

AQUASYSTEM PP-RCT

Increase
your flow



Connections for life

GF Piping Systems is the leading flow solutions provider across the world. We enable the safe and sustainable transport of fluids. Our business is driven by maintaining industry-leading sustainability levels, innovating through digitally enabled solutions, and investing in a culture built on performance, learning, and caring.

Your partner for modern plastic piping systems

The plastic piping systems from GF Piping Systems are non-corrosive and do not need replacing throughout the system's entire service life. Therefore, they contribute to the increased reliability of the system while lowering maintenance costs and staff requirements. They are excellently suited for applications involving potable and sewage water, coolants, acids, leaches, and other chemicals, as well as abrasive compounds.

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. With Specialized Solutions, GF Piping Systems supports the design and installation of state of the art plastic piping systems, so that owners and planners can concentrate on their daily business without interruption. GF Piping Systems is present every step of the way, from the design phase all the way through to installation and maintenance.

Strong regional footprint

GF Piping Systems has been present in the ASIAN market since 1994, when the first office in the region was registered in Singapore. Today, with seven offices in five countries, production facilities in Malaysia and Indonesia, and numerous regional partners across South East Asia, GF Piping Systems is committed to the region and ensures competent customer support and technical on-site training.



● Sales / Representative office

● Production facility

● Distributors



GF Piping Systems Malaysia

From metal to plastic

+ Why we love plastics

Extremely long service life

Plastic pipelines are maintenance-free and do not need to be replaced over the entire service life of the system (at least 25 years). This reduces the need for maintenance and repair, operating and overall costs.

Corrosion-free and abrasion-resistant

Whether potable or process water, coolants, acids and other chemicals or water-solid mixtures (e.g. sludge) - plastic piping systems excellently withstand all chemical and mechanical loads.

Faster installation

Innovative system additions ensure that plastic piping can be installed up to 50 percent faster.

Versatility

The choice of materials allows plastic pipelines to be perfectly adapted to the respective requirements.



Low weight

Plastic pipes weight 60 percent less than comparable metal pipes. Thus, they cause less constructional concern when installed in buildings or ships, while being easier to transport and move on-site.

Higher safety

The excellent properties of plastics mean that there are significantly fewer leaks compared to metal solutions. At the same time they show a comparable mechanical behavior. In certain situations, it is even better than metal because of plastic's typical flexibility.

Higher efficiency

The system's efficiency is increased by the low pressure drop of plastic pipes, their low thermal conductivity, and their excellent flow rate.



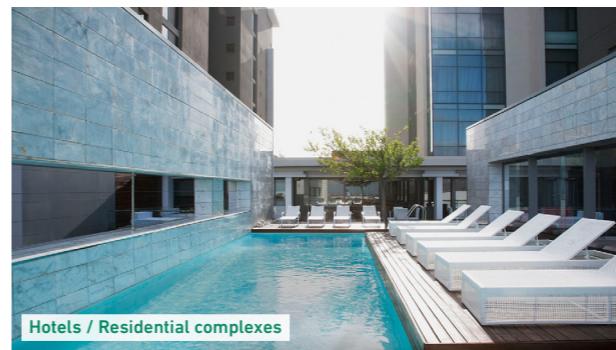
Covering your needs in building technologies

The right solutions for your potable water supply, heating and cooling applications - durable piping solutions developed to meet the highest standards of the modern building.

Potable water installations must comply with the highest hygiene standards. Hot water distribution requires an energy-efficient system including reliable measurement and control technology to ensure a high level of comfort. GF Piping Systems supplies long-lasting and efficient piping systems and valves for residential houses, hotels, hospitals, industrial buildings, recreational facilities, and ships.

Benefits

- Hygiene solutions for potable water supply in buildings
- Comfort for living and during operating
- Simple and easy to use, operate, and fast to install
- High standards for energy-efficiency and sustainability



Hotels / Residential complexes



Office buildings



Malls



Industrial buildings



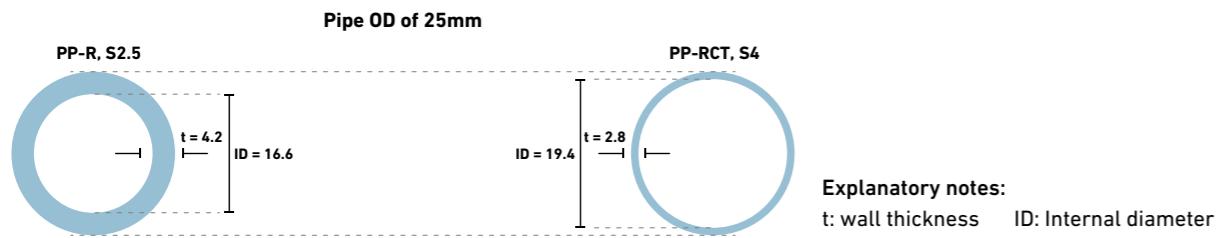
Hospitals



Public schools

Meet the next generation of piping systems

The original PP-R, a long time favorite for hot and cold water applications in apartment complexes, hotels, and malls, just got better. Made of next generation polypropylene random copolymer with modified crystallinity, AQUASYSTEM PP-RCT is one of the most technically advanced systems on the market.



Higher stability at higher temperatures

- PP-RCT structure provides higher pressure at higher operating temperature than PP-R
- Internal pressure resistance improved
- Enhanced long-term durability
- Good impact resistance

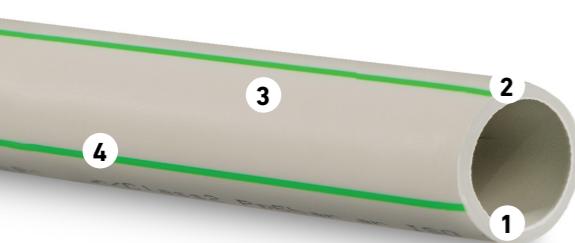
30% lower weight compared to PP-R

- Reduced wall thickness with PP-RCT leads to a lighter system
- Allowing for benefits in installation and handling

Superior flow rate

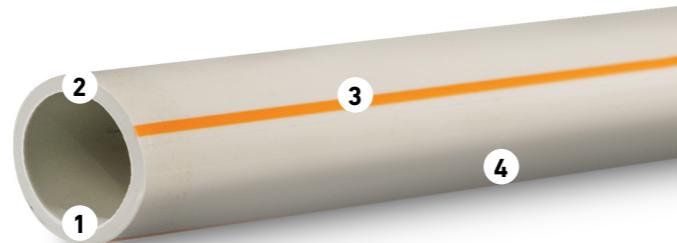
- With the same outside diameter as the original PP-R, the reduced thickness of AQUASYSTEM PP-RCT means a higher internal diameter which allows for a higher flow rate
- Reduced system costs - pipes with higher hydraulic capacity
- Do not require to upsize as much as PP-R due to larger inner diameter

Green stripes for cold water



1. Thinner wall thickness compared to PP-R pipe with the same outer diameter
2. Made of polypropylene random copolymer with modified crystallinity
3. Do not require to upsize as much as PP-R due to larger inner diameter
4. Higher pressure resistance at high temperatures for a longer period of time (compared to regular PP-R)

Orange stripes for hot water



1. Thinner wall thickness compared to PP-R pipe with the same outer diameter
2. Made of polypropylene random copolymer with modified crystallinity
3. Do not require to upsize as much as PP-R due to larger inner diameter
4. Higher pressure resistance at high temperatures for a longer period of time (compared to regular PP-R)

The right solution for your needs



Equally appreciated by end users, consultants, installers, and plumbers, AQUASYSTEM PP-RCT is the right solution for your high class building project. The system features high temperature and pressure resistance while being hygienically safe and eligible for use in potable water supply systems. Thanks to its chemical resistance behavior, the system is also a great choice for transferring or discharging chemical media.



