

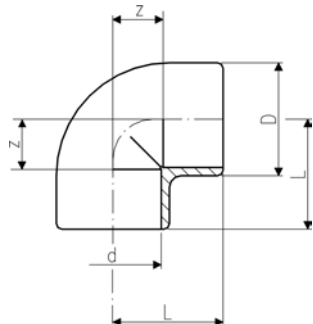
Fittings for Socket Fusion

PROGEF Standard, Elbows 90°

27 10 01

Model:

- Material: PP-H



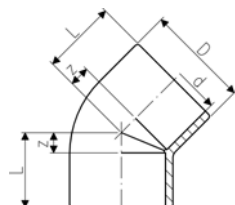
d [mm]	PN	Code	kg	D [mm]	L [mm]	z [mm]
16	10	727 100 105	0.015	26	25	12
20	10	727 100 106	0.020	31	28	14
25	10	727 100 107	0.029	36	32	16
32	10	727 100 108	0.044	44	38	20
40	10	727 100 109	0.074	54	44	24
50	10	727 100 110	0.128	66	51	28
63	10	727 100 111	0.230	82	62	35
75	10	727 100 112	0.317	93	76	45
90	10	727 100 113	0.512	110	88	53
110	10	727 100 114	0.874	134	106	65

27 15 01

PROGEF Standard, Elbows 45°

Model:

- Material: PP-H



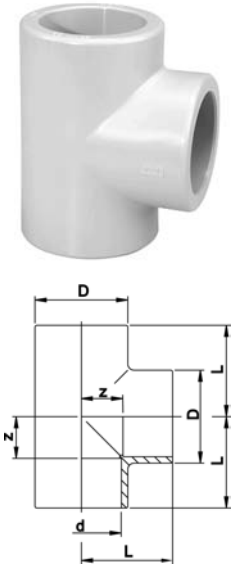
d [mm]	PN	Code	kg	D [mm]	L [mm]	z [mm]
16	10	727 150 105	0.008	23	20	7
20	10	727 150 106	0.016	31	21	7
25	10	727 150 107	0.024	36	24	8
32	10	727 150 108	0.036	44	28	10
40	10	727 150 109	0.059	53	33	13
50	10	727 150 110	0.084	64	36	13
63	10	727 150 111	0.185	82	43	16
75	10	727 150 112	0.234	93	51	20
90	10	727 150 113	0.405	114	58	23
110	10	727 150 114	0.657	134	68	27

27 20 01

PROGEF Standard, Tees 90° equal

Model:

- Material: PP-H



d [mm]	PN	Code	kg	D [mm]	L [mm]	z [mm]
16	10	727 200 105	0.019	26	25	12
20	10	727 200 106	0.027	31	28	14
25	10	727 200 107	0.038	36	32	16
32	10	727 200 108	0.058	44	38	20
40	10	727 200 109	0.094	54	44	24
50	10	727 200 110	0.158	66	51	28
63	10	727 200 111	0.288	82	62	35
75	10	727 200 112	0.380	93	76	45
90	10	727 200 113	0.739	114	88	53
110	10	727 200 114	1.070	134	106	65

27 91 01

PROGEF Standard, Sockets equal

Model:

- Material: PP-H



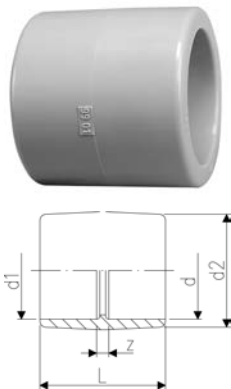
d [mm]	PN	Code	kg	D [mm]	L [mm]	z [mm]
16	10	727 910 105	0.010	26	33	7
20	10	727 910 106	0.013	31	35	7
25	10	727 910 107	0.019	36	39	7
32	10	727 910 108	0.026	44	43	7
40	10	727 910 109	0.042	54	48	8
50	10	727 910 110	0.075	66	54	8
63	10	727 910 111	0.129	82	62	8
75	10	727 910 112	0.144	93	70	8
90	10	727 910 113	0.257	112	81	11
110	10	727 910 114	0.405	134	96	14

27 91 30

Adaptor Sockets, PP-H metric - Inch BS

Model:

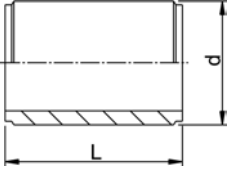
- Material: PP-H
- With fusion socket metric and BS Inch (ASTM)



d [mm]	d1 [inch]	PN	Code	kg	d2 [mm]	L [mm]	z [mm]
20	1/2	10	727 913 006	0.013	31	35	7
25	3/4	10	727 913 007	0.010	36	39	7
32	1	10	727 913 008	0.025	44	43	7
40	1 1/4	10	727 913 009	0.040	54	48	8
50	1 1/2	10	727 913 010	0.100	66	54	8
63	2	10	727 913 011	0.130	82	62	8
90	3	10	727 913 013	0.260	112	81	10
110	4	10	727 913 014	0.389	134	96	12

27 91 09

PROGEF Standard, Barrel Nipples



Model:

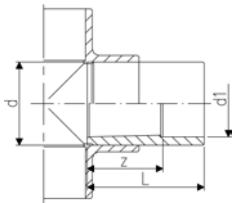
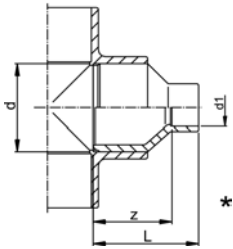
- Material: PP-H
- With fusion sockets on both sides
- For the shortest possible distance between fittings
- Overall length $L = 2 \times$ fusion length

* In these two sizes, stiffeners Code No. 727 900 006 (20 x 1,9) ad 727 900 007 (25 x 2,3) must be used with socket fusion joints.

d [mm]	PN	Code	kg	L [mm]	e [mm]
*20	10	727 910 906	0.005	37	1.9
*25	10	727 910 907	0.006	41	2.3
32	10	727 910 908	0.010	45	2.9
40	10	727 910 909	0.017	50	3.7
50	10	727 910 910	0.029	55	4.6
63	10	727 910 911	0.058	64	5.8
75	10	727 910 912	0.096	76	6.8
90	10	727 910 913	0.167	90	8.2
110	10	727 910 914	0.305	108	10.0

27 91 03

PROGEF Standard, Reducers



Model:

- Material: PP-H

Note:

- * Fusion spigot and socket

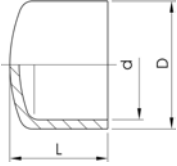
d [mm]	d1 [mm]	PN	Code	kg	L [mm]	z [mm]
20	16	10	727 910 334	0.009	35	22
25	16	10	727 910 338	0.010	38	25
25	20	10	727 910 337	0.014	37	23
32	20	10	727 910 342	0.016	43	29
32	25	10	727 910 341	0.020	43	27
*40	20	10	727 910 348	0.022	48	34
*40	25	10	727 910 347	0.026	48	32
40	32	10	727 910 346	0.031	48	30
*50	20	10	727 910 355	0.034	54	40
*50	25	10	727 910 354	0.035	54	38
*50	32	10	727 910 353	0.040	54	36
50	40	10	727 910 352	0.047	54	34
*63	25	10	727 910 361	0.058	64	48
*63	32	10	727 910 360	0.061	64	46
*63	40	10	727 910 359	0.068	64	44
63	50	10	727 910 358	0.082	64	41
75	63	10	727 910 364	0.098	62	35
*90	63	10	727 910 371	0.181	88	61
90	75	10	727 910 370	0.134	70	39
110	90	10	727 910 376	0.247	81	46

27 96 01

PROGEF Standard, End Caps

Model:

- Material: PP-H



d [mm]	PN	Code	kg	D [mm]	L [mm]
16	10	727 960 105	0.006	25	20
20	10	727 960 106	0.010	30	27
25	10	727 960 107	0.015	36	30
32	10	727 960 108	0.024	44	34
40	10	727 960 109	0.036	53	38
50	10	727 960 110	0.061	65	44
63	10	727 960 111	0.098	80	51
75	10	727 960 112	0.146	91	65
90	10	727 960 113	0.273	111	77
110	10	727 960 114	0.417	137	93

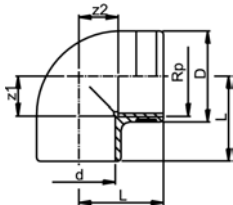
Adaptor Fittings for Socket Fusion

27 10 02

PROGEF Standard, Elbows 90°, metric - Rp

Model:

- Material: PP-H
- With fusion socket metric and parallel female thread Rp, reinforced
- Connection to plastic or metal
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to PP



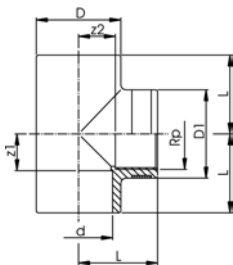
d [mm]	Rp [inch]	PN	Code	kg	D [mm]	L [mm]	z1 [mm]	z2 [mm]
20	1/2	10	727 100 206	0.022	30	28	14	14
25	3/4	10	727 100 207	0.029	35	32	16	16
32	1	10	727 100 208	0.054	44	38	20	20
40	1 1/4	10	727 100 209	0.087	54	44	24	24

27 20 02

PROGEF Standard, Tees 90°, metric - Rp

Model:

- Material: PP-H
- Line, with fusion socket metric
- Branch, with BSP parallel female thread Rp, reinforced
- Connection to plastic or metal
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to PP



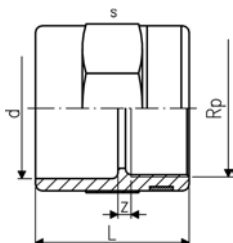
d [mm]	Rp [inch]	PN	Code	kg	D [mm]	L [mm]	z1 [mm]	z2 [mm]
20	1/2	10	727 200 206	0.030	31	28	14	14
25	3/4	10	727 200 207	0.042	36	32	16	16
32	1	10	727 200 208	0.069	44	38	20	20
40	1 1/4	10	727 200 209	0.107	54	44	24	24

27 91 02

PROGEF Standard, Adaptor Sockets, metric - Rp

Model:

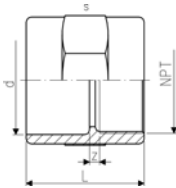
- Material: PP-H
- With fusion socket metric and parallel female thread Rp, reinforced
- Connection to plastic or metal
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to PP



d [mm]	Rp [inch]	PN	Code	kg	L [mm]	s [mm]	z [mm]
20	3/8	10	727 910 205	0.017	35	32	7
20	1/2	10	727 910 206	0.017	40	32	7
25	3/4	10	727 910 207	0.023	42	36	7
32	1	10	727 910 208	0.038	48	46	7
40	1 1/4	10	727 910 209	0.056	53	55	7
50	1 1/2	10	727 910 210	0.089	54	65	9
63	2	10	727 910 211	0.137	62	80	9

27 91 42

Adaptor Sockets, PP-H metric - NPT



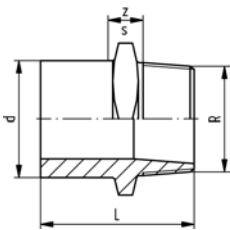
Model:

- Material: PP-H
- With fusion socket metric and NPT tapered female thread, reinforced
- Connection to plastic or metal
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to PP

d [mm]	NPT [inch]	PN	Code	kg	L [mm]	s [mm]	z [mm]
20	½	10	727 914 266	0.017	40	32	7
25	¾	10	727 914 267	0.023	42	36	7
32	1	10	727 914 268	0.038	48	46	7
40	1 ¼	10	727 914 269	0.056	53	55	7
50	1 ½	10	727 914 270	0.092	54	65	9
63	2	10	727 914 271	0.146	62	80	9

27 91 05

PROGEF Standard, Adaptor Nipples, metric - R



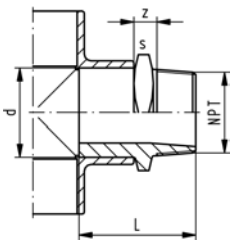
Model:

- Material: PP-H
- With fusion spigot metric and BSP tapered male thread
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PP

d [mm]	R [inch]	PN	Code	kg	L [mm]	s [mm]	z [mm]
16	⅜	10	727 910 505	0.008	37	27	13
20	½	10	727 910 506	0.012	42	32	13
25	¾	10	727 910 507	0.016	46	36	13
32	1	10	727 910 508	0.027	52	46	12
40	1 ¼	10	727 910 509	0.041	56	55	14
50	1 ½	10	727 910 510	0.062	60	65	15
63	2	10	727 910 511	0.100	69	80	16

27 91 45

PROGEF Standard, Adaptor Nipples metric - NPT



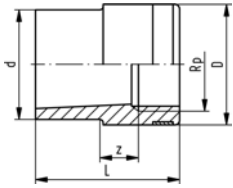
Model:

- Material: PP-H
- With fusion spigot metric and NPT tapered male thread
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PP

d [mm]	NPT [inch]	PN	Code	kg	s [mm]	L [mm]	z [mm]
16	⅜	10	727 914 555	0.008	27	37	13
20	½	10	727 914 556	0.012	32	42	13
25	¾	10	727 914 557	0.016	36	46	13
32	1	10	727 914 558	0.027	46	52	12
40	1 ¼	10	727 914 559	0.041	55	56	14
50	1 ½	10	727 914 560	0.100	65	60	15
63	2	10	727 914 561	0.185	80	69	16

27 91 04

PROGEF Standard, Reducing Bushes metric - Rp



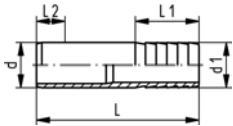
Model:

- Material: PP-H
- With fusion spigot metric and BSP parallel female thread, reinforced
- Connection to plastic or metal
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to PP

d [mm]	Rp [inch]	PN	Code	kg	L [mm]	z [mm]
20	¼	10	727 910 433	0.008	36	7
20	⅜	10	727 910 434	0.011	36	7
25	½	10	727 910 437	0.015	45	6
32	¾	10	727 910 441	0.023	47	8
40	1	10	727 910 446	0.039	53	9
50	1 ¼	10	727 910 452	0.061	55	10

27 96 04

PROGEF Standard, Hose Connectors metric



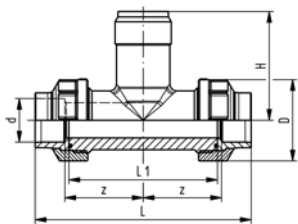
Model:

- Material: PP-H
- With socket fusion spigot metric and parallel hose connection

d [mm]	d1 [mm]	PN	Code	kg	L [mm]	L1 [mm]	L2 [mm]
20	20	10	727 960 406	0.009	78	27	14
25	25	10	727 960 407	0.015	91	36	16
32	32	10	727 960 408	0.026	100	36	18
40	40	10	727 960 409	0.040	104	42	20
50	50	10	727 960 410	0.061	90	48	23
63	60	10	727 960 411	0.096	100	50	27

33 31 00

Installation Fitting Type 310, PE80 for Socket Systems metric



Model:

- For Signet Paddlewheel Sensors Type -X0 (104 mm)
- Body and union nut PP-H
- Union end with fusion socket PE80

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
20	15	10	733 310 006	733 310 036	0.136
25	20	10	733 310 007	733 310 037	0.190
32	25	10	733 310 008	733 310 038	0.250
40	32	10	733 310 009	733 310 039	0.356
50	40	10	733 310 010	733 310 040	0.510
63	50	10	733 310 011	733 310 041	0.800

d [mm]	DN [mm]	D [mm]	z [mm]	L [mm]	L1 [mm]	H [mm]	Sensor Type
20	15	48	50	128	90	76	X0
25	20	58	55	142	100	78	X0
32	25	65	60	156	110	81	X0
40	32	79	60	160	110	85	X0
50	40	91	65	176	120	89	X0
63	50	105	70	194	130	95	X0

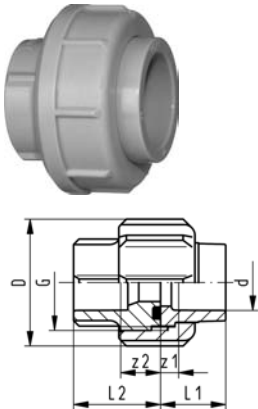
Unions for Socket Fusion

EPDM 27 51 01
FPM 27 52 01

PROGEF Standard, Unions, metric

Model:

- Material: PP-H
- With fusion sockets metric
- D75-110 with new thread geometry, now rated PN10 up to d110
- Jointing face: with O-ring groove
- **For the dimensions d75-110 please see instructions for the installation**



