

Product range

IR PVC-U





Creating connections for life

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

+ Maintenance-free plastic

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

+ Complete system solutions

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

+ Local support

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

+ Service in all project phases

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

+ Partner for digitization

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

Facts and figures (2022)

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

The first infrared welded PVC-U system

The IR PVC-U System is suitable for installations that come into contact with particularly aggressive media and most demanding applications. With integrated process control and automatic process documentation the system offers a unique solution in the chemical process industry and water treatment applications.



Pipes



Elbow 90



Ball Valve



Fusion technology



Automation

Technical data

Nominal pressure	Up to 16 bar
Temperature range	0°C to +60°C
Joining technology	Infrared welding
Standards and guidelines	ISO, DIN, DVS

Most important market segments

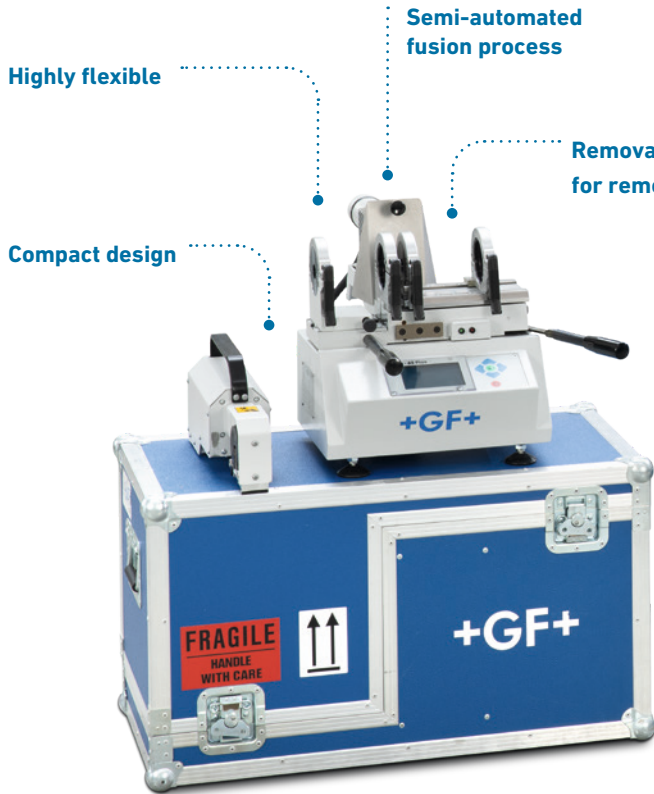
- Chemical Process Industry
- Water Treatment

IR PVC-U Product Range

Products	bar PN	SDR						
		DN	9	13.6	13.6	13.6	13.6	13.6
		d	15	20	25	32	40	50
			20	25	32	40	50	63
Pipes	16							
Fittings	16							
Ball Valve	16							
Butterfly Valve	10							
Check Valve	16							
Diaphragm Valve	10							
Pressure Regulating Valve	10							
Flange	16							
Pipe Clips	-							
Sensors & Controllers	-							
Solenoid Valves	0 – 6							