End-Users (Developers, Residence, Facility Team)

- Lower total cost of ownership
- Reduced leakage risk
- Efficient purchasing and installation process



Installers/Plumbers

- Lower total cost of installation
- No extra training costs and time due to common jointing method
- No heavy equipment needed due to light weight
- Faster installation



Consultants

- Lower total cost of pipeline design
- Reduced leakage risk
- No upsizing required when converting from metal, due to increased flow rate

Socket Fusion Installation



1 Fix heating bushes

Attach the heating bushes on the heating tool. A maximum of two sets of bushes can be attached at the same time.



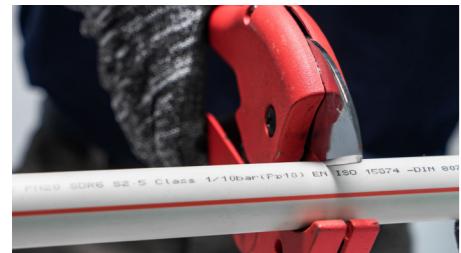
2 Clean the heating tools

Wipe the heater bush with a clean cloth. This process must be repeated after each welding.



3 Check the temperature

Once the socket fusion machine is turned on, set the temperature on the electronic display which must range between 255°C and 265°C. To ensure correct temperature, regular calibration is recommended.



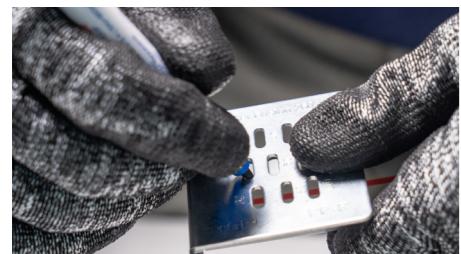
4 Cut the pipe

Cut the pipe at right angle; if necessary remove burrs from inside. If necessary cut deformed or damaged pipe ends of 5 cm.



5 Clean pipe and fitting

Clean the fitting of the sockets on the inside and the outer wall of the pipe (the presence of dust, grease or other impurities can affect the fusion quality and lead to weak jointing).



6 Mark the pipe

Mark the insertion depth on the pipe (see table). The mark must remain visible under heating and jointing.



7 Heat pipe and fitting

Push the pipe and the fitting straight into the heating bushes. Pull out the pipe and fitting slowly and without twisting once the heating time has elapsed.



8 Joint pipe and fitting

Push the pipe into the fitting so that the welding beads of pipe and fitting touch together. During the jointing time, small adjustments in angle and alignment can be made. During the cooling time, any stress on the joint must be avoided.



9 Fusion inspection

The outer fusion bead must be inspected. A double bead must be uninterrupted all around the pipe circumference.

Summary Value table

Pipe Diameter (mm)	Insertion depth (mm)	Heating time (sec.)	Jointing time (sec.)	Cooling fixed (sec.)	Cooling time (min.)
20	14	6 (5 sec. for PN10)	4	6	2
25	16	7	4	6	3
32	18	8	6	10	4
40	20	12	6	10	4
50	23	18	6	20	5
63	26	25	8	20	6
75	28	30	8	30	8
90	31	40	10	30	8
110	33	50	10	40	8
125	40	60	10	50	8

Certificate

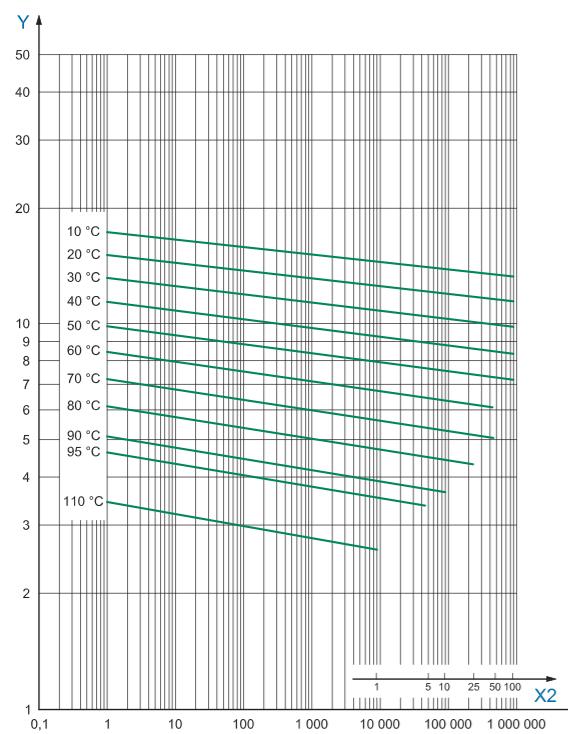
GF Piping Systems is a leading and dynamic organization in terms of continuous improvement and customer satisfaction. We provide product standards at the desired quality based on these certificates:



Physical and mechanical properties of raw material PP-RCT

Properties	Testing Conditions	Unit	Testing Method	Result
MRS Classification	20°C, extrapolation 50 years	MPa	ISO 9080	11.2
CRS Classification	70°C, extrapolation 50 years	MPa	ISO 9080	5.3
Density	23°C	g/cm³	ISO 1183	0.89 - 0.91
Melting Flow Index MFI	190°C, 5 kg 230°C, 2.16 kg 230°C, 5 kg	g/10dk g/10mn	ISO 1133	0.4 - 0.6 0.2 - 0.5 0.8 - 1.3
Tensile Stress at Yield	23°C, 50 mm/dk 50 mm/min	MPa	ISO 527	23 - 28
Tensile Strain at Yield	23°C, 50 mm/dk 50 mm/min	%	ISO 527	min %10
Elasticity Modulus	23°C, 1 mm/dk 1 mm/min	MPa	ISO 179	800 - 900
Charpy Notched Impact Strength	0°C	kJ/m²	ISO 179	9.5
Izod Notched Impact Strength	0°C	kJ/m²	DIN 52612	17
Thermal Conductivity	-	W/(m K)	DIN 52612	0.24
Coefficient of Thermal Expansion (0°C/90°C)	-	1/K	DIN 53752	1.5 * 10⁻⁴

Isothermal Mechanical Strength graphic for PP-RCT



Key
X1 time, t_1 , to fracture, in hours
X2 time, t_2 , to fracture, in years
Y hoop stress, σ , in megapascal