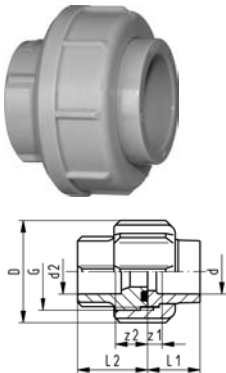
d [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	G [inch]	L1 [mm]	L2 [mm]	z [mm]	z1 [mm]
16	10	727 510 155	727 520 155	0.020	35	3/4	18	24	5	11
20	10	727 510 156	727 520 156	0.038	48	1	19	26	5	12
25	10	727 510 157	727 520 157	0.062	58	1 1/4	21	28	5	12
32	10	727 510 158	727 520 158	0.079	65	1 1/2	23	30	5	12
40	10	727 510 159	727 520 159	0.137	79	2	25	34	5	14
50	10	727 510 160	727 520 160	0.180	91	2 1/4	28	39	5	16
63	10	727 510 161	727 520 161	0.312	111	2 3/4	32	47	5	20
75	10	727 510 172	727 520 172	0.450	135	S107,5x3,6	36	51	5	20
90	10	727 510 173	727 520 173	0.645	158	S127,5x3,6	42	55	7	20
110	10	727 510 174	727 520 174	1.020	188	S152,5x3,6	49	54	7	12

27 51 30

PROGEF Standard, Adapter Unions, metric - Inch BS (ASTM)

Model:

- Material: PP-H
- With fusion sockets metric
- Jointing face: with O-ring groove



d [mm]	d2	PN	Code	kg	D [mm]	G [inch]	L1 [mm]	L2 [mm]	z1 [mm]	z2 [mm]
20	1/2	10	727 513 006	0.036	48	1	19	26	5	12
25	3/4	10	727 513 007	0.060	58	1 1/4	21	28	5	12
32	1	10	727 513 008	0.079	65	1 1/2	23	30	5	12
40	1 1/4	10	727 513 009	0.112	79	2	25	34	5	14
50	1 1/2	10	727 513 010	0.182	91	2 1/4	28	39	5	16
63	2	10	727 513 011	0.315	111	2 3/4	32	47	5	20

Instructions for the installation of unions in PP, PE d 75, d 90 and d 110

The newest generation of plastic unions in the above materials and dimensions has been fitted with a state-of-the-art, plastics-oriented buttress thread. You therefore have a product in which the nominal pressure and the safety reserve have been dramatically increased. Also new are the butt fusion versions. In this connection, there are a few points which you must be aware of.

Caution

- ① The threads of the union nut and bush have been reworked for PP, PVDF and PE! When using individual parts, please check prior to installation if the threads of the union bush and the union nut coincide.



Union bush with trapezoid thread on union nut with trapezoid thread
or
Union bush with buttress thread on union nut with buttress thread

Tip

To make installation of the union easier, wet the union nut.

- ② For the dimensions d 90 and d 110 we advise fusing the complete union, if possible (or slide the union nut to the collar of the union end) because after fusion the union nut cannot be slid over the fusion bead. (Fig. 1)
- ③ For design reasons, it is theoretically possible to combine different nominal diameters of union ends and nuts. To make sure combinations are technically correct, you can find the code numbers of the single parts and spare parts for each union in the Tables 1-3.

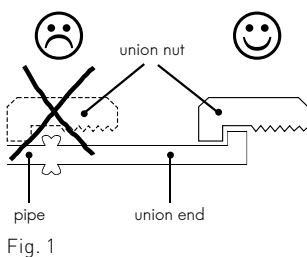


Fig. 1

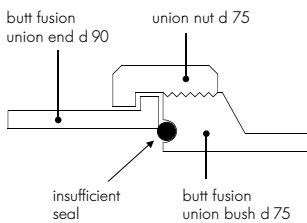


Fig. 2

Caution

Only use union bushes and union ends with the same nominal diameter!

A butt fusion union bush d 75 may not be combined with a butt fusion union end d 90 to form a reducer because this can cause leakage, as illustrated to the left. (Fig. 2)

Markings on the union nuts

SF/MS = socket fusion, BF/ST = butt fusion

SF/MS 75 specified for socket fusion d 75
BF/ST 75-90 specified for butt fusion d 75-75 and d 90-90

SF/MS 90 specified socket fusion d 90
BF/ST 110 specified butt fusion d 110

110 specified for socket fusion d 110

Tip

We recommend changing materials only for the union end for installation reasons.

Selection tables for single parts and spare parts



Butt fusion

Socket fusion

Table 1

Single parts for **PP-H** unions d 75, d 90 and d 110

d	BF/ST	SF/MS	SDR	PN	Code union end	Code union bush	Code union nut*
75	==		11	10	727 608 512	727 648 512	727 690 422
			17.6	6	727 608 412	727 648 412	727 690 422
			—	10	727 600 112	727 640 172	727 690 422
90	==		11	10	727 608 513	727 648 513	727 690 422
			17.6	6	727 608 413	727 648 413	727 690 422
			—	10	727 600 113	727 640 173	727 690 423
110	==		11	10	727 608 514	727 648 514	727 690 423
			17.6	6	727 608 414	727 648 414	727 690 423
			—	10	727 600 114	727 640 174	727 690 424

Table 2

Single parts for **PE 100** unions d 75, d 90 and d 110

d	BF/ST	SF/MS	SDR	PN	Code union end	Code union bush	Code union nut*
75	==		11	10	753 608 612	753 648 612	727 690 442
			17.6	10	753 608 412	753 648 412	727 690 442
90	==		11	10	753 608 613	753 648 613	727 690 442
			17.6	10	753 608 413	753 648 413	727 690 442
110	==		11	10	753 608 614	753 648 614	727 690 443
			17.6	10	753 608 414	753 648 414	727 690 443

Table 3

O-Rings for PP-H, PE 100

d	BF/ST	SF/MS	SDR	PN	Code O-Ring EPDM ¹	Code O-Ring FPM ¹
75	==			16	748 410 013	749 410 013
				16	748 410 014	749 410 014
90	==			16	748 410 014	749 410 014
				16	748 410 015	749 410 015
110	==			16	748 410 015	749 410 015
				16	748 410 016	749 410 016

* Union nuts overlap several dimensions

¹ Flange adaptor O-rings, one size smaller in nominal dimensions, are used for the d 75–110 butt-fusion unions

Adaptor Unions for Socket Fusion

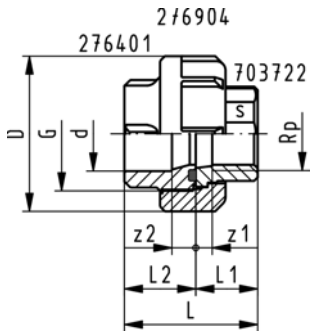
27 53 03

Adaptor Unions, PP-H / malleable iron metric - Rp



Model:

- Union Nut: PP-H
- Union Bush: fusion socket PP-H metric
- Union End: malleable iron with parallel female thread Rp
- Gasket: O-Ring EPDM No. 48 41 00



d [mm]	Rp [inch]	Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z1 [mm]	z2 [mm]	G [inch]	s [mm]
20	1/2	727 530 306	0.073	43	48	22	26	9	10	1	25
25	3/4	727 530 307	0.118	51	50	22	28	7	10	1 1/4	31
32	1	727 530 308	0.199	58	56	26	30	9	10	1 1/2	38
40	1 1/4	727 530 309	0.276	72	65	31	34	12	12	2	48
50	1 1/2	727 530 310	0.357	83	72	33	39	14	14	2 1/4	54
63	2	727 530 311	0.579	100	82	35	47	11	18	2 3/4	67

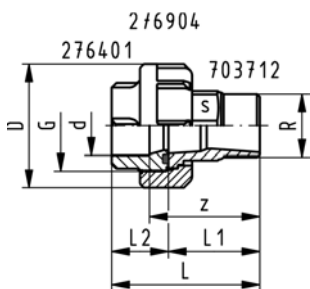
27 53 08

Adaptor Unions, PP-H / malleable iron metric - R



Model:

- Union Nut: PP-H
- Union Bush: fusion socket PP-H metric
- Union End: malleable iron with taper male thread R
- Gasket: O-Ring EPDM No. 48 41 00



d [mm]	R [inch]	Code	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z [mm]	G [inch]	s [mm]
20	1/2	727 530 806	43	66	40	26	50	1	25
25	3/4	727 530 807	51	71	43	28	53	1 1/4	31
32	1	727 530 808	58	78	48	30	58	1 1/2	38
40	1 1/4	727 530 809	72	91	57	34	69	2	48
50	1 1/2	727 530 810	83	98	59	39	73	2 1/4	54
63	2	727 530 811	100	109	62	47	80	2 3/4	67

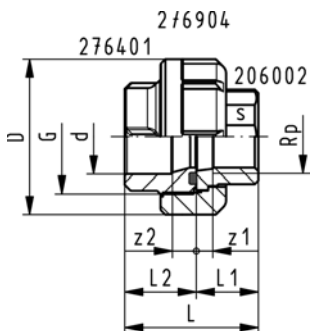
27 55 03

Adaptor Unions, PP-H / Brass metric - Rp



Model:

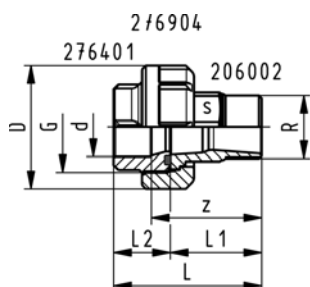
- Union Nut: PP-H
- Union Bush: fusion socket PP-H metric
- Union End: brass with parallel female thread Rp
- Gasket: O-Ring EPDM No. 48 41 00



d [mm]	Rp [inch]	PN	Code	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z1 [mm]	z2 [mm]	G [inch]	s [mm]
20	1/2	10	727 550 306	48	48	22	26	10	10	1	25
25	3/4	10	727 550 307	58	50	22	28	6	10	1 1/4	31
32	1	10	727 550 308	65	57	27	30	8	10	1 1/2	38
40	1 1/4	10	727 550 309	79	65	31	34	10	12	2	48
50	1 1/2	10	727 550 310	91	69	30	39	9	14	2 1/4	54
63	2	10	727 550 311	105	81	34	47	8	18	2 3/4	67

27 55 08

Adaptor Unions, PP-H / Brass metric - R



Model:

- Union Nut: PP-H
- Union Bush: fusion socket PP-H metric
- Union End: brass with taper male thread R
- Gasket: O-Ring EPDM No. 48 41 00

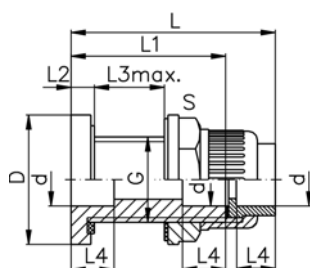
d [mm]	R [inch]	PN	Code	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z [mm]	G [inch]	s [mm]
20	1/2	10	727 550 806	48	63	37	26	47	1	25
25	3/4	10	727 550 807	58	68	40	28	50	1 1/4	31
32	1	10	727 550 808	65	73	43	30	53	1 1/2	38
40	1 1/2	10	727 550 809	79	82	48	34	60	2	48
50	1 1/2	10	727 550 810	91	89	50	39	64	2 1/4	54
63	2	10	727 550 811	105	104	57	47	75	2 3/4	67

67 05 02

Tank Adaptors, PP

Model:

- Material: PP-H
- End connection: Union with fusion socket metric
- Gasket: flat gasket EPDM



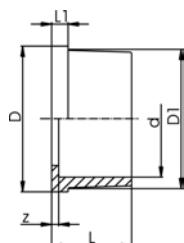
d [mm]	Code	kg	G [inch]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	s [mm]	Diameter of bore in tank side [mm]
20	167 050 226	0.083	1	56	89	67	11	30	16	38	35
25	167 050 227	0.135	1 1/4	65	96	72	12	32	18	47	43
32	167 050 228	0.158	1 1/2	70	100	75	12	33	20	53	49
40	167 050 229	0.305	2	95	106	78	12	32	22	75	61
50	167 050 230	0.325	2 1/4	95	112	82	13	32	25	75	67
63	167 050 231	0.325	2 3/4	115	112	87	13	33	29	101	83

27 60 01

Union Ends, PP-H

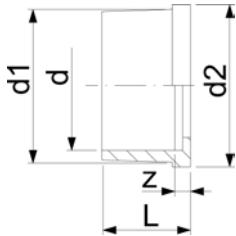
Model:

- Material: PP-H
- With fusion sockets metric
- Suitable for unions, diaphragm valves Type 314, tank adaptors and Vortex sensors



d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	10	727 600 105	0.004	24	22	18	4	3
20	10	727 600 106	0.006	30	28	19	5	3
25	10	727 600 107	0.011	39	36	21	5	3
32	10	727 600 108	0.014	45	42	23	6	3
40	10	727 600 109	0.025	57	53	25	6	3
50	10	727 600 110	0.024	63	59	28	7	3
63	10	727 600 111	0.042	79	74	32	8	3
75	10	727 600 112	0.085	101	91	36	10	3
90	10	727 600 113	0.130	121	108	42	11	5
110	10	727 600 114	0.220	146	131	49	12	6

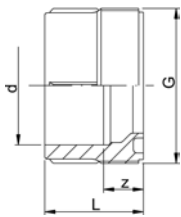
34 60 01

Union Ends, PE80**Model:**

- With fusion socket metric
- Suitable for unions, tank connectors and diaphragm valves Type 314

d [mm]	PN	Code	kg	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	z [mm]
20	10	734 600 106	0.006	28	30	19	5	5
25	10	734 600 107	0.012	36	39	21	5	5
32	10	734 600 108	0.015	42	45	23	6	5
40	10	734 600 109	0.026	53	57	25	6	5
50	10	734 600 110	0.027	59	63	28	7	5
63	10	734 600 111	0.045	74	79	32	8	5

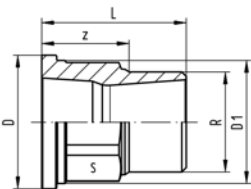
27 64 01

Union Bushes, PP-H**Model:**

- Material: PP-H
- With fusion sockets metric
- D75-110 with new thread geometry, now rated PN10 up to d110
- Jointing face: with O-ring groove
- **For the dimensions d75-110 please see instructions for the installation**

d [mm]	PN	Code	kg	G [inch]	L [mm]	z [mm]
16	10	727 640 155	0.006	3/4	24	11
20	10	727 640 156	0.011	1	26	12
25	10	727 640 157	0.018	1 1/4	28	12
32	10	727 640 158	0.024	1 1/2	30	12
40	10	727 640 159	0.040	2	34	14
50	10	727 640 160	0.052	2 1/4	39	16
63	10	727 640 161	0.096	2 3/4	47	20
75	10	727 640 172	0.080	S107,5x3,6	51	18
90	10	727 640 173	0.220	S127,5x3,6	55	18
110	10	727 640 174	0.289	S152,5x3,6	54	22

70 37 12

Union Ends, Malleable Iron Galvanized R**Model:**

- Union End: malleable iron with taper male thread R

d [mm]	R [inch]	Code	kg	D [mm]	D1 [mm]	L [mm]	z [mm]	s [mm]
20	1/2	724 600 806	0.085	30	27	40	25	23
25	3/4	724 600 807	0.147	39	36	43	27	30
32	1	724 600 808	0.210	44	41	48	29	36
40	1 1/4	724 600 809	0.315	56	52	57	36	48
50	1 1/2	724 600 810	0.411	62	58	59	37	54
63	2	724 600 811	0.665	78	73	62	36	66

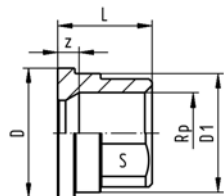
70 37 22

Union Ends, Malleable Iron Galvanized Rp



Model:

- Union End: malleable iron with parallel female thread Rp



d [mm]	Rp [inch]	Code	kg	D [mm]	D1 [mm]	L [mm]	z [mm]	s [mm]
20	1/2	724 600 206	0.058	30	27	22	9	25
25	3/4	724 600 207	0.096	39	36	22	7	31
32	1	724 600 208	0.127	44	41	26	9	38
32	1 1/4	724 600 209	0.204	56	52	31	12	48
50	1 1/2	724 600 210	0.268	62	58	33	14	54
63	2	724 600 211	0.443	78	73	35	11	67