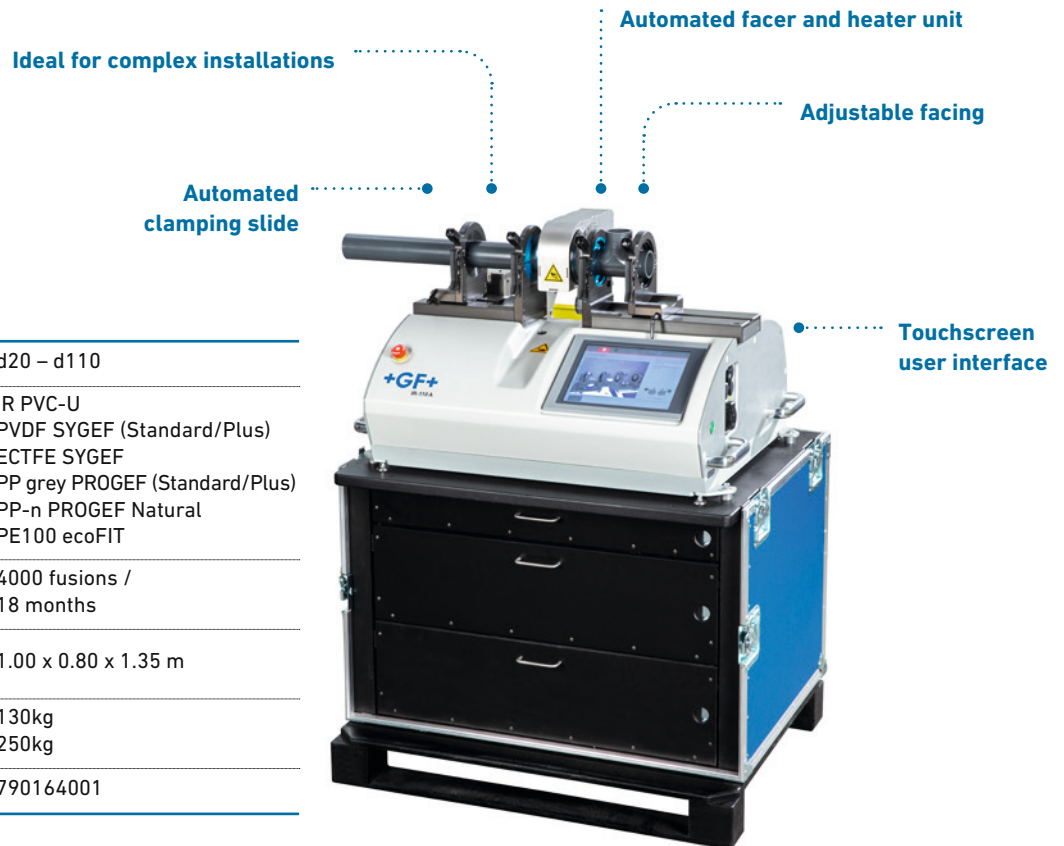


IR Welding Machines



IR-63 Plus

Dimensions	d20 – d63
Material	IR PVC-U PVDF SYGEF (Standard/Plus) ECTFE SYGEF, PP-H PROGEF (Standard/Plus) PP-n PROGEF Natural, PE100 ecoFIT, PFA
Maintenance / Calibration check	2500 weldings / 18 months
Size L x W x H Incl. Box	0.8 x 0.4 x 0.45 m
Weight machine / With transport case	18kg 60kg
Code Number	790131007



IR-110 A

Dimensions	d20 – d110
Material	IR PVC-U PVDF SYGEF (Standard/Plus) ECTFE SYGEF PP grey PROGEF (Standard/Plus) PP-n PROGEF Natural PE100 ecoFIT
Maintenance / Calibration check	4000 fusions / 18 months
Size L x W x H Incl. Box	1.00 x 0.80 x 1.35 m
Weight machine / With transport case	130kg 250kg
Code Number	790164001

Proven material and jointing technology – the perfect match

The IR PVC-U system combines GF Piping Systems expertise as the inventor of IR welding technology as well as the innovator in PVC-U piping systems with a combined history of 100 Years.

+ Integrated process and quality control

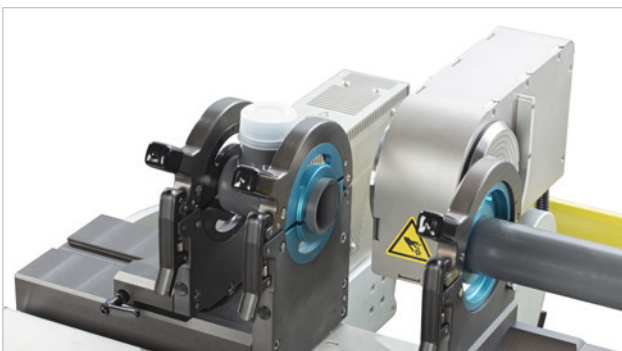
With the automated process control, the same parameters (e.g. temperature, fusion time, cooling time, etc.) are applied in every fusion. The welding process guarantees permanent control and monitoring and thus consistent joint quality throughout. If one of the values is outside the defined tolerance, the machine recognises this deviation and automatically evaluates the weld as “not OK”.

+ Sustainable raw material

GF Piping Systems uses bio-attributed materials for all of its market-leading PVC-U metric pressure pipes, fittings and valves produced in Europe. It reduces the CO2 emissions while keeping the same technical and chemical performance as conventional PVC-U.

+ IR Fusion Machines

Welding of IR PVC-U is possible on IR-63 Plus and IR-110 A machines. For both IR-110 A and IR-63 Plus special clamping inserts are required for the inner clamping units.



+ Automated process documentation

Due to the controlled process sequence, a documentation of the welding process is integrated, which allows an easy traceability of the welding. With the included printer, the machines allow a label to be attached to each weld. In addition, the data of each weld is stored by the machine, which ensures clear identification and traceability.

+ Strong chemical resistance

The material formulation specially developed by GF offers outstanding chemical resistance. This PVC-U withstand demanding conditions, particularly during the transport of aggressive media, such as acids, bases and salts. Combined with the infrared fusion technology the IR PVC-U System is perfectly suited for applications in the most demanding conditions.



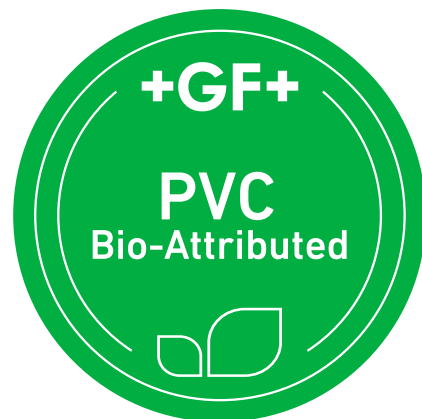
Read more about
IR PVC-U Piping System

Bio PVC-U

More sustainable PVC-U piping systems

It is our mission to show our commitment to sustainability, by supporting our customers' success with innovative, energy-saving solutions making the collective global footprint more sustainable. Using bio-attributed raw material for our PVC-U systems, we reduce the CO2 emissions by up to 90%.

- + Each standard pressure pipe, fitting and valve is partially manufactured using this new material.
- + Every installation becomes more sustainable, without the need to change anything in regards to planning, installation or operation.
- + GF Piping Systems marks all relevant products with a new label.
- + All existing approvals (drinking water, food contact, etc.) stay valid.
- + The material has the identical chemical and mechanical properties as conventional PVC-U compounds guaranteed.

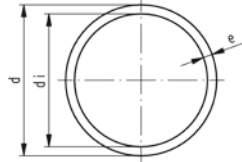


Read more about
GF Piping Systems' PVC-U system

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Pipes

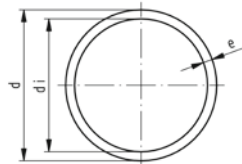


Pipe PVC-U grey SDR9 High Performance

Model:

- SDR 9 / High Performance
- Material: PVC-U
- Dimension: acc. to DIN 8061/62
- Colour: darkgrey RAL 7011
- Pipe length: 5000mm, with plain ends
- **Note 1:** DIBT Z-40.23-1 approval
- Attention: Pressure rates refer to operating temperatures at 20°C. Higher temperatures and aggressive flow media reduce pressure load (see above DIN and our technical documentation). Pressure load capacity has to be determined in consideration with safety demands of the respective applications and calculated in accordance.

