	16	RV0RCF90H	1	165	0.148	95	33.3	30.2	20.1
4	3	16	RV0RCF91I	1	90	0.289	120	39.3	33.3	24.0

TP Threaded nipple R PVC-U



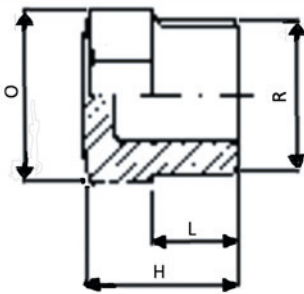
R (inch)	PN (bar)	Code	SP	GP	Weight (kg)	H (mm)	L (mm)	O (mm)
¾	16	RV0NIF160	10	600	0.007	33	11.4	22
½	16	RV0NIF200	10	400	0.011	42	15.0	24
¾	16	RV0NIF250	10	280	0.018	44	16.3	30
1	16	RV0NIF320	10	160	0.027	50	19.1	36
1 ¼	16	RV0NIF400	1	130	0.045	58	21.4	46
1 ½	16	RV0NIF500	1	90	0.050	58	21.4	50
2	16	RV0NIF630	1	125	0.091	66	25.7	65
2 ½	16	RV0NIF750	1	140	0.142	76	30.2	80
3	16	RV0NIF900	1	90	0.223	85	33.3	95
4	16	RV0NIF910	1	45	0.346	96	39.3	120

TP Threaded reducing nipple R PVC-U



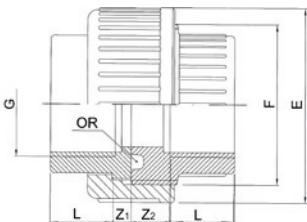
R-R (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L1 (mm)	L2 (mm)	H (mm)	O (mm)
½ - ¾	16	RV0NRF20A	10	400	0.010	15.0	11.4	38	24
¾ - 1	16	RV0NRF25B	10	280	0.017	16.3	15.0	43	30
1 - 1 ¼	16	RV0NRF32C	10	180	0.025	19.1	16.3	47	36
1 ¼ - 1 ½	16	RV0NRF40D	1	150	0.044	21.4	19.1	56	46
1 ½ - 1 ¾	16	RV0NRF50E	1	100	0.049	21.4	21.4	58	50
2 - 1 ½	16	RV0NRF63F	1	130	0.081	25.7	21.4	62	65
2 ½ - 2	16	RV0NRF75G	1	110	0.137	30.2	25.7	73	80
3 - 2 ½	16	RV0NRF90H	1	50	0.207	33.3	30.2	82	95
4 - 3	16	RV0NRF91I	1	36	0.338	39.3	33.3	90	120

TP Threaded plug R PVC-U



R (inch)	PN (bar)	Code	SP	GP	Weight (kg)	H (mm)	O (mm)	L (mm)
¾	16	RV0TAF160	10	700	0.007	24	22	11.4
1	16	RV0TAF200	10	500	0.010	29	24	15.0
1 ¼	16	RV0TAF250	10	320	0.015	30	30	16.3
1 ½	16	RV0TAF320	10	250	0.022	33	36	19.1
2	16	RV0TAF400	1	200	0.039	39	46	21.4
2 ½	16	RV0TAF500	1	150	0.042	39	50	21.4
3	16	RV0TAF630	1	180	0.079	43	65	25.7
4	16	RV0TAF750	1	100	0.140	51	80	30.2
	16	RV0TAF900	1	65	0.213	55	95	33.3
	16	RV0TAF910	1	40	0.355	61	120	39.3

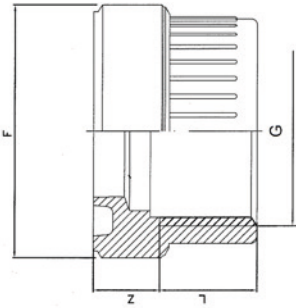
TP Threaded union G with o-ring PVC-U



G (inch)	PN (bar)	EPDM Code	SP	GP	Weight (kg)	E (mm)	Z1 (mm)	Z2 (mm)	L (mm)	F (inch)
¾	16	RV0BOF160	10	250	0.024	34.0	5.6	13.6	11	¾
1	16	RV0BOF200	10	150	0.040	42.0	4.0	11.0	15	1
1 ¼	16	RV0BOF250	10	100	0.065	52.0	5.7	12.7	16	1 ¼
1 ½	16	RV0BOF320	10	60	0.095	59.0	5.9	12.9	19	1 ½
2	16	RV0BOF400	1	90	0.155	72.0	7.6	16.6	21	2
2 ½	16	RV0BOF500	1	60	0.230	79.0	12.6	23.6	21	2 ½
3	10	RV0BOF630	1	36	0.400	96.0	15.3	30.3	26	2 ¾
4	10	RV0BOF750	1	20	0.583	119.0	16.8	31.8	30	3 ½
	10	RV0BOF900	1	15	0.842	134.0	22.7	35.7	33	4
	10	RV0BOF910	1	18	1.229	163.0	26.7	39.7	39	5

TP Union bush G PVC-U

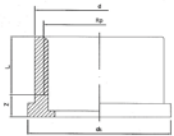
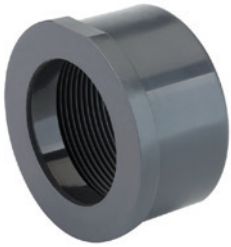
Suitable for BOF/BOP



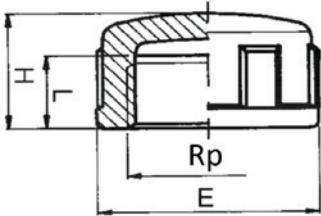
G (inch)	PN (bar)	Code	SP	Weight (kg)	F (inch)	Z (mm)	L (mm)
3/8	16	RV0BFF160	1	0.010	3/8	13.6	11.4
1/2	16	RV0BFF200	1	0.015	1	11.0	15.0
3/4	16	RV0BFF250	1	0.027	1 1/4	12.7	16.3
1	16	RV0BFF320	1	0.036	1 1/2	12.9	19.1
1 1/4	16	RV0BFF400	1	0.058	2	16.6	21.4
1 1/2	16	RV0BFF500	1	0.104	2 1/4	23.6	21.4
2	16	RV0BFF630	1	0.168	2 3/4	30.3	25.7
2 1/2	10	RV0BFF750	1	0.235	3 1/2	31.8	30.2
3	10	RV0BFF900	1	0.335	4	35.7	33.3
4	10	RV0BFF910	1	0.462	5	39.7	39.3

TP Union end Rp PVC-U

Suitable for BOF



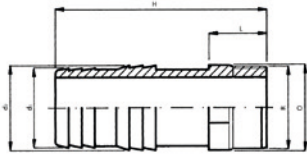
Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	d (mm)	L (mm)	d1 (mm)	Z (mm)
3/8	16	RV0BLF160	1	0	0.007	22.0	11.4	24.0	5.6
1/2	16	RV0BLF200	1	0	0.008	27.5	15.0	30.1	4.0
3/4	16	RV0BLF250	1		0.017	36.0	16.3	38.8	5.7
1	16	RV0BLF320	1		0.021	41.5	19.1	44.7	5.9
1 1/4	16	RV0BLF400	1		0.038	53.0	21.4	56.5	7.6
1 1/2	16	RV0BLF500	1		0.054	59.0	21.4	62.6	12.6
2	16	RV0BLF630	1		0.102	74.0	25.7	78.4	15.3
2 1/2	10	RV0BLF750	1		0.160	92.5	30.2	97.2	16.8
3	10	RV0BLF900	1		0.235	105.0	33.3	110.0	22.7
4	10	RV0BLF910	1		0.334	129.0	39.3	135.4	26.7



TP Threaded cap Rp PVC-U

Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L (mm)	H (mm)	E (mm)
½	16	RV0CAF200	10	500	0.008	15.0	21.0	28
¾	16	RV0CAF250	10	400	0.010	16.3	23.0	34
1	16	RV0CAF320	10	250	0.020	19.1	26.0	42
1 ¼	16	RV0CAF400	1	160	0.036	21.4	29.0	51
1 ½	16	RV0CAF500	1	80	0.047	21.4	32.0	61
2	16	RV0CAF630	1	50	0.080	25.7	37.0	75
2 ½	16	RV0CAF750	1	90	0.188	30.2	50.0	89
3	16	RV0CAF900	1	60	0.269	33.3	53.0	103
4	16	RV0CAF910	1	34	0.424	39.3	59.0	130

TP Threaded hose adaptor R PVC-U



R (inch)	PN (bar)	Code	SP	GP	Weight (kg)	O (mm)	L (mm)	H (mm)	d1 (mm)	d2 (mm)
¾	16	RV0PGF160	10	400	0.008	22	11.4	56.0	16	18
½	16	RV0PGF200	10	280	0.016	24	15.0	66.0	20	22
¾	16	RV0PGF250	10	180	0.024	30	16.3	71.3	25	27
1	16	RV0PGF320	10	130	0.035	36	19.1	77.1	30	32
1 ¼	16	RV0PGF400	85	85	0.059	46	21.4	87.4	40	42
1 ½	16	RV0PGF500	1	130	0.074	50	21.4	91.4	50	52
2	16	RV0PGF630	1	70	0.124	65	25.7	98.7	60	64

TP Threaded Bar



R (inch)	Code	SP	GP	Weight (kg)	L (mm)
½	RV0BAF200	10	320	0.012	60
¾	RV0BAF250	10	240	0.018	60
1	RV0BAF320	10	260	0.036	80
1 ¼	RV0BAF400	1	160	0.053	80
1 ½	RV0BAF500	1	100	0.071	80
2	RV0BAF630	1	60	0.125	100
2 ½	RV0BAF750	1	40	0.153	150
3	RV0BAF900	1	60	0.295	150
4	RV0BAF910	1	30	0.455	150

TP Tank Adaptor



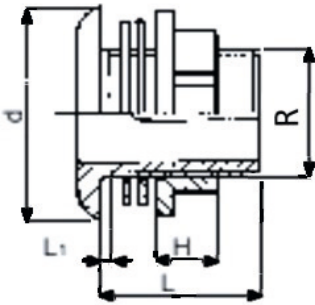
R (inch)	Code	SP	GP	Weight (kg)	L (mm)
½	RV0TAK200	1	150	0.033	60
¾	RV0TAK250	1	100	0.045	60
1	RV0TAK320	1	60	0.093	80
1 ¼	RV0TAK400	1	50	0.119	80
1 ½	RV0TAK500	1	40	0.163	80

R (inch)	Code	SP	GP	Weight (kg)	L (mm)
2	RV0TAK630	1	30	0.311	100
2 ½	RV0TAK750	1	20	0.361	150
3	RV0TAK900	1	16	0.671	150
4	RV0TAK910	1	12	0.975	150

TP Tank connector R PP

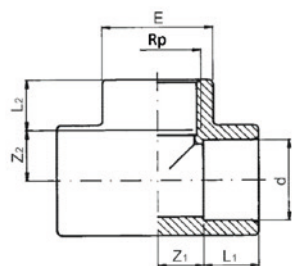


R (inch)	PN (bar)	Code	SP	GP	Weight (kg)	H (mm)	L1 (mm)	D (mm)	L (mm)
½	10	RP0ATS200	10	400	0.020	18	4	41.0	47
¾	10	RP0ATS250	10	300	0.030	18	4	49.0	47
1	10	RP0ATS320	10	180	0.040	18	5	58.0	49
1 ¼	10	RP0ATS400	10	120	0.055	18	5	70.0	49
1 ½	10	RP0ATS500	10	150	0.082	25	9	79.5	49



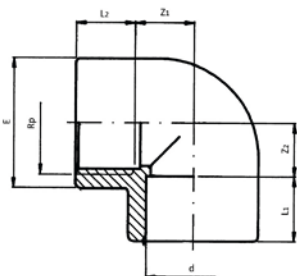
PVC-U adaptor fittings range

TP Threaded central offtake tee Rp PVC-U



d (mm)	d (inch)	Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L2 (mm)	Z2 (mm)	E (mm)	Z1 (mm)	L1 (mm)
16		3/8	16	RV0TIP16A	10	280	0.017	11.4	11.6	23	9	14
20		1/2	16	RV0TIP20B	10	150	0.028	15.0	12.0	28	11	16
25		3/4	16	RV0TIP25C	10	100	0.044	16.3	16.7	34	14	19
32		1	16	RV0TIP32D	10	130	0.073	19.1	19.9	42	17	22
40		1 1/4	16	RV0TIP40E	1	90	0.125	21.4	25.6	51	21	26
50		1 1/2	16	RV0TIP50F	1	50	0.198	21.4	35.6	61	26	31
63		2	16	RV0TIP63G	1	25	0.337	25.7	45.3	75	33	38
75	2 1/2	2 1/2	16	RV0TIP75H	1	35	0.537	30.2	52.8	89	39	44
90		3	16	RV0TIP90I	1	24	0.825	33.3	64.7	106	47	51
110		4	16	RV0TIP91L	1	14	1.395	39.3	78.7	129	57	61

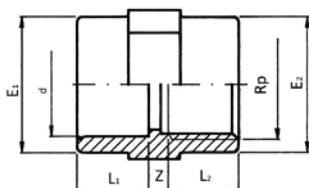
TP Plain/threaded elbow 90° Rp PVC-U



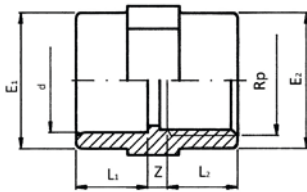
d (mm)	d (inch)	Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	E (mm)	Z2 (mm)	L1 (mm)	L2 (mm)	Z1 (mm)
16		3/8	16	RV0GOP16A	10	360	0.013	23	12	14	11.4	9
20		1/2	16	RV0GOP20B	10	200	0.020	28	12	16	15.0	11
25		3/4	16	RV0GOP25C	10	160	0.034	34	17	19	16.3	14
32		1	16	RV0GOP32D	10	80	0.056	42	20	22	19.1	17
40		1 1/4	16	RV0GOP40E	1	130	0.093	51	26	26	21.4	21
50		1 1/2	16	RV0GOP50F	1	80	0.162	61	36	31	21.4	26
63		2	16	RV0GOP63G	1	40	0.255	75	45	38	25.7	33
75	2 1/2	2 1/2	16	RV0GOP75H	1	50	0.404	89	53	44	30.2	39
90		3	16	RV0GOP90I	1	30	0.701	106	65	51	33.3	47
110		4	16	RV0GOP91L	1	17	1.051	129	79	61	39.3	57

TP Plain/threaded socket Rp PVC-U

• (*) Without octagon

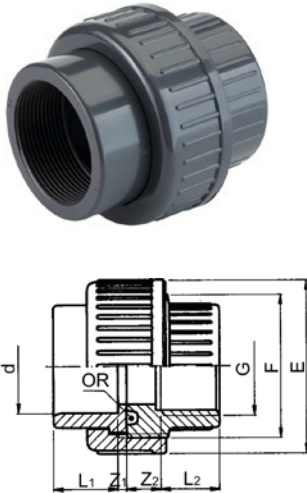


d (mm)	d (inch)	Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	E2 (mm)	E1 (mm)	L1 (mm)	L2 (mm)	Z (mm)
16		3/8	16	RV0MAP16A	10	500	0.009	23	23	14	11.4	6
20		1/2	16	RV0MAP20B	10	250	0.017	28	28	16	15.0	6
25		3/4	16	RV0MAP25C	10	200	0.024	34	34	19	16.3	6
32		1	16	RV0MAP32D	10	130	0.042	42	42	22	19.1	6
40		1 1/4	16	RV0MAP40E	1	100	0.059	51	51	26	21.4	4
50		1 1/2	16	RV0MAP50F	1	60	0.093	58	61	31	21.4	7
63		2	16	RV0MAP63G	1	80	0.128	72	75	38	25.7	7
75	2 1/2	2 1/2	16	RV0MAP75H	1	110	0.215	89	89	44	30.2	8
90		3	16	RV0MAP90I	1	64	0.337	103	106	51	33.3	9



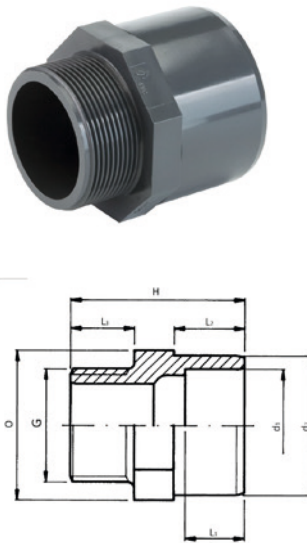
	d (mm)	d (inch)	Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	E2 (mm)	E1 (mm)	L1 (mm)	L2 (mm)	Z (mm)
	110		4	16	RV0MAP91L	1	35	0.535	130	129	61	39.3	10
*	125		5	16	RV0MAP92N	1	16	1.111		160	69	43.6	51
*	140	5	5	16	RV0MAP93N	1	9	1.185		162	76	43.6	40
*	160		6	16	RV0MAP94O	9	9	1.390		184	86	48.0	46

TP Plain/threaded union with o-ring G PVC-U



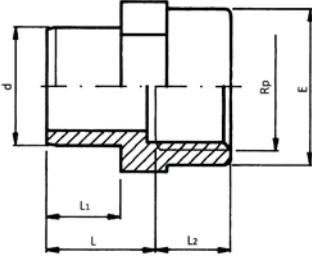
	d (mm)	d (inch)	G (inch)	PN (bar)	EPDM Code	SP	GP	Weight (kg)	E (mm)	F (inch)	Z2 (mm)	L1 (mm)	L2 (mm)	Z1 (mm)
	16		3/8	16	RV0BOP16A	10	250	0.024	34	3/4	13.6	14	11.4	3
	20		1/2	16	RV0BOP20B	10	150	0.040	42	1	11.0	16	15.0	3
	25		3/4	16	RV0BOP25C	10	100	0.065	52	1 1/4	12.7	19	16.3	3
	32		1	16	RV0BOP32D	10	60	0.090	59	1 1/2	12.9	22	19.1	3
	40		1 1/4	16	RV0BOP40E	1	90	0.157	72	2	16.6	26	21.4	3
	50		1 1/2	16	RV0BOP50F	1	60	0.209	79	2 1/4	23.6	31	21.4	3
	63		2	16	RV0BOP63G	1	36	0.374	96	2 3/4	30.3	38	25.7	3
	75	2 1/2	2 1/2	10	RV0BOP75H	1	20	0.625	119	3 1/2	31.8	44	30.2	3
	90		3	10	RV0BOP90I	1	15	0.801	134	4	35.7	51	33.3	5
	110		4	10	RV0BOP91L	1	18	1.271	163	5	39.7	61	39.3	5

TP Threaded adaptor GAS PVC-U 3 diameters



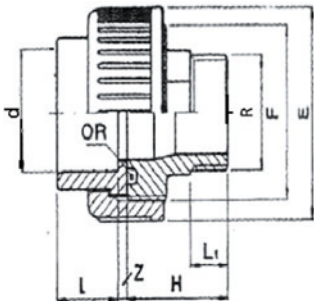
d1-d2 (mm)	G (inch)	PN (bar)	Code	SP	GP	Weight (kg)	O (mm)	L3 (mm)	L1 (mm)	H (mm)	L2 (mm)
16 - 20	3/8	16	RV0AMP16A	10	500	0.010	24	11.4	14	40	16
16 - 20	1/2	16	RV0AMP16B	10	400	0.011	24	15.0	14	43	16
20 - 25	3/8	16	RV0AMP20A	10	300	0.013	30	11.4	16	43	19
20 - 25	1/2	16	RV0AMP20B	10	300	0.014	30	15.0	16	46	19
20 - 25	3/4	16	RV0AMP20C	10	300	0.015	30	16.3	16	47	19
25 - 32	1/2	16	RV0AMP25B	10	200	0.025	36	15.0	19	49	22
25 - 32	3/4	16	RV0AMP25C	10	200	0.026	36	16.3	19	50	22
25 - 32	1	16	RV0AMP25D	10	200	0.029	36	19.1	19	53	22
32 - 40	3/8	16	RV0AMP32C	10	140	0.037	42	16.3	22	54	26
32 - 40	1	16	RV0AMP32D	10	120	0.038	42	19.1	22	57	26
32 - 40	1 1/4	16	RV0AMP32E	10		0.048	46	21.4	22	60	26
40 - 50	1	16	RV0AMP40D	90		0.068	55	19.1	26	64	31
40 - 50	1 1/4	16	RV0AMP40E	50		0.072	55	21.4	26	67	31
40 - 50	1 1/2	16	RV0AMP40F	80		0.071	55	21.4	26	67	31
50 - 63	1 1/4	16	RV0AMP50E	50		0.114	65	21.4	31	74	38
50 - 63	1 1/2	16	RV0AMP50F	110		0.113	65	21.4	31	74	38
50 - 63	2	16	RV0AMP50G	100		0.122	65	25.7	31	78	38
63 - 75	1 1/2	16	RV0AMP63F	35		0.139	80	21.4	38	80	44
63 - 75	2	16	RV0AMP63G	70		0.150	80	25.7	38	84	44
63 - 75	2 1/2	16	RV0AMP63H	50		0.170	80	30.2	38	91	44
75 - 90	2	16	RV0AMP75G	54		0.266	95	25.7	44	94	51
75 - 90	2 1/2	16	RV0AMP75H	60		0.270	95	30.2	44	99	51
75 - 90	3	16	RV0AMP75I	36		0.281	95	33.3	44	102	51
90 - 110	2 1/2	16	RV0AMP90H	25		0.465	115	30.2	51	110	61
90 - 110	3	16	RV0AMP90I	25		0.486	115	33.3	51	113	61
90 - 110	4	16	RV0AMP90L	16		0.487	115	39.3	51	118	61
110 - 125	3	10	RV0AMP91I	40		0.480	130	33.3	61	115	66
110 - 125	4	10	RV0AMP91L	32		0.480	130	39.3	61	120	66
110 - 125	5	10	RV0AMP91N	32		0.533	130	40.0	61	120	66
125 - 140	5	10	RV0AMP92N	24		0.609		74.0	69	145	71