PP-RCT - Permissible Operating Pressure

Water Temperature	Working years	Type of Pipe		
		SDR 17	SDR 11	SDR 9
		S 8	S 5	S 4
Pressure Bar				
10°C	1	12.0	19.0	24.0
	5	11.6	18.4	23.2
	10	11.5	18.2	22.9
	25	11.3	17.9	22.5
	50	11.1	17.7	22.2
20°C	1	10.4	16.6	20.9
	5	10.1	16.0	20.2
	10	10.0	15.8	19.9
	25	9.8	15.5	19.6
	50	9.6	15.3	19.3
30°C	1	9.0	14.3	18.1
	5	8.7	13.9	17.4
	10	8.6	13.6	17.2
	25	8.4	13.4	16.9
	50	8.3	13.2	16.6
40°C	1	7.8	12.3	15.5
	5	7.5	11.9	15.0
	10	7.4	11.7	14.7
	25	7.2	11.5	14.4
	50	7.1	11.3	14.2
50°C	1	6.6	10.5	13.3
	5	6.4	10.1	12.8
	10	6.3	10.0	12.6
	25	6.1	9.7	12.3
	50	6.0	9.6	12.1
60°C	1	5.6	8.9	11.2
	5	5.4	8.6	10.8
	10	5.3	8.4	10.6
	25	5.2	8.2	10.4
	50	5.1	8.1	10.2
70°C	1	4.7	7.5	9.4
	5	4.5	7.2	9.1
	10	4.4	7.0	8.9
	25	4.3	6.9	8.7
	50	4.2	6.8	8.5
80°C	1	3.9	6.2	7.9
	5	3.7	6.0	7.5
	10	3.7	5.9	7.4
	25	3.6	5.7	7.2
	50	2.9	4.7	5.9
95°C	1	2.8	4.4	5.6
	5	2.8	4.4	5.6

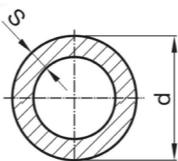
DIN8077: 2008-09, safety factor 1.5

AQUASYSTEM PP-RCT

Product Name	Page
AQUASYSTEM PP-RCT - Pipe PN 10	13
AQUASYSTEM PP-RCT - Pipe PN 16	13
AQUASYSTEM PP-RCT - Pipe PN 20	14
Socket	15
Elbow 90°	15
Elbow 45°	15
Equal Tee 90°	16
Reducing Tee 90°	16
Reducing Bush	17
End Cap	17
Swan Neck	18
Saddle with Spigot	18
Threaded Female Saddles with Spigot	19
Elbow 90° (butt fusion)	20
Elbow 45° (butt fusion)	20
Equal Tee 90° (butt fusion)	20
Reducer (butt fusion)	21
Flange Adaptor (butt fusion)	21
Electric Socket	22
Threaded Male Coupling	23
Threaded Female Coupling	23
Threaded Male Elbow 90°	23
Threaded Female Elbow 90°	24
Threaded Male Elbow 90° with Bracket	24
Threaded Female Elbow 90° with Bracket	24
Threaded Male Tee	25
Threaded Female Tee	25
Union Socket PP-H - PN10	25
Flange Adaptor	26
Backing Flange	26
Flat Gasket EPDM	26
Stop Valve PP-R	27
Ball Valve Type 546 PP-H (PN10) with Fusion Socket Metric	27
Butterfly Valves Type 567 PP-H (PN10) Hand Lever with Ratchet Settings	27
Ball Valve with Handle	28
Chrome Handle Valve PP-R	28
Adaptor Union Male Thread	29
Adaptor Union Female Thread	29
Union Socket-Socket	29



Pipe



AQUASYSTEM PP-RCT - Pipe PN 10

Model:

- Material: PP-RCT
- PN10, SDR 17, S8
- EN ISO 15874
- Colour: grey

d x s (mm)	Green Strips Code	SP (kg/m)	Length (m)
20.0 x 1.8	300 200 100	100	0.093
25.0 x 1.8	300 200 101	60	0.119
32.0 x 1.9	300 200 102	48	0.163
40.0 x 2.4	300 200 103	32	0.257
50.0 x 3.0	300 200 104	20	0.401
63.0 x 3.8	300 200 105	16	0.640
75.0 x 4.5	300 200 106	12	0.902
90.0 x 5.4	300 200 107	8	1.299
110.0 x 6.6	300 200 108	4	1.940
125.0 x 7.4	300 200 109	4	2.475

AQUASYSTEM PP-RCT - Pipe PN 16

Model:

- Material: PP-RCT
- PN16, SDR 11, S5
- EN ISO 15874
- Colour: grey

d x s (mm)	Green Strips Code	Orange Strips Code	SP (kg/m)	Length (m)
20.0 x 1.9	300 200 111	300 200 122	100	0.098
25.0 x 2.3	300 200 112	300 200 123	60	0.149
32.0 x 2.9	300 200 113	300 200 124	48	0.240
40.0 x 3.7	300 200 114	300 200 125	32	0.382
50.0 x 4.6	300 200 115	300 200 126	20	0.594
63.0 x 5.8	300 200 116	300 200 127	16	0.944
75.0 x 6.8	300 200 117	300 200 128	12	1.319
90.0 x 8.2	300 200 118	300 200 129	8	1.908
110.0 x 10.0	300 200 119	300 200 130	4	2.843
125.0 x 11.4	300 200 120	300 200 131	4	3.683
160.0 x 14.6	300 200 121	300 200 132	4	6.037

Socket Fusion Fittings

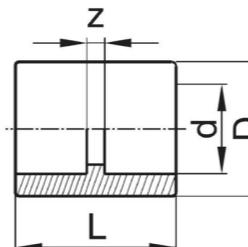
AQUASYSTEM PP-RCT - Pipe PN 20



Model:

- Material: PP-RCT
- PN20, SDR 9, S4
- EN ISO 15874
- Colour: grey

d x s (mm)	Orange Strips Code	SP (kg/m)	Length (m)
20.0 x 2.3	300 200 133	100	0.116
25.0 x 2.8	300 200 134	60	0.177
32.0 x 3.6	300 200 135	48	0.291
40.0 x 4.5	300 200 136	32	0.455
50.0 x 5.6	300 200 137	20	0.707
63.0 x 7.1	300 200 138	16	1.129
75.0 x 8.4	300 200 139	12	1.591
90.0 x 10.1	300 200 140	8	2.296
110.0 x 12.3	300 200 141	4	3.417

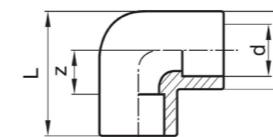


Socket

Model:

- Polypropylene - Random (PP-R)
- EN ISO 15874, MS 2286
- Colour: grey

d (mm)	Code	GP	g	D	L	z
20	300 206 022	300	12	29	34	2
25	300 206 023	200	16	34	38	2
32	300 206 024	160	27	43	43	3
40	300 206 025	200	50	55	47	3
50	300 206 026	120	92	70	53	3
63	300 206 027	60	177	88	62	4
75	300 206 028	25	242	103	67	5
90	300 206 029	16	347	122	73	5
110	300 206 030	10	586	148	83	5
125	300 206 031	8	699	160	91	5

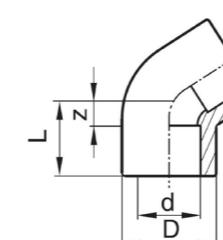


Elbow 90°

Model:

- Polypropylene - Random (PP-R)
- EN ISO 15874, MS 2286
- Colour: grey

d (mm)	Code	GP	g	D	L	z
20	300 206 032	250	18	29	42	5
25	300 206 033	150	30	34	48	6
32	300 206 034	200	46	43	60	10
40	300 206 035	120	90	55	71	14
50	300 206 036	60	188	70	88	19
63	300 206 037	30	343	88	106	24
75	300 206 038	10	490	103	124	31
90	300 206 039	6	775	122	145	39
110	300 206 040	8	1260	148	171	47
125	300 206 041	1	2311	160	195	55