Note	d (mm)	SDR	PN (bar)	Code	Weight (kg/m)	e (mm)
1	20	9	16	161 017 131	0.199	2.3



Pipe PVC-U grey SDR13,6/PN16/S6,4

Model:

- Material: PVC-U
- Dimension: acc. to DIN 8061/62
- Colour: darkgrey RAL 7011
- Pipe length: 5000mm, with plain ends
- * SDR 11
- **Note 1:** DIBT Z-40.23-1 approval
- **Note 3:** DVGW approval + DIN plus
- Attention: Pressure rates refer to operating temperatures at 20°C. Higher temperatures and aggressive flow media reduce pressure load (see above DIN and our technical documentation). Pressure load capacity has to be determined in consideration with safety demands of the respective applications and calculated in accordance.

Note	d (mm)	SDR	PN (bar)	Code	Weight (kg/m)	e (mm)
1, 3	25	13.6	16	161 017 107	0.215	1.9
1, 3	32	13.6	16	161 017 108	0.347	2.4
1, 3	40	13.6	16	161 017 109	0.533	3.0
1, 3	50	13.6	16	161 017 110	0.821	3.7
1, 3	63	13.6	16	161 017 111	1.310	4.7

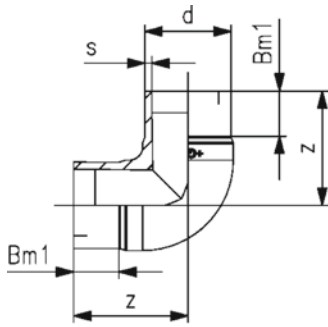
Fittings



IR PVC-U Elbow 90°

Model:

- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

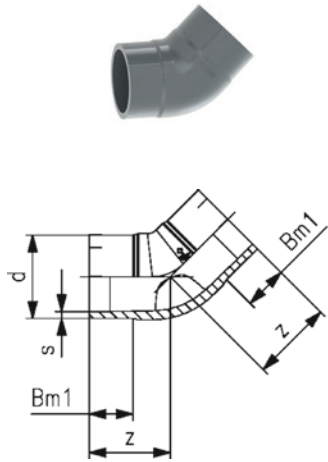


d	DN	PN	SDR	Code	Weight	s	Bm1	z
(mm)	(mm)	(bar)			(kg)	(mm)	(mm)	(mm)
20	15	16	9	721 108 106	0.017	2.3	21	40
25	20	16	13.6	721 108 107	0.024	1.9	21	42
32	25	16	13.6	721 108 108	0.036	2.4	21	47
40	32	16	13.6	721 108 109	0.064	3.0	21	53
50	40	16	13.6	721 108 110	0.107	3.7	21	58
63	50	16	13.6	721 108 111	0.219	4.7	25	74

IR PVC-U Elbow 45°

Model:

- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

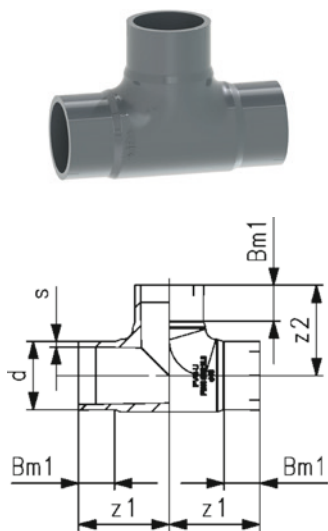


d	DN	PN	SDR	Code	Weight	s	Bm1	z
(mm)	(mm)	(bar)			(kg)	(mm)	(mm)	(mm)
20	15	16	9	721 158 106	0.014	2.3	21	32
25	20	16	13.6	721 158 107	0.017	1.9	21	34
32	25	16	13.6	721 158 108	0.028	2.4	21	36
40	32	16	13.6	721 158 109	0.046	3.0	21	39
50	40	16	13.6	721 158 110	0.086	3.7	21	42
63	50	16	13.6	721 158 111	0.134	4.7	25	47

IR PVC-U Tee 90° equal

Model:

- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)



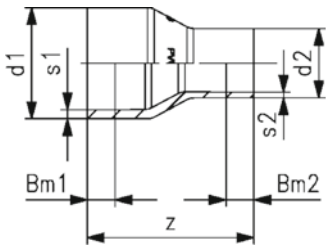
d	DN	PN	SDR	Code	Weight	s	Bm1	z1	z2
(mm)	(mm)	(bar)			(kg)	(mm)	(mm)	(mm)	(mm)
20	15	16	9	721 208 106	0.026	2.3	21	40	40
25	20	16	13.6	721 208 107	0.029	1.9	21	42	42
32	25	16	13.6	721 208 108	0.053	2.4	21	47	47
40	32	16	13.6	721 208 109	0.092	3.0	21	53	53
50	40	16	13.6	721 208 110	0.156	3.7	21	60	60
63	50	16	13.6	721 208 111	0.316	4.7	25	74	74



IR PVC-U Reducer

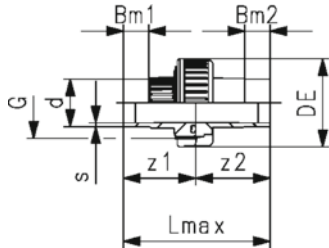
Model:

- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)



d1 (mm)	d2 (mm)	SDR	PN (bar)	Code	Weight (kg)	z (mm)	s1 (mm)	s2 (mm)	Bm1 (mm)	Bm2 (mm)
25	20	13.6	16	721 908 337	0.012	60	1.9	2.3	22	22
32	20	13.6	16	721 908 342	0.017	60	2.4	2.3	22	22
32	25	13.6	16	721 908 341	0.017	60	2.4	1.9	22	22
40	25	13.6	16	721 908 347	0.023	60	3.0	1.9	22	22
40	32	13.6	16	721 908 346	0.027	60	3.0	2.4	22	22
50	25	13.6	16	721 908 354	0.034	60	3.7	1.9	22	22
50	32	13.6	16	721 908 353	0.037	60	3.7	2.4	22	22
50	40	13.6	16	721 908 352	0.041	60	3.7	3.0	22	22
63	32	13.6	16	721 908 360	0.065	70	4.7	2.4	25	22
63	50	13.6	16	721 908 358	0.077	70	4.7	3.7	26	22

Unions



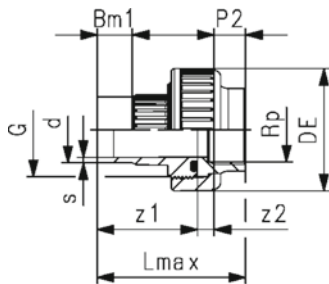
IR PVC-U Union

Model:

- Union End: IR welded spigot
- Union Bush: IR welded spigot
- Jointing face: With O-ring groove
- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

d	DN	PN	SDR	G	EPDM Code	Weight (kg)	FKM Code
(mm)	(mm)	(bar)		(inch)			
20	15	16	9	1 inch	721 518 106	0.056	721 518 131
25	20	16	13.6	1 1/4 inch	721 518 107	0.078	721 518 132
32	25	16	13.6	1 1/2 inch	721 518 108	0.124	721 518 133
40	32	16	13.6	2 inch	721 518 109	0.173	721 518 134
50	40	16	13.6	2 1/4 inch	721 518 110	0.269	721 518 135
63	50	16	13.6	2 3/4 inch	721 518 111	0.439	721 518 136

d	Weight (kg)	Lmax (mm)	z1 (mm)	z2 (mm)	DE (mm)	Bm1 (mm)	Bm2 (mm)
20	0.056	101	48	53	43	21	21
25	0.078	112	56	56	51	21	21
32	0.123	114	55	59	58	21	21
40	0.177	124	61	63	72	21	21
50	0.273	131	65	66	83	21	21
63	0.437	153	84	69	100	25	25



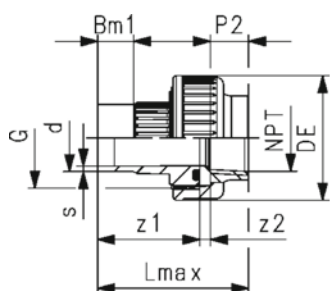
IR PVC-U Adaptor Union Rp

Model:

- Union End: Rp thread
- Union Bush: IR welded spigot
- Gasket: O-ring EPDM
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

d	DN	PN	s	EPDM Code	Weight (kg)	Lmax (mm)	z1 (mm)	z2 (mm)	NPT	DE (mm)	Rp (inch)	Bm1 (mm)	P2 (mm)
(mm)	(mm)	(bar)	(mm)						(inch)				
20	15	10	2.3	721 518 206	0.049	67	48	19	1/2	43	1	21	16
25	20	10	1.9	721 518 207	0.071	78	56	22	3/4	51	1 1/4	21	18
32	25	10	2.4	721 518 208	0.092	80	55	25	1	58	1 1/2	21	21
40	32	10	3.0	721 518 209	0.154	90	61	29	1 1/4	72	2	21	23
50	40	10	3.7	721 518 210	0.250	99	65	34	1 1/2	83	2 1/4	21	27
63	50	10	4.7	721 518 211	0.412	125	84	41	2	100	2 3/4	25	33

IR PVC-U Adaptor Union NPT

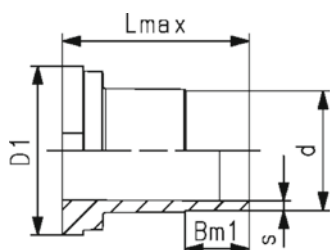


Model:

- Union End: NPT thread
- Union Bush: IR welded spigot
- Gasket: O-ring EPDM
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

d	DN	PN	s	EPDM	Weight	Lmax	z1	z2	NPT	DE	G	Bm1	P2
(mm)	(mm)	(bar)	(mm)	Code	(kg)	(mm)	(mm)	(mm)	(inch)	(mm)	(inch)	(mm)	(mm)
20	15	10	2.3	721 519 206	0.048	67	48	19	½	43	1	21	16
25	20	10	1.9	721 519 207	0.071	78	56	22	¾	51	1 1/4	21	18
32	25	10	2.4	721 519 208	0.096	80	55	25	1	58	1 1/2	21	21
40	32	10	3.0	721 519 209	0.156	90	61	29	1 ¼	72	2	21	23
50	40	10	3.7	721 519 210	0.248	99	65	34	1 ½	83	2 1/4	21	27
63	50	10	4.7	721 519 211	0.438	125	84	41	2	100	2 3/4	25	33

IR PVC-U Union End

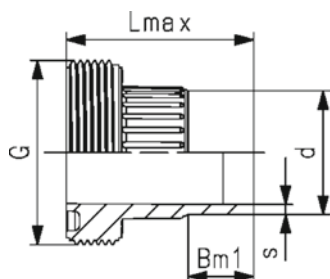


Model:

- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

d	DN	PN	SDR	Code	Weight	s	Lmax	Bm1	D1
(mm)	(mm)	(bar)			(kg)	(mm)	(mm)	(mm)	(mm)
20	15	16	9	721 808 106	0.017	2.3	53	21	30
25	20	16	13.6	721 808 107	0.024	1.9	56	21	39
32	25	16	13.6	721 808 108	0.033	2.4	59	21	45
40	32	16	13.6	721 808 109	0.069	3.0	63	21	56
50	40	16	13.6	721 808 110	0.080	3.7	66	21	63
63	50	16	13.6	721 808 111	0.129	4.7	69	25	78

IR PVC-U Union Bush

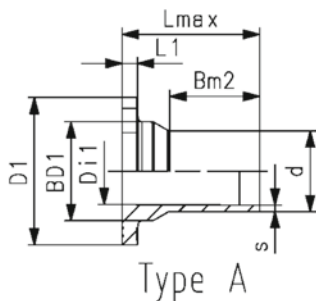


Model:

- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

d	DN	PN	SDR	Code	Weight	s	Lmax	Bm1	G
(mm)	(mm)	(bar)			(kg)	(mm)	(mm)	(mm)	(inch)
20	15	16	9	721 848 106	0.018	2.3	48	21	1
25	20	16	13.6	721 848 107	0.032	1.9	56	21	1 1/4
32	25	16	13.6	721 848 108	0.039	2.4	55	21	1 1/2
40	32	16	13.6	721 848 109	0.064	3.0	61	21	2
50	40	16	13.6	721 848 110	0.090	3.7	65	21	2 1/4
63	50	16	13.6	721 848 111	0.175	4.7	84	25	2 3/4

Flange adaptors



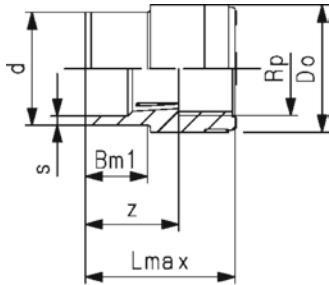
IR PVC-U Flange Adaptor Combined jointing face flat and serrated metric

Model:

- d20 - d50: Sealing surface flat
- d63: combined jointing face flat and serrated
- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

d	DN	PN	SDR	Code	Weight	s	Lmax	Bm2	L1	D1	BD1	Di1
(mm)	(mm)	(bar)			(kg)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
20	15	16	9	721 798 106	0.024	2.3	54	35	6.0	45	26	14.5
25	20	16	13.6	721 798 107	0.037	1.9	56	35	6.5	58	32	20.0
32	25	16	13.6	721 798 108	0.051	2.4	58	35	7.0	63	40	26.0
40	32	16	13.6	721 798 109	0.076	3.0	68	45	7.5	73	49	33.0
50	40	16	13.6	721 798 110	0.117	3.7	69	45	8.0	88	40	41.0
63	50	16	13.6	721 798 111	0.180	4.7	72	45	9.0	102	75	52.0

Adaptor Fittings

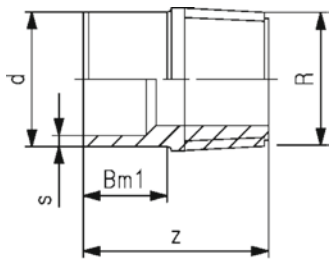


IR PVC-U Adaptor Rp

Model:

- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

d1 (mm)	DN (mm)	PN (bar)	Code	Weight (kg)	s1 (mm)	Rp (inch)	Lmax (mm)	Do (mm)	Bm1 (mm)
20	15	16	721 918 434	0.014	2.3	3/8	33	25	15
25	20	16	721 918 437	0.019	1.9	1/2	39	30	15
32	25	16	721 918 441	0.030	2.4	3/4	46	35	15
40	32	16	721 918 446	0.057	3.0	1	53	45	15
50	40	16	721 918 452	0.096	3.7	1 1/4	63	55	15
63	50	16	721 918 458	0.142	4.7	1 1/2	74	62	15



IR PVC-U Adaptor R

Model:

- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

* weldable only once

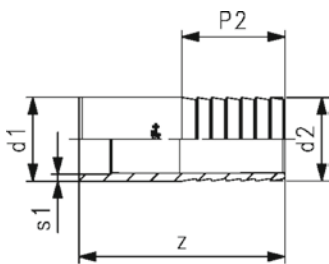
	d1 (mm)	DN (mm)	PN (bar)	Code	Weight (kg)	s (mm)	z (mm)	Bm1 (mm)	R (inch)
*	20	15	10	721 918 506	0.009	2.3	33	15	1/2
*	25	20	10	721 918 507	0.014	1.9	38	15	3/4
*	32	25	10	721 918 508	0.025	2.4	44	15	1

IR PVC-U Hose Connector

Model:

- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

* weldable only once



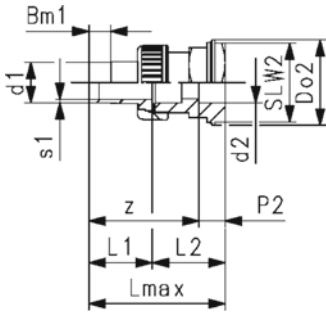
	d1 (mm)	DN (mm)	PN (bar)	Code	Weight (kg)	s1 (mm)	d2 (mm)	P2 (mm)	z (mm)
*	20	15	16	721 968 406	0.014	2.3	20	32	71
*	25	20	16	721 968 407	0.018	1.9	25	33	77
*	32	25	16	721 968 408	0.032	2.4	32	40	87
*	40	32	16	721 968 409	0.053	3.0	40	49	89
*	50	40	16	721 968 410	0.099	3.7	50	48	101
*	63	50	16	721 968 411	0.168	4.7	63	50	117