TP Threaded adaptor Rp PVC-U



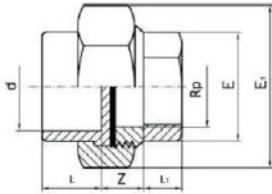
d (mm)	d (inch)	Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L (mm)	L1 (mm)	E (mm)	L2 (mm)
16		3/8	16	RV0AFP16A	10	600	0.009	22	14	23	11.4
20		1/2	16	RV0AFP20B	10	300	0.017	24	16	28	15.0
25		1/2	16	RV0AFP25B	10	220	0.019	27	19	28	15.0
25		3/4	16	RV0AFP25C	10	200	0.023	27	19	34	16.3
25		1	16	RV0AFP25D	10	140	0.040	27	19	42	19.1
32		3/4	16	RV0AFP32C	10	180	0.028	30	22	34	16.3
32		1	16	RV0AFP32D	10	120	0.042	30	22	42	19.1
40		1	16	RV0AFP40D	1	100	0.049	36	26	42	19.1
40		1 1/4	16	RV0AFP40E	1	90	0.060	36	26	51	21.4
50		1 1/4	16	RV0AFP50E	1	70	0.075	41	31	51	21.4
50		1 1/2	16	RV0AFP50F	1	60	0.075	41	31	58	21.4
50		2	16	RV0AFP50G	1	100	0.119	41	31	72	25.7
63		2	16	RV0AFP63G	1	80	0.131	48	38	72	25.7
75		2	16	RV0AFP75G	1	72	0.170	53	44	72	25.7
75	2 1/2	2 1/2	16	RV0AFP75H	1	90	0.221	58	44	89	30.2
90		4	16	RV0AFP90L	1	52	0.446	65	51	130	39.3
110		3	16	RV0AFP91I	1	45	0.376	76	61	103	33.3
110		4	16	RV0AFP91L	1	45	0.471	76	61	130	39.3

TP Plain threaded union R PVC-U



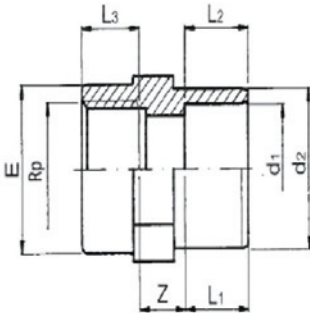
d (mm)	R (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L1 (mm)	H (mm)	L (mm)	E (mm)	Z (mm)	F (inch)
25	3/4	16	RV0BMP25C	10	100	0.069	16.3	44	19	52	3	1 1/4
32	1	16	RV0BMP32D	10	40	0.098	19.1	48	22	59	3	1 1/2
40	1 1/4	16	RV0BMP40E	1	40	0.164	21.4	54	26	72	3	2
50	1 1/2	16	RV0BMP50F	1	60	0.211	22.0	58	31	79	3	2 1/4
50	2	16	RV0BMP50G	1	60	0.255	26.0	58	31	79	3	2 1/4
63	2	16	RV0BMP63G	1	63	0.364	26.0	66	38	96	3	2 3/4

TP Union PVC-U/brass threaded Rp



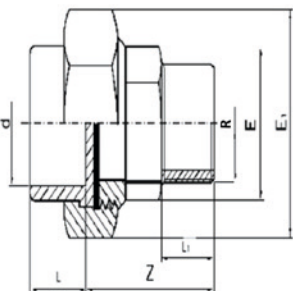
d (mm)	Rp (inch)	PN (bar)	Code	SP	Weight (kg)	E (mm)	L (mm)	L1 (mm)	Z (mm)	E1 (mm)
16	3/8	16	RV0BMF16A	1	0.082	20	14	11	10	30
20	1/2	16	RV0BMF20B	1	0.149	25	16	15	11	38
25	3/4	16	RV0BMF25C	1	0.215	32	19	15	14	47
32	1	16	RV0BMF32D	1	0.280	38	22	16	12	55
40	1 1/4	16	RV0BMF40E	1	0.391	48	26	19	13	65
50	1 1/2	16	RV0BMF50F	1	0.513	54	31	21	13	72
63	2	16	RV0BMF63G	1	0.797	66	38	25	14	88

TP Adaptor socket Rp PVC-U 3 diameters



d1-d2 (mm)	Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L1 (mm)	L3 (mm)	Z (mm)	L2 (mm)	E (mm)
20 - 25	1/2	16	RV0MFP25B	10	200	0.016	16	15.0	12	19	28
25 - 32	3/4	16	RV0MFP32C	10	150	0.027	19	16.3	13	22	34
32 - 40	1	16	RV0MFP40D	1	130	0.045	22	19.1	14	26	42
40 - 50	1 1/4	16	RV0MFP50E	1	110	0.072	26	21.4	16	31	51
50 - 63	1 1/2	16	RV0MFP63F	1	80	0.120	31	21.4	18	38	58
63 - 75	2	16	RV0MFP75G	1	70	0.250	38	25.7	18	44	72
75 - 90	2 1/2	16	RV0MFP90H	1	90	0.277	44	30.2	21	51	89
90 - 110	3	16	RV0MFP91I	1	50	0.480	51	33.3	25	61	103

TP Union PVC-U/brass threaded R

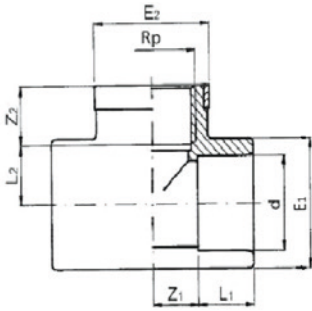


d (mm)	R (inch)	PN (bar)	Code	SP	Weight (kg)	E1 (mm)	Z (mm)	L1 (mm)	L (mm)	E (mm)
16	3/8	16	RV0BMM16A	1	0.107	30	35	11	14	20
20	1/2	16	RV0BMM20B	1	0.173	38	41	12	16	25
25	3/4	16	RV0BMM25C	1	0.246	47	45	15	19	32
32	1	16	RV0BMM32D	1	0.325	55	47	19	22	38
40	1 1/4	16	RV0BMM40E	1	0.470	65	55	21	26	48
50	1 1/2	16	RV0BMM50F	1	0.639	72	57	21	31	54
63	2	16	RV0BMM63G	1	0.941	88	68	25	38	66

PVC-U adaptor fittings range

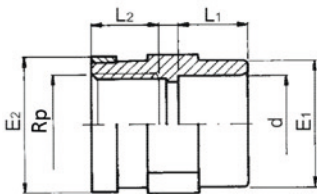
With metal ring reinforced

TP Threaded central offtake tee Rp PVC-U



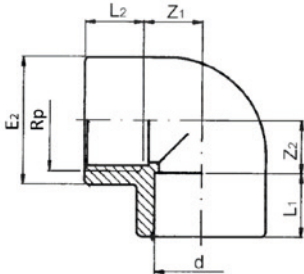
d (mm)	Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	Z1 (mm)	L1 (mm)	L2 (mm)	Z2 (mm)	E2 (mm)	E1 (mm)
16	3/8	16	RV0TTP16A	10	280	0.018	9	14	11.4	11.6	25	23
20	1/2	16	RV0TTP20B	10	150	0.030	11	16	15.0	12.0	30	28
25	3/4	16	RV0TTP25C	10	100	0.047	14	19	13.3	16.7	35	34
32	1	16	RV0TTP32D	10	100	0.079	17	22	19.1	19.9	45	42
40	1 1/4	16	RV0TTP40E	1	80	0.133	21	26	21.4	25.6	55	51
50	1 1/2	16	RV0TTP50F	1	50	0.205	26	31	21.4	35.6	65	61
63	2	16	RV0TTP63G	1	20	0.354	33	38	25.7	45.3	75	75

TP Plain/threaded socket Rp PVC-U



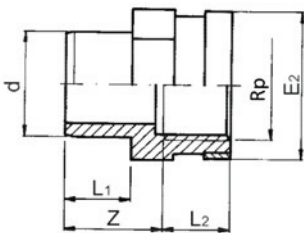
d (mm)	Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	E2 (mm)	E1 (mm)	L2 (mm)	L1 (mm)
16	3/8	16	RV0MMP16A	10	500	0.010	25	23	11.4	14
20	1/2	16	RV0MMP20B	10	250	0.019	30	28	15.0	16
25	3/4	16	RV0MMP25C	10	200	0.027	35	34	16.3	19
32	1	16	RV0MMP32D	10	120	0.047	45	42	19.1	22
40	1 1/4	16	RV0MMP40E	1	100	0.065	55	51	21.4	26
50	1 1/2	16	RV0MMP50F	1	60	0.104	65	61	21.4	31
63	2	16	RV0MMP63G	1	80	0.143	75	75	25.7	38

TP Plain/threaded elbow 90° Rp PVC-U



d (mm)	Rp (inch)	PN (bar)	Code	SP	GP	Weight (kg)	E2 (mm)	Z2 (mm)	L1 (mm)	Z1 (mm)	L2 (mm)
16	3/8	16	RV0GGP16A	10	360	0.015	25	11.6	14	9	11.4
20	1/2	16	RV0GGP20B	10	200	0.024	30	12.0	16	11	15.0
25	3/4	16	RV0GGP25C	10	160	0.038	35	16.7	19	14	16.3
32	1	16	RV0GGP32D	10	80	0.062	45	19.9	22	17	19.1
40	1 1/4	16	RV0GGP40E	1	130	0.100	55	25.6	26	21	21.4
50	1 1/2	16	RV0GGP50F	1	70	0.169	65	35.6	31	26	21.4
63	2	16	RV0GGP63G	1	40	0.288	75	45.3	38	33	25.7

TP Threaded adaptor Rp PVC-U



d (mm)	Code	SP	GP	Weight (kg)	Rp (inch)	PN (bar)	L2 (mm)	E2 (mm)	Z (mm)	L1 (mm)
16	RV0AAP16A	10	600	0.011	3/8	16	11.4	25	22	14
20	RV0AAP20B	10	300	0.020	1/2	16	15.0	30	22	14
20	RV0AAP20C	10	240	0.027	3/4	16	15.0	30	24	16
25	RV0AAP25B	10	220	0.021	1/2	16	16.3	35	24	16
25	RV0AAP25C	10	200	0.028	3/4	16	15.0	30	27	19
25	RV0AAP25D	10	140	0.045	1	16	16.3	35	27	19
32	RV0AAP32C	10	180	0.032	3/4	16	19.1	45	27	19
32	RV0AAP32D	10	120	0.047	1	16	16.3	35	30	22
40	RV0AAP40D	1	100	0.053	1	16	19.1	45	30	22
40	RV0AAP40E	1	90	0.066	1 1/4	16	19.1	45	36	26
50	RV0AAP50E	1	70	0.084	1 1/4	16	21.4	55	36	26
50	RV0AAP50F	1	60	0.104	1 1/2	16	21.4	55	41	31
50	RV0AAP50G	1	90	0.133	2	16	21.4	60	41	31
63	RV0AAP63G	1	80	0.146	2	16	25.7	75	41	31
75	RV0AAP75G	1	160	0.180	2	16	25.7	75	48	38

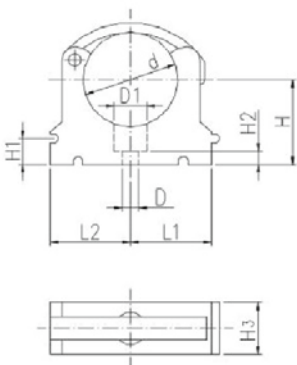
Accessories



Polypropylene pipe clip

- UV resistant

	d (mm)	Code	SP	GP	Weight (kg)
*	16	APOSPT160	10	500	0.006
*	20	APOSPT200	10	1100	0.008
*	25	APOSPT250	10	1000	0.010
*	32	APOSPT320	10	800	0.013
	40	APOSPT400	10	250	0.026
	50	APOSPT500	10	400	0.033
	63	APOSPT630	10	160	0.047
	75	APOSPT750	10	150	0.087
	90	APOSPT900	10	120	0.112
	110	APOSPT910	10	100	0.143
	125	APOSPT920	10	50	0.232
	140	APOSPT930	10	30	0.274
	160	APOSPT940	10	20	0.333



	d (mm)	D (mm)	D1 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	L1 (mm)	L2 (mm)
*	16	6	11	27	10	6	16	14	17
*	20	6	11	27	10	6	16	17	19
*	25	6	11	30	10	6	16	19	22
*	32	6	11	36	10	6	16	24	27
	40	7	14	44	10	7	22	34	34
	50	7	14	51	10	7	22	37	37
	63	9	17	64	10	10	25	45	45
	75	9	17	58	10	10	25	52	52
	90	9	17	65	10	10	28	65	65
	110	9	17	75	10	10	28	79	79
	125	9	17	90	10	10	32	88	88
	140	9	17	110	10	10	32	98	98
	160	9	17	108	10	10	32	109	109



O-ring

Suitable for unions

- (*) Traded items

	d (mm)	EPDM Code	SP	GP
*	16	1ORD03062	10	
*	20	1ORD04081P	10	
*	25	1ORD04112P	10	
*	32	1ORD04131P	10	
*	40	1ORD06162P	10	
*	50	1ORD06187P	10	
*	63	1ORD06237P	10	
*	75	1ORD06312	10	10
*	90	1ORD06362	10	10
*	110	1ORD06450	10	10

PVC-U Safeblock water ball valves

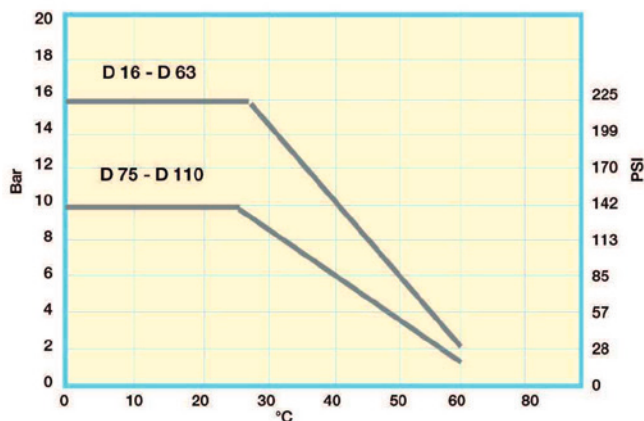
General characteristics

Single and Double Union Ball Valve - compact type - characterized by optimal handling, full flow, axial pipe load block with micro-adjustment of ball seat. Moreover in closed position the pipeline can be disconnected downstream from the valve.

Features outlined make TP valves particularly suited for the following applications: distribution, treatment and sewage water, swimming pools, water parks and aquaculture.

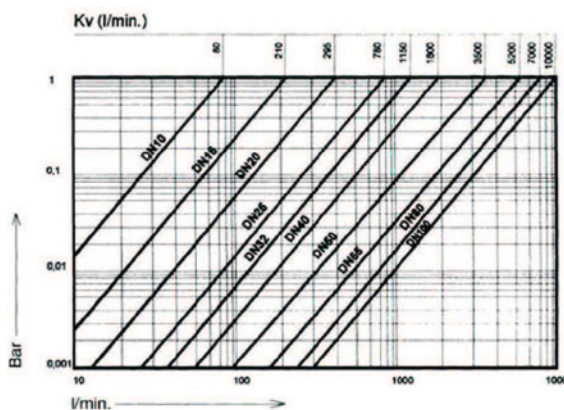
MAX WORKING PRESSURE

The a. m. technical information should be used as a guide. Please consult our Technical dpt for specific queries.



Pressure temperature rating for water an harmless liquid.

CHARGE LOSS



With water at 20°C and the valve in open position

TORQUE

D	G	Nm
16-20	3/8"-1/2"	0,7
25	3/4"	2
32	1"	3,5
40	1" 1/4	7
50	1" 1/2	9
63	2"	13
75	2" 1/2	24
90	3"	30
110	4"	48

Max torque at max working pressure.

Installation and use

When glueing the end connector of the pipe, care must be taken to prevent the glue or solvent from coming in contact with the valve seats or ball.

Threaded ends should not be connected with cone-shaped male threads and the use of hemp or similar materials should be carefully avoided. A special attention should be paid to the correct line-up of the installation. Tighten the union nut hand tight only. The use of wrench is not allowed. It is important that the unions are not used to pull the system together.

If there is any leakage from the union nuts, please check

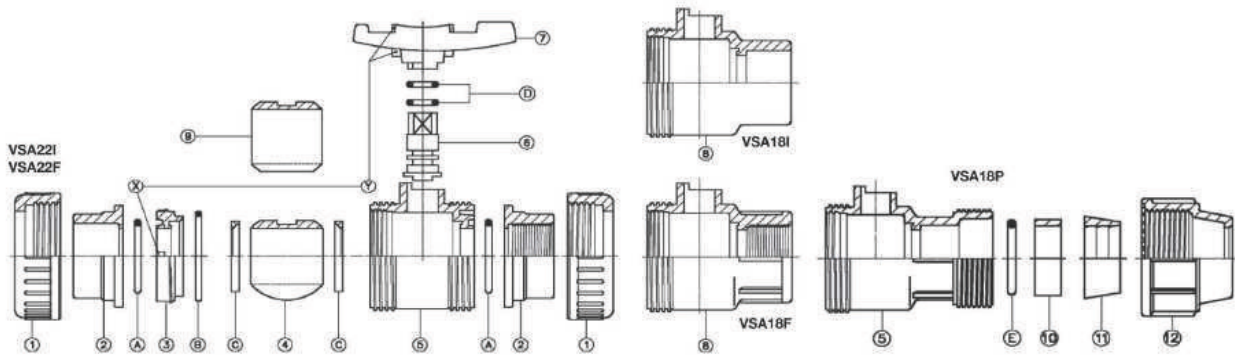
the correct line-up of the system and the pipe length. An excessive tightening of the unions could finally break them.

Before the valve is cycled, all dirt, sand or other material should be flushed from the system. This is to prevent scarring of the ball and/or seats.

It is important to avoid rapid closures/opening of the valve to eliminate the possibility of water hammer causing damage to the pipeline.

It is necessary that all installation and maintenance personnel become familiar with the proper solvent cement and the adjoining procedure.

PVC-U Safeblock water ball valves



VALVE COMPONENTS

Pos	Components	n°			
		Material	VSA22	VSA18	
1	Union nut	2	1	1	PVC
2	End connector	2	1	1	PVC
3	Adjustable support	1	1	1	PVC
4	Ball DN≥40 a ≤100	1	-	1	PVC
5	Body	1	-	1	PVC
6	Stem	1	1	1	PVC
7	Handle	1	1	1	PVC
8	Singleunionbody	-	1	-	PVC
9	Ball DN≥10 a ≤32	1	-	-	PVC
10	Ball	-	1	-	PVC
11	Packing presserbush	-	-	1	PVC
12	Clip ring	-	-	1	POM
	Quickjointnut	-	-	1	PVC
A	O-ring body	2	1	1	EPDM
B	O-ring support	1	1	1	EPDM
C	Ball seal	2	2	1	PTFE+PE
D	O-ring stem	2	2	2	EPDM
E	Quick joint O-ring	-	-	1	EPDM

PVC: Polyvinyl chloride

EPDM: Ethylene-propylene

PTFE+PE: Polytetra+fluoroethylene+polyethylene

POM: Polyacetale

DISASSEMBLING AND REASSEMBLING IN CASE OF MAINTENANCE DOUBLE UNION VSA.22. ...

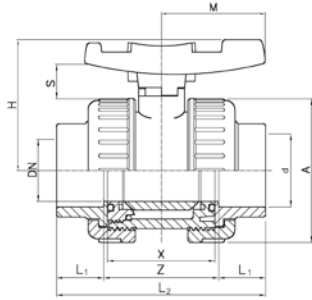
Screwing the union nut (1) it is possible to take out radially from the system the whole body of the valve.

To reach the internal parts of the valve act as follows:

- 1- Set the valve on open position.
- 2- Withdraw the handle (7) from control stem (6).
- 3- Screw the support (3) of the body (5) using the two teeth (Y) of the handle (7) screwing operations should be done counter-clockwise.
- 4- After having screwed the support (3) and taken out the O-ring B which was inside (5), it is possible to reach all the internal parts of the valve to check the O-rings and in case substitute them.
 - to disassemble the ball (4)-(9) turn it using the control stem (6) setting it in closing position to withdraw the ballonet coupling through the control stem (6);
 - to disassemble the control stem (6) of the body (5) push it downwards as far as its complete outcome.

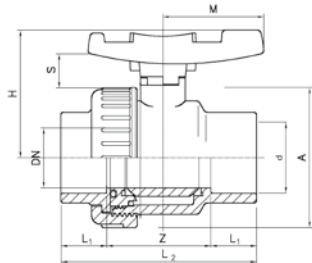
To assemble the valve act in the opposite way being careful to set the O-ring properly and greased it with silicon grease. Screw threaded support 3 straight to the end taking care not to block the ball (4)-(9).

PVC-U safeblock water ball valves



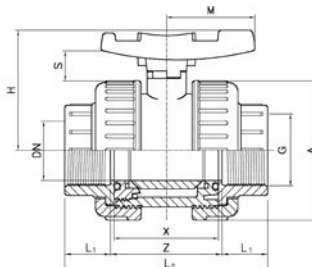
Double union safeblock ISO PVC-U
Ball valve with solvent cement sockets

d (mm)	d (inch)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	L1 (mm)	H (mm)	L2 (mm)	A (mm)	S (mm)	Z (mm)	X (mm)	M (mm)
16		10	16	VSA22I160	50	0.125	14	53	76	50	19	48	42	40
20		15	16	VSA22I200	50	0.130	16	53	80	50	19	48	41	40
25		20	16	VSA22I250	45	0.205	19	60	91	59	19	53	48	45
32		25	16	VSA22I320	50	0.295	22	67	102	68	21	58	54	51
40		32	16	VSA22I400	36	0.435	26	79	120	80	25	68	62	59
50		40	16	VSA22I500	24	0.690	31	90	140	94	27	78	72	70
63		50	16	VSA22I630	13	1.160	38	107	169	115	29	93	86	84
75	2 ½	65	10	VSA22I750	8	2.200	44	129	206	145	32	118	110	103
90		80	10	VSA22I900	4	3.310	51	143	242	168	36	140	128	120
110		100	10	VSA22I910	2	5.925	61	169	282	210	43	160	150	141



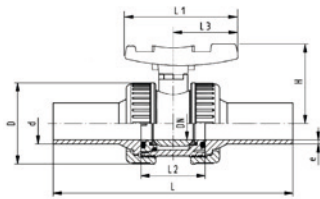
Single union safeblock ISO PVC-U
Ball valve with solvent cement sockets

d (mm)	d (inch)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	L1 (mm)	M (mm)	A (mm)	S (mm)	H (mm)	L2 (mm)	Z (mm)
16		10	16	VSA18I160	180	0.095	14	40	50	19	53	76	48
20		15	16	VSA18I200	180	0.099	16	40	50	19	53	80	48
25		20	16	VSA18I250	120	0.155	19	45	59	19	60	91	53
32		25	16	VSA18I320	75	0.234	22	51	68	21	67	102	58
40		32	16	VSA18I400	45	0.350	26	59	80	25	79	120	68
50		40	16	VSA18I500	30	0.534	31	70	94	28	90	140	78
63		50	16	VSA18I630	16	0.893	38	84	115	29	107	169	93
75	2 ½	65	10	VSA18I750	8	1.640	44	103	145	32	129	206	118
90		80	10	VSA18I900	5	2.576	51	120	168	36	143	242	140
110		100	10	VSA18I910	2	4.772	61	141	210	43	169	282	160



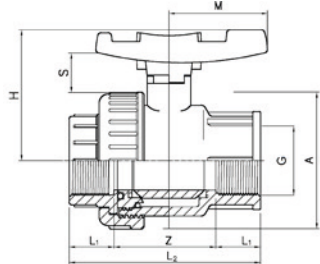
Double union safeblock B.S.P. PVC-U
Ball valve with threaded sockets G

G (inch)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	Z (mm)	X (mm)	M (mm)	S (mm)	A (mm)	L2 (mm)	H (mm)	L1 (mm)
½	15	16	VSA22F200	150	0.127	48	42	40	19	50	80	53	16
¾	20	16	VSA22F250	100	0.202	53	48	45	19	59	91	60	19
1	25	16	VSA22F320	60	0.292	58	54	51	21	68	102	67	22
1 ¼	32	16	VSA22F400	36	0.439	68	62	59	25	80	120	79	26
1 ½	40	16	VSA22F500	24	0.685	78	72	70	27	94	140	90	31
2	50	16	VSA22F630	16	1.160	93	86	84	29	115	169	107	38
2 ½	65	10	VSA22F750	8	2.141	118	110	103	32	145	206	129	44
3	80	10	VSA22F900	1	3.220	140	128	120	36	168	242	143	51
4	100	10	VSA22F910	1	5.764	160	150	141	43	210	282	169	61



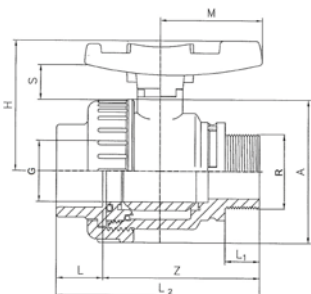
Double union safeblock PVC-U
Ball valve with spigots PE100 SDR11

d (mm)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	L2 (mm)	L (mm)	L3 (mm)	L1 (mm)	H (mm)	D (mm)	e (mm)
20	15	16	VSA22B200	30	0.140	42	171	40	67	53	50	3.3
25	20	16	VSA22B250	20	0.210	48	194	45	77	60	59	3.5
32	25	16	VSA22B320	10	0.310	54	243	51	87	67	68	3.5
40	32	16	VSA22B400	10	0.475	62	232	59	102	79	80	4.0
50	40	16	VSA22B500	6	0.760	72	248	70	119	90	94	5.0
63	50	16	VSA22B630	3	1.255	86	281	84	146	107	115	6.0
75	65	10	VSA22B750	1	2.390	110	338	103	179	129	145	6.9
90	80	10	VSA22B900	1	3.525	128	378	120	209	143	168	8.5
110	100	10	VSA22B910	1	6.100	150	410	141	250	169	210	11.5



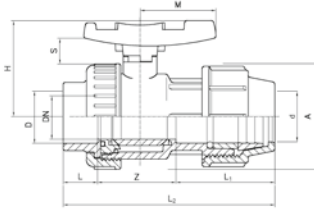
Single union safeblock B.S.P. PVC-U
Ball valve with threaded sockets G

G (inch)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	H (mm)	L2 (mm)	L1 (mm)	A (mm)	S (mm)	M (mm)	Z (mm)
½	15	16	VSA18F200	180	0.100	53	80	16	50	19	40	48
¾	20	16	VSA18F250	120	0.160	60	91	19	59	19	45	53
1	25	16	VSA18F320	75	0.230	67	102	22	68	21	51	58
1 ¼	32	16	VSA18F400	45	0.335	79	120	26	80	25	59	68
1 ½	40	16	VSA18F500	80	0.515	90	140	31	94	27	70	78
2	50	16	VSA18F630	18	0.890	107	169	38	115	29	84	93
2 ½	65	10	VSA18F750	8	1.620	129	206	44	145	32	103	118
3	80	10	VSA18F900	5	2.420	143	242	51	168	36	120	140
4	100	10	VSA18F910	2	4.559	169	282	61	210	43	141	160



Single union safeblock B.S.P. PVC-U
Ball valve with female threaded socket G/male thread R

G (inch)	R (inch)	PN (bar)	EPDM Code	SP	Weight (kg)	A (mm)	S (mm)	Z (mm)	M (mm)	L1 (mm)	L2 (mm)	L (mm)	H (mm)
½	½	16	VSA18S200	180	0.096	50	19	55	40	15.0	71	16	53
¾	¾	16	VSA18S250	120	0.152	59	19	61	45	16.5	80	19	60
1	1	16	VSA18S320	75	0.225	68	21	68	51	19.5	90	22	67
1 ¼	1 ¼	16	VSA18S400	45	0.340	80	25	84	59	21.5	110	26	79
1 ½	1 ½	16	VSA18S500	30	0.500	94	27	97	70	21.5	128	31	90
2	2	16	VSA18S630	18	0.845	115	29	119	84	25.5	157	38	107



Single union safeblock PVC-U
Ball valve with compression fitting

d-d (mm)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	M (mm)	Z (mm)	L1 (mm)	L (mm)	H (mm)	A (mm)	L2 (mm)	S (mm)
50 - 50	40	16	VSA18P500	1	0.764	70	63	88	31	90	94	182	27



Spare parts for manual valves



Blue handle

Suitable for VSA22 - VSA18

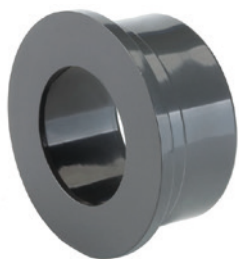
d (mm)	DN (mm)	Code	SP
16 - 20	15	3VMNG1D20	1
25	20	3VMNG1D25	1
32	25	3VMNG1D32	1
40	32	3VMNG1D40	1
50	40	3VMNG1D50	1
63	50	3VMNG1D63	1
75	65	3VMNG1D75	1
90	80	3VMNG1D90	1
110	100	3VMNG1D91	1



Kit of colored discs for VSA handle

Suitable for VSA22 - VSA18

d (mm)	DN (mm)	Code	SP	GP
16 - 20	15	AK00MNG20	1	15
25	20	AK00MNG25	1	15
32	25	AK00MNG32	1	15
40	32	AK00MNG40	1	15
50	40	AK00MNG50	1	15
63	50	AK00MNG63	1	15
75	65	AK00MNG75	1	15
90	80	AK00MNG90	1	15
110	100	AK00MNG91	1	15



TP Plain socket PVC-U metric

Suitable for VSA

d (mm)	PN (bar)	Code	SP
16	16	3VCLV1I16	1
20	16	3VCLV1I20	1
25	16	3VCLV1I25	1
32	16	3VCLV1I32	1
40	16	3VCLV1I40	1
50	16	RV0CLVI500	1
63	16	RV0CLVI630	1
75	10	3VCLV1I75	1
90	10	3VCLV1I90	1
110	10	3VCLV1I91	1



Gasket set

Suitable for VSA

d (mm)	EPDM/ PTFE/PE Code	SP	GP	Weight (kg)
20	XSASED200	1	10	0.010
25	XSASED250	1	10	0.010
32	XSASED320	1	10	0.010

d (mm)	EPDM/ PTFE/PE Code	SP	GP	Weight (kg)
40	XSASED400	1	10	0.015
50	XSASED500	1	10	0.025
63	XSASED630	1	10	0.035
75	XSASED750	1	10	0.045
90	XSASED900	1	10	0.070
110	XSASED910	1		0.080



TP Nut PVC-U

Suitable for VSA - VSI - VRO - VRI

d (mm)	DN (mm)	Code	SP
16 - 20	10 - 15	3VGHR0A20	1
25	20	3VGHR0A25	1
32	25	3VGHR0A32	1
40	32	3VGHR0A40	1
50	40	RV0GHR500	1
63	50	RV0GHR630	1
75	65	3VGHR0A75	1
90	80	3VGHR0A90	1
110	100	3VGHR0A91	1



Threaded socket B.S.P. G PVC-U

Suitable for VSA

G (inch)	PN (bar)	Code	SP	GP
3/8	16	3VCLV1F16	1	
1/2	16	3VCLV1F20	180	
3/4	16	3VCLV1F25	1	250
1	16	3VCLV1F32		100
1 1/4	16	3VCLV1F40		70
1 1/2	16	3VCLV1F50		25
2	16	3VCLV1F63		18
2 1/2	10	3VCLV1F75		1
3	10	3VCLV1F90	6	
4	10	3VCLV1F91		4

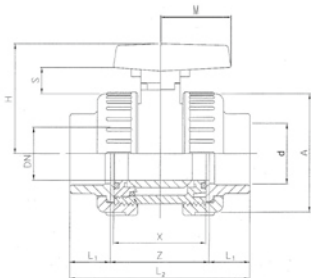


Socket PE100

• (*) Traded items
Suitable for VSA - VRO - VRV - VRI

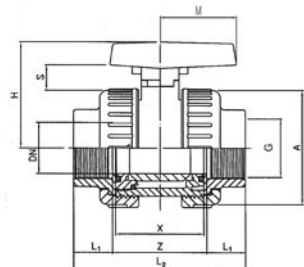
d (mm)	DN (mm)	PN (bar)	Code	SP	Weight (kg)
*	20	15	3ECLV20C	50	0.020
*	25	20	3ECLV25C	40	0.025
*	32	25	3ECLV32C	20	0.040
*	40	32	3ECLV40C	20	0.060
*	50	40	3ECLV50C	30	0.090
*	63	50	3ECLV63C	30	0.100
*	75	65	3ECLV75C	10	0.110
*	90	80	3ECLV90C	12	0.120
*	110	100	3ECLV91C	10	0.700

PVC-U water ball valves



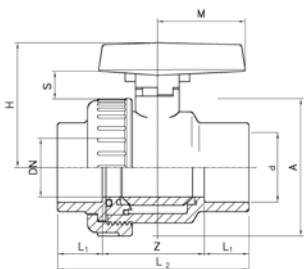
Double union ball valve ISO PVC-U
With solvent cement sockets

d (mm)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	A (mm)	S (mm)	H (mm)	L2 (mm)	L1 (mm)	Z (mm)	X (mm)	M (mm)
20	15	16	VSA21I200	150	0.128	50	12	51	80	16	48	42	36
25	20	16	VSA21I250	100	0.204	59	15	58	91	19	53	48	39
32	25	16	VSA21I320	60	0.294	68	16	65	102	22	58	54	45
40	32	16	VSA21I400	38	0.431	80	18	76	120	26	68	62	51
50	40	16	VSA21I500	24	0.670	94	21	88	140	31	78	72	57
63	50	16	VSA21I630	13	1.123	115	23	103	169	38	93	86	66



Double union ball valve B.S.P PVC-U
With threaded sockets G

G (inch)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	H (mm)	L1 (mm)	A (mm)	L2 (mm)	S (mm)	M (mm)	X (mm)	Z (mm)
½	15	16	VSA21F200	150	0.130	51	16	50	80	12	36	42	48
¾	20	16	VSA21F250	100	0.205	58	19	59	91	15	39	48	53
1	25	16	VSA21F320	60	0.296	65	22	68	102	16	45	54	58
1 ¼	32	16	VSA21F400	38	0.412	76	26	80	120	18	51	62	68
1 ½	40	16	VSA21F500	24	0.665	88	31	94	140	21	57	72	78
2	50	16	VSA21F630	16	1.104	103	38	115	169	23	66	86	93

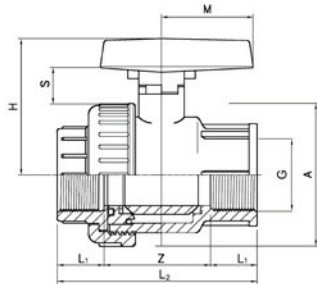


Single union ball valve ISO PVC-U
With solvent cement sockets

d (mm)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	S (mm)	A (mm)	L2 (mm)	H (mm)	M (mm)	Z (mm)	X (mm)	L1 (mm)
20	15	16	VSA11I200	180	0.099	12	50	80	51	36	48	42	16
25	20	16	VSA11I250	120	0.155	15	59	91	58	39	53	48	19
32	25	16	VSA11I320	75	0.229	16	68	102	65	45	58	54	22
40	32	16	VSA11I400	48	0.338	18	80	120	76	51	68	62	26
50	40	16	VSA11I500	30	0.525	21	94	140	88	57	78	72	31
63	50	16	VSA11I630	16	0.890	23	115	169	103	66	93	86	38
75	65	10	VSA11I750	8	1.598	24	145	206	124	78	118	110	44
90	80	10	VSA11I900	5	2.450	26	168	242	137	84	140	128	51
110	100	10	VSA11I910	2	4.684	28	210	282	162	96	160	150	61



**Single union ball valve B.S.P. PVC-U
With threaded sockets G**



G	DN	PN	EPDM	SP	Weight	Z	X	M	A	S	H	L2	L1
(inch)	(mm)	(bar)	Code		(kg)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
½	15	16	VSA11F200	180	0.101	48	42	36	50	12	51	80	16
¾	20	16	VSA11F250	120	0.157	53	48	39	59	15	58	91	19
1	25	16	VSA11F320	75	0.233	58	54	45	68	16	65	102	22
1 ¼	32	16	VSA11F400	48	0.333	68	62	51	80	18	76	120	26
1 ½	40	16	VSA11F500	30	0.518	78	72	57	94	21	88	140	31
2	50	16	VSA11F630	18	0.869	93	86	66	115	23	103	169	38

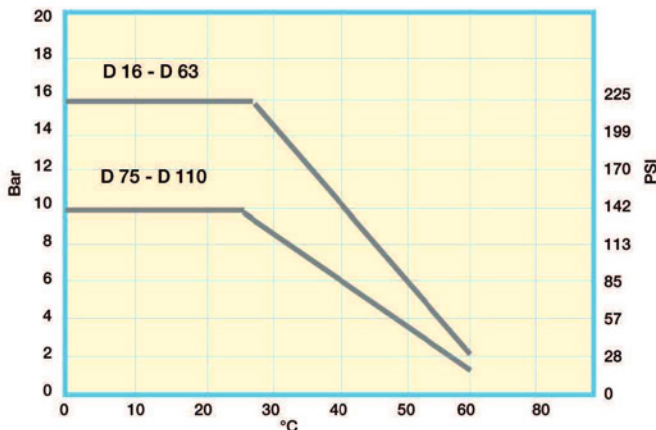
PVC-U Irrigation black ball valves

General characteristics

Black PVC ball valve - economy type - recommended for outdoor installation and irrigation system mainly. It is available with F/F - M/F, quick joint connection.

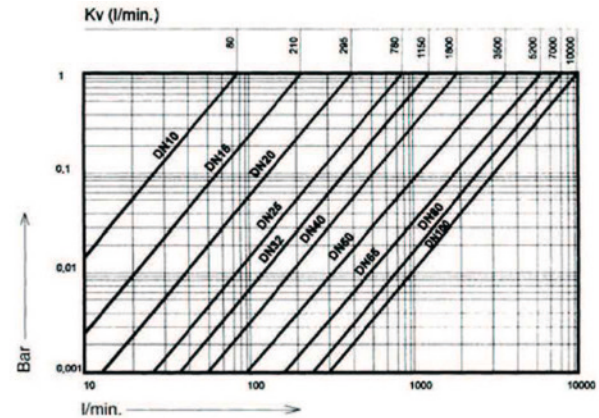
MAX WORKING PRESSURE

The a. m. technical information should be used as a guide. Please consult our Technical dpt for specific queries.



Pressure temperature rating for water and harmless liquid.

CHARGE LOSS



With water at 20°C and the valve in open position

TORQUE

D	G	Nm
16-20	3/8"-1/2"	0,8
25	3/4"	2,5
32	1"	4
40	1" 1/4	8
50	1" 1/2	10
63	2"	14
75	2" 1/2	25
90	3"	32
110	4"	50

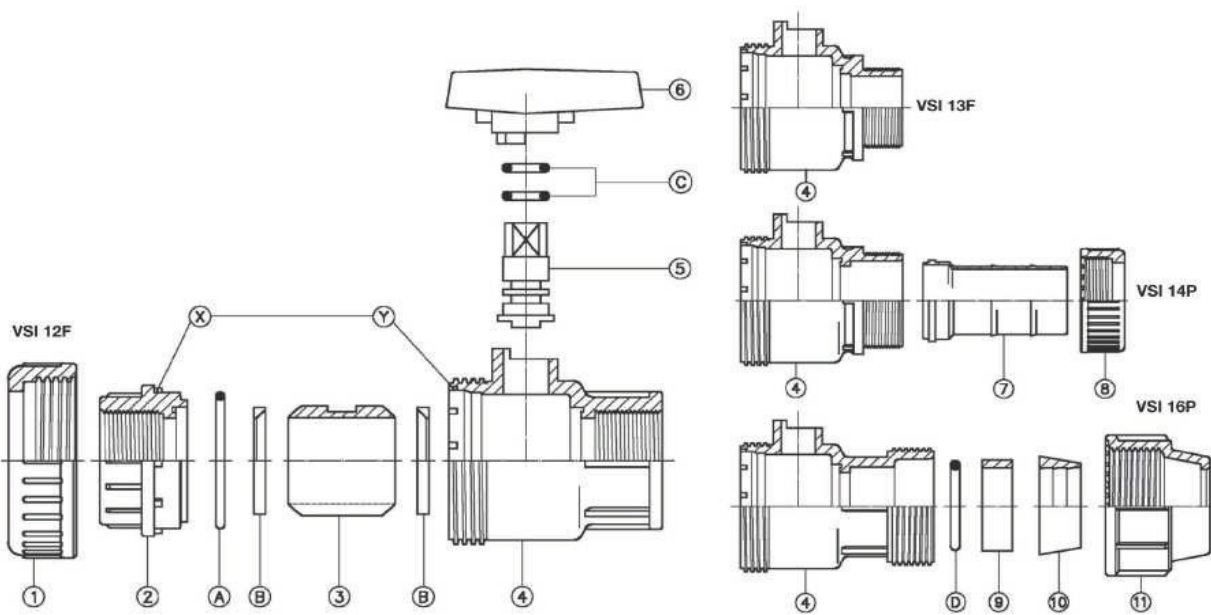
Max torque at max working pressure.

Installation and use

For a perfect sealing it is recommended to wind up completely the threaded male end with a good quality PTFE tape. All connection with cone-shaped male threads should be carefully avoided as they can finally break the female socket during jointing or running procedures. Avoid use of keys to screw the nuts because they can produce breakings. Sand or other impurities must be absent before starting the installation because they can damage the ball or the seat.

The use of wrench is not allowed. It is important to avoid rapid closure/opening of the valve to eliminate the possibility of water hammer causing damage to the pipeline. It is necessary that all installation and maintenance personnel become familiar with the proper solvent cement and thread joining procedures. TP technical dept. will be glad to support you with installation instruction leaflets.

PVC-U Irrigation black ball valves



VALVE COMPONENTS

Pos	Components	n°	Material
1	Union nut	1	PVC
2	Support	1	PVC
3	Ball	1	PVC
4	Body	1	PVC
5	Stem	1	PVC
6	Handle	1	PVC
7	Hose adaptor	1	PP
8	Hose adaptor nut	1	PVC
9	Packing presser bush	1	PVC
10	Clip-ring	1	POM
11	Quick joint nut	1	PVC
A	O-ring support	1	EPDM
B	Ball seal	2	PTFE+PE
C	O-ring stem	2	EPDM
D	Quick joint O-ring	1	EPDM

PVC: Polyvinyl chloride

EPDM: Ethylene-propylene

PTFE+PE: Polytetra+fluoroethylene+polyethylene

POM: Polyacetale

PP: Polypropylene honopolymere thermoresistant

DISASSEMBLING AND REASSEMBLING IN CASE OF MAINTENANCE

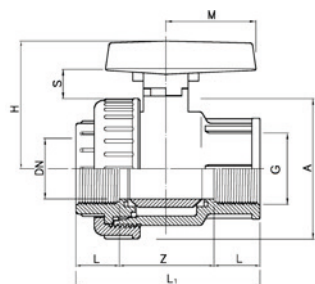
Single union VSI cannot be radially disassembled from the installation.

TP does not recommend to take out the support (2) from its seat when making up the connection. In any case if the valve is disassembled, be sure that the socket O-ring (A) does not come out of its groove and insert the teeth (X) of the support (2) in their correct seat (Y).

After taking out the support (2) it is possible to reach the internal parts of the valve in order to check the state of the O-ring and substitute them if necessary.

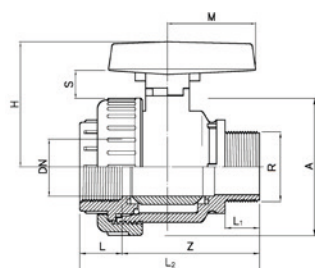
To reassemble the valve please act the other way taking care of replacing the O-ring correctly into their seats duly cleaned.

PVC-U irrigation black ball valves



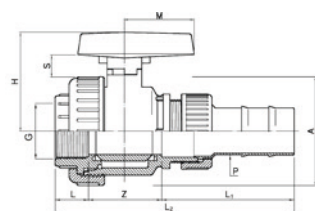
**Single union ball valve B.S.P PVC-U
With threaded sockets G**

G (inch)	PN (bar)	EPDM Code	SP	Weight (kg)	A (mm)	L (mm)	S (mm)	M (mm)	Z (mm)	L1 (mm)	H (mm)
½	16	VSI12F200	200	0.095	50	16	12	36	36	68	51
¾	16	VSI12F250	120	0.152	59	19	15	39	42	80	58
1	16	VSI12F320	75	0.214	68	22	16	45	46	90	65
1 ¼	16	VSI12F400	50	0.316	80	24	18	51	53	101	76
1 ½	16	VSI12F500	30	0.499	94	24	21	57	63	111	88
2	16	VSI12F630	18	0.830	115	28	23	66	78	134	103
2 ½	10	VSI12F750	10	1.525	145	33	24	78	96	162	124
3	10	VSI12F900	6	2.260	168	36	26	84	108	180	137
4	10	VSI12F910	2	4.347	210	42	28	96	139	223	162



**Single union ball valve B.S.P PVC-U
With threaded socket G/male thread R**

R (inch)	PN (bar)	EPDM Code	SP	Weight (kg)	L1 (mm)	Z (mm)	M (mm)	S (mm)	A (mm)	L2 (mm)	L (mm)	H (mm)
½	16	VSI13F200	200	0.095	15	55	36	12	50	71	16	51
¾	16	VSI13F250	120	0.144	17	61	39	15	59	80	19	58
1	16	VSI13F320	75	0.210	20	68	45	16	68	90	22	65
1 ¼	16	VSI13F400	50	0.320	22	84	51	18	80	108	24	76
1 ½	16	VSI13F500	30	0.495	22	97	57	21	94	121	24	88
2	16	VSI13F630	18	0.845	26	119	66	23	115	147	28	103



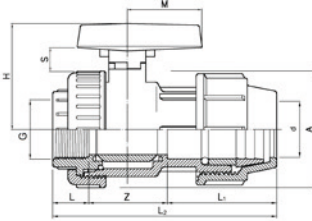
Valve with nut and hose adaptor PVC-U

d (mm)	G (inch)	PN (bar)	EPDM Code	SP	Weight (kg)	M (mm)	Z (mm)	H (mm)	L1 (mm)	L2 (mm)	L (mm)	S (mm)	A (mm)
32	1	16	VSI14P32D	1	0.213	66	68	103	75	165	22	23	115



Valve with compression fitting PVC-U

d (mm)	G (inch)	PN (bar)	EPDM Code	SP	Weight (kg)	L1 (mm)	H (mm)	M (mm)	S (mm)	A (mm)	L2 (mm)	L (mm)	Z (mm)
20	½	16	VSI16P200	1	0.135	50	52	36	12	50	102	16	36
25	¾	16	VSI16P250	90	0.200	57	58	39	15	59	118	19	42
32	1	16	VSI16P320	50	0.300	64	65	45	16	68	132	22	46
40	1 ¼	16	VSI16P400	10	0.460	76	76	51	18	80	153	24	53
50	1 ½	16	VSI16P500	20	0.730	88	88	57	21	94	175	24	63
63	2	16	VSI16P630	12	1.187	100	103	66	23	115	206	28	78



PVC-U One flow direction valves

General characteristics

Compact double union valve: all one direction valves are realized with the same dimensions of our ball valves VSA and can be disassembled from the network simply by unscrewing the two unions nuts.

VRO allows the passage of the liquid in one direction only. VRO type orientated as a foot valve allows the passage of the liquid acting as a foot valve. As an air release valve

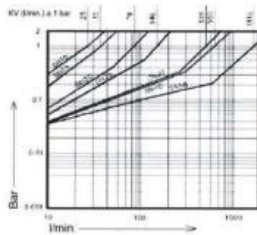
acts releasing the air until the liquid reaches the floating wedge closing the valve and maintaining therefore the liquid under pressure.

Materials chemical resistances according to ISO/TR 10358.

Please consult the supplier about applications and details.

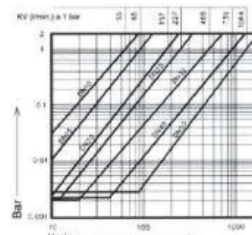
VRO CHARGE LOSS

The a. m. technical information should be used as a guide. Please consult our Technical dpt for specific questions.

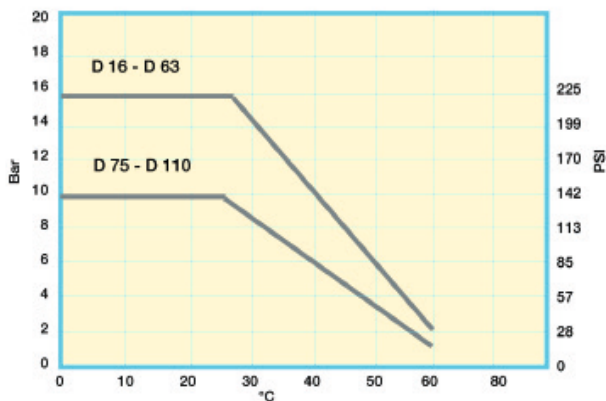


With water at 20°C (valve with spring)

VRV-VRF CHARGE LOSS



With water at 20°C (valve without spring)



Pressure temperature rating for water an harmless liquid.

PRESSURE

D	G	VRO mm H ₂ O	VRV/VRF mm H ₂ O	Weight g
16	3/8"	150	23	4
20	1/2"	150	23	4
25	3/4"	70	25	8
32	1"	32	22	11
40	1 1/4"	40	21	17
50	1 1/2"	38	24	30
63	2"	44	29	56

Min. opening pressure of spring and own weight (water column).

Installation and use

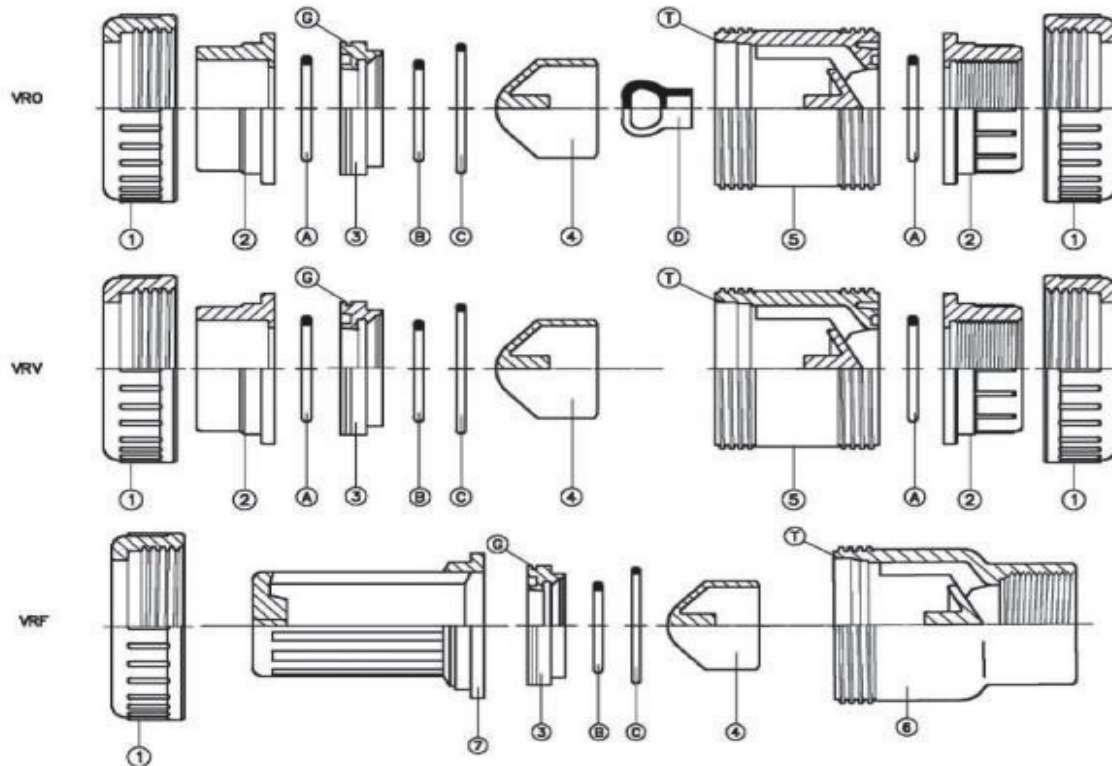
Be careful during the glueing of the end connector of the pipes; the glue or solvent must absolutely not run into the wedge or O' ring of the valve. Threaded ends should not be connected with cone-shaped male threads and the use of hemp or similar materials should be carefully avoided. A special attention should be paid to the correct line-up of the installation and to the pipe length. Tighten the union nut hand tight only.

The use of wrench is not allowed. It is important that the

unions are not used to pull the system together. If there is any leakage from the union nuts, please check the correct line-up of the system and the pipe length. An excessive tightening of the unions could finally break them.

Before the valve is cycled, all dirt, sand or other material should be flushed from the system. This is to prevent scarring of the ball and/or seats. It is necessary that all installation and maintenance personnel become familiar with the proper solvent cement and thread joining procedure.

PVC-U One flow direction valves



PRESSURE

Pos	Components	n°			Material
		VRO	VRV	VRF	
1	Union nut	2	2	1	PVC
2	End connector	2	2	-	PVC
3	Support	1	1	1	PVC
4	Wedge	1	1	1	PVC
5	Body	1	1	-	PVC
6	Threaded body	-	-	1	PVC
7	Screen	-	-	1	PP
A	O-ring body	2	2	1	EPDM
B	O-ring wedge	1	2	1	EPDM
C	O-ring support	1	1	1	EPDM
D	Spring wedge	1	-	-	EPDM

PVC: Polyvinyl chloride

EPDM: Ethylene-propylene (DUTRAL®)

Disassembling and reassembling in case of maintenance

Unscrewing the union nut (1) it is possible to take out radially from the system the whole central group of the valve.

To reach the internal parts of the valve act as follows:

- 1 Take out the support (3) from the body (5) levering with a screwdriver between the two gates T of the body and the groove G of the support.

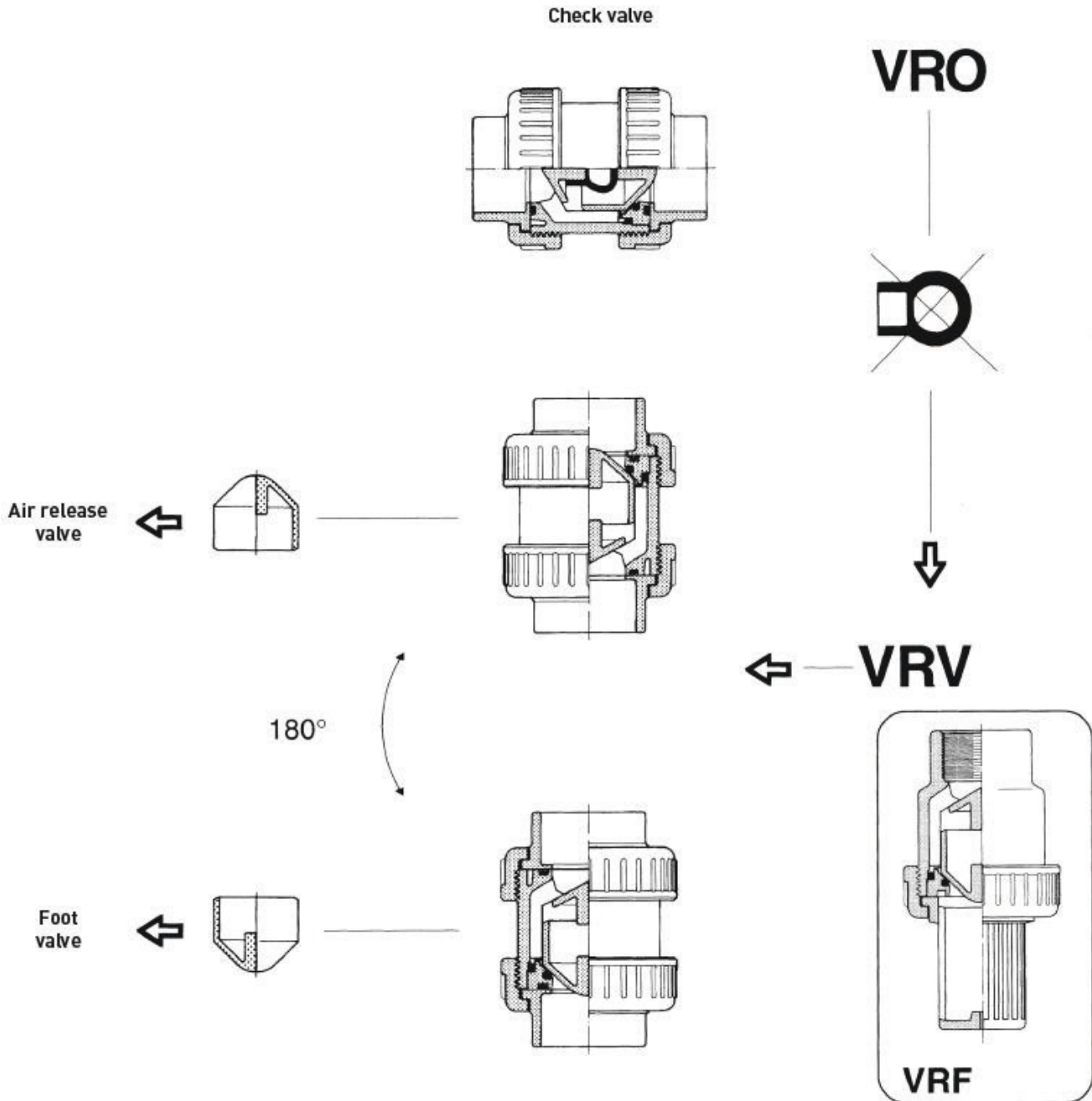
- 2 After disassembling the support (3) and taking out the O-ring C that has stayed inside the body (5), it is possible to reach all the parts of the valve and check the O-rings and in case substitute them.

To assemble the valve act in the opposite way being careful to set the O-ring properly and greased it with silicon grease.

PVC-U One flow direction valves

The VRO type has an internal rubber spring. Taking out the internal spring and orientating the valve in the right way, it is become either a foot valve or an air release.

The valve VR range has the same dimensions as the ball valves VSA, allowing this way a unique way of fixing to the wall thanks to the same type of clamping (cf. STF).



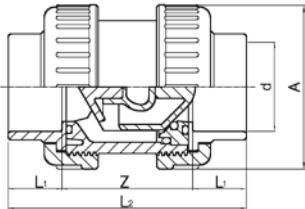
PVC-U one flow direction Valves & spare parts



Check valve ISO PVC-U With solvent cement sockets

Model:

- Rubber spring
- (*)Body and dimensions = 3"



d (mm)	d (inch)	DN (mm)	PN (bar)	EPDM Code	SP	GP	Weight (kg)	L1 (mm)	L2 (mm)	A (mm)	X (mm)	Z (mm)
16		10	16	VR021I160	1	32	0.133	14	76	50	42	48
20		15	16	VR021I200	1	32	0.125	16	80	50	42	48
25		20	16	VR021I250	1	32	0.196	19	91	59	48	53
32		25	16	VR021I320	1	20	0.245	22	102	68	54	58
40		32	16	VR021I400	1	15	0.375	26	120	80	62	68
50		40	16	VR021I500	1	6	0.610	31	140	94	72	78
63		50	16	VR021I630	1	4	1.030	38	169	115	86	93
*	2 ½	65	10	VR021I750	1	2	3.028	44	206	168	110	118
90		80	10	VR021I900	1	2	3.054	51	242	168	128	140

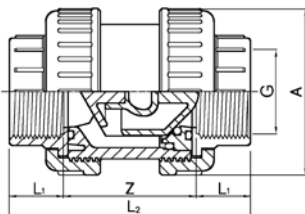


Check valve B.S.P. PVC-U With threaded sockets G

- (*)Body and dimensions = 3"

Model:

- Rubber spring

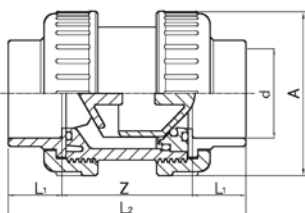


G (inch)	DN (mm)	PN (bar)	EPDM Code	SP	GP	Weight (kg)	L2 (mm)	A (mm)	L1 (mm)	X (mm)	Z (mm)
¾	10	16	VR021F160	1	32	0.136	76	50	14	42	48
½	15	16	VR021F200	1	32	0.125	80	50	16	42	48
¾	20	16	VR021F250	1	32	0.193	91	59	19	48	53
1	25	16	VR021F320	1	20	0.273	102	68	22	54	58
1 ¼	32	16	VR021F400	1	15	0.392	116	80	24	62	68
1 ½	40	16	VR021F500	1	6	0.605	126	94	24	72	78
2	50	16	VR021F630	1	4	1.023	149	115	28	86	93
*	2 ½	65	VR021F750	1	2	2.977	184	168	33	128	118
3	80	10	VR021F900	1	2	3.051	212	168	36	128	140



Air release/foot valve ISO PVC-U With solvent cement sockets

- (*)Body and dimensions = 3"

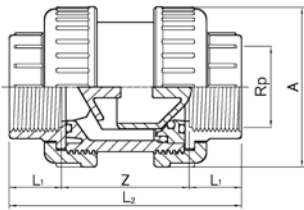


d (mm)	d (inch)	DN (mm)	PN (bar)	EPDM Code	SP	GP	Weight (kg)	Z (mm)	A (mm)	L1 (mm)	L2 (mm)
16		10	16	VRV21I160	1	32	0.132	48	50	14	76
20		15	16	VRV21I200	1	32	0.125	48	50	16	80
25		20	16	VRV21I250	1	32	0.197	53	59	19	91
32		25	16	VRV21I320	1	20	0.273	58	68	22	102
40		32	16	VRV21I400	1	15	0.398	68	80	26	120
50		40	16	VRV21I500	1	6	0.597	78	94	31	140
63		50	16	VRV21I630	1	4	1.016	93	115	38	169
*	2 ½	65	10	VRV21I750	1	2	2.985	118	168	44	206
90		80	10	VRV21I900	1	2	3.050	140	168	51	242

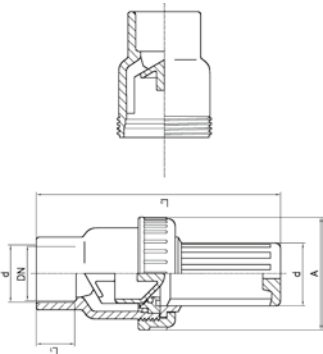


**Air release/foot valve B.S.P. PVC-U
With threaded sockets Rp**

• (*)Body and dimensions = 3"

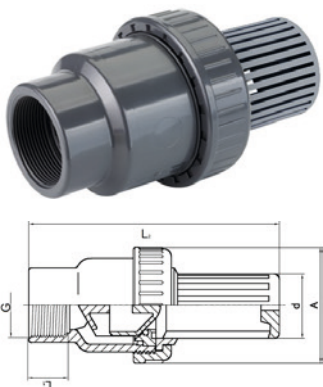


	Rp (inch)	DN (mm)	PN (bar)	EPDM Code	SP	GP	Weight (kg)	Z (mm)	L1 (mm)	A (mm)	L2 (mm)
	3/8	10	16	VRV21F160	1	32	0.110	48	14	50	76
	1/2	15	16	VRV21F200	1	32	0.110	48	16	50	80
	3/4	20	16	VRV21F250	1	32	0.197	53	19	59	91
	1	25	16	VRV21F320	1	20	0.268	58	22	68	102
	1 1/4	32	16	VRV21F400	1	15	0.386	68	24	80	116
	1 1/2	40	16	VRV21F500	1	6	0.555	78	24	94	126
	2	50	16	VRV21F630	1	4	1.002	93	28	115	149
*	2 1/2	65	10	VRV21F750	1	2	2.900	118	33	168	184
	3	80	10	VRV21F900	1	2	3.002	140	36	168	212



**Foot valve PVC-U with PP screen
With solvent cement socket**

DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	L2 (mm)	A (mm)	L1 (mm)
15	16	VRF111200	200	0.074	110	50	16
20	16	VRF111250	120	0.120	130	59	19
25	16	VRF111320	60	0.171	145	68	22
32	16	VRF111400	40	0.256	162	80	26
40	16	VRF111500	21	0.397	187	94	31
50	16	VRF111630	15	0.698	215	115	38
80	10	VRF111900	5	2.045	275	168	51



Foot valve B.S.P. PVC-U threaded with PP screen

Rp (inch)	PN (bar)	EPDM Code	SP	Weight (kg)	L1 (mm)	L2 (mm)	d (mm)	A (mm)
1/2	16	VRF11F200	1	0.074	16	110	23	50
3/4	16	VRF11F250	1	0.120	19	130	30	59
1	16	VRF11F320	1	0.173	22	145	38	68
1 1/4	16	VRF11F400	1	0.259	24	160	48	80
1 1/2	16	VRF11F500	1	0.399	24	180	57	94
2	16	VRF11F630	1	0.690	28	205	71	115
3	10	VRF11F900	1	2.042	36	260	110	168

Spare parts



Rubber spring

Suitable for VRO

d (mm)	EPDM Code	SP
20	2MLL01D20	10
25	2MLL01D25	10
32	2MLL01D32	10
40	2MLL01D40	10
50	2MLL01D50	10
63	2MLL01D63	10
75 - 90	2MLL01D90	10



Foot valve PP screen

Suitable for VRF

d (mm)	Rp (inch)	PN (bar)	Code	SP	Weight (kg)
20	½	16	ARVSCPF20	1	0.010
25	¾	16	ARVSCPF25	1	0.012
32	1	16	ARVSCPF32	1	0.019
40	1 ¼	16	ARVSCPF40	1	0.030
50	1 ½	16	ARVSCPF50	1	0.045
63	2	16	ARVSCPF63	1	0.072
90	3	16	ARVSCPF90	1	0.165

PVC-U wafer check valves



Wafer check valve standard PVC-U Without spring

- Other diameters on request
- (*) Traded items

	d (mm)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)
*	75	65	6	VVCLP750	30	0.310
*	90	80	6	VVCLP900	24	0.397
*	110	100	6	VVCLP910	15	0.559
*	125	125	6	VVCLP920	15	0.624
*	140	125	6	VVCLP930	4	0.780
*	160	150	6	VVCLP940	4	1.102
*	200	200	6	VVCLP960	4	1.433

PVC-U Butterfly Valves

General description

VFA Butterfly Valves are designed to guarantee reliability, safety, top level performance and simple operation. The rational, compact shape and the construction concept simplify assembly and routine maintenance operations. VFA valves are ideally suited for water and neutral fluids.

Technical features

Available versions

- Lever-operated
- Pre-assembled with flanges
- With pneumatic actuators
- With electric actuators

Dimensions

- All versions from DN65 to DN200

Body material

- PVC-U

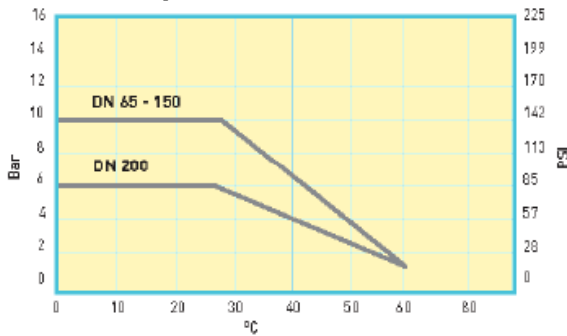
Gasket material

- EPDM disk gasket – O rings
- SANTOPRENE™ flange gaskets

Stem material

- Zinc plated steel

Operating Pressure versus temperature



Functional Features

VALVE SIZE DN Inch	OPERATING TORQUE New Valve at operating PN	TIGHTENING TORQUE (with PVC-U/Metal Flanges)
65 – 2 1/2"	11 Nm *	15 Nm
80 – 3"	14 Nm *	20 Nm
100 – 4"	16 Nm *	23 Nm
125 – 5"	26 Nm *	30 Nm
150 – 6"	35 Nm *	30 Nm
200 – 8"	50 Nm *	50 Nm

* Reference value: These values can change, depending on the specific application and also over time

Applications

VFA Butterfly Valves have been designed to be used mainly in contact with water and neutral fluids in different applications such as public and private swimming pools, water parks, thermal pools, Spa's, irrigation and aquaculture.

Pressure

- From DN65 to DN150: PN 10
- DN200: PN 6

Temperature

- 0 °C + 60 °C

Flange Connecting Standards

- ISO – DIN – BS – ANSI

Conformity

- Ministerial Decree 174

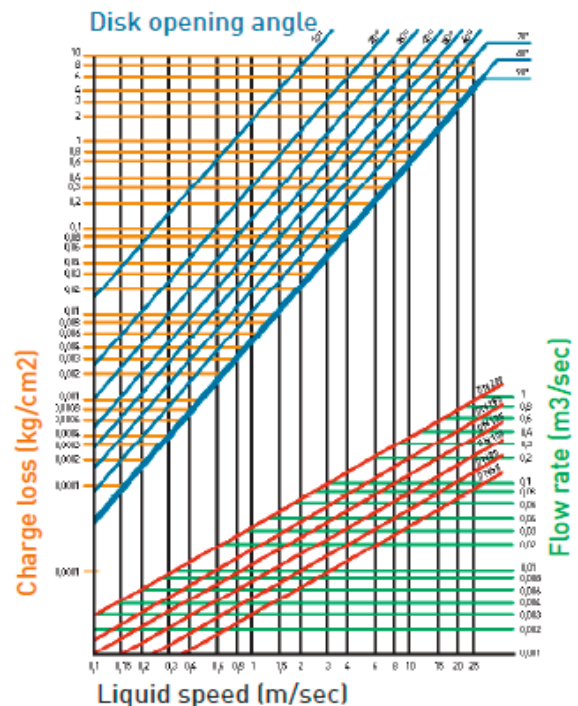
Actuators

- 24 V electric actuators
- Single/double-acting pneumatic actuators

Valve standards

- Conform to ISO 16136 - Pr EN 1452 - ISO 9393

Charge Loss



PVC-U Butterfly Valves - Assembly instructions



1. Insert the bolts, washers and nuts without tightening in the lower part between the flanges. Take the valve out of its package, carefully checking its integrity and that it is perfectly clean.



2. Insert the valve in the "CLOSED" position between the flanges until the slots in the lower part of the body rest directly on the bolts, taking care to maintain parallelism with the flanges.



3. Insert the remaining bolts, washers and nuts in the upper part between the flanges. Tighten the nuts/bolts in across pattern until the tightening torque indicated is reached. (TAB. A) We recommend that you use a torque wrench.



4-5. Check that:

- the flanges adhere perfectly to the valve body
- correct parallelism is maintained between the valve and the flanges
- an axial position is maintained relative to the pipe.



6. Use the safety stop if necessary

Operate the valve with no load, checking that movements are smooth and there are no abnormal stresses.

BUTTERFLY VALVE DISASSEMBLY INSTRUCTIONS

Before proceeding, make sure that:

- All valves upstream and downstream of the one to be worked On are closed.
- The system has been depressurized.
- The pipe has been completely emptied.

Carry out the assembly operations described in reverse order.

We recommend to clean the internal components of the valve as well as to open and close the valve itself regularly. By complete disassembling of the valve, please pay attention to put the gaskets in the correct positioning

TAB. A

VALVE DN	TIGHTENING TOR@UE†
65 - 2" 1/2	15 Nm
80 - 3"	20 Nm
100 - 4"	23 Nm
125 - 5"	30 Nm
150 - 6"	30 Nm
200 - 8"	50 Nm

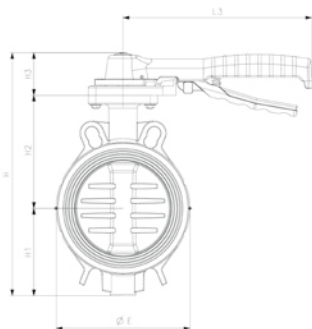
*WITH PVCU/METAL FLANES

PVC-U butterfly valves

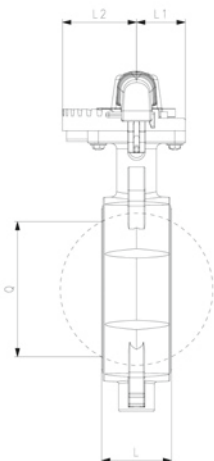


Lever-operated butterfly valve PVC-U
With EPDM/SANTOPRENE™ gaskets

d	DN	DN	PN	Code	SP	Weight
(mm)	(mm)	(inch)	(bar)			(kg)
75	65	2 ½	10	VFA02D750	1	1.189
90	80	3	10	VFA02D900	1	1.292
110	100	4	10	VFA02D910	1	1.723
125 - 140	125	5	10	VFA02D920	1	2.328
160	150	6	10	VFA02D940	1	3.350
200 - 225	200	8	6	VFA02D960	1	5.482



d	H3	L3	Q	H2	L	L2	L1	H	E	H1	H4
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
75	55	220	46	115	46	70	46	246	112	76	43
90	55	220	64	120	48	70	46	267	128	92	43
110	55	220	84	130	54	70	46	291	152	106	43
125 - 140	55	250	108	150	63	70	46	321	177	116	43
160	55	250	133	169	63	70	46	356	212	131	43
200 - 225	61	282	180	209	74	70	46	433	260	163	43



Lever-operated butterfly valve PVC-U
With free flanges kit
With EPDM/SANTOPRENE™ gaskets

d	DN	PN	DN	Code	SP	Weight
(mm)	(mm)	(bar)	(inch)			(kg)
75	65	10	2 ½	VFA02D75K	1	3.281
90	80	10	3	VFA02D90K	1	4.799
110	100	10	4	VFA02D91K	1	6.020
125	125	10	5	VFA02D92K	1	7.025
140	125	10	5	VFA02D93K	1	7.720
160	150	10	6	VFA02D94K	1	11.989
200	200	6	8	VFA02D96K	1	16.711
225	200	6	8	VFA02D97K	1	17.117

Butterfly valves kits



Kit including backing flanges PVC-U
Stub and screws

d (mm)	DN (inch)	DN (mm)	PN (bar)	Code	SP	Weight (kg)
75	2 ½	65	10	XVFFLIZ75	1	2.083
90	3	80	10	XVFFLIZ90	1	3.534
110	4	100	10	XVFFLIZ91	1	4.260
125	5	125	10	XVFFLIZ92	1	4.800
140	5	125	10	XVFFLIZ93	1	5.500
160	6	150	10	XVFFLIZ94	1	8.639
200	8	200	6	XVFFLIZ96	1	11.350
225	8	200	6	XVFFLIZ97	1	10.985

Spare parts for butterfly valves



Coloured handle

Suitable for VFA02D

DN-DN (mm)	DN-DN (inch)	d-d (mm)	Code	SP	GP
65 - 100	2 ½ - 4	75 - 110	3V0VFM04	1	15
125 - 150	5 - 6	125 - 160	3V0VFM05	1	15
200 - 200	8 - 8	200 - 225	3V0VFM06	1	10



Disk seal

- suitable for VFA02D
- (*) Traded items

d (mm)	DN (mm)	DN (inch)	EPDM Code	GP
*	75	65	2 ½ 2G0VF10D75	8
*	90	80	3 2G0VF10D90	10
*	110	100	4 2G0VF10D91	10
*	125 - 140	125	5 2G0VF10D92	10
*	160	150	6 2G0VF10D94	10
*	200 - 225	200	8 2G0VF10D96	10



External gasket kit in EPDM/SANTOPRENE™

- suitable for VFA02D
- (*) Traded items

d (mm)	DN (inch)	DN (mm)	Code	SP	GP
*	75	2 ½	65 2G0VF1ED75	8	8
*	90	3	80 2G0VF1ED90	10	10
*	110	4	100 2G0VF1ED91	10	10
*	125 - 140	5	125 2G0VF1ED92	10	10
*	160	6	150 2G0VF1ED94	10	10
*	200 - 225	8	200 2G0VF1ED96	10	10

External O ring



- Suitable for external Gasket 2GOVF1ED
- (*) Traded items

	d (mm)	DN (mm)	DN (inch)	Code	GP
*	75 - 90	80	2 ½	1ORD03037T	8
*	110	100	4	1ORD03043T	10
*	125 - 140	125	5	1ORD00117T	10
*	160	150	6	1ORD03068T	10
*	200	200	8	1ORD03093T	10

Actuator fixing bracket



Suitable for VFA

DN (mm)	Code	SP	GP
65 - 150	3V0VFSG01	1	30
200	3V0VFSG02	1	30

PVC-U Fittings and valves British standard range

Mechanical resistances

The following data are referred to water or not particularly aggressive liquids, at a working temperature of 20° C.

Materials

The PVC-U compound used by TP is stabilized unplasticized polyvinyl chloride.

Material chemical resistances according to ISO/TR10358

Coupling tolerance for solvent welding BS series, in accordance with:

fittings complying with:

BS 4346/1

Pipes complying with:

BS3505 e BS 3506

The following table reports diameter and tolerances of our fittings, according to prescription.

Series	Dimensions	Class	PN
Solvent welding (d inch)	from 3/8" to 3"	E	15
BS plain-ISO plain (T)	from 3/8" to 6"	E	15
Adaptor (R)	from 3/8" to 2"	E D	15 12

Note: 1) Class D; 2) Class C

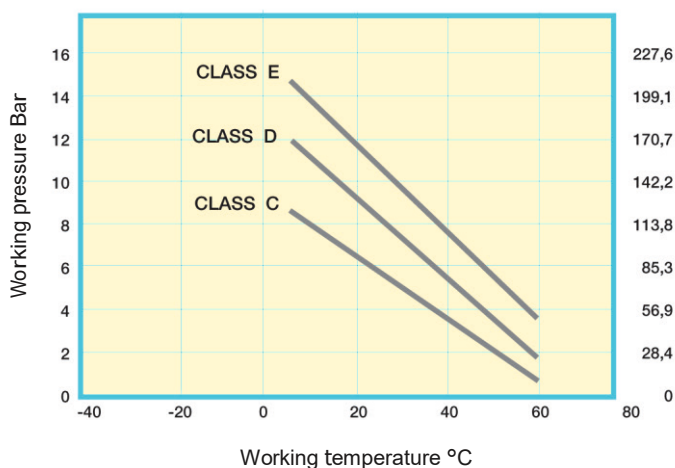
Safety factors at 20° C

Class	NP nominal pressure	1 hour	50 years
E	15 Bar	3,6	2,1
D	12 Bar	4,5	2,6
C	9 Bar	6,0	3,5

Dimensions in mm

D	Outside diam. of male fittings		Inside diam. of female fittings	
	Min	Max	Min	Max
3/8"	17,00	17,20	17,10	17,30
1/2"	21,20	21,40	21,30	21,50
3/4"	26,60	26,80	26,70	26,90
1"	33,40	33,60	33,50	33,70
1 1/4"	42,10	42,30	42,20	42,40
1 1/2"	48,10	48,30	48,20	48,40
2"	60,20	60,40	60,30	60,50
2 1/2"	75,10	75,40	75,10	75,30
3"	88,70	89,00	88,80	89,10
4"	114,10	114,40	114,20	114,50
5"	140,00	140,40	140,10	140,40
6"	168,00	168,40	168,20	168,50
8"	218,80	219,30	219,00	219,40

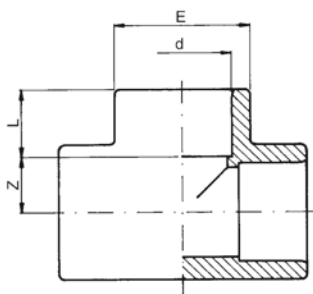
WORKING PRESSURE RANGE RELATING TO TEMPERATURE



PVC-U fittings solvent cement jointing

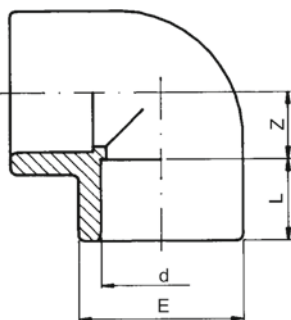
British standard Inch

TP Tee 90° PVC-U Inch BS



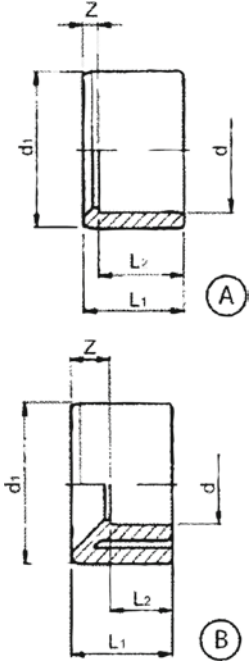
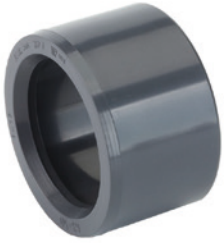
d (mm)	d (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L (mm)	E (mm)	Z (mm)
	3/8	16	RV0TIL160	10	280	0.012	14	23	9
	1/2	16	RV0TIL200	10	150	0.023	16	27	11
	3/4	16	RV0TIL250	10	100	0.036	19	33	14
	1	16	RV0TIL320	10	130	0.064	22	41	17
	1 1/4	16	RV0TIL400	90		0.102	27	52	21
	1 1/2	16	RV0TIL500	50		0.207	32	61	26
	2	16	RV0TIL630	25		0.366	37	75	33
	3	16	RV0TIL900	24		0.805	52	107	45
	4	16	RV0TIL910	10		1.437	63	133	62
	6	16	RV0TIL940	4		4.155	93	198	86
	8	10	RV0TIL970	15		11.300	116	258	116

TP Elbow 90° PVC-U Inch BS



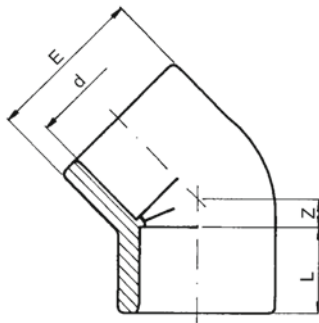
d (mm)	d (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L (mm)	E (mm)	Z (mm)
	1/2	16	RV0GOL200	10	200	0.173	17	27	11
	3/4	16	RV0GOL250	10	160	0.278	20	33	14
	1	16	RV0GOL320	10	80	0.050	23	41	17
	1 1/4	16	RV0GOL400	130		0.090	27	51	22
	1 1/2	16	RV0GOL500	80		0.157	32	61	26
	2	16	RV0GOL630	40		0.270	37	75	34
	3	16	RV0GOL900	30		0.654	52	107	45
	4	16	RV0GOL910	15		1.120	63	133	58
	6	16	RV0GOL940	5		3.264	93	198	85
	8	10	RV0GOL970	18		8.613	113	258	116

TP Reducing bush PVC-U Inch BS

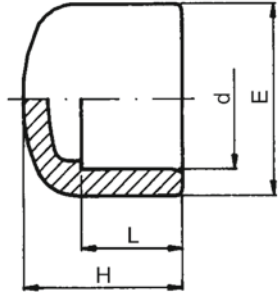


	d (inch)	d1 (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L1 (mm)	L2 (mm)	Z (mm)
	½	¾	16	RV0RCL20A	10	800	0.003	17	15	2
A	¾	1	16	RV0RCL25B	10	600	0.006	20	17	3
B	1	1 ½	16	RV0RCL32B	10	400	0.017	23	17	6
A	1	¾	16	RV0RCL32C	10	400	0.010	23	20	3
A	1 ½	1	16	RV0RCL40D	250		0.019	27	23	5
B	1 ½	1	16	RV0RCL50D	180		0.035	30	23	8
A	1 ½	1 ¼	16	RV0RCL50E	180		0.021	30	27	3
B	2	1	16	RV0RCL63D	100		0.065	36	23	14
A	2	1 ½	16	RV0RCL63F	100		0.053	36	30	6
B	2 ½	1 ½	16	RV0RCL75F	130		0.127	44	30	14
A	2 ½	2	16	RV0RCL75G	130		0.095	44	36	8
B	3	1 ½	16	RV0RCL90F	80		0.200	51	30	21
B	3	2	16	RV0RCL90G	80		0.201	51	36	15
A	3	2 ½	16	RV0RCL90H	80		0.128	51	44	7
B	4	2	16	RV0RCL91G	45		0.441	36	36	27
B	4	2 ½	16	RV0RCL91H	42		0.428	63	44	19
A	4	3	16	RV0RCL91I	45		0.345	36	51	13
B	6	4	16	RV0RCL94L	12		1.110	90	63	27

TP Elbow 45° PVC-U Inch BS



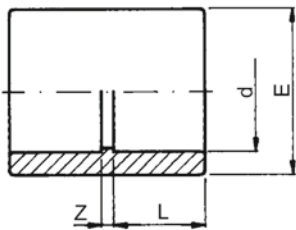
d (inch)	d (mm)	PN (bar)	Code	SP	GP	Weight (kg)	Z (mm)	L (mm)	E (mm)
¾		16	RV0GYL160	10	400	0.010	3	15	23
½		16	RV0GYL200	10	260	0.015	5	16	27
¾		16	RV0GYL250	10	150	0.023	6	19	33
1		16	RV0GYL320	10	100	0.040	8	22	41
1 ¼		16	RV0GYL400	80		0.062	10	27	52
1 ½		16	RV0GYL500	100		0.127	12	32	61
2		16	RV0GYL630	50		0.190	15	39	75
3		16	RV0GYL900	40		0.515	21	52	107
4		16	RV0GYL910	20		0.830	25	63	133
8		10	RV0GYL970	24		4.900	46	116	249



TP Cap PVC-U Inch BS

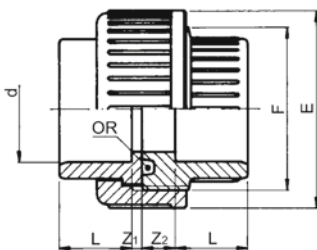
d (inch)	d (mm)	PN (bar)	Code	SP	GP	Weight (kg)	E (mm)	L (mm)	H (mm)
3/8		16	RV0CAL160	10	600	0.005	23	15	22
1/2		16	RV0CAL200	10	500	0.104	28	17	26
3/4		16	RV0CAL250	10	400	0.016	34	20	30
1		16	RV0CAL320	10	200	0.030	42	23	33
1 1/4		16	RV0CAL400	160		0.042	51	27	41
1 1/2		16	RV0CAL500	80		0.076	61	30	46
2		16	RV0CAL630	50		0.130	75	36	55
3		16	RV0CAL900	50		0.308	106	51	73
4		16	RV0CAL910	25		0.455	129	63	87
6		16	RV0CAL940	18		1.346	192	90	123

TP Double socket PVC-U Inch BS

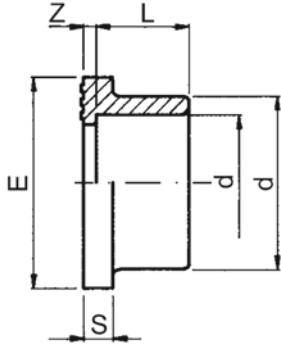
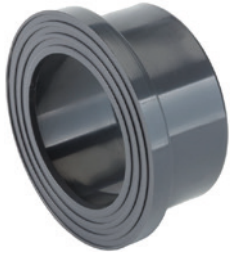


d (inch)	d (mm)	PN (bar)	Code	SP	GP	Weight (kg)	E (mm)	L (mm)	Z (mm)
3/8		16	RV0MAL160	10	500	0.008	23	14.5	3
1/2		16	RV0MAL200	10	300	0.013	27	16.0	3
3/4		16	RV0MAL250	10	200	0.020	33	19.0	3
1		16	RV0MAL320	10	130	0.030	41	22.0	3
1 1/4		16	RV0MAL400	100		0.050	52	27.0	3
1 1/2		16	RV0MAL500	60		0.098	61	32.0	3
2		16	RV0MAL630	70		0.171	75	37.0	3
3		16	RV0MAL900	60		0.382	107	52.0	5
4		16	RV0MAL910	32		0.491	133	7.0	6
6		16	RV0MAL940	9		1.684	198	90.0	8
8		10	RV0MAL970	2		4.197	253	120.0	10

TP Union with o-ring PVC-U Inch BS



d (inch)	d (mm)	PN (bar)	Code	SP	GP	Weight (kg)	F (inch)	Z2 (mm)	L (mm)	Z1 (mm)	E (mm)
3/8		16	RV0BOL160	10	250	0.023	3/8	10	15	3	34
1/2		16	RV0BOL200	10	150	0.040	1	10	16	3	42
3/4		16	RV0BOL250	10	100	0.062	1 1/4	10	19	3	52
1		16	RV0BOL320	10	60	0.086	1 1/2	10	22	3	59
1 1/4		16	RV0BOL400	90		0.148	2	12	27	3	73
1 1/2		16	RV0BOL500	60		0.209	2 1/4	14	32	3	82
2		16	RV0BOL630	36		0.350	2 3/4	18	39	3	100
3		10	RV0BOL900	15		0.775	4	18	52	5	134
4		10	RV0BOL910	18		1.125	5	18	61	5	163

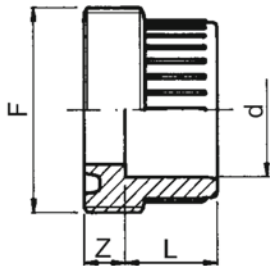


TP Flange adapter serrated PVC-U Inch BS

d (inch)	DN (mm)	PN (bar)	Code	SP	GP	Weight (kg)	Z (mm)	L (mm)	S (mm)	E (mm)
½		16	RV0QRL200	10	400	0.009	3	17	6	34
¾		16	RV0QRL250	10	300	0.015	3	20	7	41
1		16	RV0QRL320	10	200	0.024	3	23	7	50
1 ¼		16	RV0QRL400	150		0.035	3	27	8	61
1 ½		16	RV0QRL500	140		0.066	2	30	8	73
2		16	RV0QRL630	90		0.105	4	36	9	90
3		16	RV0QRL900	38		0.286	3	51	11	125
4		16	RV0QRL910	24		0.375	6	63	12	150
6		16	RV0QRL940	15		0.877	5	90	16	213
8		10	RV0QRL970	6		1.700	6	116	19	274

TP Union bush PVC-U Inch BS

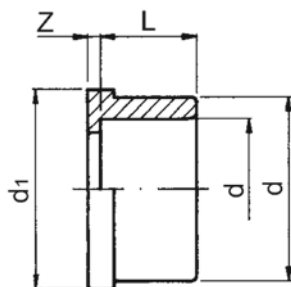
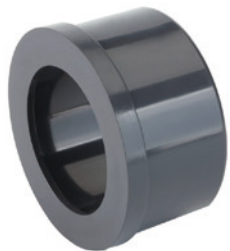
Suitable for BOL



d (inch)	d (mm)	PN (bar)	Code	SP	Weight (kg)	Z (mm)	L (mm)	F (inch)
½		16	RV0BFL200	300	0.015	10	17	1
¾		16	RV0BFL250	180	0.025	10	20	1 ¼
1		16	RV0BFL320	500	0.034	10	23	1 ½
1 ¼		16	RV0BFL400	75	0.057	11	27	2
1 ½		16	RV0BFL500	50	0.078	15	30	2 ¼
2		16	RV0BFL630	25	0.153	20	36	2 ¾
3		10	RV0BFL900	80	0.270	19	51	4
4		10	RV0BFL910	48	0.465	16	63	5

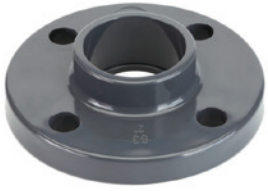
TP Union end PVC-U Inch BS

Suitable for BOL/BOR



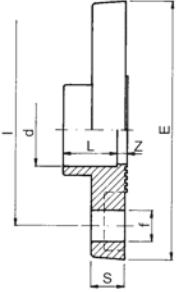
d (inch)	d (mm)	PN (bar)	Code	SP	Weight (kg)	Z (mm)	L (mm)	d1 (mm)
¾		16	RV0BLL160	1000	0.006	3	15	24
½		16	RV0BLL200	500	0.008	3	17	30
¾		16	RV0BLL250	300	0.014	3	20	39
1		16	RV0BLL320	650	0.019	3	23	45
1 ¼		16	RV0BLL400	120	0.040	2	27	57
1 ½		16	RV0BLL500	85	0.046	4	30	63
2		16	RV0BLL630	130	0.080	5	36	78
3		10	RV0BLL900	100	0.203	6	51	110
4		10	RV0BLL910	66	0.350	3	63	135

TP Fixed flange PVC-U Inch BS



- Maximum medium- or ambient temperature 45°

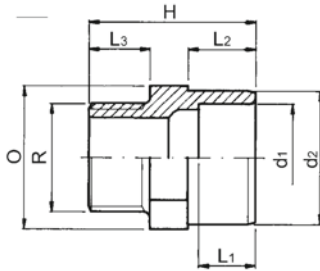
d (inch)	d (mm)	PN (bar)	Code	SP	Weight (kg)	I (mm)	E (mm)	f (mm)	L (mm)	Z (mm)
2		10	RV0FFL630	40	0.390	125	165	18	36	7
3		10	RV0FFL900	15	0.673	160	200	18	51	8
4		10	RV0FFL910	10	0.870	180	220	18	63	6
6		10	RV0FFL940	5	1.585	240	285	22	86	7



PVC-U adaptor fittings

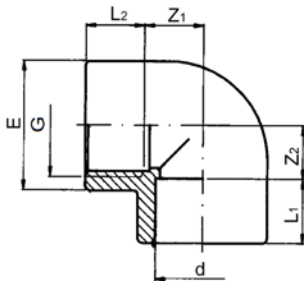
British standard Inch plain/B.S.P. threaded

TP Threaded adaptor R PVC-U Inch BS 3 diameters



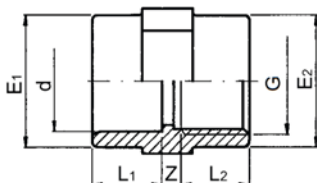
d1 (inch)	d2 (inch)	R (inch)	PN (bar)	Code	SP	GP	Weight (kg)	H (mm)	L1 (mm)	L2 (mm)	L3 (mm)	O (mm)
½	¾	½	16	RV0AMR20B	10	280	0.017	46	17	19	15	30
½	¾	¾	16	RV0AMR20C	10	280	0.019	47	17	19	16	30
¾	1	¾	16	RV0AMR25C	10	180	0.027	50	20	22	16	36
¾	1	1	16	RV0AMR25D	10	160	0.029	53	20	22	19	36
1	1 ¼	1	16	RV0AMR32D	10	120	0.046	57	23	26	19	46
1	1 ¼	1 ¼	16	RV0AMR32E	10	100	0.051	60	23	26	21	46
1 ¼	1 ½	1 ¼	16	RV0AMR40E	85		0.073	67	27	31	21	55
1 ¼	1 ½	1 ½	16	RV0AMR40F	80		0.060	67	27	31	21	55
1 ½	2	1 ½	16	RV0AMR50F	100		0.108	74	30	38	21	65
1 ½	2	2	16	RV0AMR50G	100		0.114	78	30	38	26	65
2	2 ½	2	16	RV0AMR63G	70		0.171	84	36	44	26	80
2 ½	3	2 ½	16	RV0AMR75H	54		0.254	99	44	51	30	95
3	4	3	16	RV0AMR90I	18		0.554	113	51	61	33	115

TP Plain/threaded elbow 90° PVC-U Inch BS



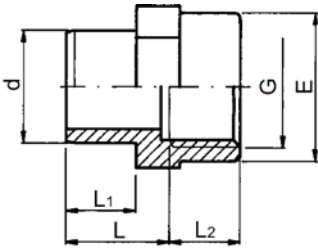
d (inch)	d (mm)	G (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L1 (mm)	L2 (mm)	Z1 (mm)	Z2 (mm)	E (mm)
½		½	16	RV0GOR20B	10	200	0.019	17	15	11	12	28
¾		¾	16	RV0GOR25C	10	160	0.031	20	16	14	17	34
1		1	16	RV0GOR32D	10	80	0.053	23	23	17	20	42
1 ¼		1 ¼	16	RV0GOR40E	130		0.080	27	21	20	26	51
1 ½		1 ½	16	RV0GOR50F	80		0.167	30	21	27	36	61
2		2	16	RV0GOR63G	40		0.288	36	26	35	45	75
3		3	16	RV0GOR90I	30		0.704	51	33	48	65	106
4		4	16	RV0GOR91L	15		1.055	63	39	55	79	129

TP Plain/threaded socket PVC-U Inch BS



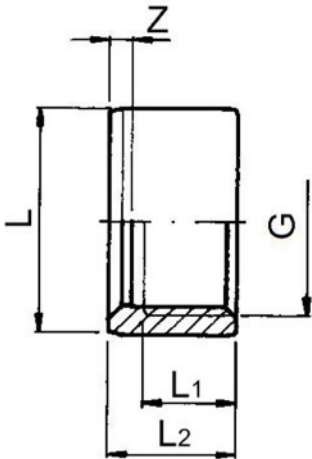
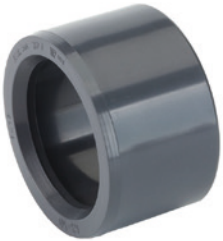
d (inch)	d (mm)	G (inch)	PN (bar)	Code	SP	GP	Weight (kg)	E1 (mm)	E2 (mm)	L1 (mm)	Z1 (mm)	L2 (mm)
¾		¾	16	RV0MAR16A	10	500	0.008	23	23	15	6	11
½		½	16	RV0MAR20B	10	250	0.021	28	28	17	4	15
¾		¾	16	RV0MAR25C	10	200	0.022	34	34	20	6	16
1		1	16	RV0MAR32D	10	130	0.039	42	42	23	6	19
1 ¼		1 ¼	16	RV0MAR40E	100		0.054	51	51	27	7	21
1 ½		1 ½	16	RV0MAR50F	60		0.100	61	58	30	9	21
2		2	16	RV0MAR63G	80		0.134	75	72	36	10	26
3		3	16	RV0MAR90I	64		0.351	106	103	51	10	33
4		4	16	RV0MAR91L	35		0.476	129	130	63	8	39

TP Threaded adaptor G PVC-U Inch BS



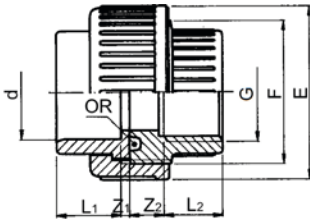
d (inch)	d (mm)	G (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L (mm)	L1 (mm)	L2 (mm)	E (mm)
3/8		3/8	16	RV0AFR16A	10	600	0.016	22	14	11	23
1/2		1/2	16	RV0AFR20B	10	300	0.017	24	16	15	28
3/4		3/4	16	RV0AFR25C	10	180	0.027	27	19	16	32
1		1	16	RV0AFR32D	10	80	0.044	30	22	19	42
1 1/4		1 1/4	16	RV0AFR40E	90		0.063	36	26	21	51
1 1/2		1 1/2	16	RV0AFR50F	150		0.071	41	31	21	58
2		2	16	RV0AFR63G	168		0.118	48	38	26	72
3		3	16	RV0AFR90I	60		0.290	65	51	33	103
4		4	16	RV0AFR91L	32		0.480	76	61	39	130

TP Plain/threaded reducing bush PVC-U Inch BS



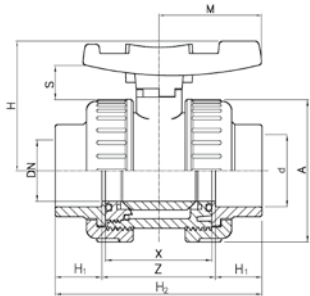
d (inch)	G (inch)	PN (bar)	Code	SP	GP	Weight (kg)	Z (mm)	L1 (mm)	L2 (mm)
1/2	3/8	16	RV0RCR20A	10	800	0.003	5	11	17
3/4	1/2	16	RV0RCR25B	10	600	0.007	5	15	20
1	3/4	16	RV0RCR32C	10	400	0.012	6	16	23

TP Plain/threaded union with o-ring PVC-U Inch BS



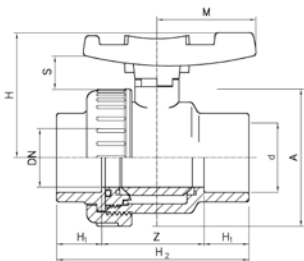
d (inch)	d (mm)	G (inch)	PN (bar)	Code	SP	GP	Weight (kg)	L1 (mm)	L2 (mm)	Z1 (mm)	F (inch)	Z2 (mm)	E (mm)
½		½	16	RV0BOR20B	10	150	0.042	17	15	3	1	11	42
¾		¾	16	RV0BOR25C	10	100	0.065	20	16	3	1 ¼	13	52
1		1	16	RV0BOR32D	10	60	0.090	23	19	3	1 ½	13	59
1 ¼		1 ¼	16	RV0BOR40E	90		0.153	27	21	2	2	17	72
1 ½		1 ½	16	RV0BOR50F	60		0.237	30	21	4	2 ¼	24	79
2		2	16	RV0BOR63G	36		0.390	36	26	5	2 ¾	30	96
3		3	10	RV0BOR90I	15		0.802	51	33	6	4	36	134
4		4	10	RV0BOR91L	18		1.366	63	39	3	5	40	163

**PVC-U safeblock ball valves
British standard range**



**Double union safe block ball valve PVC-U
With solvent cement sockets Inch BS**

d (inch)	d (mm)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	S (mm)	H1 (mm)	A (mm)	H2 (mm)	X (mm)	M (mm)	Z (mm)	H (mm)
½		15	16	VSA22L200	150	0.129	19	16	50	80	42	40	48	53
¾		20	16	VSA22L250	100	0.201	19	19	59	91	48	45	53	60
1		25	16	VSA22L320	60	0.286	21	22	68	102	54	51	58	67
1 ¼		32	16	VSA22L400	36	0.433	25	26	80	120	62	59	68	79
1 ½		40	16	VSA22L500	24	0.703	27	31	94	140	72	70	78	90
2		50	16	VSA22L630	13	1.175	29	38	115	169	86	84	93	107
3		80	10	VSA22L900	4	3.310	36	51	168	242	128	120	140	143
4		100	10	VSA22L910	2	5.864	43	61	210	282	150	141	160	169

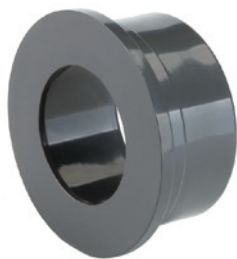


**Single union ball valve PVC-U
With solvent cement sockets Inch BS**

d (inch)	d (mm)	DN (mm)	PN (bar)	EPDM Code	SP	Weight (kg)	Z (mm)	M (mm)	S (mm)	H1 (mm)	A (mm)	H2 (mm)	H (mm)
½		15	16	VSA18L200	180	0.096	48	40	19	16	50	80	53
¾		20	16	VSA18L250	120	0.152	53	45	19	9	59	91	60
1		25	16	VSA18L320	75	0.224	58	51	21	22	68	102	67
1 ¼		32	16	VSA18L400	45	0.337	68	59	25	26	80	120	79
1 ½		40	16	VSA18L500	28	0.545	78	70	27	31	94	140	90
2		50	16	VSA18L630	16	0.923	93	84	29	38	115	169	107
3		80	10	VSA18L900	5	2.450	140	120	36	51	168	242	143
4		100	10	VSA18L910	2	4.100	160	141	13	61	210	282	169



Spare parts

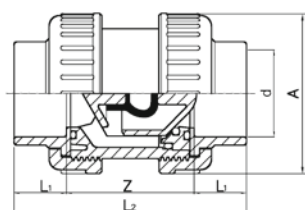


Solvent cement socket inch BS

Suitable for VSA

d (inch)	PN (bar)	Code
3/8	16	3VCLV1L16
1/2	16	3VCLV1L20
3/4	16	3VCLV1L25
1	16	3VCLV1L32
1 1/4	16	3VCLV1L40
1 1/2	16	3VCLV1L50
2	16	3VCLV1L63
3	10	3VCLV1L90
4	10	3VCLV1L91

PVC-U single flow direction valves British standard range



Double union check valve PVC-U With solvent cement sockets Inch BS

• (*)Body and dimensions = 3"



d (inch)	d (mm)	DN (mm)	PN (bar)	EPDM Code	SP	GP	Weight (kg)	A (mm)	L1 (mm)	L2 (mm)	Z (mm)
3/8		15	16	VR021L160	1	32	0.098	50	14	76	48
1/2		15	16	VR021L200	1	32	0.128	50	16	80	48
3/4		20	16	VR021L250	1	32	0.196	59	19	91	53
1		25	16	VR021L320	1		0.264	68	22	102	58
1 1/4		32	16	VR021L400	1	15	0.385	80	26	120	68
1 1/2		40	16	VR021L500	1		0.627	94	31	140	78
2		50	16	VR021L630	1		1.055	115	38	169	93
3		80	10	VR021L900	1	2	3.054	168	51	242	140

Index

Code	Page	Code	Page	Code	Page	Code	Page
1ORD00117T	56	3V0VFSG01	56	APOSPT900	32	RV0AAP50G	31
1ORD03037T	56	3V0VFSG02	56	APOSPT910	32	RV0AAP63G	31
1ORD03043T	56	3VCLV1F16	39	APOSPT920	32	RV0AAP75G	31
1ORD03062	32	3VCLV1F20	39	APOSPT930	32	RV0AFP16A	28
1ORD03068T	56	3VCLV1F25	39	APOSPT940	32	RV0AFP20B	28
1ORD03093T	56	3VCLV1F32	39	ARVSCPF20	51	RV0AFP25B	28
1ORD04081P	32	3VCLV1F40	39	ARVSCPF25	51	RV0AFP25C	28
1ORD04112P	32	3VCLV1F50	39	ARVSCPF32	51	RV0AFP25D	28
1ORD04131P	32	3VCLV1F63	39	ARVSCPF40	51	RV0AFP32C	28
1ORD06162P	32	3VCLV1F75	39	ARVSCPF50	51	RV0AFP32D	28
1ORD06187P	32	3VCLV1F90	39	ARVSCPF63	51	RV0AFP40D	28
1ORD06237P	32	3VCLV1F91	39	ARVSCPF90	51	RV0AFP40E	28
1ORD06312	32	3VCLV1I16	38	DV0DEF32Z	18	RV0AFP50E	28
1ORD06362	32	3VCLV1I20	38	DV0DEF40A	18	RV0AFP50F	28
1ORD06450	32	3VCLV1I25	38	DV0DEF50A	18	RV0AFP50G	28
2G0VF1ED75	55	3VCLV1I32	38	DV0DEF50B	18	RV0AFP63G	28
2G0VF1ED90	55	3VCLV1I40	38	DV0DEF50C	18	RV0AFP75G	28
2G0VF1ED91	55	3VCLV1I75	38	DV0DEF50Z	18	RV0AFP75H	28
2G0VF1ED92	55	3VCLV1I90	38	DV0DEF63A	18	RV0AFP90L	28
2G0VF1ED94	55	3VCLV1I91	38	DV0DEF63B	18	RV0AFP91I	28
2G0VF1ED96	55	3VCLV1L16	66	DV0DEF63C	18	RV0AFP91L	28
2G0VF1OD75	55	3VCLV1L20	66	DV0DEF75A	18	RV0AFR16A	64
2G0VF1OD90	55	3VCLV1L25	66	DV0DEF75C	18	RV0AFR20B	64
2G0VF1OD91	55	3VCLV1L32	66	DV0DEF75D	18	RV0AFR25C	64
2G0VF1OD92	55	3VCLV1L40	66	DV0DEF90B	18	RV0AFR32D	64
2G0VF1OD94	55	3VCLV1L50	66	DV0DEF90D	18	RV0AFR40E	64
2G0VF1OD96	55	3VCLV1L63	66	DV0DEF90F	18	RV0AFR50F	64
2GRNPD160	14	3VCLV1L90	66	DV0DEF91B	18	RV0AFR63G	64
2GRNPD200	14	3VCLV1L91	66	DV0DEI50B	16	RV0AFR90I	64
2GRNPD250	14	3VGHR0A20	39	DV0DEI50D	16	RV0AFR91L	64
2GRNPD320	14	3VGHR0A25	39	DV0DEI63B	16	RV0AMP16A	27
2GRNPD400	14	3VGHR0A32	39	DV0DEI63C	16	RV0AMP16B	27
2GRNPD500	14	3VGHR0A40	39	DV0DEI63D	16	RV0AMP20A	27
2GRNPD630	14	3VGHR0A75	39	DV0DEI75F	16	RV0AMP20B	27
2GRNPD750	15	3VGHR0A90	39	DV0DEI90F	16	RV0AMP20C	27
2GRNPD900	15	3VGHR0A91	39	DV0DEI90G	16	RV0AMP25B	27
2GRNPD910	15	3VMNG1D20	38	DV0DEI91E	16	RV0AMP25C	27
2GRNPD920	15	3VMNG1D25	38	DV0DEI91F	16	RV0AMP25D	27
2GRNPD930	15	3VMNG1D32	38	DV0DEI91G	16	RV0AMP32C	27
2GRNPD940	15	3VMNG1D40	38	DV0DEI92F	16	RV0AMP32D	27
2GRNPD960	15	3VMNG1D50	38	DV0DEI93E	16	RV0AMP32E	27
2GRNPD970	15	3VMNG1D63	38	DV0DEI93G	16	RV0AMP40D	27
2GRNPD980	15	3VMNG1D75	38	DV0DEI94G	16	RV0AMP40E	27
2MLL01D20	51	3VMNG1D90	38	DV0DEI96G	16	RV0AMP40F	27
2MLL01D25	51	3VMNG1D91	38	DV0DEI97G	16	RV0AMP50E	27
2MLL01D32	51	AK00MNG20	38	RP0ATS200	25	RV0AMP50F	27
2MLL01D40	51	AK00MNG25	38	RP0ATS250	25	RV0AMP50G	27
2MLL01D50	51	AK00MNG32	38	RP0ATS320	25	RV0AMP63F	27
2MLL01D63	51	AK00MNG40	38	RP0ATS400	25	RV0AMP63G	27
2MLL01D90	51	AK00MNG50	38	RP0ATS500	25	RV0AMP63H	27
3ECLV20C	39	AK00MNG63	38	RV0AAP16A	31	RV0AMP75G	27
3ECLV25C	39	AK00MNG75	38	RV0AAP20B	31	RV0AMP75H	27
3ECLV32C	39	AK00MNG90	38	RV0AAP20C	31	RV0AMP75I	27
3ECLV40C	39	AK00MNG91	38	RV0AAP25B	31	RV0AMP90H	27
3ECLV50C	39	APOSPT160	32	RV0AAP25C	31	RV0AMP90I	27
3ECLV63C	39	APOSPT200	32	RV0AAP25D	31	RV0AMP90L	27
3ECLV75C	39	APOSPT250	32	RV0AAP32C	31	RV0AMP91I	27
3ECLV90C	39	APOSPT320	32	RV0AAP32D	31	RV0AMP91L	27
3ECLV91C	39	APOSPT400	32	RV0AAP40D	31	RV0AMP91N	27
3V0VFMD04	55	APOSPT500	32	RV0AAP40E	31	RV0AMP92N	27
3V0VFMD05	55	APOSPT630	32	RV0AAP50E	31	RV0AMR20B	63
3V0VFMD06	55	APOSPT750	32	RV0AAP50F	31	RV0AMR20C	63

Index

Code	Page	Code	Page	Code	Page	Code	Page
RV0AMR25C	63	RV0BLF400	23	RV0BOI750	11	RV0CAL910	60
RV0AMR25D	63	RV0BLF500	23	RV0BOI900	11	RV0CAL940	60
RV0AMR32D	63	RV0BLF630	23	RV0BOI910	11	RV0CLVI500	38
RV0AMR32E	63	RV0BLF750	23	RV0BOL160	60	RV0CLVI630	38
RV0AMR40E	63	RV0BLF900	23	RV0BOL200	60	RV0CRI200	9
RV0AMR40F	63	RV0BLF910	23	RV0BOL250	60	RV0CRI250	9
RV0AMR50F	63	RV0BLI160	14	RV0BOL320	60	RV0CRI320	9
RV0AMR50G	63	RV0BLI200	14	RV0BOL400	60	RV0CRI400	9
RV0AMR63G	63	RV0BLI250	14	RV0BOL500	60	RV0CRI500	9
RV0AMR75H	63	RV0BLI320	14	RV0BOL630	60	RV0CRI630	9
RV0AMR90I	63	RV0BLI400	14	RV0BOL900	60	RV0CRI750	9
RV0BAF200	24	RV0BLI500	14	RV0BOL910	60	RV0CRI900	9
RV0BAF250	24	RV0BLI630	14	RV0BOP16A	27	RV0CRI910	9
RV0BAF320	24	RV0BLI750	14	RV0BOP20B	27	RV0CUI200	10
RV0BAF400	24	RV0BLI900	14	RV0BOP25C	27	RV0CUI250	10
RV0BAF500	24	RV0BLI910	14	RV0BOP32D	27	RV0CUI320	10
RV0BAF630	24	RV0BLL160	61	RV0BOP40E	27	RV0CUI400	10
RV0BAF750	24	RV0BLL200	61	RV0BOP50F	27	RV0CUI500	10
RV0BAF900	24	RV0BLL250	61	RV0BOP63G	27	RV0CUI630	10
RV0BAF910	24	RV0BLL320	61	RV0BOP75H	27	RV0CUI750	10
RV0BFF160	23	RV0BLL400	61	RV0BOP90I	27	RV0CUI900	10
RV0BFF200	23	RV0BLL500	61	RV0BOP91L	27	RV0CUI910	10
RV0BFF250	23	RV0BLL630	61	RV0BOR20B	65	RV0DAF200	20
RV0BFF320	23	RV0BLL900	61	RV0BOR25C	65	RV0DAF250	20
RV0BFF400	23	RV0BLL910	61	RV0BOR32D	65	RV0DAF320	20
RV0BFF500	23	RV0BMF16A	29	RV0BOR40E	65	RV0DAF400	20
RV0BFF630	23	RV0BMF20B	29	RV0BOR50F	65	RV0DAF500	20
RV0BFF750	23	RV0BMF25C	29	RV0BOR63G	65	RV0DAF630	20
RV0BFF900	23	RV0BMF32D	29	RV0BOR90I	65	RV0DAF750	20
RV0BFF910	23	RV0BMF40E	29	RV0BOR91L	65	RV0DAF900	20
RV0BFI160	13	RV0BMF50F	29	RV0CAF200	24	RV0DAF910	20
RV0BFI200	13	RV0BMF63G	29	RV0CAF250	24	RV0FAI920	15
RV0BFI250	13	RV0BMM16A	29	RV0CAF320	24	RV0FCI630	16
RV0BFI320	13	RV0BMM20B	29	RV0CAF400	24	RV0FCI750	16
RV0BFI400	13	RV0BMM25C	29	RV0CAF500	24	RV0FCI900	16
RV0BFI500	13	RV0BMM32D	29	RV0CAF630	24	RV0FCI910	16
RV0BFI630	13	RV0BMM40E	29	RV0CAF750	24	RV0FCI920	16
RV0BFI750	13	RV0BMM50F	29	RV0CAF900	24	RV0FCI930	16
RV0BFI900	13	RV0BMM63G	29	RV0CAF910	24	RV0FCI940	16
RV0BFI910	13	RV0BMP25C	28	RV0CAI160	11	RV0FCI960	16
RV0BFL200	61	RV0BMP32D	28	RV0CAI200	11	RV0FCI970	16
RV0BFL250	61	RV0BMP40E	28	RV0CAI250	11	RV0FFI630	15
RV0BFL320	61	RV0BMP50F	28	RV0CAI320	11	RV0FFI750	15
RV0BFL400	61	RV0BMP50G	28	RV0CAI400	11	RV0FFI900	15
RV0BFL500	61	RV0BMP63G	28	RV0CAI500	11	RV0FFI910	15
RV0BFL630	61	RV0BOF160	22	RV0CAI630	11	RV0FFI920	15
RV0BFL900	61	RV0BOF200	22	RV0CAI750	11	RV0FFI930	15
RV0BFL910	61	RV0BOF250	22	RV0CAI900	11	RV0FFI940	15
RV0BG0160	13	RV0BOF320	22	RV0CAI910	11	RV0FFL630	62
RV0BG0200	13	RV0BOF400	22	RV0CAI920	11	RV0FFL900	62
RV0BG0250	13	RV0BOF500	22	RV0CAI930	11	RV0FFL910	62
RV0BG0320	13	RV0BOF630	22	RV0CAI940	11	RV0FFL940	62
RV0BG0400	13	RV0BOF750	22	RV0CAI960	11	RV0FLI200	15
RV0BG0500	13	RV0BOF900	22	RV0CAI970	11	RV0FLI250	15
RV0BG0630	13	RV0BOF910	22	RV0CAL160	60	RV0FLI320	15
RV0BG0750	13	RV0BOI160	11	RV0CAL200	60	RV0FLI400	15
RV0BG0900	13	RV0BOI200	11	RV0CAL250	60	RV0FLI500	15
RV0BG0910	13	RV0BOI250	11	RV0CAL320	60	RV0FLI630	15
RV0BLF160	23	RV0BOI320	11	RV0CAL400	60	RV0FLI750	15
RV0BLF200	23	RV0BOI400	11	RV0CAL500	60	RV0FLI900	15
RV0BLF250	23	RV0BOI500	11	RV0CAL630	60	RV0FLI910	15
RV0BLF320	23	RV0BOI630	11	RV0CAL900	60	RV0FLI920	15

Index

Code	Page	Code	Page	Code	Page	Code	Page
RV0FLI930	15	RV0GOR20B	63	RV0MAI940	8	RV0NIF160	21
RV0FLI940	15	RV0GOR25C	63	RV0MAI960	8	RV0NIF200	21
RV0FLI960	15	RV0GOR32D	63	RV0MAI970	8	RV0NIF250	21
RV0FLI970	15	RV0GOR40E	63	RV0MAI980	8	RV0NIF320	21
RV0FLI980	15	RV0GOR50F	63	RV0MAI991	8	RV0NIF400	21
RV0FLI991	15	RV0GOR63G	63	RV0MAL160	60	RV0NIF500	21
RV0GGP16A	31	RV0GOR90I	63	RV0MAL200	60	RV0NIF630	21
RV0GGP20B	31	RV0GOR91L	63	RV0MAL250	60	RV0NIF750	21
RV0GGP25C	31	RV0GPI500	7	RV0MAL320	60	RV0NIF900	21
RV0GGP32D	31	RV0GPI630	7	RV0MAL400	60	RV0NIF910	21
RV0GGP40E	31	RV0GTI500	9	RV0MAL500	60	RV0NRF20A	22
RV0GGP50F	31	RV0GTI630	9	RV0MAL630	60	RV0NRF25B	22
RV0GGP63G	31	RV0GYI160	6	RV0MAL900	60	RV0NRF32C	22
RV0GHR500	39	RV0GYI200	6	RV0MAL910	60	RV0NRF40D	22
RV0GHR630	39	RV0GYI250	6	RV0MAL940	60	RV0NRF50E	22
RV0GOF160	19	RV0GYI320	6	RV0MAL970	60	RV0NRF63F	22
RV0GOF200	19	RV0GYI400	6	RV0MAP16A	26	RV0NRF75G	22
RV0GOF250	19	RV0GYI500	6	RV0MAP20B	26	RV0NRF90H	22
RV0GOF320	19	RV0GYI630	6	RV0MAP25C	26	RV0NRF91I	22
RV0GOF400	19	RV0GYI750	6	RV0MAP32D	26	RV0PGF160	24
RV0GOF500	19	RV0GYI900	6	RV0MAP40E	26	RV0PGF200	24
RV0GOF630	19	RV0GYI910	6	RV0MAP50F	26	RV0PGF250	24
RV0GOF750	19	RV0GYI920	6	RV0MAP63G	26	RV0PGF320	24
RV0GOF900	19	RV0GYI930	6	RV0MAP75H	26	RV0PGF400	24
RV0GOF910	19	RV0GYI940	6	RV0MAP90I	26	RV0PGF500	24
RV0GOI160	6	RV0GYI960	6	RV0MAP91L	27	RV0PGF630	24
RV0GOI200	6	RV0GYI970	6	RV0MAP92N	27	RV0PGI160	17
RV0GOI250	6	RV0GYI980	6	RV0MAP93N	27	RV0PGI200	17
RV0GOI320	6	RV0GYI991	6	RV0MAP940	27	RV0PGI250	17
RV0GOI400	6	RV0GYL160	59	RV0MAR16A	63	RV0PGI320	17
RV0GOI500	6	RV0GYL200	59	RV0MAR20B	63	RV0PGI400	17
RV0GOI630	6	RV0GYL250	59	RV0MAR25C	63	RV0PGI500	17
RV0GOI750	6	RV0GYL320	59	RV0MAR32D	63	RV0PGI630	17
RV0GOI900	6	RV0GYL400	59	RV0MAR40E	63	RV0QRI200	14
RV0GOI910	6	RV0GYL500	59	RV0MAR50F	63	RV0QRI250	14
RV0GOI920	6	RV0GYL630	59	RV0MAR63G	63	RV0QRI320	14
RV0GOI930	6	RV0GYL900	59	RV0MAR90I	63	RV0QRI400	14
RV0GOI940	6	RV0GYL910	59	RV0MAR91L	63	RV0QRI500	14
RV0GOI960	6	RV0GYL970	59	RV0MFP25B	29	RV0QRI630	14
RV0GOI970	6	RV0MAF160	20	RV0MFP32C	29	RV0QRI750	14
RV0GOI980	6	RV0MAF200	20	RV0MFP40D	29	RV0QRI900	14
RV0GOI991	6	RV0MAF250	20	RV0MFP50E	29	RV0QRI910	14
RV0GOL200	58	RV0MAF320	20	RV0MFP63F	29	RV0QRI920	14
RV0GOL250	58	RV0MAF400	20	RV0MFP75G	29	RV0QRI930	14
RV0GOL320	58	RV0MAF500	20	RV0MFP90H	29	RV0QRI940	14
RV0GOL400	58	RV0MAF630	20	RV0MFP91I	29	RV0QRI960	14
RV0GOL500	58	RV0MAF750	20	RV0MMP16A	30	RV0QRI970	14
RV0GOL630	58	RV0MAF900	20	RV0MMP20B	30	RV0QRI980	14
RV0GOL900	58	RV0MAF910	20	RV0MMP25C	30	RV0QRI991	14
RV0GOL910	58	RV0MAF940	20	RV0MMP32D	30	RV0QRL200	61
RV0GOL940	58	RV0MAI160	8	RV0MMP40E	30	RV0QRL250	61
RV0GOL970	58	RV0MAI200	8	RV0MMP50F	30	RV0QRL320	61
RV0GOP16A	26	RV0MAI250	8	RV0MMP63G	30	RV0QRL400	61
RV0GOP20B	26	RV0MAI320	8	RV0MRF20A	21	RV0QRL500	61
RV0GOP25C	26	RV0MAI400	8	RV0MRF25B	21	RV0QRL630	61
RV0GOP32D	26	RV0MAI500	8	RV0MRF32C	21	RV0QRL900	61
RV0GOP40E	26	RV0MAI630	8	RV0MRF40D	21	RV0QRL910	61
RV0GOP50F	26	RV0MAI750	8	RV0MRF50E	21	RV0QRL940	61
RV0GOP63G	26	RV0MAI900	8	RV0MRF63F	21	RV0QRL970	61
RV0GOP75H	26	RV0MAI910	8	RV0MRF75G	21	RV0RCF25B	21
RV0GOP90I	26	RV0MAI920	8	RV0MRF90H	21	RV0RCF32C	21
RV0GOP91L	26	RV0MAI930	8	RV0MRF91I	21	RV0RCF40D	21

Index

Code	Page	Code	Page	Code	Page	Code	Page
RVORCF50E	21	RVORCL90H	59	RVOTII320	8	RVOTRI92I	7
RVORCF63F	21	RVORCL91G	59	RVOTII400	8	RVOTRI94I	7
RVORCF75G	21	RVORCL91H	59	RVOTII500	8	RVOTRI94L	7
RVORCF90H	21	RVORCL91I	59	RVOTII630	8	RVOTTP16A	30
RVORCF91I	21	RVORCL94L	59	RVOTII750	8	RVOTTP20B	30
RVORCI20A	12	RVORCR20A	64	RVOTII900	8	RVOTTP25C	30
RVORCI25A	12	RVORCR25B	64	RVOTII910	8	RVOTTP32D	30
RVORCI25B	12	RVORCR32C	64	RVOTII920	8	RVOTTP40E	30
RVORCI32A	12	RVORIF20A	19	RVOTII930	8	RVOTTP50F	30
RVORCI32B	12	RVORIF25A	19	RVOTII940	8	RVOTTP63G	30
RVORCI32C	12	RVORIF25B	19	RVOTII960	8	VFA02D750	54
RVORCI40B	12	RVORIF32B	19	RVOTII970	8	VFA02D75K	54
RVORCI40C	12	RVORIF32C	19	RVOTII980	8	VFA02D900	54
RVORCI40D	12	RVORIF40B	19	RVOTII991	8	VFA02D90K	54
RVORCI50C	12	RVORIF40D	19	RVOTIL160	58	VFA02D910	54
RVORCI50D	12	RVORIF50C	19	RVOTIL200	58	VFA02D91K	54
RVORCI50E	12	RVORIF50D	19	RVOTIL250	58	VFA02D920	54
RVORCI63D	12	RVORIF50E	19	RVOTIL320	58	VFA02D92K	54
RVORCI63E	12	RVORIF63D	19	RVOTIL400	58	VFA02D93K	54
RVORCI63F	12	RVORIF63E	19	RVOTIL500	58	VFA02D940	54
RVORCI75E	12	RVORIF63F	19	RVOTIL630	58	VFA02D94K	54
RVORCI75F	12	RVORIF75G	19	RVOTIL900	58	VFA02D960	54
RVORCI75G	12	RVORIF90F	19	RVOTIL910	58	VFA02D96K	54
RVORCI90F	12	RVORIF90G	19	RVOTIL940	58	VFA02D97K	54
RVORCI90G	12	RVORIF90H	19	RVOTIL970	58	VRF11F200	50
RVORCI90H	12	RVORIF91G	19	RVOTIP16A	26	VRF11F250	50
RVORCI91G	12	RVORIF91I	19	RVOTIP20B	26	VRF11F320	50
RVORCI91H	12	RV0TAF160	22	RVOTIP25C	26	VRF11F400	50
RVORCI91I	12	RV0TAF200	22	RVOTIP32D	26	VRF11F500	50
RVORCI92H	12	RV0TAF250	22	RVOTIP40E	26	VRF11F630	50
RVORCI92I	12	RV0TAF320	22	RVOTIP50F	26	VRF11F900	50
RVORCI92L	12	RV0TAF400	22	RVOTIP63G	26	VRF11I200	50
RVORCI93I	12	RV0TAF500	22	RVOTIP75H	26	VRF11I250	50
RVORCI93L	12	RV0TAF630	22	RVOTIP90I	26	VRF11I320	50
RVORCI93M	12	RV0TAF750	22	RVOTIP91L	26	VRF11I400	50
RVORCI94L	12	RV0TAF900	22	RVOTRI25B	7	VRF11I500	50
RVORCI94M	12	RV0TAF910	22	RVOTRI32B	7	VRF11I630	50
RVORCI94N	12	RV0TAK200	24	RVOTRI32C	7	VRF11I900	50
RVORCI950	12	RV0TAK250	24	RVOTRI40B	7	VRO21F160	49
RVORCI960	12	RV0TAK320	24	RVOTRI40C	7	VRO21F200	49
RVORCI96P	12	RV0TAK400	24	RVOTRI40D	7	VRO21F250	49
RVORCI970	12	RV0TAK500	24	RVOTRI50B	7	VRO21F320	49
RVORCI97Q	12	RV0TAK630	25	RVOTRI50C	7	VRO21F400	49
RVORCI980	12	RV0TAK750	25	RVOTRI50D	7	VRO21F500	49
RVORCI98Q	12	RV0TAK900	25	RVOTRI50E	7	VRO21F630	49
RVORCI98R	12	RV0TAK910	25	RVOTRI63C	7	VRO21F750	49
RVORCI991Q	12	RV0TCI900	10	RVOTRI63D	7	VRO21F900	49
RVORCI991R	12	RV0TDI900	9	RVOTRI63E	7	VRO21I160	49
RVORCI991S	12	RV0TDI930	9	RVOTRI63F	7	VRO21I200	49
RVORCL20A	59	RV0TIF160	18	RVOTRI75D	7	VRO21I250	49
RVORCL25B	59	RV0TIF200	18	RVOTRI75E	7	VRO21I320	49
RVORCL32B	59	RV0TIF250	18	RVOTRI75F	7	VRO21I400	49
RVORCL32C	59	RV0TIF320	18	RVOTRI75G	7	VRO21I500	49
RVORCL40D	59	RV0TIF400	18	RVOTRI90E	7	VRO21I630	49
RVORCL50D	59	RV0TIF500	18	RVOTRI90F	7	VRO21I750	49
RVORCL50E	59	RV0TIF630	18	RVOTRI90G	7	VRO21I900	49
RVORCL63D	59	RV0TIF750	18	RVOTRI90H	7	VRO21L160	66
RVORCL63F	59	RV0TIF900	18	RVOTRI91F	7	VRO21L200	66
RVORCL75F	59	RV0TIF910	18	RVOTRI91G	7	VRO21L250	66
RVORCL75G	59	RV0TII160	8	RVOTRI91H	7	VRO21L320	66
RVORCL90F	59	RV0TII200	8	RVOTRI91I	7	VRO21L400	66
RVORCL90G	59	RV0TII250	8	RVOTRI92G	7	VRO21L500	66

Index

Code	Page	Code	Page	Code	Page
VR021L630	66	VSA18P500	37	VSI12F900	44
VR021L900	66	VSA18S200	36	VSI12F910	44
VRV21F160	50	VSA18S250	36	VSI13F200	44
VRV21F200	50	VSA18S320	36	VSI13F250	44
VRV21F250	50	VSA18S400	36	VSI13F320	44
VRV21F320	50	VSA18S500	36	VSI13F400	44
VRV21F400	50	VSA18S630	36	VSI13F500	44
VRV21F500	50	VSA21F200	40	VSI13F630	44
VRV21F630	50	VSA21F250	40	VSI14P32D	44
VRV21F750	50	VSA21F320	40	VSI16P200	45
VRV21F900	50	VSA21F400	40	VSI16P250	45
VRV21I160	49	VSA21F500	40	VSI16P320	45
VRV21I200	49	VSA21F630	40	VSI16P400	45
VRV21I250	49	VSA21I200	40	VSI16P500	45
VRV21I320	49	VSA21I250	40	VSI16P630	45
VRV21I400	49	VSA21I320	40	VVCLP750	51
VRV21I500	49	VSA21I400	40	VVCLP900	51
VRV21I630	49	VSA21I500	40	VVCLP910	51
VRV21I750	49	VSA21I630	40	VVCLP920	51
VRV21I900	49	VSA22B200	36	VVCLP930	51
VSA11F200	41	VSA22B250	36	VVCLP940	51
VSA11F250	41	VSA22B320	36	VVCLP960	51
VSA11F320	41	VSA22B400	36	XSASED200	38
VSA11F400	41	VSA22B500	36	XSASED250	38
VSA11F500	41	VSA22B630	36	XSASED320	38
VSA11F630	41	VSA22B750	36	XSASED400	39
VSA11I200	40	VSA22B900	36	XSASED500	39
VSA11I250	40	VSA22B910	36	XSASED630	39
VSA11I320	40	VSA22F200	35	XSASED750	39
VSA11I400	40	VSA22F250	35	XSASED900	39
VSA11I500	40	VSA22F320	35	XSASED910	39
VSA11I630	40	VSA22F400	35	XVFFLIZ75	55
VSA11I750	40	VSA22F500	35	XVFFLIZ90	55
VSA11I900	40	VSA22F630	35	XVFFLIZ91	55
VSA11I910	40	VSA22F750	35	XVFFLIZ92	55
VSA18F200	36	VSA22F900	35	XVFFLIZ93	55
VSA18F250	36	VSA22F910	35	XVFFLIZ94	55
VSA18F320	36	VSA22I160	35	XVFFLIZ96	55
VSA18F400	36	VSA22I200	35	XVFFLIZ97	55
VSA18F500	36	VSA22I250	35		
VSA18F630	36	VSA22I320	35		
VSA18F750	36	VSA22I400	35		
VSA18F900	36	VSA22I500	35		
VSA18F910	36	VSA22I630	35		
VSA18I160	35	VSA22I750	35		
VSA18I200	35	VSA22I900	35		
VSA18I250	35	VSA22I910	35		
VSA18I320	35	VSA22L200	65		
VSA18I400	35	VSA22L250	65		
VSA18I500	35	VSA22L320	65		
VSA18I630	35	VSA22L400	65		
VSA18I750	35	VSA22L500	65		
VSA18I900	35	VSA22L630	65		
VSA18I910	35	VSA22L900	65		
VSA18L200	65	VSA22L910	65		
VSA18L250	65	VSI12F200	44		
VSA18L320	65	VSI12F250	44		
VSA18L400	65	VSI12F320	44		
VSA18L500	65	VSI12F400	44		
VSA18L630	65	VSI12F500	44		
VSA18L900	65	VSI12F630	44		
VSA18L910	65	VSI12F750	44		

General Conditions of Supply

1. General

- 1.1 These general conditions shall apply to all goods supplied by Georg Fischer TPA srl 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 TPA srl.

2. Tenders

Tenders shall only be binding if they contain a specifically stated period for acceptance.

3. Scope of Delivery

- 3.1 Georg Fischer TPA srl'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 TPA srl and may only be used for the agreed purposes or as Georg Fischer TPA srl may consent.
- 4.3 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.

5. Local Laws and Regulations

The Purchaser shall bring to the attention of Georg Fischer TPA srl 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. Prices

- 6.1 Unless agreed otherwise, the prices shall be deemed quoted net, ex works, including standard packing. All supplementary costs, such as the cost of carriage, insurance, export 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.
- 6.2 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 TPA srl reserve the right to revise their prices accordingly should any change occur in the relevant tariffs.

7. Payment

- 7.1 The Purchaser shall make payment in the manner agreed by the parties to the Georg Fischer works conducting the account without any deductions such as discounts, costs, taxes or dues.
- 7.2 The Purchaser may only withhold or off-set payments due against counter-claims which are either expressly acknowledged by Georg Fischer TPA srl or finally awarded to the Purchaser. In particular, payment shall still be made when unessential items are still outstanding provided, however, that the goods already delivered are not rendered unusable as a result.

8. Retention of Title

- 8.1 The goods shall remain the property of Georg Fischer TPA srl until the Purchaser shall have settled all claims, present and future, which Georg Fischer TPA srl may have against him.
- 8.2 Should the Purchaser sell goods to which title is reserved he shall then be deemed to have tacitly assigned to Georg Fischer TPA srl the proceeds deriving from their sale together with all collateral rights, securities and reservations of title until all claims held by Georg Fischer TPA srl shall have been settled.
- 8.3 To the extent the value of the goods to which title is reserved together with collateral securities should exceed Georg Fischer TPA srl's claims against the Purchaser by more than 20%, Georg Fischer TPA srl shall reassign the above proceeds to Purchaser at his request.
- 8.4 In case of default on the part of the Purchaser, in particular in case of arrears, Georg Fischer shall be entitled to repossession of the goods after having given notice to this effect, and the Purchaser shall be obligated to surrender the goods.

9. Delivery

- 9.1 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 points have been settled. The term of delivery shall be deemed duly observed when, upon its expiry, the goods are ready for despatch.
- 9.2 Delivery is subject to the following conditions, i. e. the term of delivery shall be reasonably extended:
 - a) if Georg Fischer TPA srl 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 TPA srl are prevented from performing the contract by force majeure. Force majeure shall equally be deemed to be any unforeseeable event beyond Georg Fischer TPA srl's control which renders Georg Fischer TPA srl's performance commercially unpracticable or impossible, such as delayed or defective supplies from subcontractors, labour disputes, governmental orders or regulations, shortages in materials or energy, serious disturbances in Georg Fischer TPA srl'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 months, either party may cancel the contract forthwith. Georg Fischer TPA srl shall not be liable for any damage or loss of any kind whatsoever resulting therefrom, any suspension or cancellation being without prejudice to Georg Fischer TPA srl's right to recover all sums due in respect of consignments delivered and costs incurred to date.
 - c) if the Purchaser fails to fulfil or delays in fulfilling his obligations under the contract, in particular if he does not adhere to the agreed conditions of payment.
- 9.3 If for reasons attributable to Georg Fischer TPA srl a reasonable term of delivery is exceeded, Georg Fischer TPA srl shall not be deemed in default until the Purchaser has granted to Georg Fischer TPA srl in writing a reasonable extension thereof of not less than one month which equally is not met. The Purchaser shall then be entitled to cancel the contract.

- 9.4 If the Purchaser fails to take delivery within a reasonable time of goods notified as ready for despatch, Georg Fischer TPA srl shall be entitled to store the goods at the Purchaser's expense and risk and to invoice them as delivered.
- 9.5 Partial shipments shall be allowed and Georg Fischer TPA srl shall be entitled to invoice for such deliveries.
- 9.6 If Georg Fischer TPA srl do not insist on the performance of a contract cancelled by the Purchaser, a penalty of 10% of the contract price shall become due unless Georg Fischer TPA srl can prove greater damages.

10. Packing

If the goods are provided with additional packing over and above the standard packing, such packing shall be invoiced separately and be non-returnable.

11. Passing of Risk

- 11.1 The risk in the goods shall pass to the Purchaser as soon as they have left Georg Fischer TPA srl's works, even if delivery is made carriage-paid, under similar clauses or including installation or when carriage is organized and managed by Georg Fischer TPA srl.
- 11.2 If delivery is delayed for reasons beyond Georg Fischer TPA srl's control, the risk shall pass to the Purchaser when he is notified that the goods are ready for despatch.

12. Carriage and Insurance

- 12.1 Unless agreed otherwise, the Purchaser shall bear the cost of carriage.
- 12.2 The Purchaser shall be responsible for insurance against damage of whatever kind. Even when such insurance is arranged by Georg Fischer TPA srl it shall be deemed taken out by the order of and for the account of the Purchaser and at his risk.
- 12.3 Special requests regarding carriage and insurance shall be communicated to Georg Fischer TPA srl in due time. Otherwise carriage shall be arranged by Georg Fischer TPA srl 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 TPA srl. If the Purchaser specifies particular requirements, any extra costs involved shall be borne by him.
- 12.4 In the event of damage or loss of the goods 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 days after receipt of the goods.

13. Inspection and Acceptance

- 13.1 The goods will be subject to normal inspection by Georg Fischer TPA srl during manufacture. Additional tests required by the Purchaser shall be agreed upon in writing and shall be charged to the Purchaser.
- 13.2 It shall be a condition of Georg Fischer TPA srl's obligation under the warranties stated hereinafter that Georg Fischer TPA srl 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 goods, notice of other defects latest within the agreed warranty period.

14. Warranty

- 14.1 At the written request of the Purchaser, Georg Fischer TPA srl undertake to repair or replace, at their discretion, as quickly as possible and free of charge all goods supplied which demonstrably suffer from faulty design, materials or workmanship or from faulty operation or installation instructions. Replaced parts shall become property of Georg Fischer TPA srl.
- 14.2 The Purchaser shall be entitled to cancel the contract or to demand a reduction in the contract price if:
 - repair or replacement is impossible, or
 - Georg Fischer TPA srl are unable or refuse to remedy the defect or replace the defective goods within a reasonable period of time or are unduly delaying such remedy or replacement.
- 14.3 For goods which are manufactured to specifications, drawings or patterns supplied by the Purchaser, Georg Fischer TPA srl's warranty shall be restricted to proper materials and workmanship.
- 14.4 This warranty shall not apply to damage resulting from normal wear, improper storage and maintenance, failure to observe the operating instructions, overstressing or overloading, unsuitable operating media, improper repairs or alterations by the Purchaser or third parties, the use of non-genuine parts and other reasons beyond Georg Fischer TPA srl's control.
- 14.5 For goods or essential components manufactured by a third party and supplied by Georg Fischer TPA srl under this contract, Georg Fischer TPA srl's warranty is limited to the warranty provided by said third party.
- 14.6 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 TPA srl after the expiration of twelve (12) months from receipt of the goods by the end user or at the latest within eighteen (18) months of the goods being despatched by Georg Fischer TPA srl.

15. Limitation of Liability

The warranties set forth above are expressly in lieu of any express warranty of any kind and in lieu of any implied warranty, including any warranty of merchantability or fitness for a particular purpose. Georg Fischer TPA srl shall not be liable for any incidental special or consequential damages, such as loss of profits, loss of production, loss of use or loss of contract, arising for any reason, including damages resulting from delayed delivery, defective design, materials or workmanship or from faulty instructions and whether such damages are claimed to arise from breach of contract, in tort, the theory of product liability or otherwise; reservation is solely being made for Georg Fischer TPA srl's statutory liability due to material breach of an essential contractual obligation, express representations, wrongful intent, gross negligence or product liability acts.

16. Place of Performance and Jurisdiction

- 16.1 Place of performance for the goods shall be the Georg Fischer TPA srl works from which the goods are despatched.
- 16.2 Any civil action based upon any alleged breach of this contract shall be filed and prosecuted exclusively in the courts having jurisdiction over the Georg Fischer TPA srl works invoicing the goods. Georg Fischer TPA srl however reserves the right to file actions in any court having jurisdiction over controversies arising out of or in connection with the present contract.
- 16.3 The contract shall be governed by the law applicable at the place of business of the Georg Fischer TPA srl works invoicing the goods in question.

Local support around the world

Visit our webpage to get in touch with your local specialist:

www.gfps.com/our-locations



The information and technical data (altogether "Data") herein are not binding, unless explicitly confirmed in writing.
The Data neither constitutes any expressed, implied or warranted characteristics, nor guaranteed properties or a guaranteed durability. All Data is subject to modification. The General Terms and Conditions of Sale of Georg Fischer Piping Systems apply.