Elbow 45°

Model:

- Polypropylene - Random (PP-R)
- EN ISO 15874, MS 2286
- Colour: grey

d (mm)	Code	GP	g	D	L	z
20	300 206 052	300	15	29	21	5
25	300 206 053	200	20	34	24	6
32	300 206 054	300	31	43	27	7
40	300 206 055	150	69	55	31	9
50	300 206 056	80	124	70	37	12
63	300 206 057	40	237	88	45	16
75	300 206 058	10	365	103	121	20
90	300 206 059	6	592	122	142	22
110	300 206 060	8	952	148	164	33
125	300 206 061	1	1080	160	185	52

Equal Tee 90°



Model:

- Polypropylene - Random (PP-R)
- EN ISO 15874, MS 2286
- Colour: grey

d (mm)	Code	GP	g (mm)	D (mm)	L (mm)	z (mm)	z1 (mm)
20	300 206 062	200	23	29	55	12	10
25	300 206 063	300	36	34	64	14	14
32	300 206 064	160	69	43	77	19	19
40	300 206 065	80	126	55	87	22	23
50	300 206 066	50	229	70	105	28	28
63	300 206 067	25	444	88	126	34	35
75	300 206 068	20	584	103	141	40	42
90	300 206 069	10	932	122	163	48	46
110	300 206 070	6	1077	145	197	60	59
125	300 206 100	1	1685	160	216	65	64

Reducing Tee 90°



Model:

- Polypropylene - Random (PP-R)
- EN ISO 15874, MS 2286
- Colour: grey

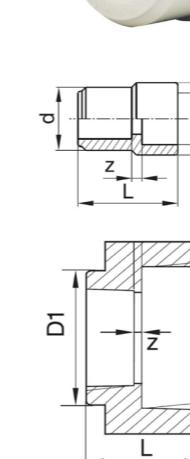
d-d1-d2 (mm)	Code	GP	g (mm)	D (mm)	L (mm)	z (mm)	z1 (mm)
25 - 20 - 25	300 206 071	250	38	34	64	14	16
32 - 20 - 32	300 206 074	160	64	43	77	19	22
32 - 25 - 32	300 206 075	60	65	43	77	19	20
40 - 20 - 40	300 206 078	100	113	55	88	22	28
40 - 25 - 40	300 206 079	100	114	55	88	22	26
40 - 32 - 40	300 206 080	80	115	55	88	22	24
50 - 20 - 50	300 206 081	60	208	70	106	28	36
50 - 25 - 50	300 206 082	60	210	70	106	28	34
50 - 32 - 50	300 206 083	60	215	70	106	28	32
50 - 40 - 50	300 206 084	50	218	70	106	28	30
63 - 25 - 63	300 206 085	25	397	88	128	35	45
63 - 32 - 63	300 206 086	10	399	88	128	35	43
63 - 40 - 63	300 206 087	25	403	88	128	35	41
63 - 50 - 63	300 206 088	25	414	88	128	35	38
75 - 25 - 75	300 206 097	20	532	103	141	40	51
75 - 32 - 75	300 206 089	20	533	103	141	40	49
75 - 40 - 75	300 206 090	20	537	103	141	40	47
75 - 50 - 75	300 206 091	20	548	103	141	40	44
75 - 63 - 75	300 206 092	20	564	103	141	40	40
90 - 32 - 90	300 206 093	10	866	122	163	48	57
90 - 40 - 90	300 206 094	10	871	122	163	48	55
90 - 50 - 90	300 206 095	10	878	122	163	48	52
90 - 63 - 90	300 206 096	10	889	122	163	48	48
110 - 50 - 110	300 206 098	6	1490	148	197	60	61
110 - 63 - 110	300 206 099	6	1490	148	197	60	57

Reducing Bush



Model:

- Polypropylene - Random (PP-R)
- EN ISO 15874, MS 2286
- Colour: grey



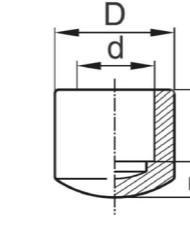
d-d1 (mm)	Code	GP	g (mm)	D (mm)	L (mm)	z (mm)	D1 (mm)
25 - 20	300 206 102	400	10	29	38	4	
32 - 20	300 206 103	240	16	29	39	5	
32 - 25	300 206 104	200	18	34	43	4	
40 - 20	300 206 105	150	23	29	44	5	
40 - 25	300 206 106	150	24	34	44	5	
40 - 32	300 206 107	250	34	43	50	7	
50 - 20	300 206 108	100	41	29	50	5	
50 - 25	300 206 109	100	40	34	50	6	
50 - 32	300 206 110	40	44	43	50	4	
50 - 40	300 206 111	40	61	55	57	5	
63 - 20	300 206 112	60	73	29	63	9	
63 - 25	300 206 113	80	74	34	63	10	
63 - 32	300 206 114	50	73	43	59	8	
63 - 40	300 206 115	50	74	55	55	4	
63 - 50	300 206 116	40	111	70	64	6	
75 - 25	300 206 118	25	251	103	54	5	34
75 - 32	300 206 119	25	255	103	56	5	44
75 - 40	300 206 120	25	247	103	58	5	55
75 - 50	300 206 121	25	245	103	61	5	70
75 - 63	300 206 122	25	252	103	65	5	88
90 - 50	300 206 125	10	357	122	64	5	70
90 - 63	300 206 126	16	357	112	68	5	88
90 - 75	300 206 127	16	361	112	70	5	103
110 - 63	300 206 129	10	604	148	74	6	88
110 - 75	300 206 130	10	589	148	75	5	103
110 - 90	300 206 131	10	585	148	78	5	122
125 - 110	300 206 132	10	920	160	90	8	148

End Cap



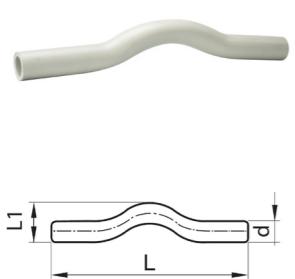
Model:

- Polypropylene - Random (PP-R)
- Colour: grey



d (mm)	Code	GP	g (mm)	D (mm)	L (mm)	z (mm)
20	300 203 132	300	7	28	22	9
25	300 203 133	200	9	35	25	7
32	300 203 134	200	15	42	30	9
40	4301904006321	150	31	53	31	11
50	4301905006421	80	69	67	41	7
63	4301906306522	50	115	83	44	17

Swan Neck



Model:

- Polypropylene - Random (PP-R)
- Colour: grey

d (mm)	Code	GP	g (mm)	L (mm)	L1 (mm)
20	4301902000121	80	38	163	48
25	300 203 143	50	75	320	60
32	300 203 144	30	126	350	64

Saddle with Spigot



Model:

- Polypropylene - Random (PP-R)
- Colour: beige

d-d1 (mm)	Code	SP	GP	B (mm)	D (mm)	E (mm)
40 - 20	760 840 190	10	10	22	20	6.5
40 - 25	760 840 191	10	10	22	27	6.5
50 - 20	760 840 192	10	10	22	20	8.0
50 - 25	760 840 193	10	10	22	27	8.0
63 - 20	760 840 194	10	10	22	20	10.0
63 - 25	760 840 195	10	10	22	27	10.0
63 - 32	760 840 196	10	10	32	30	10.0
75 - 20	760 840 197	10	10	22	20	10.0
75 - 25	760 840 198	10	10	22	27	10.0
75 - 32	760 840 199	10	10	32	30	10.0
75 - 40	760 840 200	10	10	32	30	15.0
90 - 20	760 840 220	10	10	22	20	15.0
90 - 25	760 840 221	10	10	22	27	15.0
90 - 32	760 840 222	10	10	32	30	15.0
90 - 40	760 840 231	10	10	32	30	15.0
110 - 20	760 840 223	10	10	22	20	15.0
110 - 25	760 840 224	10	10	22	27	15.0
110 - 32	760 840 225	10	10	32	30	15.0
110 - 40	760 840 226	10	10	32	30	15.0
125 - 20	760 840 227	10	10	22	27	15.0
125 - 25	760 840 228	10	10	22	30	15.0
125 - 32	760 840 229	10	10	32	30	15.0
125 - 40	760 840 230	10	10	32	30	15.0

Threaded Female Saddles with Spigot



Model:

- Polypropylene - Random (PP-R)
- Colour: beige

d-Rp (mm/inch)	Code	SP	GP	B (mm)	C (mm)	D (mm)
40-1/2	760 840 764	10	10	22	13	27
50-1/2	760 840 766	10	10	22	13	27
50-3/4	760 840 767	10	10	32	21	30
63-1/2	760 840 768	10	10	22	13	27
63-3/4	760 840 769	10	10	32	21	30
75-1/2	760 840 770	10	10	22	13	27
75-3/4	760 840 771	10	10	32	21	30
75-1	760 840 772	10	10	32	22	34
90-1/2	760 840 773	10	10	22	13	27
90-3/4	760 840 774	10	10	32	21	30
90-1	760 840 775	10	10	32	22	34
110-1/2	760 840 776	10	10	22	13	27
110-3/4	760 840 777	10	10	32	21	30
110-1	760 840 778	10	10	32	22	34
125-1/2	760 840 779	10	10	22	14	27
125-3/4	760 840 780	10	10	32	22	30
125-1	760 840 781	10	10	32	22	34

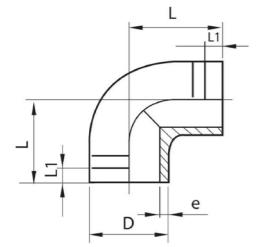
Butt Fusion Fittings

Elbow 90°

Model:

- Polypropylene - Random (PP-R)
- Colour: grey

d (mm)	Code	GP	Kg	L (mm)	L1 (mm)	e (mm)
160	300 206 605	1	4.27	231	99	14.6

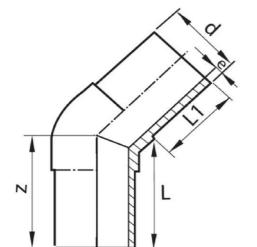


Elbow 45°

Model:

- Polypropylene - Random (PP-R)
- Colour: grey

d (mm)	Code	GP	Kg	L (mm)	L1 (mm)	e (mm)
160	300 206 615	1	3.54	151	99	14.6

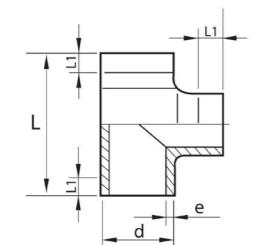


Equal Tee 90°

Model:

- Polypropylene - Random (PP-R)
- Colour: grey

d (mm)	Code	GP	Kg	L (mm)	L1 (mm)	e (mm)
160	300 206 625	1	4.47	475	99	14.6

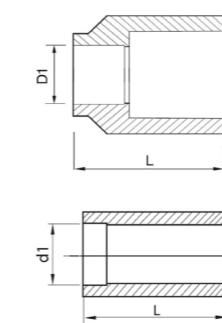


Reducer

Model:

- Polypropylene - Random (PP-R)
- Below 160mm fittings ends are only suited for socket fusion welding
- Fabricated fittings
- Colour: grey

d (mm)	Code	GP	Kg	L (mm)	e (mm)	d (mm)	d1 (mm)
160 - 110	300 206 139	1	1.20	164	14.6	160	110
160 - 125	300 206 662	1	2.15	255	14.6	160	125



Flange Adaptor

Model:

- Polypropylene - Random (PP-R)
- Colour: grey

d (mm)	Code	GP	Kg	L (mm)	L1 (mm)	L2 (mm)	D (mm)	D1 (mm)	e (mm)
160	300 206 657	6	1.54	158	25	99	175	212	14.6



Electrofusion Fittings

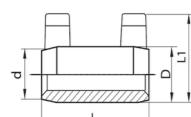


Electric Socket

Model:

- Polypropylene - Random (PP-R)
- Colour: beige

d (mm)	Code	SP	GP	g (mm)	D (mm)	L (mm)	L1 (mm)
20	760 840 452	10	10	40	33	70	50
25	760 840 453	10	10	49	38	70	57
32	760 840 454	10	10	63	46	79	62
40	760 840 455	5	5	92	55	90	71
50	760 840 456	2	2	149	67	100	82
63	760 840 457	1	1	263	86	106	101
75	760 840 458	1	1	320	103	121	115
90	760 840 459	1	1	475	121	131	134
110	760 840 460	1	1	805	142	142	156
125	760 840 461	1	1	1080	163	151	175
160	760 840 470	1	1	1950	183	161	195



Transition Fittings

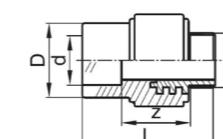


Threaded Male Coupling

Model:

- Polypropylene - Random (PP-R)
- Brass Male - Threaded
- EN ISO 15874, MS 2286
- Colour: grey
- Nickel Coating

d-R (mm/inch)	Code	(DZR Brass) Code	GP	g (mm)	D (mm)	L (mm)	z (mm)
20-1/2	300 206 241	300 206 841	80	75	28	56	25
20-3/4	300 206 242	300 206 842	60	98	34	59	24
25-1/2	300 206 243	300 206 843	60	75	33	58	25
25-3/4	300 206 244	300 206 844	60	96	34	59	24
32-3/4	300 206 245	300 206 845	60	99	42	61	23
32-1	300 206 246	300 206 846	30	204	43	75	22
40-1 1/4	300 206 248	300 206 848	10	402	54	90	31
50-1 1/2	300 206 249	300 206 849	10	526	68	93	31
63-2	300 206 250	300 206 850	6	719	86	105	30

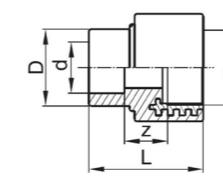


Threaded Female Coupling

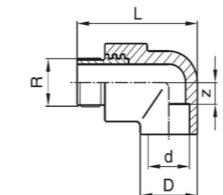


Model:

- Polypropylene - Random (PP-R)
- Brass Female - Threaded
- EN ISO 15874, MS 2286
- Colour: grey
- Nickel Coating



d-Rp (mm/inch)	Code	(DZR Brass) Code	GP	g (mm)	D (mm)	L (mm)	z (mm)
20-1/2	300 206 271	300 206 861	80	50	28	41	25
20-3/4	300 206 272	300 206 862	80	67	34	42	26
25-1/2	300 206 273	300 206 863	80	52	33	43	25
25-3/4	300 206 274	300 206 864	60	65	34	42	24
32-3/4	300 206 275	300 206 865	60	69	42	44	22
32-1	300 206 276	300 206 866	30	130	43	56	23
40-1 1/4	300 206 278	300 206 868	10	274	54	69	31
50-1 1/2	300 206 279	300 206 869	10	384	68	72	31
63-2	300 206 280	300 206 870	6	492	86	80	31



Threaded Male Elbow 90°

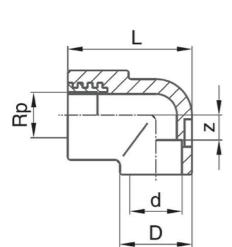
Model:

- Polypropylene - Random (PP-R)
- Brass Male - Threaded
- EN ISO 15874, MS 2286
- Colour: grey
- Nickel Coating

d-R (mm/inch)	Code	(DZR Brass) Code	GP	g (mm)	D (mm)	L (mm)	z (mm)
20-1/2	300 206 291	300 206 881	50	81	30	65	12
20-3/4	300 206 292	300 206 882	50	102	30	66	12
25-1/2	300 206 293	300 206 883	40	94	34	72	14
25-3/4	300 206 294	300 206 884	40	113	34	74	14
32-3/4	300 206 295	300 206 885	25	128	42	82	16
32-1	300 206 296	300 206 886	20	165	44	95	19

**Threaded Female Elbow 90°****Model:**

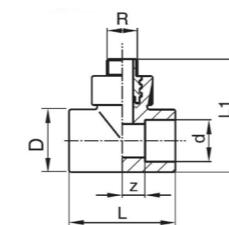
- Polypropylene - Random (PP-R)
- Brass Female - Threaded
- EN ISO 15874, MS 2286
- Colour: grey
- Nickel Coating



d-Rp (mm/inch)	Code	(DZR Brass) Code	GP	g (mm)	D (mm)	L (mm)	z (mm)
20-1/2	300 206 301	300 206 891	50	59	30	50	12
20-3/4	300 206 302	300 206 892	50	72	30	50	12
25-1/2	300 206 303	300 206 893	50	70	34	57	14
25-3/4	300 206 304	300 206 894	40	93	34	57	14
32-3/4	300 206 305	300 206 895	30	96	42	65	16
32-1	300 206 306	300 206 896	20	163	44	77	19

Threaded Male Tee**Model:**

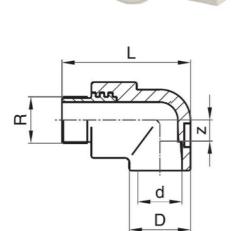
- Polypropylene - Random (PP-R)
- Brass Male - Threaded
- EN ISO 15874, MS 2286
- Colour: grey
- Nickel Coating



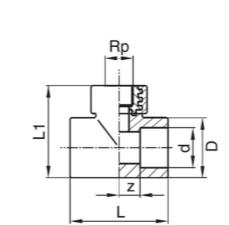
d-R (mm/inch)	Code	(DZR Brass) Code	GP	g (mm)	D (mm)	L (mm)	L1 (mm)	z (mm)
20-1/2	300 206 341	300 206 911	50	85	29	55	65	12
25-1/2	300 206 343	300 206 913	50	97	34	64	72	14
25-3/4	300 206 344	300 206 914	40	119	34	64	74	14
32-3/4	300 206 345	300 206 915	30	145	44	77	81	19
32-1	300 206 346	300 206 916	20	247	43	77	96	19

**Threaded Male Elbow 90° with Bracket****Model:**

- Polypropylene - Random (PP-R)
- Brass Male - Threaded
- Colour: grey
- Nickel Coating



d-R (mm/inch)	Code	(DZR Brass) Code	GP	g (mm)	D (mm)	L (mm)	z (mm)
20-1/2	300 206 321	300 206 901	50	83	30	65	12

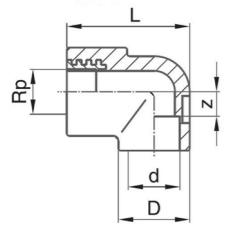
**Threaded Female Tee****Model:**

- Polypropylene - Random (PP-R)
- Brass Female - Threaded
- EN ISO 15874, MS 2286
- Colour: grey
- Nickel Coating

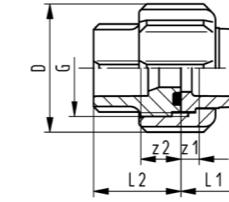
d-Rp (mm/inch)	Code	(DZR Brass) Code	GP	g (mm)	D (mm)	L (mm)	L1 (mm)	z (mm)
20-1/2	300 206 351	300 206 921	50	62	29	55	50	12
25-1/2	300 206 353	300 206 923	50	74	34	64	57	14
25-3/4	300 206 354	300 206 924	40	86	34	64	57	14
32-3/4	300 206 356	300 206 926	30	114	44	77	64	19
32-1	300 206 357	300 206 927	20	174	43	77	78	19

**Threaded Female Elbow 90° with Bracket****Model:**

- Polypropylene - Random (PP-R)
- Brass Female - Threaded
- Colour: grey
- Nickel Coating



d-Rp (mm/inch)	Code	(DZR Brass) Code	GP	g (mm)	D (mm)	L (mm)	z (mm)
20-1/2	300 206 331	300 206 905	50	61	30	50	12

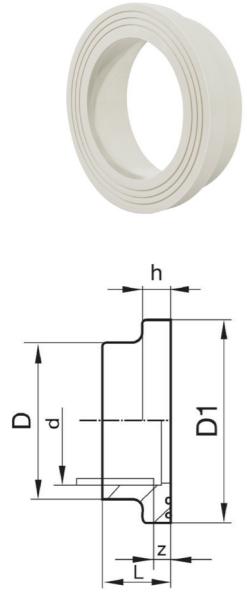
**Union Socket PP-H - PN10****Model:**

- Fusion socket metric
- Material: PP-H

d (mm)	Code	GP	g (mm)	D (mm)	L1 (mm)	L2 (mm)	z1 (mm)	z2 (mm)	G (inch)
25	727 510 157	1	62	58	21	28	5	12	1 1/4
32	727 510 158	1	79	65	23	30	5	12	1 1/2
40	727 510 159	1	137	79	25	34	5	14	2
50	727 510 160	1	180	91	28	39	5	16	2 1/4
63	727 510 161	1	312	111	32	47	5	20	2 3/4

Valves

Flange Adaptor



Model:

- Polypropylene - Random (PP-R)
- Colour: grey
- Socket fusion

d (mm)	Code	GP	g (mm)	D (mm)	L (mm)	D1 (mm)	z (mm)	h (mm)
40	300 206 415	200	30	50	28	62	6	10
50	300 206 416	120	45	61	31	74	6	12
63	300 206 417	60	74	76	35	91	6	14
75	300 206 418	25	110	90	37	108	6	13
90	300 206 419	16	163	108	40	128	6	16
110	300 206 420	10	242	131	45	151	6	19
125	300 206 421	8	337	148	53	169	10	20



Stop Valve PP-R

Model:

- Polypropylene - Random (PP-R)
- Colour: grey
- EPDM Gasket
- Nickel Coating

d (mm)	Code	(DZR Brass) Code	GP	g (mm)	L (mm)	H (mm)	D (mm)
20	300 206 832	300 206 835	30	120	72	82	29
25	300 206 833	300 206 836	20	207	84	90	37
32	300 206 834	300 206 837	20	370	104	95	47



Ball Valve Type 546 PP-H (PN10) with Fusion Socket Metric

Model:

- For easy installation and removal
- Material: PP-H

Option:

- Pneumatic or electric actuators from GF
- Individual configuration of the valve

d (mm)	Code	SP	g (mm)	D (mm)	L (mm)	z (mm)
20	167 546 002	1	115	50	95	66
25	167 546 003	1	180	58	109	77
32	167 546 004	1	255	68	119	83
40	167 546 005	1	440	84	135	99
50	167 546 006	1	610	97	147	105
63	167 546 007	1	1145	124	168	117



Butterfly Valves Type 567 PP-H (PN10) Hand Lever with Ratchet Settings

Model:

- Polypropylene Homopolymeride (PP-H)
- Double internal shaft sealing on both sides
- Double eccentric operating principle
- Standard 5° ratchet setting / fine adjustment as option
- Lockable

d (mm)	Code	SP	g (mm)	D (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)
63	167 567 002	1	969	19	264	77	134	54
75	167 567 003	1	1061	19	277	83	140	54
90	167 567 004	1	1191	19	289	89	146	54
110	167 567 005	1	1751	19	325	104	167	55
160	167 567 006	1	2989	24	373	130	189	55



Flat Gasket EPDM

Model:

- EPDM Material
- Integrated Fixation
- Suited for all metric Flange Adaptors
- Hardness approx. 65° Shore

d (mm)	Code	SP	g (mm)	D (mm)	D1 (mm)	H (mm)
40	748 400 309	5	8	59	40	3
50	748 400 310	5	12	71	50	3
63	748 400 311	5	17	88	63	3
75	748 400 312	1	24	104	75	3
90	748 400 313	1	32	123	90	3
110	748 400 314	1	62	148	110	4
125	748 400 315	1	58	168	125	4
160	748 400 317	1	63	211	160	4

Unions



Ball Valve with Handle

Model:

- Polypropylene - Random (PP-R)
- Colour: beige

d (mm)	Code	GP	g	L (mm)	M (mm)	H (mm)	D (mm)	z (mm)
20	760 840 402	60	122	73.5	85	51.5	30.0	17.0
25	760 840 403	60	130	77.5	85	51.5	35.8	18.5
32	760 840 404	32	205	89.0	108	58.0	44.5	21.5
40	760 840 405	25	355	97.5	108	70.0	56.0	22.5
50	760 840 406	13	610	112.0	108	75.0	71.0	24.5
63	760 840 407	7	935	131.5	150	101.0	89.5	27.5
75	760 840 408	5	1640	151.0	150	106.0	102.5	31.0
90	760 840 409	5	2165	188.5	305	140.0	108.0	36.0
110	760 840 410	3	3210	214.0	305	150.0	130.0	41.5
125	760 840 411	1	4800	240.0	305	165.0	160.0	50.0



Chrome Handle Valve PP-R

Model:

- Polypropylene - Random (PP-R)
- Colour: grey

d (mm)	Code	GP	g	L (mm)	H (mm)	D (mm)
20	300 206 814	20	320	111.5	72	29
25	300 206 815	20	389	119.0	84	34
32	300 206 816	20	560	138.7	104	44

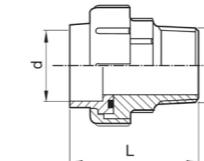


Adaptor Union Male Thread

Model:

- Polypropylene - Random (PP-R)
- EPDM O-Ring
- Colour: grey

d-R (mm/inch)	Code	(DZR Brass) Code	GP	g	L (mm)
20-1/2	300 206 702	300 206 690	80	140	52
25-3/4	300 206 703	300 206 691	60	160	56
32-1	300 206 704	300 206 692	30	220	61
40-1 1/4	300 206 705	300 206 693	10	280	76
50-1 1/2	300 206 706	300 206 694	10	360	79
63-2	300 206 707	300 206 695	6	480	89

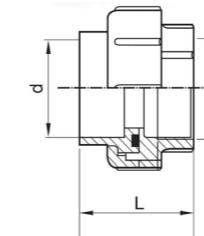


Adaptor Union Female Thread

Model:

- Polypropylene - Random (PP-R)
- EPDM O-Ring
- Colour: grey

d-Rp (mm/inch)	Code	(DZR Brass) Code	GP	g	L (mm)
20-1/2	300 206 712	300 206 722	80	120	39
25-3/4	300 206 713	300 206 723	60	140	41
32-1	300 206 714	300 206 724	30	200	43
40-1 1/4	300 206 715	300 206 725	10	240	54
50-1 1/2	300 206 716	300 206 726	10	320	57
63-2	300 206 717	300 206 727	6	440	63

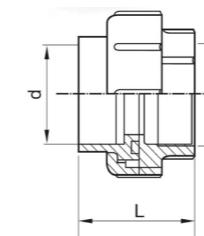


Union Socket-Socket

Model:

- Polypropylene - Random (PP-R)
- EPDM O-Ring
- Colour: grey

d (mm)	Code	(DZR Brass) Code	GP	g	L (mm)
20	300 206 731	300 206 741	80	120	41
25	300 206 732	300 206 742	60	140	45
32	300 206 733	300 206 743	30	200	49
40	300 206 734	300 206 744	10	240	60
50	300 206 735	300 206 745	10	320	66
63	300 206 736	300 206 746	6	440	74



Fully equipped with our complete solutions range

With Specialized Solutions, GF Piping Systems supports the design and installation of state of the art plastic piping systems, so that owners and planners can concentrate on their daily business without interruption. GF Piping Systems is present every step of the way, from providing planning support on new projects to testing the condition of old systems.



Engineering

Specialized expertise

Increase the efficiency of your project with the tailor-made analysis packages from GF Piping Systems and decide which offer is right for you according to your needs.

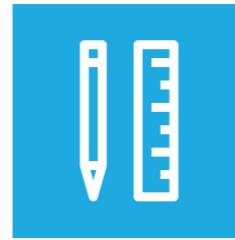
You have the choice between Project Analysis and Advanced Engineering, thus always receiving the appropriate support in every phase of your project.



Digital Libraries

Specialized models

The libraries cover three key areas for the design, creation, and maintenance of a project: Building Information Modeling, the Plant Design Software, and the CAD Library, helping you reduce costs and construction times.



Custom Product Design and Prefabrication

Specialized ideas

Having your individual needs and application in focus, our customizing teams forge the solution that fits you best, developing custom-made parts to complete systems or special solutions produced in small series, individual consulting, and off-site prefabrication.

Through our global network of flexible locations, we offer a wide range of comprehensive solutions.



Training

Specialized education

GF Piping Systems instructional courses to help you teach your customers and their installers essential knowledge for the welding of pipes and piping components, as well as an in-depth understanding of butt and electrofusion connections.

With Specialized Education from GF Piping Systems, we help prevent damage before it occurs, with well-trained and qualified installers.