IR PVC-U Tank Connector Type 050



Model:

- Gaskets: flat gaskets EPDM
- Washer: PP
- Run-out holes: two holes in octagonal head
- FKM flat gaskets available for tank adaptor type 050



d1 (mm)	PN (bar)	s1 (mm)	EPDM Code	Weight (kg)	Bm1 (mm)	z (mm)	L1 (mm)	L2 (mm)	Lmax (mm)	P2 (mm)	d2 (mm)	Do2 (mm)
20	16	2.3	161 058 346	0.105	21	102	53	61	114	12	20	35
25	16	1.9	161 058 347	0.220	21	108	56	65	121	13	25	42
32	16	2.4	161 058 348	0.288	21	113	59	67	126	13	32	49
40	16	3.0	161 058 349	0.379	21	122	63	72	135	13	40	59
50	16	3.7	161 058 350	0.418	21	127	66	76	142	15	50	70
63	16	4.7	161 058 351	0.780	25	138	69	84	153	15	63	82

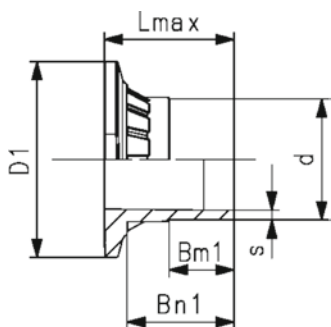
Valve ends



IR PVC-U Valve End

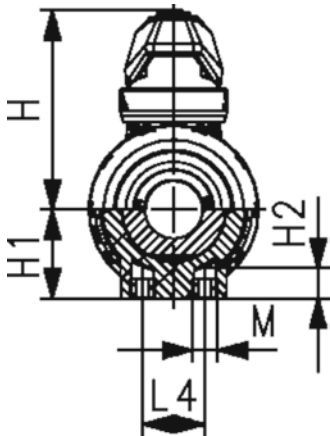
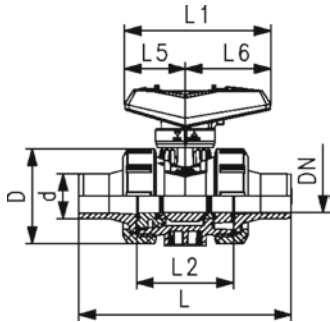
Model:

- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)



d	DN	PN	SDR	Code	Weight	s	Lmax	D1	Bm1	Bn1
(mm)	(mm)	(bar)			(kg)	(mm)	(mm)	(mm)	(mm)	(mm)
20	15	16	9	161 498 702	0.013	23.0	37	38	22	28
25	20	16	13.6	161 498 703	0.017	1.9	40	44	22	30
32	25	16	13.6	161 498 704	0.026	2.4	40	53	22	34
40	32	16	13.6	161 498 705	0.044	3.0	43	65	22	35
50	40	16	13.6	161 498 706	0.078	3.7	51	77	22	42
63	50	16	13.6	161 498 707	0.143	4.7	59	99	26	49

Ball valve type 546 Pro



IR PVC-U ball valve 546 Pro With IR fusion spigots

Model:

- Lockable lever as standard (DN10-DN50)
- For easy installation and removal
- Ball seat PTFE
- Integrated stainless steel mounting inserts
- For infrared welded joints on GF machines
- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

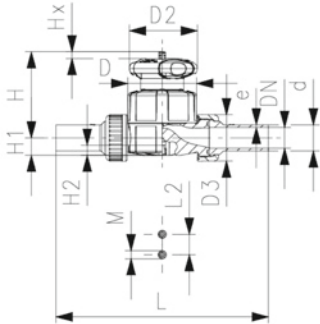
Option:

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

d (mm)	SDR	DN (mm)	PN (bar)	kv-value ($\Delta p=1$ bar) (l/min)	EPDM Code	SP	Weight (kg)	FKM Code	SP	Weight (kg)
20	9	16	16	185	161 546 982	1	0.157	161 546 992	1	0.157
25	13.6	20	16	350	161 546 983	1	0.240	161 546 993	1	0.242
32	13.6	25	16	700	161 546 984	1	0.359	161 546 994	1	0.359
40	13.6	32	16	1000	161 546 985	1	0.620	161 546 995	1	0.620
50	13.6	40	16	1600	161 546 986	1	0.838	161 546 996	1	0.844
63	13.6	50	16	3100	161 546 987	1	1.550	161 546 997	1	1.550

d (mm)	D (mm)	H (mm)	H1 (mm)	H2 (mm)	L (mm)	L1 (mm)	L2 (mm)	L4 (mm)	L5 (mm)	L6 (mm)	M	e (mm)
20	50	61	27	12	129	82	56	25	35	47	M6	2.3
25	58	74	30	12	144	106	65	25	44	62	M6	1.9
32	68	80	34	12	151	106	71	25	44	62	M6	2.4
40	84	95	44	15	170	131	85	45	57	74	M8	3.0
50	97	102	51	15	191	131	89	45	57	74	M8	3.7
63	124	117	64	15	219	152	101	45	66	86	M8	4.7

Diaphragm valve type 514



IR PVC-U diaphragm valve type 514 With IR fusion spigots

Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length
- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)

Option:

- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration

* O-Ring material: FKM

d (mm)	DN (mm)	PN (bar)	SDR	kv-value ($\Delta p=1$ bar) (l/min)	EPDM Code	SP	Weight (kg)	PTFE/ EPDM* Code	SP	Weight (kg)
20	15	10	9.0	125	161 514 942	1	0.323	161 514 982	1	0.339
25	20	10	13.6	371	161 514 943	1	0.472	161 514 983	1	0.506
32	25	10	13.6	481	161 514 944	1	0.704	161 514 984	1	0.748
40	32	10	13.6	759	161 514 945	1	0.973	161 514 985	1	1.105
50	40	10	13.6	1263	161 514 946	1	1.618	161 514 986	1	1.679
63	50	10	13.6	1728	161 514 947	1	2.484	161 514 987	1	2.548

d (mm)	FKM Code	SP	Weight (kg)	D	D2	D3	H	H1	L	L2	M	e	Lift = Hx (mm)
20	161 514 952	1	0.332	65	65	43	73	14	192	25	M6	2.3	7
25	161 514 953	1	0.499	80	65	51	81	18	216	25	M6	1.9	10
32	161 514 954	1	0.732	88	87	58	107	22	230	25	M6	2.4	13
40	161 514 955	1	1.087	101	87	72	115	26	256	45	M8	3.0	15
50	161 514 956	1	1.669	117	135	83	148	32	286	45	M8	3.7	19
63	161 514 957	1	2.555	144	135	100	166	39	322	45	M8	4.7	25

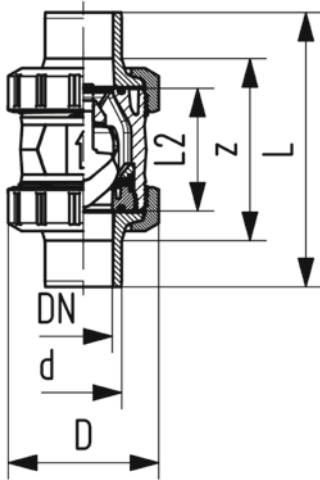
Check valve type 561



IR PVC-U check valve type 561 With IR fusion spigots

Model:

- Sealing at a minimum water column of 2 m
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length
- For welding on IR-63 Plus and IR-110 A
- Special Clamping inserts needed on IR-63 Plus and IR-110 A
- Only use Tangit KS Cleaner (799298023)



d (mm)	DN (mm)	PN (bar)	SDR	kv-value ($\Delta p=1$ bar) (l/min)	EPDM Code	SP	Weight (kg)	FKM Code	SP	Weight (kg)
20	15	16	9.0	180	161 561 972	1	0.130	161 561 982	1	0.130
25	20	16	13.6	380	161 561 973	1	0.188	161 561 983	1	0.290
32	25	16	13.6	460	161 561 974	1	0.296	161 561 984	1	0.320
40	32	16	13.6	850	161 561 975	1	0.530	161 561 985	1	0.530
50	40	16	13.6	1080	161 561 976	1	0.762	161 561 986	1	0.810
63	50	16	13.6	1670	161 561 977	1	1.419	161 561 987	1	1.450

d (mm)	D (mm)	L (mm)	L2 (mm)
20	50	129	56
25	58	141	65
32	68	151	71
40	84	170	85
50	97	192	89
63	124	219	101

Fusion Machines



IR-63 Plus Fusion Machine (with PVC-U parameter)

Model:

- Fully-equipped manually operated infrared fusion machine with integrated remote welding unit
- Welding of PVDF SYGEF (Standard/Plus), ECTFE SYGEF, PP-H PROGEF (Standard/Plus), PP-n PROGEF Natural, PE100 ecoFIT, PFA, IR PVC-U
- Dimensions d20-63 mm
- Monochrome display with icons and various languages
- 2 USB interfaces
- Heating and facing element
- Clamping slide with movable clamping units
- Clamping inserts d20-63 mm (8 pcs. per dimension), **not for PVC-U metric**
- End caps PE d20-63 mm (4 pcs. per dimension)
- Pipe stop
- Clean-room compatible accessory tray with tools
- Transport box
- 1-phase AC (50/60 Hz) 230V L/N/PE
- Power supply cable 230 V
- Extension cable for clamping slide, heater and facing tool for remote welding (5m each)
- Label printer

Note:

Clamping inserts PVC-U metric on request

Clamping inserts PFA (inch) on request

Clamping inserts CONTAIN-IT Plus on request

d-d (mm)	Code	Weight (kg)
20 - 63	790 131 007	60.000

Clamping inserts IR-63 Plus PVC-U metric



- The clamping inserts are different for each dimension. They are used to clamp and position the pipe components.
- 4x PVC-U metric clamping inserts are needed for the two inner clamping units.
- **The clamping inserts can only be used for PVC-U metric**

d (mm)	Code	Weight (kg)	Pieces
20	790 131 071	0.062	1
25	790 131 072	0.058	1
32	790 131 073	0.055	1
40	790 131 074	0.054	1
50	790 131 075	0.050	1
63	790 131 076	0.034	1



IR-110 A Automated Fusion Machine

Model:

- Fully equipped automated infrared fusion machine with integrated working table for use under clean room conditions
- Welding of PVDF SYGEF (Standard/Plus), ECTFE SYGEF, PP grey PROGEF (Standard/Plus), PP-n PROGEF Natural, PE100 ecoFIT, IR PVC-U
- Dimensions d20-110 mm
- User friendly touch-screen interface 12.1" with various languages
- 4 USB interfaces, LAN Ethernet interface, 230 V Output
- Automated facer, clamping slide and heater
- Integrated video camera and temperature sensors
- Movable clamping units
- Clamping inserts d20-90 mm (8 pcs. per dimension), **not for PVC-U metric**
- End caps PE d20-110 mm (4 pcs. per dimension)
- Shavings collection tray
- Transport box with integrated pallet
- 1-phase AC (50/60 Hz) 230V L/N/PE
- Power supply cable 230V EU Standard
- Torx key (T10) for facing knives
- Cleaning brush
- Label printer

Note:

Clamping inserts PVC-U metric on request

d-d (mm)	Code	Weight (kg)
20 - 110	790 164 001	250.000

Clamping inserts IR-110 A PVC-U metric

- The clamping inserts are different for each dimension. They are used to clamp and position the pipe components.
- 4x PVC-U metric clamping inserts are needed for the two inner clamping devices.
- **The clamping inserts can only be used for PVC-U metric**



d (mm)	Code	Weight (kg)	Pieces
20	790 132 161	0.108	1
25	790 132 162	0.105	1
32	790 132 163	0.104	1
40	790 132 164	0.100	1
50	790 132 165	0.096	1
63	790 132 166	0.085	1



Tangit KS Cleaner

- Special cleaner for plastic fusion connections in the material of PE, PP, PB, PVDF, ECTFE and PVC-U
- Suitable for Tangit Rapid. Must not be used for solvent cementing
- DVGW approved
- DW 5290 BR 0464

Size	Code	SP	Weight (kg)
1 liter	799 298 023	8	0.872



Cleaning tissue KO-TON-R

Minimum order quantity 100 pieces

- This cleaning tissue is suitable for the cleaning of the welding zone of piping components, because it is lint free and clean room checked.

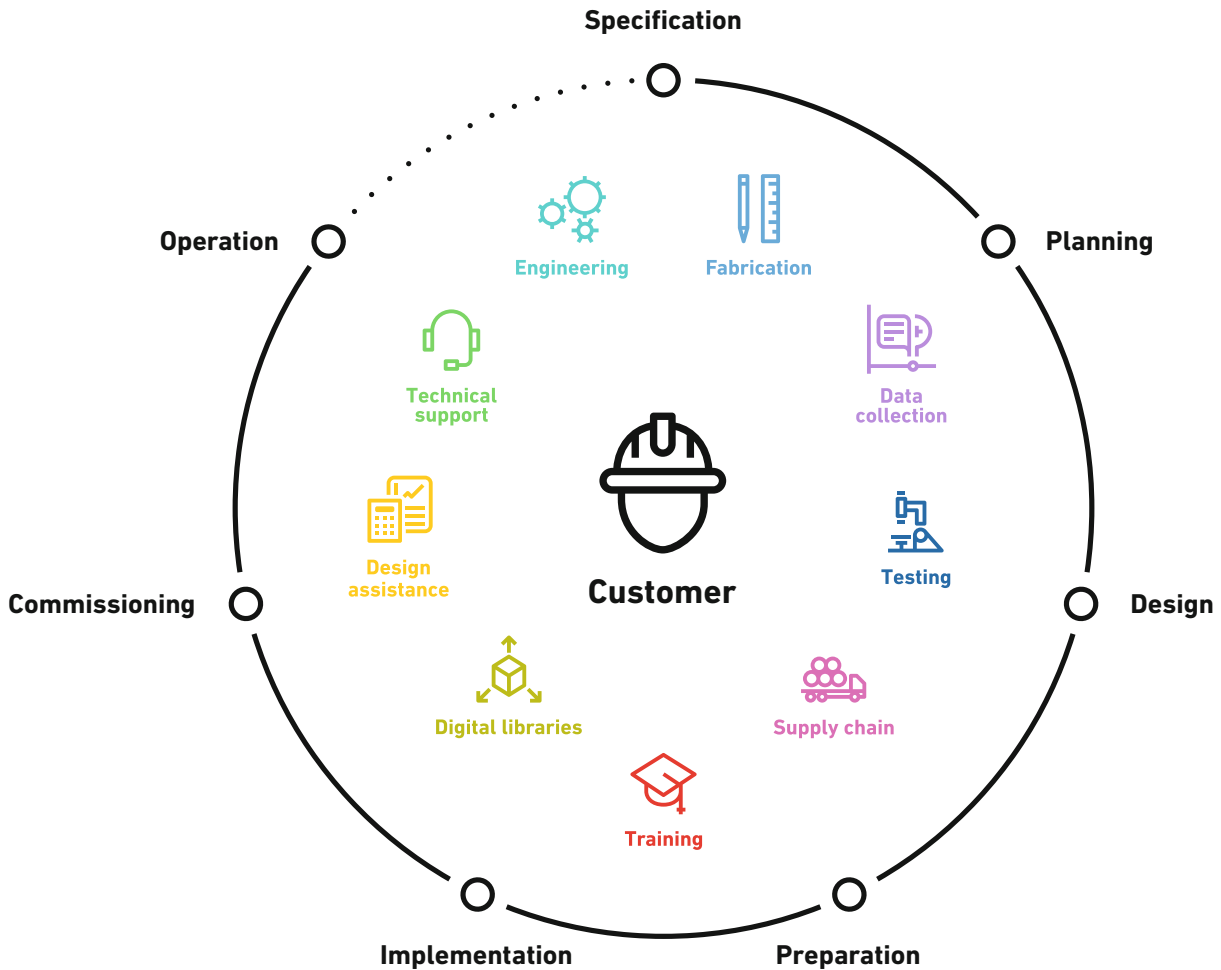
Code	Weight
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(kg)

790 122 085	0.005
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