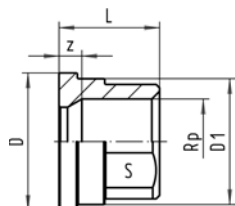
20 60 02

Union Ends, Brass Rp



Model:

- Union End: brass with parallel female thread Rp



d [mm]	Rp [inch]	Code	kg	D [mm]	D1 [mm]	z [mm]	L [mm]
20	1/2	720 600 206	0.059	30	28	7	22
25	3/4	720 600 207	0.094	39	36	6	22
32	1	720 600 208	0.138	45	42	8	27
40	1 1/4	720 600 209	0.250	56	53	10	31
50	1 1/2	720 600 210	0.282	62	59	10	30
63	2	720 600 211	0.480	78	74	8	34
75	2 1/2	720 600 212	0.796	100	91	8	38
90	3	720 600 213	1.238	121	110	7	40

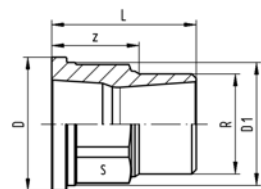
20 60 02

Union Ends, Brass R



Model:

- Union End: brass with taper male thread R



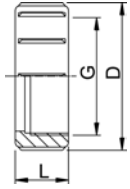
d [mm]	R [inch]	Code	kg	D [mm]	D1 [mm]	L [mm]	z [mm]	s [mm]
20	1/2	720 600 226	0.097	30	27	37	24	25
25	3/4	720 600 227	0.148	39	36	40	26	31
32	1	720 600 228	0.224	45	42	43	26	38
32	1 1/4	720 600 229	0.384	56	53	48	29	48
50	1 1/2	720 600 230	0.468	62	59	50	31	54
63	2	720 600 231	0.746	78	74	57	34	67
75	2 1/2	720 600 232	1.285	100	92	70	43	83
90	3	720 600 233	1.809	121	110	72	42	96

27 69 04

Union Nut, PP-GF

Model:

- PP glass-fibre reinforced



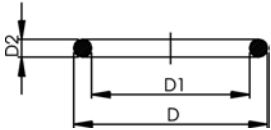
Socket Fusion d [mm]	Butt Fusion d [mm]	PN	G [inch]	Code	kg	D [mm]	L [mm]
16	16	10	3/4	727 690 405	0.008	35	21
20	20	10	1	727 690 406	0.021	48	24
25	25	10	1 1/4	727 690 407	0.034	58	26
32	32	10	1 1/2	727 690 408	0.042	65	28
40	40	10	2	727 690 409	0.045	79	31
50	50	10	2 1/4	727 690 410	0.060	91	35
63	63	10	2 3/4	727 690 411	0.168	111	39
75	75 - 90	10	S107,5x3,6	727 690 422	0.205	135	40
90	110	10	S127,5x3,6	727 690 423	0.288	158	43
110	-	10	S152,5x3,6	727 690 424	0.460	188	48

EPDM 48 41 00
FPM 49 41 00

O-Ring Gaskets

Model:

- For unions and adaptor unions
- Hardness approx. 65° Shore
- EPDM minimum temperature -40°C
- FPM minimum temperature -15°C

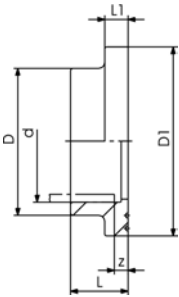


d [mm]	DN [mm]	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	D2 [mm]
16	10	748 410 005	749 410 005	0.002	21	16	3
20	15	748 410 006	749 410 006	0.002	27	20	4
25	20	748 410 007	749 410 007	0.002	35	28	
32	25	748 410 008	749 410 008	0.002	40	33	4
40	32	748 410 009	749 410 009	0.006	51	41	5
50	40	748 410 010	749 410 010	0.007	58	47	5
63	50	748 410 011	749 410 011	0.010	70	60	5
75	65	748 410 014	749 410 014	0.012	93	82	
90	80	748 410 015	749 410 015	0.015	112	101	
110	100	748 410 016	749 410 016	0.031	134	120	

Flange Adaptors, Flanges and Gaskets for Socket Fusion

27 79 02

PROGEF Standard, Flange Adaptor Jointing face flat/serrated



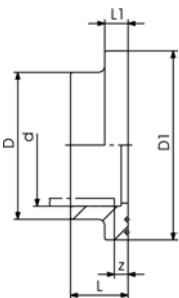
Model:

- Material: PP-H
- Counterpart: Flange Adaptor flat/serrated or with O-ring groove
- Connection: according to EN ISO 15494-1
- Gasket: Profile flange gasket EPDM No. 48 44 07, FPM No. 49 44 07
- Flanges: PP with steel core, No. 27 70 02, PP-V, No. 27 70 04

d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
20	10	727 790 206	0.011	27	45	19	7	5
25	10	727 790 207	0.022	33	58	21	9	5
32	10	727 790 208	0.033	41	68	23	10	5
40	10	727 790 209	0.046	50	78	25	11	5
50	10	727 790 210	0.062	61	88	28	12	5
63	10	727 790 211	0.090	76	102	32	14	5
75	10	727 790 212	0.163	90	122	36	16	5
90	10	727 790 213	0.233	108	138	42	17	7
110	10	727 790 214	0.319	131	158	48	18	7

27 79 02

PROGEF Standard, Flange Adaptor Jointing face serrated ANSI



Model:

- Material: PP-H
- Counterpart: Flange adaptor serrated
- Gasket: Profile flange gasket EPDM No. 48 44 05, FPM No. 49 44 05
- Flanges: PP with steel core, No. 27 70 02, PP-V, No 27 70 04

d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
25	10	727 790 257	0.019	33	54	21	7	5
32	10	727 790 258	0.028	41	63	23	7	5
40	10	727 790 259	0.040	50	73	25	8	5
50	10	727 790 260	0.053	61	82	28	8	5
90	10	727 790 263	0.233	108	133	36	16	5

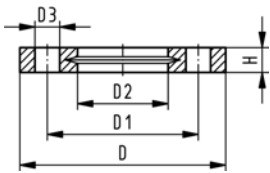
27 70 04
27 70 05

Backing Flanges, PP-V for Socket Systems metric

Model:

- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt retainers as an assembly aid
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**

¹⁾ Suitable for socket- and butt fusion systems (no pictograph on flange)
AL: number of holes



d [mm]	Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20		15	16	727 700 406	0.080	95	65	28	14	16	4	M12
25		20	16	727 700 407	0.100	105	75	34	14	17	4	M12
32		25	16	727 700 408	0.140	115	85	42	14	18	4	M12
40		32	16	727 700 409	0.220	140	100	51	18	20	4	M16
50		40	16	727 700 410	0.210	150	110	62	18	22	4	M16
63		50	16	727 700 411	0.380	165	125	78	18	24	4	M16
75		65	16	727 700 412	0.480	185	145	92	18	26	4	M16
90		80	16	727 700 413	0.520	200	160	110	18	27	8	M16
110		100	16	727 700 414	0.680	220	180	133	18	28	8	M16

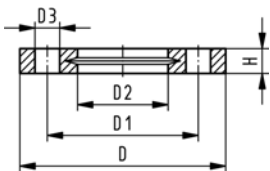
27 70 14
27 70 15

Backing Flanges, PP-V for Socket Systems Inch/ANSI

Model:

- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt-fixing as an assembly aid
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**

¹⁾ Suitable for socket- and butt fusion systems (no pictograph on flange)
AL: number of holes



Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
1/2	15	16	727 701 406	0.080	95	60	28	16	16	4	M12
3/4	20	16	727 701 407	0.100	105	70	34	16	17	4	M12
1	25	16	727 701 408	0.140	115	79	42	16	18	4	M12
1 1/4	32	16	727 701 409	0.220	140	89	51	16	20	4	M16
1 1/2	40	16	727 701 410	0.210	150	98	62	16	22	4	M16
2	50	16	727 701 411	0.380	165	121	78	19	24	4	M16
2 1/2	65	16	727 701 412	0.480	185	140	92	19	26	4	M16
3	80	16	727 701 413	0.520	200	152	110	19	27	4	M16
4	100	16	727 701 414	0.680	229	190	133	19	28	8	M16

27 70 02

Backing Flanges, PP/Steel for Socket Systems metric



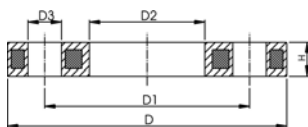
Model:

- PP-GF (30% glass-fibre reinforced) with steel ring
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**

¹ Connecting dimension: ISO 2536 DN125

* Connecting dimension: ISO 2536

AL: number of holes



d [mm]	d [inch]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20		15	16	727 700 206	0.220	95	65	28	14	12	4	M12
25		20	16	727 700 207	0.260	105	75	34	14	12	4	M12
32		25	16	727 700 208	0.430	115	85	42	14	16	4	M12
40		32	16	727 700 209	0.650	140	100	51	18	16	4	M16
50		40	16	727 700 210	0.820	150	110	62	18	18	4	M16
63		50	16	727 700 211	0.940	165	125	78	18	18	4	M16
75		65	16	727 700 212	1.300	185	145	92	18	18	4	M16
90		80	16	727 700 213	1.400	200	160	110	18	20	8	M16
110		100	16	727 700 214	1.560	220	180	133	18	20	8	M16

27 70 12

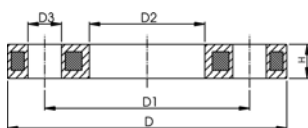
Backing Flanges, PP/Steel for Socket Systems Inch/ANSI



Model:

- For Flange Adaptors BS/ANSI
- Material: PP (30 % glass-fibre reinforced) with steel ring
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**
- DN100 and DN150: only for use with original metric flange adaptors

AL: number of holes



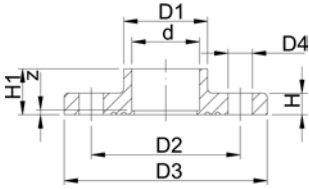
d [inch]	DN [mm]	d [mm]	PN	Code	kg	D1 [mm]	D2 [mm]	D3 [mm]	D [mm]	H [mm]	AL
½	15	20	16	727 701 206	0.210	60	28	16	95	12	4
¾	20	25	16	727 701 207	0.250	70	34	16	105	12	4
1	25	32	16	727 701 208	0.420	79	42	16	115	16	4
1 ¼	32	40	16	727 701 209	0.670	89	51	16	140	16	4
1 ½	40	50	16	727 701 210	0.860	98	62	16	150	18	4
2	50	63	16	727 701 211	0.930	121	78	19	165	18	4
2 ½	65	75	16	727 701 212	1.340	140	92	19	185	18	4
3	80	90	16	727 701 213	1.550	152	110	19	200	20	4
4	100	110	16	727 701 214	1.810	190	133	19	229	20	8

27 30 10
27 40 10

Fixed Flanges, PP-H metric Jointing Face flat

Model:

- With fusion socket metric
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10



AL: number of holes

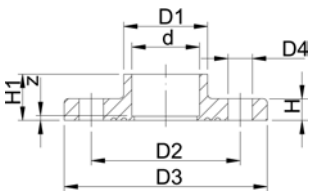
d [mm]	DN [mm]	Inch	PN	Code	kg	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	AL	z [mm]
20	15	1/2	10	727 730 106	0.069	27	65	94	14	12	19	4	5
25	20	3/4	10	727 730 107	0.094	33	75	103	14	13	21	4	5
32	25	1	10	727 730 108	0.129	40	85	115	14	14	23	4	5
40	32	1 1/4	10	727 730 109	0.203	50	100	138	18	15	25	4	5
50	40	1 1/2	10	727 730 110	0.246	61	110	148	18	16	27	4	5
63	50	2	10	727 730 111	0.330	76	125	163	18	18	31	4	5

27 30 10
27 40 10

Fixed Flanges, PP-H metric Combined jointing face: flat and serrated

Model:

- With fusion socket metric
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10



AL: number of holes

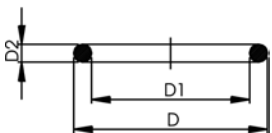
d [mm]	DN [mm]	Inch	PN	Code	kg	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	AL	z [mm]
20	15	1/2	10	727 740 106	0.065	27	65	94	14	12	19	4	5
25	20	3/4	10	727 740 107	0.083	33	75	103	14	13	21	4	5
32	25	1	10	727 740 108	0.117	40	85	115	14	14	23	4	5
40	32	1 1/4	10	727 740 109	0.175	50	100	138	18	15	25	4	5
50	40	1 1/2	10	727 740 110	0.212	61	110	148	18	16	27	4	5
63	50	2	10	727 740 111	0.330	76	125	163	18	18	31	4	5

EPDM 48 41 01
FPM 49 41 01

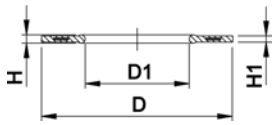
O-Ring Gaskets

Model:

- For Flange Adaptors
- Hardness approx. 65° Shore



d [mm]	DN [mm]	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	D2 [mm]
20	15	748 410 001	749 410 001	0.002	31	23	3.53
25	20	748 410 007	749 410 007	0.002	35	28	3.53
32	25	748 410 002	749 410 002	0.003	43	36	3.53
40	32	748 410 003	749 410 003	0.007	55	44	5.34
50	40	748 410 012	749 410 012	0.008	64	53	5.34
63	50	748 410 013	749 410 013	0.011	80	69	5.34
75	65	748 410 014	749 410 014	0.012	93	82	5.34
90	80	748 410 015	749 410 015	0.015	112	101	5.34
110	100	748 410 016	749 410 016	0.031	134	120	6.99



Flange Gaskets metric

Model:

- Profile Gasket with steel insert (type G-ST-P/K)
- Hardness: 70° Shore **EPDM**, 75° Shore **FPM**
- For Flange Adaptors
- For flange adaptors only in combination with butterfly valves

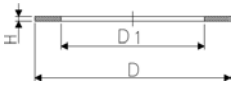
d [mm]	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	H [mm]	H1 [mm]	
20	748 440 101	749 440 101	0.008	51	20	4	3	
25	748 440 102	749 440 102	0.011	61	25	4	3	
32	748 440 103	749 440 103	0.014	71	32	4	3	
40	748 440 104	749 440 104	0.020	82	40	4	3	
50	748 440 105	749 440 105	0.021	92	50	4	3	
63	748 440 106	749 440 106	0.040	107	63	5	4	
75	748 440 107	749 440 107	0.054	127	75	5	4	
90	748 440 108	749 440 108	0.060	142	90	5	4	
110	748 440 109	749 440 109	0.083	162	110	6	5	

EPDM 48 40 00
FPM 49 40 00

Flat Gaskets

Model:

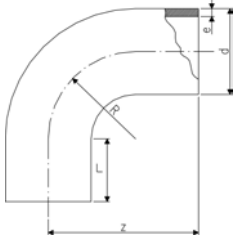
- For Flange Adaptors 21 79 01/21 80 01
- Hardness: 70° Shore **EPDM**, 75° Shore **FPM**



d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	H [mm]	
20	15	½	10	748 400 015	749 400 015	0.003	32	20	2	
25	20	¾	10	748 400 016	749 400 016	0.003	39	25	2	
32	25	1	10	748 400 017	749 400 017	0.004	48	32	2	
40	32	1 ¼	10	748 400 018	749 400 018	0.008	59	40	3	
50	40	1 ½	10	748 400 019	749 400 019	0.012	71	50	3	
63	50	2	10	748 400 020	749 400 020	0.017	88	63	3	
75	65	2 ½	10	748 400 021	749 400 021	0.024	104	75	3	
90	80	3	10	748 400 022	749 400 022	0.032	123	90	3	
110	100	4	10	748 400 023	749 400 023	0.062	148	110	4	

Fittings for Butt Fusion

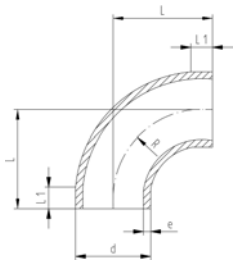
Bends 90°, PP-H S5/SDR11 - 0.75d



Model:

- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H

d [mm]	FM	Code	kg	z [mm]	L [mm]	R [mm]	e [mm]
20	IR	727 018 606	0.007	38	23	15	1.9
25	IR	727 018 607	0.012	42	23	19	2.3
32	IR	727 018 608	0.021	46	22	24	2.9
40	IR	727 018 609	0.072	51	21	30	3.7
50	IR	727 018 610	0.063	58	21	37	4.6
63	IR	727 018 611	0.113	66	21	45	5.8



PROGEF Standard, Bends 90°, S5/SDR11 - Type B

Model:

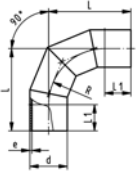
- Material: PP-H
- Bends with new geometry
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H

¹ Material: PP-R

d [mm]	FM	Code	kg	L [mm]	L1 [mm]	R [mm]	e [mm]
20	IR	727 018 481	0.005	28	5	22	1,9
25	IR	727 018 482	0.009	33	7	27	2,3
32	IR	727 018 483	0.017	41	7	35	2,9
40	IR	727 018 484	0.036	52	10	44	3,7
50	IR	727 018 485	0.066	63	10	55	4,6
63	IR	727 018 486	0.126	77	10	69	5,8
75	IR	727 018 612	0.229	100	20	90	6,8
90	IR	727 018 613	0.335	100	20	90	8,2
110	IR	727 018 614	0.607	141	25	130	10,0
125	IR	727 018 490	0.790	140	15	125	11,4
140	IR	727 018 491	1.080	155	15	140	12,7
160	IR	727 018 492	1.600	175	15	160	14,6
180	IR	727 018 493	2.600	195	15	180	16,4
200	IR	727 018 494	3.130	215	15	200	18,2
225	IR	727 018 495	4.230	245	20	225	20,5
250	--	727 018 521	6.450	256	48	232	22,7
280	--	727 018 522	9.500	286	48	262	25,4
315	--	727 018 523	12.800	321	48	297	28,6
¹ 355	--	727 018 574	19.400	380	15	355	32,2
¹ 400	--	727 018 575	28.500	435	25	400	36,3



PROGEF Standard, Bends 90°, S5/SDR11



Model:

- Production process: segment welded
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- Segment welded fittings have a pressure reduction factor of 0.8

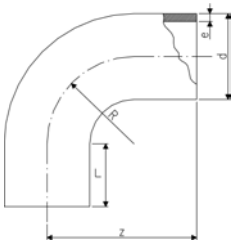
d [mm]	Code	kg	L [mm]	L1 [mm]	R [mm]	e [mm]
450	727 018 576	55.400	975	300	675	40,9
500	727 018 577	77.400	1100	350	750	45,4



Bends 90°, PP-H S8,3/SDR17,6 - 0.75d

Model:

- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H



d [mm]	FM	Code	kg	z [mm]	L [mm]	R [mm]	e [mm]
50	IR	727 018 635	0.050	58	21	37	2.9
63		727 018 636	0.081	66	21	45	3.6

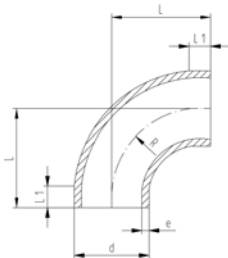


PROGEF Standard, Bend 90°, S8,3/SDR17,6 - Type B

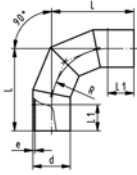
Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H
- Bends with new geometry

¹ Material: PP-R



d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
50	--	727 018 435	0.047	63	10	2.9
63	IR	727 018 436	0.089	77	10	3.6
75	IR	727 018 637	0.161	100	20	4.3
90	IR	727 018 638	0.229	100	20	5.1
110	IR	727 018 639	0.486	141	25	6.3
125	IR	727 018 440	0.590	140	15	7.1
140	IR	727 018 441	0.820	155	15	8.0
160	IR	727 018 442	1.200	175	15	9.1
180	IR	727 018 443	1.690	195	15	10.2
200	IR	727 018 444	2.300	215	15	11.4
225	IR	727 018 445	3.200	245	20	12.8
250	--	727 018 421	4.400	256	48	14.2
280	--	727 018 422	6.200	286	48	15.9
315	--	727 018 423	8.800	321	48	17.9
¹ 355	--	727 018 549	13.300	355	15	20.1
¹ 400	--	727 018 550	18.600	400	25	22.7



PROGEF Standard, Bend 90°, S8,3/SDR17,6



Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- Production process: segment welded
- Segment welded fittings have a pressure reduction factor of 0.8

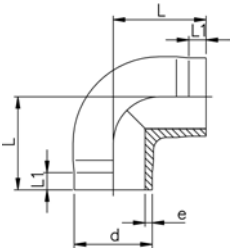
d [mm]	Code	kg	L [mm]	L1 [mm]	e [mm]	R [mm]
450	727 018 551	55.400	975	300	25,5	675
500	727 018 552	77.400	1100	350	28,4	750

27 10 85

PROGEF Standard, Elbows 90°, S5/SDR11

Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H



d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
20	IR	727 108 506	0.007	38	25	1,9
25	IR	727 108 507	0.012	42	26	2,3
32	IR	727 108 508	0.022	46	27	2,9
40	IR	727 108 509	0.044	51	22	3,7
50	IR	727 108 510	0.077	58	23	4,6
63	IR	727 108 511	0.138	66	21	5,8

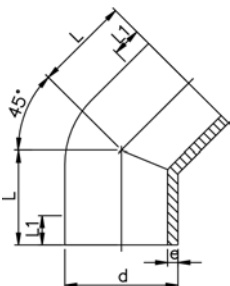
27 15 85

PROGEF Standard, Elbows 45°, S5/SDR11

Model:

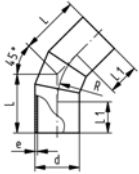
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H

¹ Material: PP-R



d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
20	IR	727 158 506	0.006	32	24	1,9
25	IR	727 158 507	0.010	34	25	2,3
32	IR	727 158 508	0.020	36	25	2,9
40	IR	727 158 509	0.037	39	25	3,7
50	IR	727 158 510	0.054	42	26	4,6
63	IR	727 158 511	0.097	47	29	5,8
75	IR	727 158 512	0.135	49	29	6,8
90	IR	727 158 513	0.224	57	34	8,2
110	IR	727 158 514	0.415	70	43	10,0
125	IR	727 158 515	0.607	79	48	11,4
140	IR	727 158 516	0.860	88	55	12,7
160	IR	727 158 517	1.260	100	60	14,6
200	IR	727 158 519	2.460	124	75	18,2
225	IR	727 158 520	3.400	140	85	20,5
1250		727 158 521	7.890	225	133	22,7
1280		727 158 522	10.170	235	143	25,4
1315		727 158 523	11.690	255	154	28,6

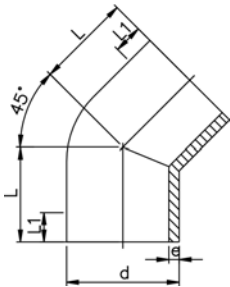
27 15 85

PROGEF Standard, Bend 45°, S5/SDR11**Model:**

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- Production process: segment welded
- Segment welded fittings have a pressure reduction factor of 0.8

d [mm]	Code	kg	L [mm]	L1 [mm]	e [mm]	R [mm]
355	727 158 524	32.300	520	300	32,2	532.5
400	727 158 525	43.200	548	300	36,3	600.0
450	727 158 526	57.700	580	300	40,9	675.0
500	727 158 527	87.200	665	350	45,4	750.0

27 15 85

PROGEF Standard, Elbows 45°, S8,3/SDR17,6**Model:**

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H

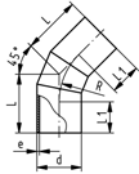
¹ Material: PP-R

*Machined from S5/SDR11

d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
*50	--	727 158 535	0.042	42	26	2,9
*63	IR	727 158 536	0.083	47	29	3,6
75	IR	727 158 412	0.099	49	29	4,3
90	IR	727 158 413	0.164	57	34	5,1
110	IR	727 158 414	0.296	70	43	6,3
*125	IR	727 158 540	0.570	79	48	7,1
*140	IR	727 158 541	0.825	88	55	8,0
*160	IR	727 158 542	1.190	100	60	9,1
*200	IR	727 158 544	2.300	124	75	11,4
*225	IR	727 158 545	3.200	140	85	12,8
¹ 250		727 158 546	4.970	225	133	14,2
¹ 280		727 158 547	7.130	235	143	15,9
¹ 315		727 158 548	9.600	255	154	17,9

27 15 85

PROGEF Standard, Bend 45°, S8,3/SDR17,6



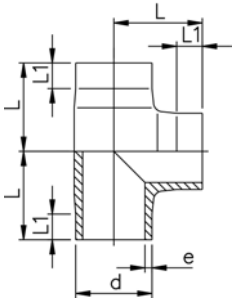
Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- Production process: segment welded
- Segment welded fittings have a pressure reduction factor of 0.8

d [mm]	Code	kg	L [mm]	L1 [mm]	e [mm]	R [mm]
355	727 158 549	21.000	520	300	20,1	532.5
400	727 158 550	28.100	548	300	22,7	600.0
450	727 158 551	37.400	580	300	25,5	675.0
500	727 158 552	52.600	665	350	28,4	750.0

27 20 85

PROGEF Standard, Tee 90° equal, S5/SDR11



Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H

¹ Material: PP-R

d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
20	IR	727 208 506	0.011	38	24	1,9
25	IR	727 208 507	0.018	42	26	2,3
32	IR	727 208 508	0.030	46	26	2,9
40	IR	727 208 509	0.059	51	22	3,7
50	IR	727 208 510	0.103	58	22	4,6
63	IR	727 208 511	0.200	66	21	5,8
75	IR	727 208 512	0.300	75	20	6,8
90	IR	727 208 513	0.530	90	20	8,2
110	IR	727 208 514	0.950	110	20	10,0
125	IR	727 208 515	1.400	125	25	11,4
140	IR	727 208 516	1.980	140	28	12,7
160	IR	727 208 517	2.900	160	28	14,6
180	IR	727 208 568	4.430	194	74	16,4
200	IR	727 208 519	5.570	200	35	18,2
225	IR	727 208 520	7.820	220	35	20,5
250	--	727 208 571	12.480	276	92	22,7
280	--	727 208 572	17.250	318	110	25,4
315	--	727 208 573	24.060	353	118	28,6
¹ 355	--	727 208 574	31.100	345	103	32,2
¹ 400	--	727 208 575	38.000	360	105	36,3

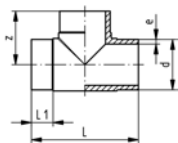
27 20 85

PROGEF Standard, Tee 90° equal, S5/SDR11



Model:

- Injection moulded
- Material: PP-R
- Conventional butt-welding according to DVS 2207 part 11



d [mm]	Code	kg	L [mm]	L1 [mm]	z [mm]	e [mm]
450	727 208 576	58.000	970	195	485	40,9
500	727 208 577	73.000	1060	215	530	45,4

27 20 85

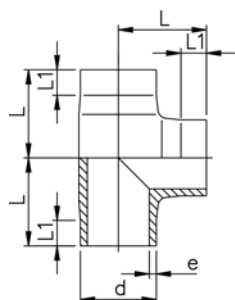
PROGEF Standard, Tee 90° equal, S8,3/SDR17,6

Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H



¹ Material: PP-R



d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
50	--	727 208 535	0.090	59	26	2,9
63	IR	727 208 536	0.160	73	31	3,6
75	IR	727 208 412	0.230	75	20	4,3
90	IR	727 208 413	2.200	90	20	5,1
110	IR	727 208 414	0.723	110	20	6,3
125	IR	727 208 540	1.066	125	30	7,1
140	IR	727 208 541	1.449	140	35	8,0
160	IR	727 208 542	2.240	160	43	9,1
180	IR	727 208 543	3.090	194	70	10,2
200	IR	727 208 544	4.360	210	70	11,4
225	IR	727 208 545	6.030	235	82	12,8
250	--	727 208 546	8.610	276	92	14,2
280	--	727 208 547	11.660	318	110	15,9
315	--	727 208 548	16.230	353	118	17,9
¹ 355	--	727 208 549	21.000	345	103	20,1
¹ 400	--	727 208 550	26.000	360	105	22,7

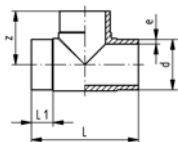
27 20 85

PROGEF Standard, Tee 90° equal, S8,3/SDR17,6



Model:

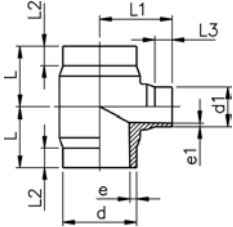
- Injection moulded
- Material: PP-R
- Conventional butt-welding according to DVS 2207 part 11



d [mm]	Code	kg	L [mm]	L1 [mm]	z [mm]	e [mm]
450	727 208 551	58.000	525	1050	525	25,5
500	727 208 552	73.000	600	1200	600	28,4

PROGEF Standard, Tee 90° reduced, S5/SDR11**Model:**

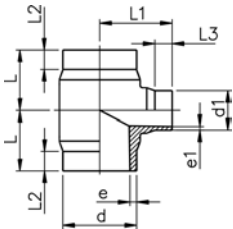
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H



d	d1	FM	Code	kg	L	L1	L2	L3	e	e1
[mm]	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
63	32	IR	727 208 351	0.160	65	70	25	25	5,8	2,9
63	50	IR	727 208 352	0.170	65	70	25	25	5,8	4,6
75	32	IR	727 208 353	0.240	70	75	25	25	6,8	2,9
75	50	IR	727 208 354	0.250	70	75	25	25	6,8	4,6
75	63	IR	727 208 355	0.260	70	75	25	25	6,8	5,8
90	50	IR	727 208 357	0.410	80	85	25	25	8,2	4,6
90	63	IR	727 208 358	0.420	80	85	25	25	8,2	5,8
90	75	IR	727 208 359	0.440	80	85	25	25	8,2	6,8
110	32	IR	727 208 360	0.650	90	95	30	25	10	2,9
110	50	IR	727 208 361	0.670	90	95	30	25	10,0	4,6
110	63	IR	727 208 362	0.680	90	95	30	25	10,0	5,8
110	75	IR	727 208 363	0.690	90	95	30	25	10,0	6,8
110	90	IR	727 208 364	0.700	90	95	30	25	10,0	8,2
160	63	IR	727 208 371	2.125	142	135	50	30	14,6	5,8
160	75	IR	727 208 372	2.140	142	135	50	30	14,6	6,8
160	90	IR	727 208 373	2.160	142	135	50	30	14,6	8,2
160	110	IR	727 208 374	2.200	142	135	50	30	14,6	10,0
225	90	IR	727 208 388	4.530	155	165	40	30	20,5	8,2
225	110	IR	727 208 389	4.520	155	165	40	30	20,5	10,0
225	160	IR	727 208 391	4.530	155	165	40	30	20,5	14,6

PROGEF Standard, Tee 90° reduced, S8,3/SDR17,6**Model:**

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H

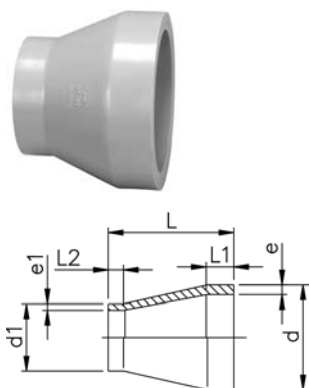


* Branch SDR11

d	d1	FM	Code	kg	L	L1	L2	L3	e	e1
[mm]	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
*63	32	IR	727 208 301	0.120	65	70	25	25	3,6	2,9
63	50	IR	727 208 302	0.125	65	70	25	25	3,6	2,9
*75	32	IR	727 208 303	0.180	70	75	25	25	4,3	2,9
75	50	IR	727 208 304	0.180	70	75	25	25	4,3	2,9
75	63	IR	727 208 305	0.190	70	75	25	25	4,3	3,6
90	50	IR	727 208 307	0.310	80	85	25	25	5,1	2,9
90	63	IR	727 208 308	0.310	80	85	25	25	5,1	3,6
90	75	IR	727 208 309	0.320	80	85	25	25	5,1	4,3
*110	32	IR	727 208 310	0.490	90	95	30	25	6,3	2,9
110	50	IR	727 208 311	0.490	90	95	30	25	6,3	2,9
110	63	IR	727 208 312	0.500	90	95	30	25	6,3	3,6
110	75	IR	727 208 313	0.500	90	95	30	25	6,3	4,3
110	90	IR	727 208 314	0.510	90	95	30	25	6,3	5,1
160	63	IR	727 208 321	1.560	142	135	50	30	9,1	3,6
160	75	IR	727 208 322	1.570	142	135	50	30	9,1	4,3
160	90	IR	727 208 323	1.580	142	135	50	30	9,1	5,1
160	110	IR	727 208 324	1.600	142	135	50	30	9,1	6,3
225	90	IR	727 208 338	3.330	155	165	40	30	12,8	5,1
225	110	IR	727 208 339	3.310	155	165	40	30	12,8	6,3
225	160	IR	727 208 341	3.330	155	165	40	30	12,8	9,1

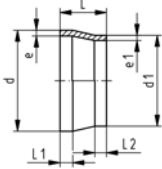
PROGEF Standard, Reducers, S5/SDR11**Model:**

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H

¹ Material: PP-R

d	d1	FM	Code	kg	L	L1	L2	e	e1
[mm]	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]
25	20	IR	727 908 537	0.007	50	20	20	2,3	1,9
32	20	IR	727 908 542	0.010	50	20	20	2,9	1,9
32	25	IR	727 908 541	0.011	50	20	20	2,9	2,3
40	20	IR	727 908 548	0.015	58	20	23	3,7	1,9
40	25	IR	727 908 547	0.016	55	20	20	3,7	2,3
40	32	IR	727 908 546	0.019	55	20	20	3,7	2,9
50	25	IR	727 908 554	0.025	60	20	20	4,6	2,3
50	32	IR	727 908 553	0.027	60	20	20	4,6	2,9
50	40	IR	727 908 552	0.030	60	20	20	4,6	3,7
63	32	IR	727 908 560	0.043	65	20	20	5,8	2,9
63	40	IR	727 908 559	0.047	65	20	20	5,8	3,7
63	50	IR	727 908 558	0.052	65	20	20	5,8	4,6
75	40	IR	727 908 566	0.058	68	20	20	6,8	3,7
75	50	IR	727 908 565	0.065	65	20	20	6,8	4,6
75	63	IR	727 908 564	0.074	65	20	20	6,8	5,8
90	63	IR	727 908 571	0.107	75	22	19	8,2	5,8
90	75	IR	727 908 570	0.117	75	22	19	8,2	6,8
110	75	IR	727 908 577	0.193	90	28	18	10,0	6,8
110	90	IR	727 908 576	0.216	90	28	30	10,0	8,2
125	110	IR	727 908 580	0.325	100	32	30	11,4	10,0
140	110	IR	727 908 585	0.405	110	33	29	12,7	10,0
140	125	IR	727 908 584	0.447	110	34	30	12,7	11,4
160	110	IR	727 908 590	0.550	120	39	27	14,6	10,0
160	140	IR	727 908 588	0.625	120	40	35	14,6	12,7
180	90	IR	727 908 978	0.670	157	45	22	16,4	8,2
180	110	IR	727 908 977	0.550	157	45	28	16,4	10,0
180	125	IR	727 908 976	0.520	136	45	32	16,4	11,4
180	140	IR	727 908 975	0.520	136	45	35	16,4	12,7
180	160	IR	727 908 974	0.530	136	45	35	16,4	14,6
200	160	IR	727 908 592	1.120	145	50	40	18,2	14,6
200	180	IR	727 908 979	0.710	151	50	45	18,2	16,4
225	110	IR	727 908 595	1.330	160	55	35	20,5	10,0
225	160	IR	727 908 596	1.470	160	55	40	20,5	14,6
225	180	IR	727 908 983	0.941	171	55	45	20,5	16,4
225	200	IR	727 908 597	1.650	160	55	50	20,5	18,2
250	160	--	727 908 990	1.483	194	60	55	22,7	14,6
250	225	--	727 908 987	1.041	182	60	55	22,7	20,5
¹ 280	225	--	727 908 992	1.804	105	30	20	25,4	20,5
¹ 280	250	--	727 908 991	1.311	70	30	18	25,4	22,7
¹ 315	225	--	727 908 997	2.615	130	30	20	28,6	20,5
¹ 315	250	--	727 908 996	2.204	100	30	20	28,6	22,7
¹ 315	280	--	727 908 995	1.590	63	30	18	28,6	25,4
355	250	--	727 908 963	4.400	245	90	60	32,3	22,7
355	280	--	727 908 962	4.100	245	90	70	32,2	25,4
355	315	--	727 908 961	3.700	245	90	80	32,2	28,6
400	315	--	727 908 966	5.300	260	95	80	36,3	28,6
400	355	--	727 908 965	4.800	260	95	90	36,3	32,2

PROGEF Standard, Reducers, S5/SDR11

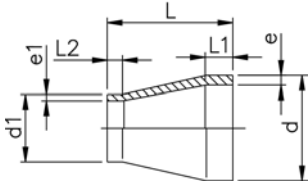


Model:

- Machined
- Material: PP-R
- Conventional butt-welding according to DVS 2207 part 11

d	d1	Code	kg	L	L1	L2	e	e1
[mm]	[mm]			[mm]	[mm]	[mm]	[mm]	[mm]
450	280	727 908 960	5.000	230	60	70	40,9	25,4
450	315	727 908 948	5.000	230	60	80	40,9	28,6
450	355	727 908 950	5.000	230	60	90	40,9	32,2
450	400	727 908 951	5.000	230	60	95	40,9	36,3
500	315	727 908 953	5.000	230	60	80	45,4	28,6
500	355	727 908 954	5.000	230	60	90	45,4	32,2
500	400	727 908 956	5.000	230	60	95	45,4	36,3
500	450	727 908 964	5.000	230	60	60	45,4	40,9

PROGEF Standard, Reducers, S8,3/SDR17,6



Model:

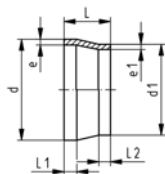
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H

¹ Material: PP-R

d	d1	FM	Code	kg	L	L1	L2	e	e1
[mm]	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]
50	40	--	727 908 949	0.010	55	12	12	2,9	2,3
63	40	--	727 908 901	0.020	65	16	12	3,6	2,3
63	50	--	727 908 900	0.020	65	16	12	3,6	2,9
75	40	--	727 908 904	0.041	65	20	20	4,3	2,3
75	50	--	727 908 465	0.054	65	20	20	4,3	2,9
75	63	IR	727 908 464	0.064	65	20	20	4,3	3,6
90	63	IR	727 908 471	0.092	75	22	19	5,1	3,6
90	75	IR	727 908 470	0.089	75	21	19	5,1	4,3
110	75	IR	727 908 477	0.144	90	28	18	6,3	4,3
110	90	IR	727 908 476	0.158	90	28	20	6,3	5,1
125	110	IR	727 908 912	0.151	108	32	28	7,1	6,3
140	110	IR	727 908 917	0.144	115	35	28	8,0	6,3
140	125	IR	727 908 916	0.150	115	35	32	8,0	7,1
160	110	IR	727 908 922	0.287	124	40	28	9,1	6,3
160	140	IR	727 908 920	0.245	124	40	35	9,1	8,0
180	90	IR	727 908 928	0.440	157	45	22	10,2	5,1
180	110	IR	727 908 927	0.360	157	45	28	10,2	6,3
180	125	IR	727 908 926	0.340	136	45	32	10,2	7,1
180	140	IR	727 908 925	0.340	136	45	35	10,2	8,0
180	160	IR	727 908 924	0.350	136	45	40	10,2	9,1
200	160	IR	727 908 930	0.461	151	50	40	11,4	9,1
200	180	IR	727 908 929	0.600	151	50	45	11,4	10,2
225	110	IR	727 908 936	0.960	171	55	40	12,8	6,3
225	160	IR	727 908 934	0.620	171	55	45	12,8	9,1
225	180	IR	727 908 933	0.600	171	55	45	12,8	10,2
225	200	IR	727 908 932	0.614	184	60	40	12,8	11,4
250	160	IR	727 908 940	0.975	194	60	40	14,2	9,1
250	225	IR	727 908 937	0.681	182	60	55	14,2	12,8
¹ 280	225	--	727 908 942	1.180	105	30	20	15,9	12,8
¹ 280	250	--	727 908 941	0.858	70	30	18	15,9	14,2
¹ 315	225	--	727 908 947	1.715	130	30	20	17,9	12,8
¹ 315	250	--	727 908 946	1.446	100	30	20	17,9	14,2
¹ 315	280	--	727 908 945	1.040	63	30	18	17,9	15,9
355	250	--	727 908 959	3.000	245	90	60	20,1	14,2
355	280	--	727 908 958	2.700	245	90	70	20,1	15,9
355	315	--	727 908 957	2.400	245	90	80	20,1	17,9
400	315	--	727 908 972	3.600	260	95	80	22,7	17,9
400	355	--	727 908 971	3.100	260	95	90	22,7	20,1

27 90 89

PROGEF Standard, Reducers, S8,3/SDR17,6



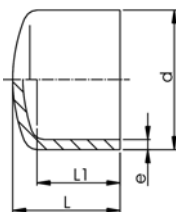
Model:

- Machined
- Material: PP-R
- Conventional butt-welding according to DVS 2207 part 11

d [mm]	d1 [mm]	Code	kg	L [mm]	L1 [mm]	L2 [mm]	e [mm]	e1 [mm]
450	280	727 908 967	5.000	230	60	70	25,5	15,9
450	315	727 908 984	5.000	230	60	80	25,5	17,9
450	355	727 908 988	5.000	230	60	90	25,5	20,1
450	400	727 908 989	5.000	230	60	95	25,5	22,7
500	315	727 908 993	5.000	230	60	80	28,4	17,9
500	355	727 908 994	5.000	230	60	95	28,4	20,1
500	400	727 908 998	5.000	230	60	95	28,4	22,7
500	450	727 908 999	5.000	230	60	60	28,4	25,5

27 96 89

PROGEF Standard, End Caps, S5/SDR11



Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H

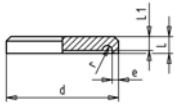
¹ Material: PP-R

d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
20	IR	727 968 931	0.004	42	30	1,9
25	IR	727 968 932	0.005	50	35	2,3
32	IR	727 968 933	0.010	55	40	2,9
40	IR	727 968 934	0.018	65	45	3,7
50	IR	727 968 935	0.029	70	50	4,6
63	IR	727 968 936	0.049	80	55	5,8
75	IR	727 968 937	0.065	90	60	6,8
90	IR	727 968 938	0.107	105	70	8,2
110	IR	727 968 939	0.174	120	80	10,0
125	IR	727 968 940	0.210	50	25	11,4
140	IR	727 968 941	0.323	60	30	12,7
160	IR	727 968 942	0.570	76	40	14,6
180	IR	727 968 943	1.580	125	88	16,4
200	IR	727 968 944	1.060	100	50	18,2
225	IR	727 968 945	1.710	103	60	20,5
¹ 250	--	727 968 946	2.700	220	140	22,7
¹ 280	--	727 968 947	3.100	238	151	25,4
¹ 315	--	727 968 948	6.600	258	158	28,6
¹ 355	--	727 968 949	9.000	291	175	32,2
¹ 400	--	727 968 950	12.500	318	195	36,3

27 96 89

PROGEF Standard, End Caps, S5/SDR11**Model:**

- Machined
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11

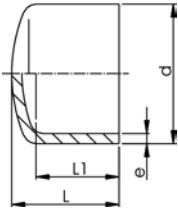


d [mm]	Code	kg	L [mm]	L1 [mm]	e [mm]
450	727 968 951	10.000	80	66	40,9
500	727 968 952	10.000	85	74	74,5

27 96 89

PROGEF Standard, End Caps, S8,3/SDR17,6**Model:**

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H

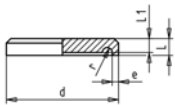
¹ Material: PP-R

d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
50	--	727 968 910	0.030	75	53	2,9
63	IR	727 968 911	0.050	85	58	3,6
75	IR	727 968 912	0.045	90	60	4,3
90	IR	727 968 913	0.073	105	70	5,1
110	IR	727 968 914	0.118	120	80	6,3
125	IR	727 968 915	0.176	50	25	7,1
140	IR	727 968 916	0.194	60	30	8,0
160	IR	727 968 917	0.408	76	40	9,1
180	IR	727 968 918	1.580	125	88	10,2
200	IR	727 968 919	0.730	100	50	11,4
225	IR	727 968 920	0.965	103	60	12,8
¹ 250	--	727 968 921	2.300	220	140	14,2
¹ 280	--	727 968 922	3.000	238	152	15,9
¹ 315	--	727 968 923	4.500	258	158	17,9
¹ 355	--	727 968 924	6.100	291	175	20,1
¹ 400	--	727 968 925	8.700	318	195	22,7

27 96 89

PROGEF Standard, End Caps, S8,3/SDR17,6**Model:**

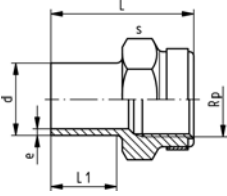
- Machined
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11



d [mm]	Code	kg	L [mm]	L1 [mm]	e [mm]
450	727 968 926	10.000	70	56	25,5
500	727 968 927	10.000	75	62	28,4

Adaptor Fittings for Butt Fusion

PROGEF Standard, Adaptor Sockets, metric - Rp



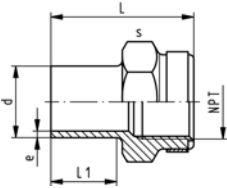
Model:

- Material: PP-H
- With butt fusion spigot **SDR11** and BSP parallel female thread Rp, reinforced
- Connection to plastic or metal
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to PP
- Install with low mechanical stress and avoid large cyclic temperature changes

d [mm]	Rp [inch]	PN	FM	Code	kg	L [mm]	L1 [mm]	s [mm]	e [mm]
20	½	10	IR	727 910 266	0.017	48	23	32	1,9
25	¾	10	IR	727 910 267	0.022	50	23	36	2,3
32	1	10	IR	727 910 268	0.038	54	23	46	2,9
40	1 ¼	10	IR	727 910 269	0.066	56	23	55	3,7
50	1 ½	10	IR	727 910 270	0.090	60	23	65	4,6
63	2	10	IR	727 910 271	0.140	62	23	80	5,8

27 91 43

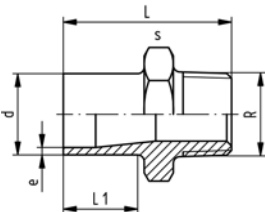
Adaptor Sockets, PP-H metric - NPT



Model:

- Material: PP-H
- With butt fusion spigot **SDR11** and NPT tapered female thread, reinforced
- Connection to plastic or metal
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to PP
- Install with low mechanical stress and avoid large cyclic temperature changes

d [mm]	NPT [inch]	PN	FM	Code	kg	L [mm]	L1 [mm]	s [mm]	e [mm]
20	½	10	IR	727 914 356	0.017	49	23	32	1,9
25	¾	10	IR	727 914 357	0.022	51	23	36	2,3
32	1	10	IR	727 914 358	0.039	54	23	46	2,9
40	1 ¼	10	IR	727 914 359	0.066	56	23	55	3,7
50	1 ½	10	IR	727 914 360	0.085	60	23	65	4,6
63	2	10	IR	727 914 361	0.122	62	23	80	5,8



PROGEF Standard, Adaptor Nipples, metric - R

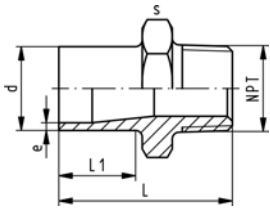
Model:

- Material: PP-H
- With butt fusion spigot and BSP tapered male thread
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PP
- Install with low mechanical stress and avoid large cyclic temperature changes

d [mm]	R [inch]	PN	FM	Code	kg	L [mm]	L1 [mm]	s [mm]	e [mm]
20	½	10	IR	727 910 556	0.013	51	23	32	1,9
25	¾	10	IR	727 910 557	0.026	52	23	36	2,3
32	1	10	IR	727 910 558	0.028	55	23	46	2,9
40	1 ¼	10	IR	727 910 559	0.041	58	23	55	3,7
50	1 ½	10	IR	727 910 560	0.062	60	23	65	4,6
63	2	10	IR	727 910 561	0.096	67	26	80	5,8

27 91 46

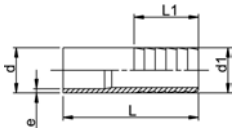
PROGEF Standard, Adaptor Nipples, metric - NPT



Model:

- Material: PP-H
- With butt fusion spigot **SDR11** and NPT tapered male thread
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PP
- Install with low mechanical stress and avoid large cyclic temperature changes

d [mm]	NPT [inch]	PN	FM	Code	kg	L [mm]	L1 [mm]	s [mm]	e [mm]
20	½	10	IR	727 914 656	0.013	51	23	32	1,9
25	¾	10	IR	727 914 657	0.026	52	23	36	2,3
32	1	10	IR	727 914 658	0.028	55	23	46	2,9
40	1 ¼	10	IR	727 914 659	0.041	58	24	55	3,7
50	1 ½	10	IR	727 914 660	0.062	60	23	65	4,6
63	2	10	IR	727 914 661	0.096	67	26	80	5,8



PROGEF Standard, Hose connectors, metric

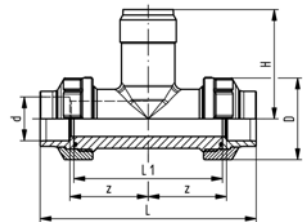
Model:

- Material: PP-H
- With butt fusion spigot **SDR11** and parallel hose connection

d [mm]	d1 [mm]	PN	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
20	20	10	IR	727 968 606	0.008	64	27	1,9
25	25	10	IR	727 968 607	0.012	75	36	2,3
32	32	10	IR	727 968 608	0.022	82	36	2,9
40	40	10	IR	727 968 609	0.030	84	42	3,7
50	50	10	IR	727 968 610	0.060	90	48	4,6
63	60	10	IR	727 968 611	0.095	100	50	5,8

27 31 00

Installation Fitting Type 310 PROGEF Standard, S5/SDR11 for Socket Systems metric



Model:

- For Signet Paddlewheel Sensors Type -X0 (104 mm)
- Union end with fusion socket PP-H

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
20	15	10	727 310 006	727 310 036	0.136
25	20	10	727 310 007	727 310 037	0.190
32	25	10	727 310 008	727 310 038	0.250
40	32	10	727 310 009	727 310 039	0.356
50	40	10	727 310 010	727 310 040	0.510
63	50	10	727 310 011	727 310 041	0.800

d [mm]	D [mm]	z [mm]	L [mm]	L1 [mm]	H [mm]	Sensor Type
20	48	50	128	90	76	X0
25	58	55	142	100	78	X0
32	65	60	156	110	81	X0
40	79	60	160	110	85	X0
50	91	65	176	120	89	X0
63	105	70	194	130	95	X0

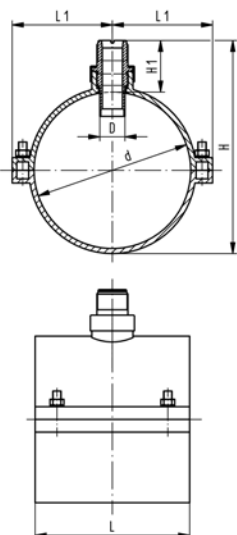
27 31 20

Installation Fitting Type 312 PP-H metric



Model:

- For Signet paddlewheel sensors Type -X1 (137 mm) and Type -X2 (213 mm)
- Top saddle with EPDM gasket
- Stainless steel bolts and nuts



d [mm]	DN [mm]	PN	Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]	Sensor Type
75	65	8	727 312 072	0.458	34	78	62	172	88	X1
90	80	8	727 312 073	0.514	34	86	69	186	87	X1
110	100	8	727 312 074	0.598	34	98	79	206	86	X1
125	100	8	727 312 075	0.667	34	101	85	212	78	X1
140	125	6	727 312 076	0.911	34	114	104	227	75	X1
160	150	6	727 312 077	0.985	34	114	114	243	72	X1
180	150	6	727 312 078	2.085	34	168	134	348	144	X2
200	200	6	727 312 079	2.045	34	168	132	357	142	X2
225	200	5	727 312 080	2.142	34	174	146	375	136	X2
250	250	5	727 312 081	2.566	34	179	159	397	131	X2
280	250	5	727 312 082	3.594	34	179	167	426	127	X2
315	300	5	727 312 083	4.250	34	248	202	450	120	X2

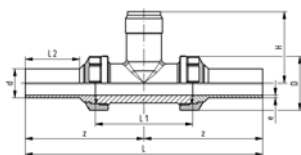
27 31 80

Installation Fitting Type 318 PROGEF Standard, S5/SDR11 for Butt Fusion Systems metric



Model:

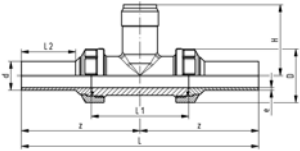
- For Signet Paddlewheel Sensors Type -X0 (104 mm)
- Union end with butt fusion spigot PP-H



d [mm]	DN [mm]	PN	FM	EPDM Code	FPM Code	kg
20	15	10	IR	727 318 006	727 318 036	0.136
25	20	10	IR	727 318 007	727 318 037	0.190
32	25	10	IR	727 318 008	727 318 038	0.250
40	32	10	IR	727 318 009	727 318 039	0.356
50	40	10	IR	727 318 010	727 318 040	0.510
63	50	10	IR	727 318 011	727 318 041	0.800

d [mm]	D [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	e [mm]	Sensor Type
20	48	112	224	90	52	76	1.9	X0
25	58	121	242	100	53	78	2.3	X0
32	65	128	256	110	55	81	2.9	X0
40	79	136	272	110	60	85	3.7	X0
50	91	147	294	120	66	89	4.6	X0
63	105	158	316	130	70	95	5.8	X0

Installation Fitting Type 318, PE100 for Butt Fusion Systems metric



Model:

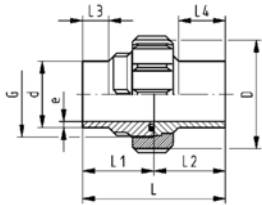
- For Signet Paddlewheel Sensors Type -X0 (104 mm)
- Body and union nut PP-H
- Union end with butt fusion spigot PE100

d [mm]	DN [mm]	PN	FM	EPDM Code	FPM Code	kg	
20	15	10	IR	753 318 006	753 318 036	0.136	
25	20	10	IR	753 318 007	753 318 037	0.190	
32	25	10	IR	753 318 008	753 318 038	0.250	
40	32	10	IR	753 318 009	753 318 039	0.356	
50	40	10	IR	753 318 010	753 318 040	0.510	
63	50	10	IR	753 318 011	753 318 041	0.800	

d [mm]	D [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	e [mm]	Sensor Type	
20	48	112	224	90	52	76	1.9	X0	
25	58	121	242	100	53	78	2.3	X0	
32	65	128	256	110	55	81	2.9	X0	
40	79	136	272	110	60	85	3.7	X0	
50	91	147	294	120	66	89	4.6	X0	
63	105	158	316	130	70	95	5.8	X0	

Unions for Butt Fusion

EPDM 27 51 85
FPM 27 52 85



PROGEF Standard, Unions, S5/SDR11

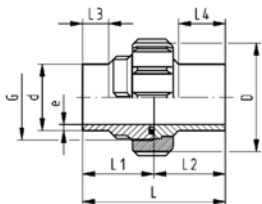
Model:

- Material: PP-H
- With butt fusion ends
- Conventional butt fusion and (IR Plus®) compatible
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00
- **For the dimensions d75-110 please see instructions for the installation**

d [mm]	PN	FM	EPDM Code	FPM Code	kg
20	10	IR	727 518 506	727 528 506	0.046
25	10	IR	727 518 507	727 528 507	0.074
32	10	IR	727 518 508	727 528 508	0.102
40	10	IR	727 518 509	727 528 509	0.169
50	10	IR	727 518 510	727 528 510	0.227
63	10	IR	727 518 511	727 528 511	0.382
75	10	IR	727 518 512	727 528 512	0.560
90	10	IR	727 518 513	727 528 513	0.588
110	10	IR	727 518 514	727 528 514	0.828

d [mm]	D [mm]	G [inch]	L [mm]	L1 [mm]	L2 [mm]	e [mm]
20	48	1	107	54.0	53.0	1,9
25	58	1 1/4	113	57.0	56.0	2,3
32	65	1 1/2	119	60.0	59.0	2,9
40	79	2	126	63.0	63.0	3,7
50	91	2 1/4	131	65.5	65.5	4,6
63	111	2 3/4	137	69.0	68.0	5,8
75	135	S107,5x3,6	131	66.0	65.5	6,8
90	135	S107,5x3,6	131	65.5	65.5	8,2
110	158	S127,5x3,6	131	65.5	65.5	10,0

EPDM 27 51 84
FPM 27 52 84



PROGEF Standard, Unions, S8,3/SDR17,6

Model:

- Material: PP-H
- With butt fusion ends
- Conventional butt fusion and (IR Plus®) compatible
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00
- **For the dimensions d75-110 please see instructions for the installation**

d [mm]	PN	FM	EPDM Code	FPM Code	kg
75	6	IR	727 518 412	727 528 412	0.476
90	6	IR	727 518 413	727 528 413	0.483
110	6	IR	727 518 414	727 528 414	0.663

d [mm]	D [mm]	G [inch]	L [mm]	L1 [mm]	L2 [mm]	e [mm]
75	135	S107,5x3,6	132	66	24	4,3
90	135	S107,5x3,6	131	66	24	5,1
110	158	S127,5x3,6	131	66	25	6,3

Instructions for the installation of unions in PP, PE d 75, d 90 and d 110

The newest generation of plastic unions in the above materials and dimensions has been fitted with a state-of-the-art, plastics-oriented buttress thread. You therefore have a product in which the nominal pressure and the safety reserve have been dramatically increased. Also new are the butt fusion versions. In this connection, there are a few points which you must be aware of.

Caution

- ① The threads of the union nut and bush have been reworked for PP, PVDF and PE! When using individual parts, please check prior to installation if the threads of the union bush and the union nut coincide.



Union bush with trapezoid thread on union nut with trapezoid thread
or
Union bush with buttress thread on union nut with buttress thread

Tip

To make installation of the union easier, wet the union nut.

- ② For the dimensions d 90 and d 110 we advise fusing the complete union, if possible (or slide the union nut to the collar of the union end) because after fusion the union nut cannot be slid over the fusion bead. (Fig. 1)
- ③ For design reasons, it is theoretically possible to combine different nominal diameters of union ends and nuts. To make sure combinations are technically correct, you can find the code numbers of the single parts and spare parts for each union in the Tables 1-3.

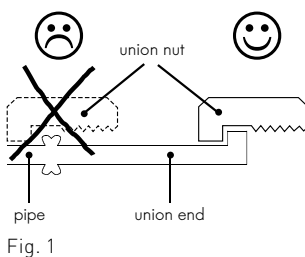


Fig. 1

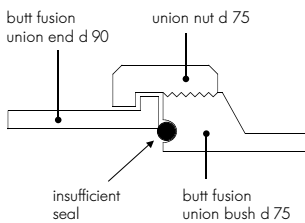


Fig. 2

Caution

Only use union bushes and union ends with the same nominal diameter!

A butt fusion union bush d 75 may not be combined with a butt fusion union end d 90 to form a reducer because this can cause leakage, as illustrated to the left. (Fig. 2)

Markings on the union nuts

SF/MS = socket fusion, BF/ST = butt fusion

SF/MS 75 specified for socket fusion d 75
BF/ST 75-90 specified for butt fusion d 75-75 and d 90-90

SF/MS 90 specified socket fusion d 90
BF/ST 110 specified butt fusion d 110

110 specified for socket fusion d 110

Tip

We recommend changing materials only for the union end for installation reasons.

Selection tables for single parts and spare parts



Butt fusion

Socket fusion

Table 1

Single parts for **PP-H** unions d 75, d 90 and d 110

d	BF/ST	SF/MS	SDR	PN	Code union end	Code union bush	Code union nut*
75	==		11	10	727 608 512	727 648 512	727 690 422
			17.6	6	727 608 412	727 648 412	727 690 422
			—	10	727 600 112	727 640 172	727 690 422
90	==		11	10	727 608 513	727 648 513	727 690 422
			17.6	6	727 608 413	727 648 413	727 690 422
			—	10	727 600 113	727 640 173	727 690 423
110	==		11	10	727 608 514	727 648 514	727 690 423
			17.6	6	727 608 414	727 648 414	727 690 423
			—	10	727 600 114	727 640 174	727 690 424

Table 2

Single parts for **PE 100** unions d 75, d 90 and d 110

d	BF/ST	SF/MS	SDR	PN	Code union end	Code union bush	Code union nut*
75	==		11	10	753 608 612	753 648 612	727 690 442
			17.6	10	753 608 412	753 648 412	727 690 442
90	==		11	10	753 608 613	753 648 613	727 690 442
			17.6	10	753 608 413	753 648 413	727 690 442
110	==		11	10	753 608 614	753 648 614	727 690 443
			17.6	10	753 608 414	753 648 414	727 690 443

Table 3

O-Rings for PP-H, PE 100

d	BF/ST	SF/MS	SDR	PN	Code O-Ring EPDM ¹	Code O-Ring FPM ¹
75	==			16	748 410 013	749 410 013
				16	748 410 014	749 410 014
90	==			16	748 410 014	749 410 014
				16	748 410 015	749 410 015
110	==			16	748 410 015	749 410 015
				16	748 410 016	749 410 016

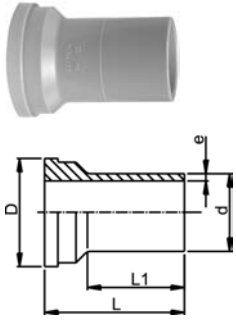
* Union nuts overlap several dimensions

¹ Flange adaptor O-rings, one size smaller in nominal dimensions, are used for the d 75–110 butt-fusion unions

27 60 85

PROGEF Standard, Union Ends IR Plus, SDR11**Model:**

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H
- Suitable for unions, diaphragm valves Type 314, tank adaptors and Vortex sensors
- **For the dimensions d75-110 please see instructions for the installation**

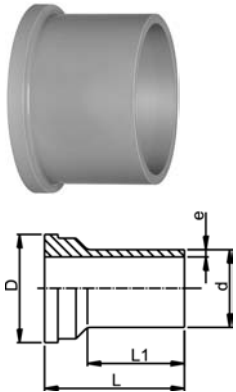


d [mm]	PN	FM	Code	kg	D [mm]	L [mm]	L1 [mm]	e [mm]
20	10	IR	727 608 506	0.010	30	54	38	1,9
25	10	IR	727 608 507	0.017	39	57	42	2,3
32	10	IR	727 608 508	0.024	45	60	41	2,9
40	10	IR	727 608 509	0.041	57	63	42	3,7
50	10	IR	727 608 510	0.054	63	66	44	4,6
63	10	IR	727 608 511	0.092	78	69	45	5,8
75	10	IR	727 608 512	0.146	101	66	34	6,8
90	10	IR	727 608 513	0.158	101	66	45	8,2
110	10	IR	727 608 514	0.233	121	66	40	10,0

27 60 84

PROGEF Standard, Union Ends IR Plus, SDR17,6**Model:**

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H
- Suitable for unions
- **For the dimensions d75-110 please see instructions for the installation**

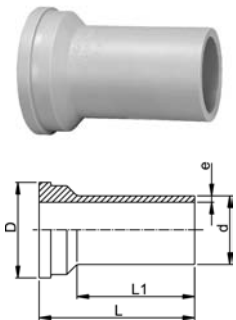


d [mm]	PN	FM	Code	kg	D [mm]	L [mm]	L1 [mm]	e [mm]
75	6	IR	727 608 412	0.114	101	66	34	4,3
90	6	IR	727 608 413	0.116	101	66	45	5,1
110	6	IR	727 608 414	0.165	121	66	40	6,3

27 60 85

PROGEF Standard, Union ends long, SDR11**Model:**

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H
- Spigot for electro fusion
- Suitable for unions, diaphragm valves Type 314 and Vortex sensors



d [mm]	PN	FM	Code	kg	D [mm]	L [mm]	L1 [mm]	e [mm]
20	10	IR	727 608 516	0.010	30	67	52	1,9
25	10	IR	727 608 517	0.017	39	71	53	2,3
32	10	IR	727 608 518	0.024	45	73	55	2,9
40	10	IR	727 608 519	0.041	57	81	60	3,7
50	10	IR	727 608 520	0.054	63	87	66	4,6
63	10	IR	727 608 521	0.092	78	93	70	5,8

27 64 85

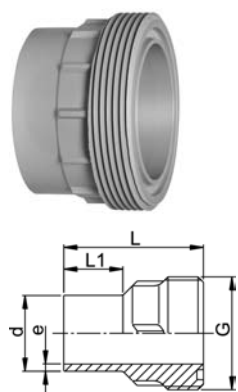
PROGEF Standard, Union Bushes, SDR11

Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H
- Spigot for electro fusion
- Suitable for unions, diaphragm valves Type 314, tank adaptors and Vortex sensors



d [mm]	PN	FM	Code	kg	G [inch]	L [mm]	L1 [mm]	e [mm]
20	10	IR	727 648 506	0.012	1	54	26	1,9
25	10	IR	727 648 507	0.020	1 1/4	57	26	2,3
32	10	IR	727 648 508	0.029	1 1/2	60	25	2,9
40	10	IR	727 648 509	0.047	2	63	25	3,7
50	10	IR	727 648 510	0.064	2 1/4	66	25	4,6
63	10	IR	727 648 511	0.104	2 3/4	69	25	5,8
75	10	IR	727 648 512	0.172	S107.5x3.6	66	24	6,8
90	10	IR	727 648 513	0.182	S107.5x3.6	66	24	8,2
110	10	IR	727 648 514	0.258	S127.5x3.6	66	25	10,0



Union Bushes, PP-H SDR17,6

Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00
- For the dimensions d75-110 please see instructions for the installation

d [mm]	PN	FM	Code	kg	G [inch]	L [mm]	L1 [mm]	e [mm]
75	6	IR	727 648 412	0.152	S127.5x3.6	65.5	24	4.3
90	6	IR	727 648 413	0.154	S107.5x3.6	66.0	24	5.1
110	6	IR	727 648 414	0.207	S127.5x3.6	66.0	24	6.3

27 69 04

Union Nut, PP-GF

Model:

- PP glass-fibre reinforced



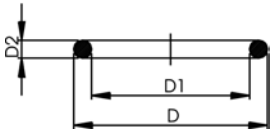
Socket Fusion d [mm]	Butt Fusion d [mm]	PN	G [inch]	Code	kg	D [mm]	L [mm]
16	16	10	3/4	727 690 405	0.008	35	21
20	20	10	1	727 690 406	0.021	48	24
25	25	10	1 1/4	727 690 407	0.034	58	26
32	32	10	1 1/2	727 690 408	0.042	65	28
40	40	10	2	727 690 409	0.045	79	31
50	50	10	2 1/4	727 690 410	0.060	91	35
63	63	10	2 3/4	727 690 411	0.168	111	39
75	75 - 90	10	S107,5x3,6	727 690 422	0.205	135	40
90	110	10	S127,5x3,6	727 690 423	0.288	158	43
110	-	10	S152,5x3,6	727 690 424	0.460	188	48

EPDM 48 41 00
FPM 49 41 00

O-Ring Gaskets

Model:

- For unions and adaptor unions
- Hardness approx. 65° Shore
- EPDM minimum temperature -40°C
- FPM minimum temperature -15°C

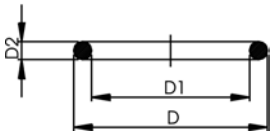


d [mm]	DN [mm]	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	D2 [mm]	
20	15	748 410 006	749 410 006	0.002	27	20	4	
25	20	748 410 007	749 410 007	0.002	35	28		
32	25	748 410 008	749 410 008	0.002	40	33	4	
40	32	748 410 009	749 410 009	0.006	51	41	5	
50	40	748 410 010	749 410 010	0.007	58	47	5	
63	50	748 410 011	749 410 011	0.010	70	60	5	

O-Ring Gasket

Model:

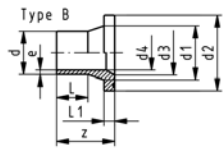
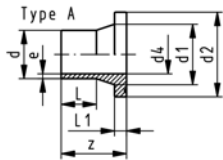
- for unions PP-H, PE100 and PVDF butt fusion
- d75 748 410 013 (EPDM), 749 410 013 (FPM)
- d90 748 410 014 (EPDM), 749 410 014 (FPM)
- d110 748 410 015 (EPDM), 749 410 015 (FPM)



EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	D2 [mm]	
748 410 013	749 410 013	0.011	80			
748 410 014	749 410 014	0.012	93			
748 410 015	749 410 015	0.015	112			

Flange Adaptors, Flanges and Gaskets for Butt Fusion

PROGEF Standard, Flange Adaptor, S5/SDR11 Combined Jointing Face: Flat and Serrated



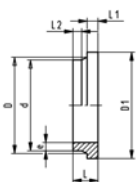
Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H
- Suitable for flange connections to metric (from d110 also to ANSI/ASME B16.5)
- Up to d315, suitable for butterfly valve type 567, 568 and 037
- Gasket: Profile flange gasket EPDM No. 48 44 07, FPM No. 49 44 07

* Type B with chamfer

d [mm]	DN [mm]	FM	Code	kg	z [mm]	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	L [mm]	L1 [mm]	e [mm]
20	15	IR	727 798 706	0.015	50	26	45		16	29	7	1.9
25	20	IR	727 798 707	0.028	52	32	58		20	27	9	2.3
32	25	IR	727 798 708	0.042	54	40	68		26	28	10	3.0
40	32	IR	727 798 709	0.064	56	49	78		32	25	11	3.7
50	40	IR	727 798 710	0.088	62	60	88		40	32	12	4.6
63	50	IR	727 798 711	0.144	68	75	102		51	38	14	5.8
*75	65	IR	727 798 712	0.243	80	89	122	66	61	43	16	6.9
*90	80	IR	727 798 713	0.326	80	105	138	78	73	41	17	8.2
*110	100	IR	727 798 714	0.441	80	125	158	100	90	40	18	10.0
*125	100	IR	727 798 715	0.520	82	132	158	114	102	35	25	11.4
*140	125	IR	727 798 716	0.800	89	155	188	127	114	39	25	12.8
*160	150	IR	727 798 717	0.920	92	175	212	151	131	45	25	14.6
*180	150	IR	727 798 718	0.900	80	180	212	154	147	45	30	16.4
*200	200	IR	727 798 719	1.670	100	232	268	203	163	30	32	18.2
*225	200	IR	727 798 720	1.700	100	235	268	210	184	35	32	20.5
*250	250		727 798 721	2.790	100	285	320	250	204	25	35	22.7
*280	250		727 798 722	2.610	100	291	320	265	229	35	35	25.4
*315	300		727 798 723	3.410	100	335	370	300	257	25	35	28.6
*355	350		727 798 724	5.600	180	373	430	340	290	20	40	32.3
*400	400		727 798 725	8.300	187	427	482	385	327	29	46	36.6

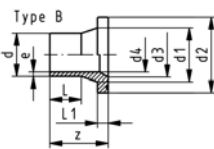
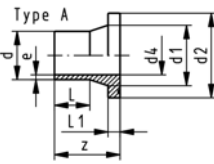
PROGEF Standard, Flange Adaptors, S5/SDR11 Jointing Face serrated, metric



Model:

- Injection moulded
- Material: PP-R
- Conventional butt-welding according to DVS 2207 part 11

d [mm]	DN [mm]	FM	Code	kg	z [mm]	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	L [mm]	L1 [mm]	e [mm]
*450	400		727 798 726	13.000	138	514	585	400	368	44	60	40.9
*500	450		727 798 727	13.000	138	530	585	440	409	44	60	45.4



PROGEF Standard, Flange Adaptor, PP-H S5/SDR11 Combined Jointing Face: Flat and Serrated

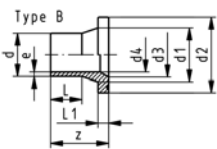
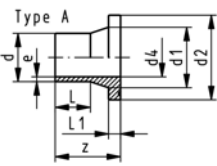


Model:

- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H
- Suitable for flange connections to **ANSI/ASME B 16.5**
- Up to d315, suitable for butterfly valve type 567, 568 and 037
- Gasket: Profile flange gasket EPDM No. 48 44 07, FPM No. 49 44 07

* Type B with chamfer

d	DN	FM	Code	kg	z	d1	d2	d3	d4	L	L1	e
[mm]	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
20	15	IR	727 798 706	0.015	50	26	45		16	29	7	1.9
25	20	IR	727 798 757	0.025	85	33	54		20	41	9	2.3
32	20	IR	727 798 758	0.039	85	40	63		26	44	10	3.0
40	20	IR	727 798 759	0.058	85	50	73		32	49	11	3.7
50	20	IR	727 798 760	0.082	85	61	82		40	55	12	4.6
63	50	IR	727 798 711	0.144	68	75	102		51	38	14	5.8
*75	65	IR	727 798 712	0.243	80	89	122	66	61	43	16	6.9
*90	20	IR	727 798 763	0.297	140	105	133	78	73	85	17	8.2
*110	100	IR	727 798 714	0.441	80	125	158	100	90	40	18	10.0
*125	100	IR	727 798 715	0.520	82	132	158	114	102	35	25	11.4
*140	125	IR	727 798 716	0.800	89	155	188	127	114	39	25	12.8
*160	150	IR	727 798 717	0.920	92	175	212	151	131	45	25	14.6
*180	150	IR	727 798 718	0.900	80	180	212	154	147	45	30	16.4
*200	200	IR	727 798 719	1.670	100	232	268	203	163	30	32	18.2
*225	200	IR	727 798 720	1.700	100	235	268	210	184	35	32	20.5
*250	250		727 798 721	2.790	100	285	320	250	204	25	35	22.7
*280	250		727 798 722	2.610	100	291	320	265	229	35	35	25.4
*315	300		727 798 723	3.410	100	335	370	300	257	25	35	28.6
*355	350		727 798 724	5.600	180	373	430	340	290	20	40	32.3
*400	400		727 798 725	8.300	187	427	482	385	327	29	46	36.6



PROGEF Standard, Flange Adaptor, S8.3/SDR17.6 Combined Jointing Face: Flat and Serrated

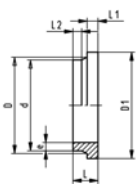


Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H
- Suitable for flange connections to metric (from d110 also to ANSI/ASME B16.5)
- Up to d315, suitable for butterfly valve type 567, 568 and 037
- Gasket: Profile flange gasket EPDM No. 48 44 07, FPM No. 49 44 07

* Type B with chamfer

d [mm]	DN [mm]	FM	Code	kg	z [mm]	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	L [mm]	L1 [mm]	e [mm]
50	40	IR	727 798 785	0.070	50	61	88		42	21	12	3.0
63	50	IR	727 798 786	0.100	50	75	102		53	16	14	3.8
75	65	IR	727 798 787	0.203	80	89	122		65	43	16	4.5
90	80	IR	727 798 788	0.273	80	105	138		78	41	17	5.4
110	100	IR	727 798 789	0.363	80	125	158		96	40	18	6.6
*125	100	IR	727 798 790	0.335	80	132	158	114	107	42	18	7.4
*140	125	IR	727 798 791	0.499	80	155	188	127	120	34	18	8.3
*160	150	IR	727 798 792	0.770	92	175	212	158	142	45	25	9.1
180	150	IR	727 798 793	0.630	80	180	212		156	30	20	10.2
*200	200	IR	727 798 794	1.380	100	232	268	203	177	30	32	11.4
*225	200	IR	727 798 795	1.350	100	235	268	210	199	35	32	12.8
*250	250		727 798 796	1.800	100	285	320	250	216	25	25	14.8
*280	250		727 798 797	2.030	100	291	320	265	243	45	25	16.6
*315	300		727 798 798	2.200	100	335	370	300	274	35	25	18.7
*355	350		727 798 799	5.800	182	374	431	340	314	100	30	21.4
*400	400		727 798 800	7.700	199	428	484	385	353	110	33	23.2



PROGEF Standard, Flange Adaptors, S8.3/SDR17,6 Jointing Face serrated, metric



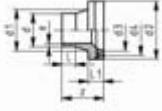
Model:

- Injection moulded
- Material: PP-R
- Conventional butt-welding according to DVS 2207 part 11

d [mm]	DN [mm]	Code	kg	z [mm]	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	L [mm]	L1 [mm]	e [mm]
*450	400	727 798 801	13.000	140	514	585		396	60	46	25.5
*500	450	727 798 802	13.000	140	530	585		440	60	46	28.4

27 79 88

PROGEF Standard, Flange Adaptors, S5/SDR11 Jointing Face, combination serrated / flat metric for Butterfly Valves



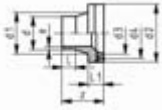
Model:

- Conventional butt-welding according to DVS 2207 part 11
- Suitable for most common butterfly valves
- Chamfered and ready for use
- Including spacer and O-Ring EPDM

d [mm]	DN [mm]	Code	kg	d1 [mm]	d2 [mm]	d3 [mm]	z [mm]	L [mm]	L1 [mm]	e [mm]
355	350	727 798 824	7.500	373	430	346	118	40	75	32.2
400	400	727 798 825	10.300	427	482	404	140	55	82	36.3

27 79 88

PROGEF Standard, Flange Adaptor, S8,3/SDR17,6 Jointing face, combination serrated / flat metric



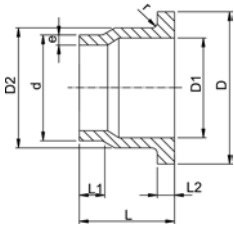
Model:

- Conventional butt-welding according to DVS 2207 part 11
- Suitable for most common butterfly valves
- Chamfered and ready for use
- Including spacer and O-Ring EPDM

d [mm]	DN [mm]	Code	kg	d1 [mm]	d2 [mm]	d3 [mm]	L [mm]	L1 [mm]	z [mm]	e [mm]
355	350	727 798 849	5.800	373	430	346	156	66	118	20.1
400	400	727 798 850	7.700	427	482	404	176	69	140	22.7

27 80 80

PROGEF Standard, Outlet Flange Adaptors, S5/SDR11



Model:

- Material: PP-R unpigmented
- Conventional butt-welding according to DVS 2207 part 11
- To wafer check valves Type 369

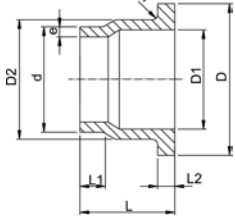
Attention:

- In conjunction with outlet flange adaptors, **flange rings for socket systems** must be used.

d [mm]	DN [mm]	Code	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	e [mm]	r [mm]
40	32	727 808 034	0.064	80	37	50	64	30	11	3,7	3
50	40	727 808 035	0.088	90	43	61	67	30	12	4,6	3
63	50	727 808 036	0.126	105	54	76	74	30	14	5,8	4
75	65	727 808 037	0.187	125	70	90	78	30	16	6,8	4
90	80	727 808 038	0.346	140	82	108	87	35	17	8,2	4
110	100	727 808 039	0.500	160	105	131	102	41	18	10,0	4
140	125	727 808 041	0.710	190	130	165	124	47	25	12,7	4
160	150	727 808 042	0.910	215	158	188	149	52	25	14,6	4
225	200	727 808 045	1.830	270	206	248	180	55	32	20,5	4
280	250	727 808 047	3.550	325	259	308	240	63	35	25,4	4
315	300	727 808 048	4.960	375	308	346	272	66	35	28,6	4

27 80 80

PROGEF Standard, Outlet Flange Adaptors, S8,3/SDR17,6



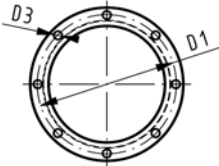
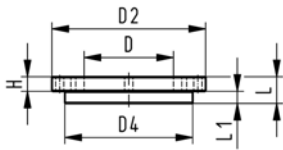
Model:

- Material: PP-R unpigmented
- Conventional butt-welding according to DVS 2207 part 11
- To wafer check valves Type 369

Attention:

- In conjunction with outlet flange adaptors, **flange rings for socket systems** must be used.

d [mm]	DN [mm]	Code	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	e [mm]	r [mm]	
40	32	727 808 009	0.048	80	37	50	64	30	11	2,3	3	
50	40	727 808 010	0.067	90	43	61	67	30	12	2,9	3	
63	50	727 808 011	0.096	105	54	76	74	30	14	3,6	4	
75	65	727 808 012	0.170	125	70	90	78	30	16	4,3	4	
90	80	727 808 013	0.260	140	82	108	87	35	17	5,1	4	
110	100	727 808 014	0.355	160	105	131	102	41	18	6,3	4	
140	125	727 808 016	0.500	190	130	165	124	47	18	8,0	4	
160	150	727 808 017	0.630	215	158	188	149	52	18	9,1	4	
225	200	727 808 020	1.225	270	206	248	180	55	24	12,7	4	
280	250	727 808 022	2.230	325	259	308	240	63	25	15,9	4	
315	300	727 808 023	2.450	375	308	346	272	66	25	17,9	4	



Blanking Flange Set, PP-H Combined Jointing face flat and serrated metric



Model:

- d63 - d315: Backing Flange PP-V with End Blank PP-H
- d355 - d630: Backing Flange PP/Steel with End Blank PP-H
- Connecting dimensions: ISO 7005, EN 1092, DIN 2501
- **Bolt circle PN 10**

AL: number of holes

L: length of the End Blank

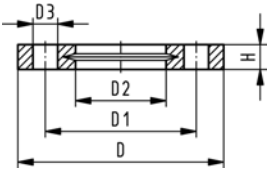
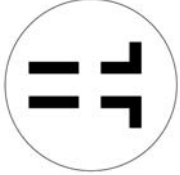
d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	H [mm]	L [mm]	L1 [mm]	AL
63	50	10	727 700 611	0.668	75	125	165	18	102	24	30	14	4
75	65	10	727 700 612	0.901	89	145	185	18	122	26	30	16	4
90	80	10	727 700 613	1.054	105	160	200	18	138	27	30	17	8
110	100	10	727 700 614	1.199	125	180	220	18	158	28	30	18	8
125	100	10	727 700 615	1.658	132	180	220	18	158	28	35	25	8
140	125	10	727 700 616	1.883	155	210	250	18	188	30	40	25	8
160	150	10	727 700 617	2.312	175	240	285	22	212	32	40	25	8
180	150	10	727 700 618	2.386	180	240	285	22	212	32	45	30	8
200	200	10	727 700 619	3.419	232	295	340	22	268	34	50	32	8
225	200	10	727 700 620	3.658	235	295	340	22	268	34	50	32	8
250	250	10	727 700 621	5.425	285	350	395	22	320	38	55	35	12
280	250	10	727 700 622	19.781	291	350	395	22	320	38	60	35	12
315	300	10	727 700 623	24.348	335	400	445	22	370	42	65	35	12
355	350	10	727 700 624	22.874	373	460	515	22	430	40	70	40	16
400	400	10	727 700 625	30.304	427	515	574	26	482	40	75	46	16
450	500	10	727 700 626	43.485	510	620	684	26	585	49	80	60	20
500	500	10	727 700 627	46.203	530	620	684	26	585	49	90	60	20
560	600	10	727 700 628	65.823	615	725	796	30	685	58	100	60	20
630	600	10	727 700 629	67.056	642	725	796	30	685	58	110	60	20

27 70 04
27 70 05

Backing Flanges, PP-V for Butt Fusion Systems metric

Model:

- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt retainers as an assembly aid
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**



¹⁾ Suitable for socket- and butt fusion systems (no pictograph on flange)
AL: number of holes

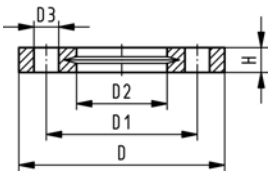
d [mm]	Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20		15	16	727 700 406	0.080	95	65	28	14	16	4	M12
25		20	16	727 700 407	0.100	105	75	34	14	17	4	M12
32		25	16	727 700 408	0.140	115	85	42	14	18	4	M12
40		32	16	727 700 409	0.220	140	100	51	18	20	4	M16
50		40	16	727 700 410	0.210	150	110	62	18	22	4	M16
63		50	16	727 700 411	0.380	165	125	78	18	24	4	M16
75		65	16	727 700 412	0.480	185	145	92	18	26	4	M16
90		80	16	727 700 513	0.520	200	160	108	18	27	8	M16
110		100	16	727 700 514	0.680	220	180	128	18	28	8	M16
125		100	16	727 700 515	0.760	220	180	135	18	28	8	M16
140		125	16	727 700 516	0.800	250	210	158	18	30	8	M16
160	6	150	16	727 700 517	1.200	285	241	178	22	32	8	M20
180		150	16	727 700 518	1.200	285	240	188	22	32	8	M20
200	8	200	16	727 700 519	1.400	340	295	235	22	34	8	M20
225	9	200	16	727 700 520	1.400	340	295	238	22	34	8	M20
250		250	16	727 700 521	1.700	395	350	288	22	38	12	M20
280		250	16	727 700 522	1.700	395	350	294	22	38	12	M20
315		300	16	727 700 523	2.400	445	400	338	22	42	12	M20
355		350	10	727 700 524	3.000	515	460	376	22	46	16	M20
400		400	10	727 700 525	3.500	574	515	442	26	50	16	M24

27 70 04
27 70 05

Backing Flanges, PP-V for Socket Systems metric



Model:

- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt retainers as an assembly aid
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**



¹⁾ Suitable for socket- and butt fusion systems (no pictograph on flange)

AL: number of holes

d [mm]	Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20		15	16	727 700 406	0.080	95	65	28	14	16	4	M12
25		20	16	727 700 407	0.100	105	75	34	14	17	4	M12
32		25	16	727 700 408	0.140	115	85	42	14	18	4	M12
40		32	16	727 700 409	0.220	140	100	51	18	20	4	M16
50		40	16	727 700 410	0.210	150	110	62	18	22	4	M16
63		50	16	727 700 411	0.380	165	125	78	18	24	4	M16
75		65	16	727 700 412	0.480	185	145	92	18	26	4	M16
90		80	16	727 700 413	0.520	200	160	110	18	27	8	M16
110		100	16	727 700 414	0.680	220	180	133	18	28	8	M16
140		125	16	727 700 416	0.800	250	210	167	18	30	8	M16
160	6	150	16	727 700 417	1.200	285	241	190	22	32	8	M20
200		200	16	727 700 419	1.500	340	296	226	22	34	8	M20
225	8	200	16	727 700 420	1.400	340	295	250	22	34	8	M20
250		250	16	727 700 421	1.700	395	350	277	22	38	12	M20
280		250	16	727 700 422	1.700	395	350	310	22	38	12	M20
315		300	16	727 700 423	2.400	445	400	348	22	42	12	M20
 355		350	10	727 700 424	3.000	515	460	388	22	46	16	M20
 400		400	10	727 700 425	3.500	574	515	442	26	50	16	M24

27 70 14
27 70 15

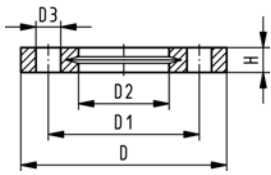
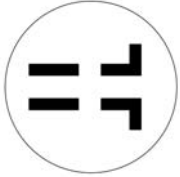
Backing Flanges, PP-V for Butt Fusion Systems Inch/ANSI

Model:

- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt-fixing as an assembly aid
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**

¹⁾ Suitable for socket- and butt fusion systems (no pictograph on flange)

AL: number of holes



Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
1/2	15	16	727 701 406	0.080	95	60	28	16	16	4	M12
3/4	20	16	727 701 407	0.100	105	70	34	16	17	4	M12
1	25	16	727 701 408	0.140	115	79	42	16	18	4	M12
1 1/4	32	16	727 701 409	0.220	140	89	51	16	20	4	M16
1 1/2	40	16	727 701 410	0.210	150	98	62	16	22	4	M16
2	50	16	727 701 411	0.380	165	121	78	19	24	4	M16
2 1/2	65	16	727 701 412	0.480	185	140	92	19	26	4	M16
3	80	16	727 701 513	0.520	200	152	108	19	27	4	M16
4	100	16	727 701 514	0.680	229	190	128	19	28	8	M16
6	150	16	727 700 517	1.200	285	241	178	22	32	8	M20
8	200	16	727 700 519	1.400	340	295	235	22	34	8	M20
9	200	16	727 700 520	1.400	340	295	238	22	34	8	M20
10	250	16	727 701 521	1.800	406	362	288	26	38	12	M20
10	250	16	727 701 522	1.700	406	362	294	26	38	12	M20
12	300	16	727 701 523	2.400	483	432	338	26	42	12	M20

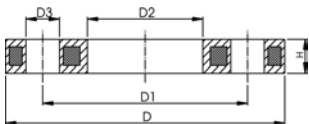
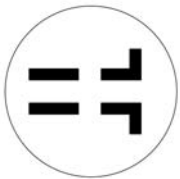
27 70 02
27 70 03

Backing Flanges, PP/Steel for Butt Fusion Systems metric

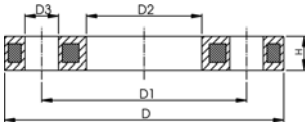
Model:

- Material: PP (30 % glass-fibre reinforced) with steel ring
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**

AL: number of holes



d [mm]	d [inch]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20		15	16	727 700 206	0.220	95	65	28	14	12	4	M12
25		20	16	727 700 207	0.260	105	75	34	14	12	4	M12
32		25	16	727 700 208	0.430	115	85	42	14	16	4	M12
40		32	16	727 700 209	0.650	140	100	51	18	16	4	M16
50		40	16	727 700 210	0.820	150	110	62	18	18	4	M16
63		50	16	727 700 211	0.940	165	125	78	18	18	4	M16
75		65	16	727 700 212	1.300	185	145	92	18	18	4	M16
90		80	16	727 700 313	1.400	200	160	108	18	20	8	M16
110		100	16	727 700 314	1.580	220	180	128	18	20	8	M16
125		100	16	727 700 315	1.550	220	180	135	18	20	8	M16
140		125	16	727 700 316	2.360	250	210	158	18	24	8	M16
160	6	150	16	727 700 317	3.890	285	240	178	22	24	8	M20
180		150	16	727 700 318	3.410	285	240	188	22	24	8	M20
200		200	16	727 700 319	5.180	340	295	235	22	27	8	M20
225		200	16	727 700 320	5.150	340	295	238	22	27	8	M20



d	d	DN	PN	Code	kg	D	D1	D2	D3	H	AL	SC
[mm]	[inch]	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]		
250		250	16	727 700 321	6.680	395	350	288	22	30	12	M20
280		250	16	727 700 322	6.580	395	350	294	22	30	12	M20
315		300	16	727 700 323	8.420	445	400	338	22	34	12	M20
355		350	16	727 700 324	15.790	515	460	376	22	40	16	M20
400		400	16	727 700 325	19.320	574	515	430	26	40	16	M24

27 70 12

Backing Flanges, PP/Steel for Butt Fusion Systems Inch/ANSI

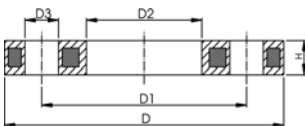
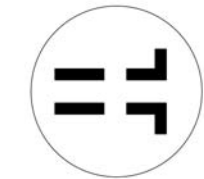
Model:

- Material: PP (30 % glass-fibre reinforced) with steel ring
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**



AL: number of holes

d	DN	d	PN	Code	kg	D1	D2	D3	D	H	AL
[inch]	[mm]	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]	
½	15	20	16	727 701 206	0.210	60	28	16	95	12	4
¾	20	25	16	727 701 207	0.250	70	34	16	105	12	4
1	25	32	16	727 701 208	0.420	79	42	16	115	16	4
1 ¼	32	40	16	727 701 209	0.670	89	51	16	140	16	4
1 ½	40	50	16	727 701 210	0.860	98	62	16	150	18	4
2	50	63	16	727 701 211	0.930	121	78	19	165	18	4
2 ½	65	75	16	727 701 212	1.340	140	92	19	185	18	4
3	80	90	16	727 701 313	1.550	152	108	19	200	20	4
4	100	110	16	727 701 314	1.840	190	128	19	229	20	8
6	150	160	16	727 700 317	3.890	240	178	22	285	24	8
8	200	200	16	727 701 319	5.180	298	235	22	340	27	8
8	200	225	16	727 701 320	5.150	298	238	22	340	27	8



24 70 04

Profiled Backing Flanges, PP/Steel for Butt Fusion Systems metric

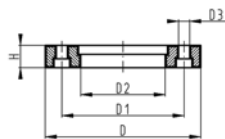
Model:

- PP with glass-fibre reinforcement and GGG 50 insert
- Connecting dimensions: ISO 7005, EN 1092, DIN 2501
- **Bolt circle PN 10**



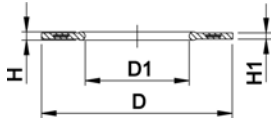
AL: number of holes

d	DN	PN	Code	kg	D	D1	D2	D3	H	AL	SC
[mm]	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]		
355	350	10	724 700 424	15.570	521	460	376	22	48	16	M20
400	400	10	724 700 425	19.800	582	515	430	26	51	16	M24
450	500	10	724 700 426	25.600	684	620	517	26	49	20	M24
500	500	10	724 700 427	24.300	684	620	533	26	49	20	M24
560	600	10	724 700 428	35.700	796	725	618	30	58	20	M27
630	600	10	724 700 429	32.500	796	725	645	30	68	20	M27



EPDM 48 44 07
FPM 49 44 07

Profile Flange Gaskets metric EPDM / FPM



Model:

- For all GF Flange Adaptors
- Profile Gasket with steel insert (type G-ST-P/K)
- Hardness: 70° Shore **EPDM**, 75° Shore **FPM**
- Centering on the inner diameter of the screw crown

di FA are the suitable inner diameters of flange adaptors

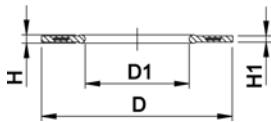
d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	H [mm]	H1 [mm]	di FA [mm]
20	15	16	748 440 706	749 440 706	0.008	51	20	4	3	10 - 20
25	20	16	748 440 707	749 440 707	0.011	61	22	4	3	12 - 22
32	25	16	748 440 708	749 440 708	0.014	71	28	4	3	18 - 28
40	32	16	748 440 709	749 440 709	0.021	82	40	4	3	30 - 40
50	40	16	748 440 710	749 440 710	0.022	92	46	4	3	36 - 46
63	50	16	748 440 711	749 440 711	0.041	107	58	5	4	48 - 58
75	65	16	748 440 712	749 440 712	0.055	127	69	5	4	59 - 69
90	80	16	748 440 713	749 440 713	0.062	142	84	5	4	73 - 84
110	100	16	748 440 714	749 440 714	0.085	162	104	6	5	94 - 104
125	100	16	748 440 715	749 440 715	0.158	162	123	6	5	113 - 123
140	125	16	748 440 716	749 440 716	0.118	192	137	6	5	127 - 137
160 / 180	150	16	748 440 717	749 440 717	0.153	218	160	8	6	150 - 160
200	200	16	748 440 719	749 440 719	0.263	273	203	8	6	192 - 203
225	200	16	748 440 720	749 440 720	0.181	273	220	8	6	207 - 220
250	250	16	748 440 721	749 440 721	0.410	328	252	8	6	238 - 252
280	250	16	748 440 722	749 440 722	0.226	328	274	8	6	264 - 274
315	300	16	748 440 723	749 440 723	0.334	378	306	8	6	296 - 306
355	350	16	748 440 724	749 440 724	0.410	438	355	10	7	340 - 355
400	400	16	748 440 725	749 440 725	0.513	489	400	10	7	385 - 400
450	500	16	748 440 726	749 440 726	0.718	594	403	10	7	393 - 403
500	500	16	748 440 727	749 440 727	0.718	594	447	10	7	437 - 447
560	600	16	748 440 728	749 440 728	0.923	695	494	10	7	484 - 494
630	600	16	748 440 729	749 440 729	0.923	695	555	10	7	545 - 555

EPDM 48 44 03
FPM 49 44 03

Profile flange gaskets for Flange connections, metric

Model:

- Hardness: 70° Shore **EPDM**, 75° Shore **FPM**
- suitable for flange adaptors



d [mm]	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	H [mm]	H1 [mm]
110	748 440 309	749 440 309	0.112	162	83 - 93	6	5
125	748 440 310	749 440 310	0.110	162	95 - 105	6	5
140	748 440 311	749 440 311	0.146	192	107 - 117	6	5
160	748 440 312	749 440 312	0.207	218	125 - 135	8	6
180	748 440 313	749 440 313	0.260	218	141 - 151	8	6
200	748 440 314	749 440 314	0.430	273	158 - 168	8	6
225	748 440 315	749 440 315	0.365	273	178 - 188	8	6
250	748 440 316	749 440 316	0.520	328	298 - 208	8	6
280	748 440 317	749 440 317	0.496	328	223 - 233	8	6
315	748 440 318	749 440 318	0.600	378	252 - 262	8	6
355	748 440 319	749 440 319	0.750	438	284 - 294	8	6
400	748 440 320	749 440 320	0.750	489	321 - 331	8	6