Worldwide at home

Our sales companies and representatives ensure local customer support in more than 100 countries.

www.gfps.com

Argentina / Southern South America

Georg Fischer Central Plastics Sudamérica S.R.L.
Buenos Aires / Argentina
Phone +54 11 4512 02 90
gfcentral.ps.ar@georgfischer.com
www.gfps.com/ar

Australia

George Fischer Pty Ltd
Riverwood NSW 2210
Phone +61 (0) 2 9502 8000
australia.ps@georgfischer.com
www.gfps.com/au

Austria

Georg Fischer Rohrleitungssysteme GmbH
3130 Herzogenburg
Phone +43 (0) 2782 856 43-0
austria.ps@georgfischer.com
www.gfps.com/at

Belgium / Luxembourg

Georg Fischer NV/SA
1600 Sint-Pieters-Leeuw / Belgium
Phone +32 (0) 2 556 40 20
Fax +32 (0) 2 524 34 26
be.ps@georgfischer.com
www.gfps.com/be

Brazil

Georg Fischer Sist. de Tub. Ltda.
04571-020 São Paulo/SP
Phone +55 (0) 11 5525 1311
br.ps@georgfischer.com
www.gfps.com.br

Canada

Georg Fischer Piping Systems Ltd
Mississauga, ON L5T 2B2
Phone +1 (905) 670 8005
Fax +1 (905) 670 8513
ca.ps@georgfischer.com
www.gfps.com/ca

China

Georg Fischer Piping Systems Ltd
Shanghai 201319
Phone +86 21 3899 3899
china.ps@georgfischer.com
www.gfps.com/cn

Denmark / Iceland

Georg Fischer A/S
2630 Taastrup / Denmark
Phone +45 (0) 70 22 19 75
info.dk.ps@georgfischer.com
www.gfps.com/dk

Finland

Georg Fischer AB
01510 Vantaa
Phone +358 (0) 9 586 58 25
Fax +358 (0) 9 586 58 29
info.fi.ps@georgfischer.com
www.gfps.com/fi

France

Georg Fischer SAS
95932 Roissy Charles de Gaulle Cedex
Phone +33 (0) 1 41 84 68 84
fr.ps@georgfischer.com
www.gfps.com/fr

Germany

Georg Fischer GmbH
73095 Albershausen
Phone +49 (0) 7161 302 0
info.de.ps@georgfischer.com
www.gfps.com/de

India

Georg Fischer Piping Systems Pvt. Ltd
400 083 Mumbai
Phone +91 22 4007 2000
Fax +91 22 4007 2020
branchoffice@georgfischer.com
www.gfps.com/in

Indonesia

PT Georg Fischer Indonesia
Karawang 41371, Jawa Barat
Phone +62 267 432 044
Fax +62 267 431 857
indonesia.ps@georgfischer.com
www.gfps.com/id

Italy

Georg Fischer S.p.A.
20063 Cernusco S/N (MI)
Phone +39 02 921 861
it.ps@georgfischer.com
www.gfps.com/it

Japan

Georg Fischer Ltd
530-0003 Osaka
Phone +81 (0) 6 6341 2451
jp.ps@georgfischer.com
www.gfps.com/jp

Korea

Georg Fischer Korea Co. Ltd
Unit 2501, U-Tower
120 Heungdeok Jungang-ro
(Yeongdeok-dong)
Giheung-gu, Yongin-si, Gyeonggi-do
Phone +82 31 8017 1450
Fax +82 31 217 1454
kor.ps@georgfischer.com
www.gfps.com/kr

Malaysia

George Fischer (M) Sdn. Bhd.
41200 Klang, Selangor Darul Ehsan
Phone +60 (0) 3 3122 5585
Fax +60 (0) 3 3122 5575
my.ps@georgfischer.com
www.gfps.com/my

Mexico / Northern Latin America

Georg Fischer S.A. de C.V.
CP 66636 Apodaca, Nuevo Leon / Mexico
Phone +52 (81) 1340 8586
Fax +52 (81) 1522 8906
mx.ps@georgfischer.com
www.gfps.com/mx

Middle East

Georg Fischer Piping Systems (Switzerland) Ltd
Dubai / United Arab Emirates
Phone +971 4 289 49 60
gcc.ps@georgfischer.com
www.gfps.com/int

Netherlands

Georg Fischer N.V.
8161 PA Epe
Phone +31 (0) 578 678 222
nl.ps@georgfischer.com
www.gfps.com/nl

New Zealand

Georg Fischer Ltd
5018 Upper Hutt
Phone +64 527 9813
Fax +64 527 9834
nz.ps@georgfischer.com
www.gfps.com/nz

Norway

Georg Fischer AS
1351 Rud
Phone +47 67 18 29 00
no.ps@georgfischer.com
www.gfps.com/no

Philippines

George Fischer Pte Ltd
Representative Office
1604 Pasig City
Phone +632 571 2365
Fax +632 571 2368
sgp.ps@georgfischer.com
www.gfps.com/sg

Poland

Georg Fischer Sp. z o.o.
05-090 Sekocin Nowy
Phone +48 (0) 22 31 31 0 50
poland.ps@georgfischer.com
www.gfps.com/pl

Romania

Georg Fischer Piping Systems (Switzerland) Ltd
020257 Bucharest - Sector 2
Phone +40 (0) 21 230 53 80
ro.ps@georgfischer.com
www.gfps.com/int

Russia

Georg Fischer Piping Systems (Switzerland) Ltd
Moscow 125040
Phone +7 495 748 11 44
ru.ps@georgfischer.com
www.gfps.com/ru

Singapore

George Fischer Pte Ltd
528 872 Singapore
Phone +65 6747 0611
Fax +65 6747 0577
sgp.ps@georgfischer.com
www.gfps.com.sg

Spain / Portugal

Georg Fischer S.A.
28046 Madrid / Spain
Phone +34 (0) 91 781 98 90
es.ps@georgfischer.com
www.gfps.com/es

Sweden

Georg Fischer AB
117 43 Stockholm
Phone +46 (0) 8 506 775 00
info.se.ps@georgfischer.com
www.gfps.com/se

Switzerland

Georg Fischer Rohrleitungssysteme (Schweiz) AG
8201 Schaffhausen
Phone +41 (0) 52 631 3026
ch.ps@georgfischer.com
www.gfps.com/ch

Taiwan

Georg Fischer Co. Ltd
San Chung Dist., New Taipei City
Phone +886 2 8512 2822
Fax +886 2 8512 2823
www.gfps.com/tw

United Kingdom / Ireland

George Fischer Sales Limited
Coventry, CV2 2ST / United Kingdom
Phone +44 (0) 2476 535 535
uk.ps@georgfischer.com
www.gfps.com/uk

USA / Caribbean

Georg Fischer LLC
92618 Irvine, CA / USA
Phone +1 714 731 8800
Fax +1 714 731 6201
us.ps@georgfischer.com
www.gfps.com/us

Vietnam

George Fischer Pte Ltd
Representative Office
Ho Chi Minh City
Phone +84 28 3948 4000
Fax +84 28 3948 4010
sgp.ps@georgfischer.com
www.gfps.com/vn

International

Georg Fischer Piping Systems (Switzerland) Ltd
8201 Schaffhausen / Switzerland
Phone +41 (0) 52 631 3003
Fax +41 (0) 52 631 2893
info.export@georgfischer.com
www.gfps.com/int



Discover more about AQUASYSTEM PP-RCT:

