



# PROGEF® Standard

## Pressure/temperature diagram for PP

### PP-H

The following pressure/temperature diagrams for PP-H pipes and fittings are valid for a lifetime of 25 years.

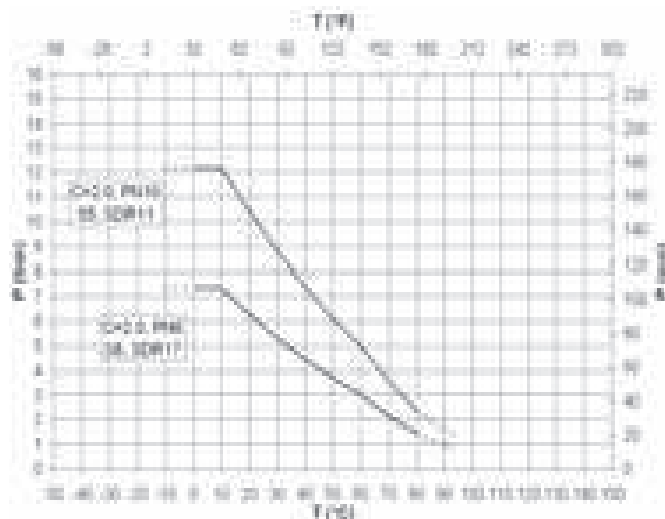
The design factor of 2.0 recommended by GF is incorporated.

They can be used for water or media resembling water, in other words, media which have no derating factor regarding the chemical resistance.

**Remark:** Please take into account the pressure/temperature diagrams for valves and special fittings. Because of the construction and/or sealing material used, differences are possible when compared with pipes and fittings. This information can be found in the planning fundamentals of the relevant types of valves, respectively special fittings.

According to the 10 °C line in the hydrostatic strength curve for PP-H, a permissible pressure of 12.2 bar / 7.4 bar in the temperature range of -10° to +10° C for the PN10 / PN6 system can be applied.

In case of applications with temperatures in the range of the dotted lines please contact your GF representative.



P Permissible pressure in bar, psi  
T Temperature in °C, °F

# PROGEF Standard – System Specification






<b>Material</b>	Beta PP-H 100 (Beta Polypropylene Homopolymer) d 16 - d 225	State-of-the-art PP (Polypropylene) d 250 - d 500
Colour	RAL 7032 pebble grey	RAL 7032 pebble grey
Density	~0.90 g/cm <sup>3</sup> (ISO 1183/ASTM D 792)	~0.90 g/cm <sup>3</sup> (ISO 1183 / ASTM D 792)
Surface tension	31 mJ/m <sup>2</sup>	24 mJ/m <sup>2</sup>
Linear expansion coefficient	0.16 mm/mK (DIN 53752)	0.16-0.18 mm/mK (DIN 53752)
E-modulus	1300 N/mm <sup>2</sup> (ISO 527/ASTM D 790)	900 N/mm <sup>2</sup> (ISO 527/ASTM D 790)
Thermal conductivity	0.23 W/mK (EN 12664)	0.23 W/mK (EN 12664)
Surface resistivity	> 10 <sup>16</sup> Ω (IEC 60093)	> 10 <sup>16</sup> Ω (IEC 60093)
<b>Dimension</b>	d 16 – d 500 in accordance to EN ISO 15494	
<b>Pressure Rating</b>	Pipes/Fittings/Diaphragm and ball valves: d 16 – d 225 SDR11, PN10, c=2.0 d 50 – d 225 SDR17.6, PN6, c=2.0 Butterfly valves: d63–d225, PN10 / d280, PN8 / d315, PN8	Pipes/Fittings: d 250 – d 500 SDR11, PN10, c=2.0 d 250 – d 500 SDR17.6, PN6, c=2.0
<b>Temperature Rating</b>	From 0 °C to 80 °C (32 °F – 176 °F)	
<b>Production</b>	Fittings: injection moulded or segment welded Pipes: extruded Valves: injection moulded	
<b>Marking</b>	All components are embossed with a permanent identification during the production process to ensure full traceability: Lot No Material Dimension Pressure Rating	
<b>Testing and Inspection (EN ISO 15494)</b>	Visual inspection Surface finish Dimension tolerance Pressure testing Full product range passed the Initial Type Test (ITT)	
<b>Material- and Product Approvals/ Conformance<sup>(1)</sup></b>	FDA CFR 21 177.1520 USP 25 class VI (physiological non-toxic) DIBt (Z-40.23-4, Z-40.23-264, Z – 40.23-265) DNV (K-2630, K – 2636) Lloyd's Register (01/ 20030(E1))	
<b>Welding Technology</b>	Socket fusion (DVS 2207 - 11): d 16 - d 110 IR Plus, infrared fusion (DVS 2207 - 6): d 20 - d 225 Butt fusion (DVS 2207-11): d 20 - d 500	
<b>Documentation<sup>(2)</sup></b>	EN 10204 2.2 / EN 10204 3.1	
<b>Packing</b>	Pipes and fittings bulk bagged	
<b>Labeling</b>	Brand Name Product Description Code Number Material Dimension CE-labeling <sup>(3)</sup> Approvals	
<b>Main Applications</b>	PROGEF has been relied to be highly resistant to impact, abrasion and many chemicals. Suitable for industrial applications in chemical production, chemical distribution, galvanisation and power stations.	

<sup>(1)</sup> For thermoplastic material only

<sup>(2)</sup> On request

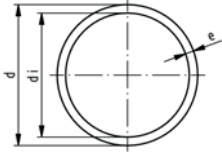
<sup>(3)</sup> From 2008 on

# PROGEF Standard Pipes, Fittings, Unions, Flanges and Flange Adaptors

		Page
	PP-H Pipes	12
	Butt fusion fittings	14
	Adaptor fittings for butt fusion	33
	SIGNET Sensor installation fittings	37
	Unions for butt fusion	40
	Flange Adaptors, Flanges and Gaskets for Butt Fusion	46
	Fittings for Socket Fusion	56
	Adaptor fittings for socket fusion	59
	Unions for socket fusion	63
	Adaptor Unions for Socket Fusion	66
	Flange Adaptors, Flanges and Gaskets for Socket Fusion	69

# PP-H Pipes

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## PROGEF Standard pipe S5/SDR11 (PN10)

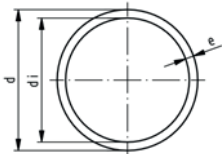
### Model:

- Material: PP-H
- Dimension: DIN 8077
- Colour: RAL 7032 pebble grey
- Length: Lengths of 5 m

\* In these two sizes, stiffeners Code No. 727 900 006 (20 x 1.9) and 727 900 007 (25 x 2.3), or pipe SDR 7.4 must be used with socket fusion joints.

d [mm]	PN	Code	kg/m	e [mm]	di [mm]
16	10	<b>167 480 710</b>	0.080	1.8	12.4
* 20	10	<b>167 480 711</b>	0.107	1.9	16.2
* 25	10	<b>167 480 712</b>	0.164	2.3	20.4
32	10	<b>167 480 713</b>	0.261	2.9	26.2
40	10	<b>167 480 714</b>	0.412	3.7	32.6
50	10	<b>167 480 715</b>	0.638	4.6	40.8
63	10	<b>167 480 716</b>	1.010	5.8	51.4
75	10	<b>167 480 717</b>	1.410	6.8	61.4
90	10	<b>167 480 718</b>	2.030	8.2	73.6
110	10	<b>167 480 719</b>	3.010	10.0	90.0
125	10	<b>167 480 720</b>	3.910	11.4	102.2
140	10	<b>167 480 721</b>	4.870	12.7	114.6
160	10	<b>167 480 722</b>	6.380	14.6	130.8
180	10	<b>167 480 723</b>	8.070	16.4	147.2
200	10	<b>167 480 724</b>	9.950	18.2	163.6
225	10	<b>167 480 725</b>	12.600	20.5	184.0
250	10	<b>167 480 726</b>	15.500	22.7	204.6
280	10	<b>167 480 727</b>	19.400	25.4	229.2
315	10	<b>167 480 728</b>	24.600	28.6	257.8
355	10	<b>167 480 729</b>	31.200	32.2	290.6
400	10	<b>167 480 730</b>	39.600	36.3	327.4
450	10	<b>167 480 731</b>	50.200	40.9	368.2
500	10	<b>167 480 732</b>	63.300	45.4	409.2

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## PROGEF Standard pipe S3.2/SDR7.4 (PN16)

### Model:

- Material: Polypropylene (PP-H) DIN 8078
- Dimension: DIN 8077
- Colour: RAL 7032 pebble grey
- Length: Lengths of 5 m
- for socket fusion without stiffeners

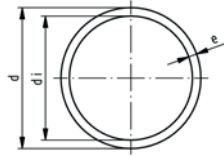
d [mm]	PN	Code	kg/m	e [mm]	di [mm]
16	16	<b>167 481 027</b>	0.095	2.2	11.6
20	16	<b>167 481 028</b>	0.148	2.8	14.4
25	16	<b>167 481 029</b>	0.230	3.5	18.0

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## PROGEF Standard pipe S8.3/SDR17.6 (PN6)

**Model:**

- Material: PP-H
- Dimension: DIN 8077
- Colour: RAL 7032 pebble grey
- Length: Lengths of 5 m

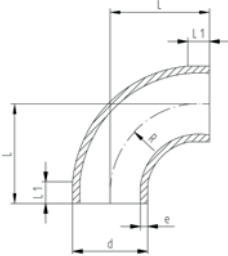


d [mm]	Code	kg/m	e [mm]	di [mm]
50	<b>167 480 680</b>	0.422	2.9	44.2
63	<b>167 480 681</b>	0.659	3.6	55.8
75	<b>167 480 682</b>	0.935	4.3	66.4
90	<b>167 480 683</b>	1.330	5.1	79.8
110	<b>167 480 684</b>	1.990	6.3	97.4
125	<b>167 480 685</b>	2.550	7.1	110.8
140	<b>167 480 686</b>	3.200	8.0	124.0
160	<b>167 480 687</b>	4.170	9.1	141.8
180	<b>167 480 688</b>	5.250	10.2	159.6
200	<b>167 480 689</b>	6.500	11.4	187.2
225	<b>167 480 690</b>	8.190	12.8	199.4
250	<b>167 480 691</b>	10.100	14.2	221.6
280	<b>167 480 692</b>	12.600	15.9	248.2
315	<b>167 480 693</b>	16.000	17.9	279.2
355	<b>167 480 694</b>	20.300	20.1	314.8
400	<b>167 480 695</b>	25.700	22.7	354.6
450	<b>167 480 696</b>	32.500	25.5	399.0
500	<b>167 480 697</b>	40.200	28.4	443.2

# Butt fusion fittings

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## PROGEF Standard bend 90° S5/SDR11



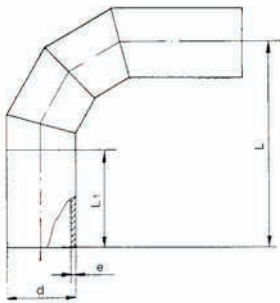
### Model:

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

<sup>1</sup> Material: PP-R

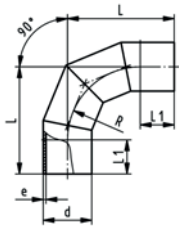
d [mm]	FM	Code	kg	L [mm]	L1 [mm]	R [mm]	e [mm]
20	IR	<b>727 018 606</b>	0.008	38	23	15	1.9
25	IR	<b>727 018 607</b>	0.013	42	23	19	2.3
32	IR	<b>727 018 608</b>	0.022	46	22	24	2.9
40	IR	<b>727 018 609</b>	0.040	51	21	30	3.7
50	IR	<b>727 018 610</b>	0.067	58	21	37	4.6
63	IR	<b>727 018 611</b>	0.117	66	21	45	5.8
75	IR	<b>727 018 612</b>	0.232	100	20	90	6.8
90	IR	<b>727 018 613</b>	0.337	100	20	90	8.2
110	IR	<b>727 018 614</b>	0.701	141	25	130	10.0
125	IR	<b>727 018 490</b>	0.927	140	15	125	11.4
140	IR	<b>727 018 491</b>	1.260	155	15	140	12.7
160	IR	<b>727 018 492</b>	2.035	175	15	160	14.6
180	IR	<b>727 018 493</b>	2.669	195	15	180	16.4
200	IR	<b>727 018 494</b>	3.574	215	15	200	18.2
225	IR	<b>727 018 495</b>	5.133	245	20	225	20.5
250	--	<b>727 018 521</b>	6.351	256	48	232	22.7
280	--	<b>727 018 522</b>	9.398	286	48	262	25.4
315	--	<b>727 018 523</b>	12.959	321	48	297	28.6
<sup>1</sup> 355	--	<b>727 018 574</b>	19.400	385	38	355	32.2
<sup>1</sup> 400	--	<b>727 018 575</b>	28.453	438	41	400	36.3

## Bend 90°, PP-H S5/SDR11



- For IR, butt- and electro fusion
- Reduction factor = 0,8
- big dimensions on request

d [mm]	Code	L [mm]	L1 [mm]	e [mm]
110	<b>700 649 384</b>	315	150	10,0
125	<b>700 649 385</b>	338	150	11,4
140	<b>700 649 386</b>	360	150	12,8
160	<b>700 649 387</b>	390	150	14,6
180	<b>700 649 388</b>	420	150	16,4
200	<b>700 649 389</b>	450	150	18,2
225	<b>700 649 390</b>	488	150	20,5
250	<b>700 649 391</b>	625	250	22,8
280	<b>700 649 392</b>	670	250	25,5
315	<b>700 649 393</b>	773	300	28,7
355	<b>700 649 394</b>	833	300	32,3
400	<b>700 649 395</b>	900	300	36,4

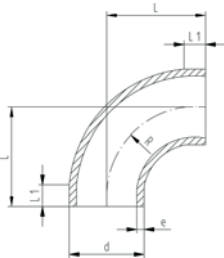


## PROGEF Standard bend 90° S5/SDR11

### 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]	R [mm]	e [mm]
450	<b>727 018 576</b>	85.300	975	300	675	40,9
500	<b>727 018 577</b>	121.940	1100	350	750	45,4



## PROGEF Standard bend 90° S8.3/SDR17.6

### Model:

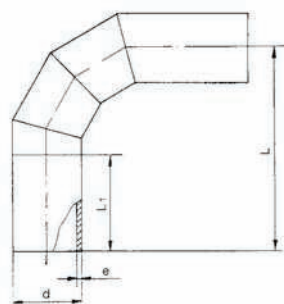
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H

<sup>1</sup> Material: PP-R

d [mm]	FM	Code	kg	L [mm]	L1 [mm]	R [mm]	e [mm]
50	IR	<b>727 018 635</b>	0.050	58	21	37	2.9
63	IR	<b>727 018 636</b>	0.081	66	21	45	3.6
75	IR	<b>727 018 637</b>	0.164	100	20	90	4.3
90	IR	<b>727 018 638</b>	0.241	100	20	90	5.1
110	IR	<b>727 018 639</b>	0.484	141	25	130	6.3
125	IR	<b>727 018 440</b>	0.638	140	15	125	7.1
140	IR	<b>727 018 441</b>	1.065	155	15	140	8.0
160	IR	<b>727 018 442</b>	1.309	175	15	160	9.1
180	IR	<b>727 018 443</b>	2.138	195	15	180	10.2
200	IR	<b>727 018 444</b>	2.378	215	15	200	11.4
225	IR	<b>727 018 445</b>	3.298	245	20	225	12.8
250	--	<b>727 018 421</b>	4.359	256	48	232	14.2
280	--	<b>727 018 422</b>	6.696	286	48	262	15.9
315	--	<b>727 018 423</b>	8.580	321	48	297	17.9
355	--	<b>727 018 549</b>	13.300	355	15	355	20.1
400	--	<b>727 018 550</b>	18.615	400	25	400	22.7

## Bend 90°, PP-H S8/SDR17.6

- For IR, butt- and electro fusion
- Reduction factor = 0,8
- big dimensions on request



d [mm]	Code	L [mm]	L1 [mm]	e [mm]
110	<b>700 649 396</b>	315	150	6,3
125	<b>700 649 397</b>	338	150	7,1
140	<b>700 649 398</b>	360	150	8,0
160	<b>700 649 399</b>	390	150	9,1
180	<b>700 649 400</b>	420	150	10,2
200	<b>700 649 401</b>	450	150	11,4
225	<b>700 649 402</b>	488	150	12,8
250	<b>700 649 403</b>	625	250	14,2
280	<b>700 649 404</b>	670	250	15,9
315	<b>700 649 405</b>	773	300	17,9
355	<b>700 649 406</b>	833	300	20,1
400	<b>700 649 407</b>	900	300	22,7

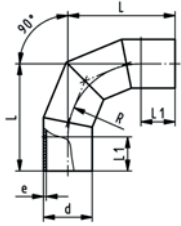




## PROGEF Standard bend 90° S8.3/SDR17.6

### 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



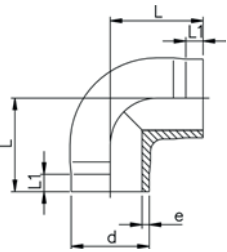
d [mm]	Code	kg	L [mm]	L1 [mm]	e [mm]	R [mm]
450	<b>727 018 551</b>	55.400	975	300	25,5	675
500	<b>727 018 552</b>	77.400	1100	350	28,4	750

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## PROGEF Standard elbow 90° S5/SDR11

### Model:

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



d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
20	IR	<b>727 108 506</b>	0.008	38	25	1.9
25	IR	<b>727 108 507</b>	0.012	42	26	2.3
32	IR	<b>727 108 508</b>	0.022	46	27	2.9
40	IR	<b>727 108 509</b>	0.045	51	22	3.7
50	IR	<b>727 108 510</b>	0.080	58	23	4.6
63	IR	<b>727 108 511</b>	0.138	66	21	5.8

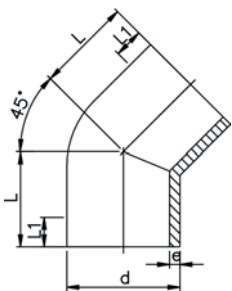
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## PROGEF Standard elbow 45° S5/SDR11

### Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H
- Long version for d250, d280 and d315

<sup>1</sup> Material: PP-R

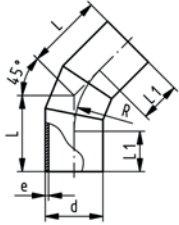


d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
20	IR	<b>727 158 506</b>	0.006	32	24	1.9
25	IR	<b>727 158 507</b>	0.010	34	25	2.3
32	IR	<b>727 158 508</b>	0.021	36	25	2.9
40	IR	<b>727 158 509</b>	0.033	39	25	3.7
50	IR	<b>727 158 510</b>	0.054	42	26	4.6
63	IR	<b>727 158 511</b>	0.097	47	29	5.8
75	IR	<b>727 158 512</b>	0.137	49	29	6.8
90	IR	<b>727 158 513</b>	0.222	57	34	8.2
110	IR	<b>727 158 514</b>	0.412	70	43	10.0
125	IR	<b>727 158 515</b>	0.570	79	48	11.4
140	IR	<b>727 158 516</b>	0.854	88	55	12.7
160	IR	<b>727 158 517</b>	1.256	100	60	14.6
200	IR	<b>727 158 519</b>	2.448	124	75	18.2
225	IR	<b>727 158 520</b>	3.495	140	85	20.5
<sup>1</sup> 250	--	<b>727 158 521</b>	7.890	225	133	22.7
<sup>1</sup> 280	--	<b>727 158 522</b>	10.170	235	143	25.4
<sup>1</sup> 315	--	<b>727 158 523</b>	11.690	255	154	28.6

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**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	<b>727 158 524</b>	32.300	520	300	32,2	532.5
400	<b>727 158 525</b>	43.200	548	300	36,3	600.0
450	<b>727 158 526</b>	57.700	580	300	40,9	675.0
500	<b>727 158 527</b>	87.200	665	350	45,4	750.0

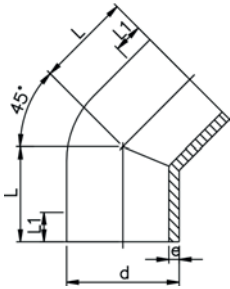
27 15 85

**PROGEF Standard elbow 45° S8.3/SDR17.6****Model:**

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

<sup>1</sup> Material: PP-R

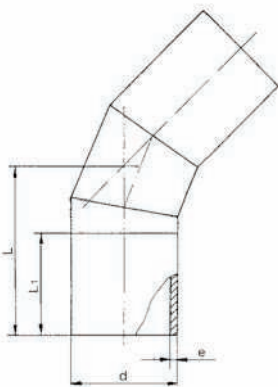
\*Machined from S5/SDR11



d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
* 50	IR	<b>727 158 535</b>	0.042	42	26	2,9
* 63	IR	<b>727 158 536</b>	0.081	47	29	3,6
75	IR	<b>727 158 412</b>	0.099	49	29	4,3
90	IR	<b>727 158 413</b>	0.164	57	34	5,1
110	IR	<b>727 158 414</b>	0.286	70	43	6,3
* 125	IR	<b>727 158 540</b>	0.570	79	48	7,1
* 140	IR	<b>727 158 541</b>	0.721	88	55	8,0
* 160	IR	<b>727 158 542</b>	1.107	100	60	9,1
* 200	IR	<b>727 158 544</b>	2.225	124	75	11,4
* 225	IR	<b>727 158 545</b>	3.194	140	85	12,8
1 250	--	<b>727 158 546</b>	4.970	225	133	14,2
1 280	--	<b>727 158 547</b>	7.130	235	143	15,9
1 315	--	<b>727 158 548</b>	9.600	255	154	17,9

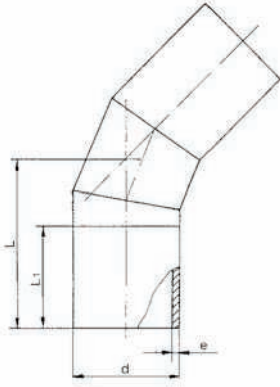
**Bend 45°, PP-H S5/SDR11**

- For IR, butt- and electro fusion
- Reduction factor = 0,8
- big dimensions on request



d [mm]	Code	L [mm]	L1 [mm]	e [mm]
110	<b>700 649 444</b>	218	150	10,0
125	<b>700 649 445</b>	228	150	11,4
140	<b>700 649 446</b>	237	150	12,8
160	<b>700 649 447</b>	249	150	14,6
180	<b>700 649 448</b>	262	150	16,4
200	<b>700 649 449</b>	274	150	18,2
225	<b>700 649 450</b>	290	150	20,5
250	<b>700 649 451</b>	412	250	22,8
280	<b>700 649 452</b>	424	250	25,5
315	<b>700 649 453</b>	498	300	28,7
355	<b>700 649 454</b>	520	300	32,3
400	<b>700 649 455</b>	548	300	36,4

## Bend 45°, PP-H S8/SDR17.6



- For IR, butt- and electro fusion
- Reduction factor = 0,8
- big dimensions on request

d [mm]	Code	L [mm]	L1 [mm]	e [mm]
110	700 649 432	218	150	6,3
125	700 649 433	228	150	7,1
140	700 649 434	237	150	8,0
160	700 649 435	249	150	9,1
180	700 649 436	262	150	10,2
200	700 649 437	274	150	11,4
225	700 649 438	290	150	12,8
250	700 649 439	412	250	14,2
280	700 649 440	424	250	15,9
315	700 649 441	498	300	17,9
355	700 649 442	520	300	20,1
400	700 649 443	548	300	22,7

27 15 85

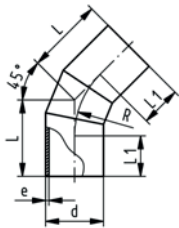
## PROGEF Standard bend 45° S8.3/SDR17.6



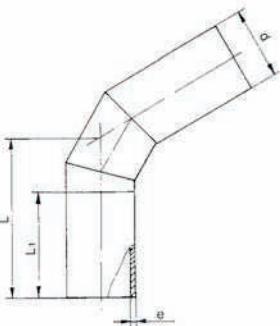
### Model:

- 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

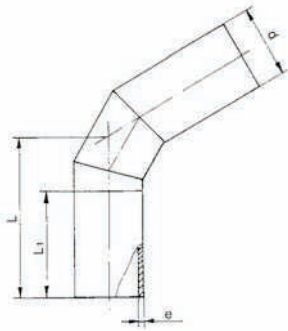


## Bend 60°, PP-H S5/SDR11



- For IR, butt- and electro fusion
- Reduction factor = 0,8
- big dimensions on request

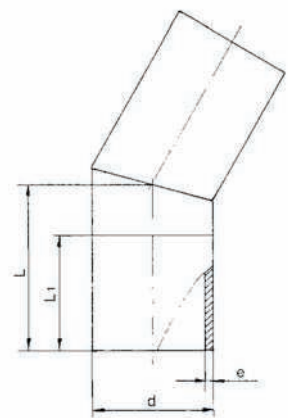
d [mm]	Code	L [mm]	L1 [mm]	e [mm]
110	700 649 420	245	150	10,0
125	700 649 421	258	150	11,4
140	700 649 422	271	150	12,8
160	700 649 423	288	150	14,6
180	700 649 424	305	150	16,4
200	700 649 425	323	150	18,2
225	700 649 426	345	150	20,5
250	700 649 427	466	250	22,8
280	700 649 428	492	250	25,5
315	700 649 429	576	300	28,7
355	700 649 430	608	300	32,3
400	700 649 431	646	300	36,4



## Bend 60°, PP-H S8/SDR17.6

- For IR, butt- and electro fusion
- Reduction factor = 0,8
- big dimensions on request

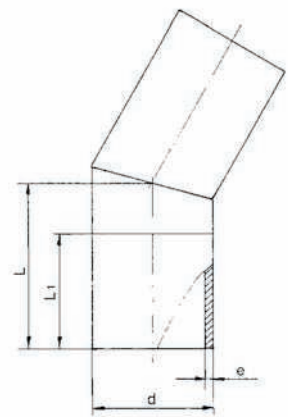
d [mm]	Code	L [mm]	L1 [mm]	e [mm]
110	<b>700 649 408</b>	245	150	6,3
125	<b>700 649 409</b>	258	150	7,1
140	<b>700 649 410</b>	271	150	8,0
160	<b>700 649 411</b>	288	150	9,1
180	<b>700 649 412</b>	305	150	10,2
200	<b>700 649 413</b>	323	150	11,4
225	<b>700 649 414</b>	345	150	12,8
250	<b>700 649 415</b>	466	250	14,2
280	<b>700 649 416</b>	492	250	15,9
315	<b>700 649 417</b>	576	300	17,9
355	<b>700 649 418</b>	608	300	20,1
400	<b>700 649 419</b>	646	300	22,7



## Bend 30°, PP-H S5/SDR11

- For IR, butt- and electro fusion
- Reduction factor = 0,8
- big dimensions on request

d [mm]	Code	L [mm]	L1 [mm]	e [mm]
110	<b>700 649 469</b>	194	150	10,0
125	<b>700 649 470</b>	200	150	11,4
140	<b>700 649 471</b>	206	150	12,8
160	<b>700 649 472</b>	214	150	14,6
180	<b>700 649 473</b>	222	150	16,4
200	<b>700 649 474</b>	230	150	18,2
225	<b>700 649 475</b>	241	150	20,5
250	<b>700 649 476</b>	350	250	22,8
280	<b>700 649 477</b>	362	250	25,5
315	<b>700 649 478</b>	428	300	28,7
355	<b>700 649 479</b>	443	300	32,3
400	<b>700 649 480</b>	461	300	36,4



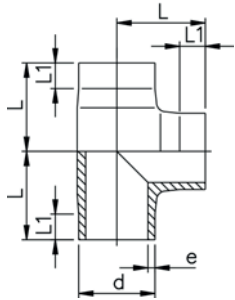
## Bend 30°, PP-H S8/SDR17.6

- For IR, butt- and electro fusion
- Reduction factor = 0,8
- big dimensions on request

d [mm]	Code	L [mm]	L1 [mm]	e [mm]
110	<b>700 649 457</b>	194	150	6,3
125	<b>700 649 458</b>	200	150	7,1
140	<b>700 649 459</b>	206	150	8,0
160	<b>700 649 460</b>	214	150	9,1
180	<b>700 649 461</b>	222	150	10,2
200	<b>700 649 462</b>	230	150	11,4
225	<b>700 649 463</b>	241	150	12,8
250	<b>700 649 464</b>	350	250	14,2
280	<b>700 649 465</b>	362	250	15,9
315	<b>700 649 466</b>	428	300	17,9
355	<b>700 649 467</b>	443	300	20,1
400	<b>700 649 468</b>	461	300	22,7

27 20 85

## PROGEF Standard tee 90° equal S5/SDR11



**Model:**

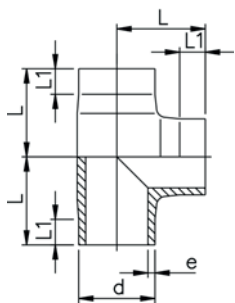
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H

<sup>1</sup> 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	0.032	46	26	2.9
40	IR	727 208 509	0.062	51	22	3.7
50	IR	727 208 510	0.105	58	22	4.6
63	IR	727 208 511	0.186	66	21	5.8
75	IR	727 208 512	0.293	75	20	6.8
90	IR	727 208 513	0.521	90	20	8.2
110	IR	727 208 514	0.928	110	20	10.0
125	IR	727 208 515	1.347	125	25	11.4
140	IR	727 208 516	1.923	140	28	12.7
160	IR	727 208 517	2.844	160	28	14.6
180	IR	727 208 568	4.844	194	74	16.4
200	IR	727 208 519	5.579	200	35	18.2
225	IR	727 208 520	7.812	220	35	20.5
250	--	727 208 571	12.380	276	92	22.7
280	--	727 208 572	17.735	318	110	25.4
315	--	727 208 573	18.214	353	118	28.6
355	--	727 208 574	31.100	345	103	32.2
400	--	727 208 575	38.000	360	105	36.3
450	--	727 208 576	58.000	419	135	40.9
500	--	727 208 577	73.000	465	160	45.4

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## PROGEF Standard tee 90° equal S8.3/SDR17.6

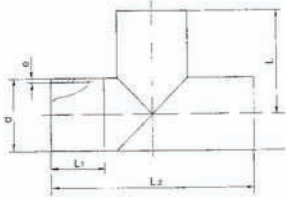


**Model:**

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

<sup>1</sup> Material: PP-R

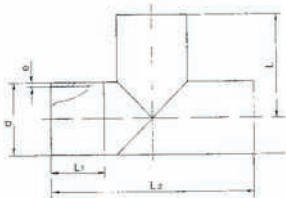
d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
50	IR	727 208 535	0.079	59	26	2,9
63	IR	727 208 536	0.178	73	31	3,6
75	IR	727 208 412	0.212	75	20	4,3
90	IR	727 208 413	2.200	90	20	5,1
110	IR	727 208 414	0.705	110	20	6,3
125	IR	727 208 540	1.077	125	30	7,1
140	IR	727 208 541	1.478	140	35	8,0
160	IR	727 208 542	2.264	160	43	9,1
180	IR	727 208 543	3.343	194	70	10,2
200	IR	727 208 544	4.902	210	70	11,4
225	IR	727 208 545	6.889	235	82	12,8
250	--	727 208 546	9.325	276	92	14,2
280	--	727 208 547	13.463	318	110	15,9
315	--	727 208 548	18.000	353	118	17,9
355	--	727 208 549	21.000	345	103	20,1
400	--	727 208 550	26.000	360	105	22,7
450	--	727 208 551	44.400	419	135	25,5
500	--	727 208 552	60.284	476	165	28,4



## Tees 90°, equal, PP-H S5/SDR11

- For IR, butt- and electro fusion
- Reducing factor = 0,6
- big dimensions on request

d [mm]	Code	L [mm]	L1 [mm]	L2 [mm]	e [mm]
225	<b>700 649 481</b>	265	150	530	20,5
250	<b>700 649 482</b>	375	250	750	22,8
280	<b>700 649 483</b>	390	250	780	25,5
315	<b>700 649 484</b>	460	300	920	28,7
355	<b>700 649 485</b>	480	300	960	32,3
400	<b>700 649 486</b>	500	300	1000	36,4



## Tees 90°, equal, PP-H S8/SDR17.6

- For IR, butt- and electro fusion
- Reducing factor = 0,6
- big dimensions on request

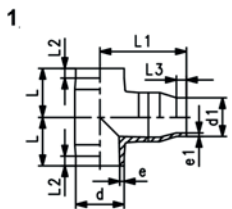
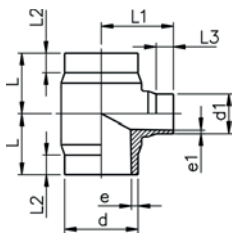
d [mm]	Code	L [mm]	L1 [mm]	L2 [mm]	e [mm]
225	<b>700 649 487</b>	265	150	530	12,8
250	<b>700 649 488</b>	375	250	750	14,2
280	<b>700 649 489</b>	390	250	780	15,9
315	<b>700 649 490</b>	460	300	920	17,9
355	<b>700 649 491</b>	480	300	960	20,1
400	<b>700 649 492</b>	500	300	1000	22,7

27 20 83

## 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. Choose fusion parameters: PP-H
- <sup>1</sup>with IR welded reducer



d [mm]	d1 [mm]	FM	Code	kg	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	e [mm]	e1 [mm]
63	32	IR	<b>727 208 351</b>	0.161	65	70	25	25	5.8	2.9
63	50	IR	<b>727 208 352</b>	0.170	65	70	25	25	5.8	4.6
75	32	IR	<b>727 208 353</b>	0.238	70	75	25	25	6.8	2.9
75	50	IR	<b>727 208 354</b>	0.249	70	75	25	25	6.8	4.6
75	63	IR	<b>727 208 355</b>	0.258	70	75	25	25	6.8	5.8
90	50	IR	<b>727 208 357</b>	0.420	80	85	25	25	8.2	4.6
90	63	IR	<b>727 208 358</b>	0.428	80	85	25	25	8.2	5.8
90	75	IR	<b>727 208 359</b>	0.430	80	85	25	25	8.2	6.8
110	32	IR	<b>727 208 360</b>	0.652	90	95	30	25	10.0	2.9
110	50	IR	<b>727 208 361</b>	0.659	90	95	30	25	10.0	4.6
110	63	IR	<b>727 208 362</b>	0.665	90	95	30	25	10.0	5.8
110	75	IR	<b>727 208 363</b>	0.681	90	95	30	25	10.0	6.8
110	90	IR	<b>727 208 364</b>	0.701	90	95	30	25	10.0	8.2
<sup>1</sup> 125	63	IR	<b>727 208 365</b>	1.680	125	232	25	16	11.4	5.8
<sup>1</sup> 125	90	IR	<b>727 208 366</b>	1.520	125	228	25	22	11.4	8.2
<sup>1</sup> 125	110	IR	<b>727 208 367</b>	1.700	125	220	25	30	11.4	10.0
<sup>1</sup> 140	75	IR	<b>727 208 368</b>	2.140	140	258	28	19	12.7	6.8
<sup>1</sup> 140	90	IR	<b>727 208 369</b>	2.150	140	250	28	22	12.7	8.2
<sup>1</sup> 140	110	IR	<b>727 208 370</b>	2.380	140	245	28	33	12.7	10.0
160	63	IR	<b>727 208 371</b>	2.130	142	135	50	30	14.6	5.8
160	75	IR	<b>727 208 372</b>	2.143	142	135	50	30	14.6	6.8
160	90	IR	<b>727 208 373</b>	2.148	142	135	50	30	14.6	8.2
160	110	IR	<b>727 208 374</b>	2.186	142	135	50	30	14.6	10.0
<sup>1</sup> 160	125	IR	<b>727 208 375</b>	3.500	160	279	28	32	14.6	11.4
<sup>1</sup> 200	160	IR	<b>727 208 385</b>	6.632	200	295	35	40	18.2	14.6
<sup>1</sup> 200	180	IR	<b>727 208 386</b>	6.200	200	345	35	45	18.2	16.4
225	90	IR	<b>727 208 388</b>	4.576	155	165	40	30	20.5	8.2
225	110	IR	<b>727 208 389</b>	4.624	155	165	40	30	20.5	10.0
225	160	IR	<b>727 208 391</b>	4.685	155	165	40	30	20.5	14.6
<sup>1</sup> 250	160		<b>727 208 393</b>	4.530	276	424	92	55	22.7	14.6

**PROGEF Standard tee 90° reduced S8.3/SDR17.6**

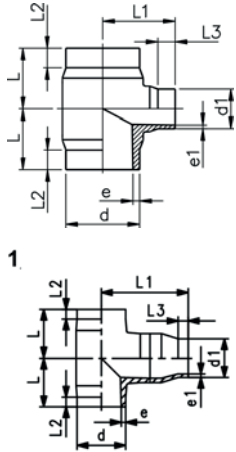


**Model:**

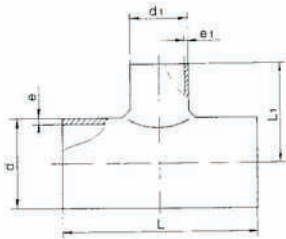
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H

<sup>1</sup>with IR welded reducer

\* Branch SDR11



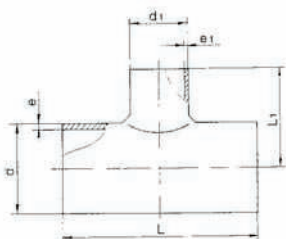
d [mm]	d1 [mm]	FM	Code	kg	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	e [mm]	e1 [mm]
* 63	32	IR	<b>727 208 301</b>	0.120	65	70	25	25	3,6	2,9
63	50	IR	<b>727 208 302</b>	0.124	65	70	25	25	3,6	2,9
* 75	32	IR	<b>727 208 303</b>	0.178	70	75	25	25	4,3	2,9
75	50	IR	<b>727 208 304</b>	0.182	70	75	25	25	4,3	2,9
75	63	IR	<b>727 208 305</b>	0.190	70	75	25	25	4,3	3,6
90	50	IR	<b>727 208 307</b>	0.305	80	85	25	25	5,1	2,9
90	63	IR	<b>727 208 308</b>	0.315	80	85	25	25	5,1	3,6
90	75	IR	<b>727 208 309</b>	0.320	80	85	25	25	5,1	4,3
* 110	32	IR	<b>727 208 310</b>	0.489	90	95	30	25	6,3	2,9
110	50	IR	<b>727 208 311</b>	0.490	90	95	30	25	6,3	2,9
110	63	IR	<b>727 208 312</b>	0.491	90	95	30	25	6,3	3,6
110	75	IR	<b>727 208 313</b>	0.500	90	95	30	25	6,3	4,3
110	90	IR	<b>727 208 314</b>	0.514	90	95	30	25	6,3	5,1
160	63	IR	<b>727 208 321</b>	1.535	142	135	50	30	9,1	3,6
160	75	IR	<b>727 208 322</b>	1.550	142	135	50	30	9,1	4,3
160	90	IR	<b>727 208 323</b>	1.567	142	135	50	30	9,1	5,1
160	110	IR	<b>727 208 324</b>	1.577	142	135	50	30	9,1	6,3
225	90	IR	<b>727 208 338</b>	3.350	155	165	40	30	12,8	5,1
225	110	IR	<b>727 208 339</b>	3.330	155	165	40	30	12,8	6,3
225	160	IR	<b>727 208 341</b>	3.427	155	165	40	30	12,8	9,1



## Tee 90°, reduced, PP-H S5/SDR11

- For IR, butt- and electro fusion
- Reducing factor = 0,6
- big dimensions on request

d [mm]	d1 [mm]	Code	L [mm]	L1 [mm]	e [mm]	e1 [mm]
225	63	<b>700 649 493</b>	363	238	20,5	5,8
225	75	<b>700 649 494</b>	375	238	20,5	6,9
225	90	<b>700 649 495</b>	390	238	20,5	8,2
225	110	<b>700 649 496</b>	410	238	20,5	10,0
225	125	<b>700 649 497</b>	425	238	20,5	11,4
225	140	<b>700 649 498</b>	440	238	20,5	12,8
225	160	<b>700 649 499</b>	460	238	20,5	14,6
250	75	<b>700 649 500</b>	475	250	22,8	6,9
250	90	<b>700 649 501</b>	490	250	22,8	8,2
250	110	<b>700 649 502</b>	510	250	22,8	10,0
250	125	<b>700 649 503</b>	525	250	22,8	11,4
250	140	<b>700 649 504</b>	540	250	22,8	12,8
250	160	<b>700 649 505</b>	560	250	22,8	14,6
250	180	<b>700 649 506</b>	580	275	22,8	16,4
280	75	<b>700 649 507</b>	475	265	25,5	6,9
280	90	<b>700 649 508</b>	490	265	25,5	8,2
280	110	<b>700 649 509</b>	510	265	25,5	10,0
280	125	<b>700 649 510</b>	525	265	25,5	11,4
280	140	<b>700 649 511</b>	540	265	25,5	12,8
280	160	<b>700 649 512</b>	560	265	25,5	14,6
280	180	<b>700 649 513</b>	580	290	25,5	16,4
280	200	<b>700 649 514</b>	600	290	25,5	18,2
315	90	<b>700 649 515</b>	490	283	28,7	8,2
315	110	<b>700 649 516</b>	510	283	28,7	10,0
315	125	<b>700 649 517</b>	525	283	28,7	11,4
315	140	<b>700 649 518</b>	540	283	28,7	12,8
315	160	<b>700 649 519</b>	560	283	28,7	14,6
315	180	<b>700 649 520</b>	580	308	28,7	16,4
315	200	<b>700 649 521</b>	600	308	28,7	18,2
315	225	<b>700 649 523</b>	625	308	28,7	20,5
355	110	<b>700 649 524</b>	510	303	32,3	10,0
355	125	<b>700 649 525</b>	525	303	32,3	11,4
355	140	<b>700 649 526</b>	540	303	32,3	12,8
355	160	<b>700 649 527</b>	560	303	32,3	14,6
355	180	<b>700 649 528</b>	580	328	32,3	16,4
355	200	<b>700 649 529</b>	600	328	32,3	18,2
355	225	<b>700 649 530</b>	625	328	32,3	20,5
355	250	<b>700 649 531</b>	650	378	32,3	22,8
400	110	<b>700 649 532</b>	510	325	36,4	10,0
400	125	<b>700 649 533</b>	525	325	36,4	11,4
400	140	<b>700 649 534</b>	540	325	36,4	12,8
400	160	<b>700 649 535</b>	560	325	36,4	14,6
400	180	<b>700 649 536</b>	580	350	36,4	16,4
400	200	<b>700 649 537</b>	600	350	36,4	18,2
400	225	<b>700 649 538</b>	625	350	36,4	20,5
400	250	<b>700 649 539</b>	650	400	36,4	22,8
400	280	<b>700 649 540</b>	680	400	36,4	25,5



## Tee 90°, reduced, PP-H S8/SDR17.6

- For IR, butt- and electro fusion
- Reducing factor = 0,6
- big dimensions on request

d [mm]	d1 [mm]	Code	L [mm]	L1 [mm]	e [mm]	e1 [mm]
225	63	<b>700 649 541</b>	363	238	12,8	3,6
225	75	<b>700 649 542</b>	375	238	12,8	4,3
225	90	<b>700 649 543</b>	390	238	12,8	5,1
225	110	<b>700 649 544</b>	410	238	12,8	6,3
225	125	<b>700 649 545</b>	425	238	12,8	7,1
225	140	<b>700 649 546</b>	440	238	12,8	8,0

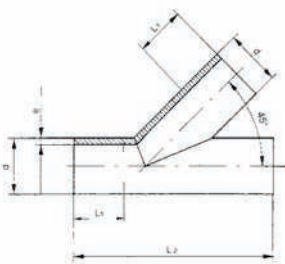
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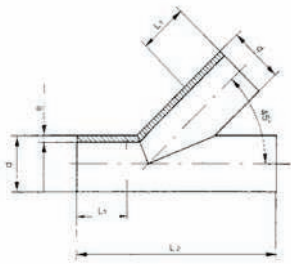
d [mm]	d1 [mm]	Code	L [mm]	L1 [mm]	e [mm]	e1 [mm]
225	160	<b>700 649 547</b>	460	238	12,8	9,1
250	75	<b>700 649 548</b>	475	250	14,2	4,3
250	90	<b>700 649 549</b>	490	250	14,2	5,1
250	110	<b>700 649 550</b>	510	250	14,2	6,3
250	125	<b>700 649 551</b>	525	250	14,2	7,1
250	140	<b>700 649 552</b>	540	250	14,2	8,0
250	160	<b>700 649 553</b>	560	250	14,2	9,1
250	180	<b>700 649 554</b>	580	275	14,2	10,2
280	75	<b>700 649 555</b>	475	265	15,9	4,3
280	90	<b>700 649 556</b>	490	265	15,9	5,1
280	110	<b>700 649 557</b>	510	265	15,9	6,3
280	125	<b>700 649 558</b>	525	265	15,9	7,1
280	140	<b>700 649 559</b>	540	265	15,9	8,0
280	160	<b>700 649 560</b>	560	265	15,9	9,1
280	180	<b>700 649 561</b>	580	290	15,9	10,2
280	200	<b>700 649 562</b>	600	290	15,9	11,4
315	90	<b>700 649 563</b>	490	283	17,9	5,1
315	110	<b>700 649 564</b>	510	283	17,9	6,3
315	125	<b>700 649 565</b>	525	283	17,9	7,1
315	140	<b>700 649 566</b>	540	283	17,9	8,0
315	160	<b>700 649 567</b>	560	283	17,9	9,1
315	180	<b>700 649 568</b>	580	308	17,9	10,2
315	200	<b>700 649 569</b>	600	308	17,9	11,4
315	225	<b>700 649 570</b>	625	308	17,9	12,8
355	110	<b>700 649 571</b>	510	303	20,1	6,3
355	125	<b>700 649 572</b>	525	303	20,1	7,1
355	140	<b>700 649 573</b>	540	303	20,1	8,0
355	160	<b>700 649 574</b>	560	303	20,1	9,1
355	180	<b>700 649 575</b>	580	328	20,1	10,2
355	200	<b>700 649 576</b>	600	328	20,1	11,4
355	225	<b>700 649 577</b>	625	328	20,1	12,8
355	250	<b>700 649 578</b>	650	378	20,1	14,2
400	110	<b>700 649 579</b>	510	325	22,7	6,3
400	125	<b>700 649 580</b>	525	325	22,7	7,1
400	140	<b>700 649 581</b>	540	325	22,7	8,0
400	160	<b>700 649 582</b>	560	325	22,7	9,1
400	180	<b>700 649 583</b>	580	350	22,7	10,2
400	200	<b>700 649 584</b>	600	350	22,7	11,4
400	225	<b>700 649 585</b>	625	350	22,7	12,8
400	250	<b>700 649 586</b>	650	400	22,7	14,2
400	280	<b>700 649 587</b>	680	400	22,7	15,9

## Branch 45°, PP-H S5/SDR11

- For IR, butt- and electro fusion
- Reduction factor = 0,5



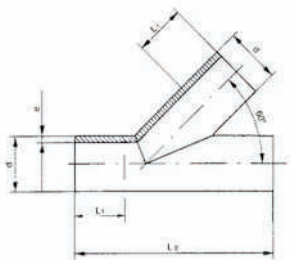
d [mm]	Code	L1 [mm]	L2 [mm]	e [mm]
110	<b>700 649 636</b>	150	520	10,0
125	<b>700 649 637</b>	150	520	11,4
140	<b>700 649 638</b>	150	570	12,8
160	<b>700 649 639</b>	150	640	14,6
180	<b>700 649 640</b>	150	700	16,4
200	<b>700 649 641</b>	150	800	18,2
225	<b>700 649 642</b>	150	800	20,5
250	<b>700 649 643</b>	250	1000	22,8
280	<b>700 649 644</b>	250	1000	25,5
315	<b>700 649 645</b>	300	1300	28,7
355	<b>700 649 646</b>	300	1500	32,3
400	<b>700 649 647</b>	300	1500	36,4



## Branch 45°, PP-H S8/SDR17.6

- For IR, butt- and electro fusion
- Reduction factor = 0,5

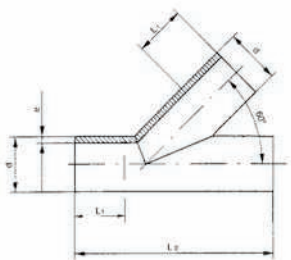
d [mm]	Code	L1 [mm]	L2 [mm]	e [mm]
110	<b>700 649 648</b>	150	520	6,3
125	<b>700 649 649</b>	150	520	7,1
140	<b>700 649 650</b>	150	570	8,0
160	<b>700 649 651</b>	150	640	9,1
180	<b>700 649 652</b>	150	700	10,2
200	<b>700 649 653</b>	150	800	11,4
225	<b>700 649 654</b>	150	800	12,8
250	<b>700 649 655</b>	250	1000	14,2
280	<b>700 649 656</b>	250	1000	15,9
315	<b>700 649 657</b>	300	1300	17,9
355	<b>700 649 658</b>	300	1500	20,1
400	<b>700 649 659</b>	300	1500	22,7



## Branch 60°, PP-H S5/SDR11

- For IR, butt- and electro fusion
- Reduction factor = 0,5

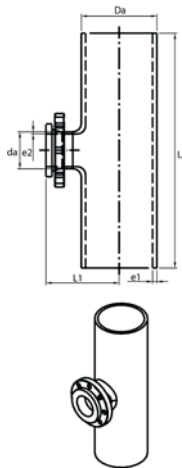
d [mm]	Code	L1 [mm]	L2 [mm]	e [mm]
110	<b>700 649 660</b>	150	520	10,0
125	<b>700 649 661</b>	150	520	11,4
140	<b>700 649 662</b>	150	570	12,8
160	<b>700 649 663</b>	150	640	14,6
180	<b>700 649 664</b>	150	700	16,4
200	<b>700 649 665</b>	150	800	18,2
225	<b>700 649 666</b>	150	800	20,5
250	<b>700 649 667</b>	250	1000	22,8
280	<b>700 649 668</b>	250	1000	25,5
315	<b>700 649 669</b>	300	1300	28,7
355	<b>700 649 670</b>	300	1500	32,3
400	<b>700 649 671</b>	300	1500	36,4



## Branch 60°, PP-H S8/SDR17.6

- For IR, butt- and electro fusion
- Reduction factor = 0,5

d [mm]	Code	L1 [mm]	L2 [mm]	e [mm]
110	<b>700 649 672</b>	150	520	6,3
125	<b>700 649 673</b>	150	520	7,1
140	<b>700 649 674</b>	150	570	8,0
160	<b>700 649 675</b>	150	640	9,1
180	<b>700 649 676</b>	150	700	10,2
200	<b>700 649 677</b>	150	800	11,4
225	<b>700 649 678</b>	150	800	12,8
250	<b>700 649 679</b>	250	1000	14,2
280	<b>700 649 680</b>	250	1000	15,9
315	<b>700 649 681</b>	300	1300	17,9
355	<b>700 649 682</b>	300	1500	20,1
400	<b>700 649 683</b>	300	1500	22,7

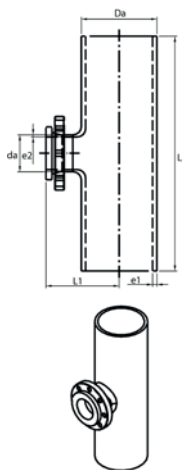


## Revision Tees 90°, PP-H SDR11

### Model:

- Flued and butt fusion according to DVS2207
- Backing Flanges to ISO 7005, EN 1092, DIN 2501, bolt circle PN 10
- Reducing factor = 0,6
- big dimensions on request

d [mm]	d1 [mm]	PN	Code	L [mm]	L1 [mm]	e1 [mm]	e2 [mm]
110	110	10	<b>700 665 628</b>	500	236	10,0	10,0
125	125	10	<b>700 665 629</b>	500	248	11,4	11,4
140	140	10	<b>700 665 630</b>	500	265	12,7	12,7
160	110	10	<b>700 665 631</b>	500	278	14,6	10,0
180	110	10	<b>700 665 632</b>	500	350	16,4	10,0
200	140	10	<b>700 665 633</b>	500	350	18,2	12,7
225	140	10	<b>700 665 634</b>	560	400	20,5	12,7
250	160	10	<b>700 665 635</b>	750	450	22,7	14,6
280	225	10	<b>700 665 636</b>	750	350	25,4	20,5
315	225	10	<b>700 665 637</b>	850	400	28,6	20,5
355	225	10	<b>700 665 638</b>	950	450	32,2	20,5
400	225	10	<b>700 665 639</b>	1000	450	36,3	20,5

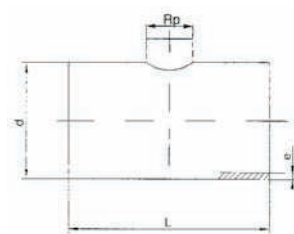


## Revision Tees 90°, PP-H SDR17.6

### Model:

- Flued and butt fusion according to DVS2207
- Backing Flanges to ISO 7005, EN 1092, DIN 2501, bolt circle PN 10
- Reducing factor = 0,6
- big dimensions on request

d [mm]	d1 [mm]	PN	Code	L [mm]	L1 [mm]	e1 [mm]	e2 [mm]
110	110	6	<b>700 647 267</b>	500	236	6,3	6,3
125	125	6	<b>700 647 268</b>	500	248	7,1	7,1
140	140	6	<b>700 647 269</b>	500	265	8,0	8,0
160	110	6	<b>700 647 270</b>	500	278	9,1	6,3
180	110	6	<b>700 665 644</b>	500	350	10,2	6,3
200	140	6	<b>700 665 645</b>	500	350	11,4	8,0
225	140	6	<b>700 665 646</b>	560	400	12,8	8,0
250	160	6	<b>700 665 647</b>	750	450	14,2	9,1
280	225	6	<b>700 665 648</b>	750	350	15,9	12,8
315	225	6	<b>700 665 649</b>	850	400	17,9	12,8
355	225	6	<b>700 665 650</b>	950	450	20,1	12,8
400	225	6	<b>700 665 651</b>	1000	450	22,7	12,8
450	315	6	<b>700 665 652</b>	1100	500	25,5	17,9
500	315	6	<b>700 665 653</b>	1200	500	28,4	17,9
560	315	6	<b>700 665 654</b>	1300	550	31,7	17,9
630	315	6	<b>700 665 655</b>	1450	550	35,7	17,9



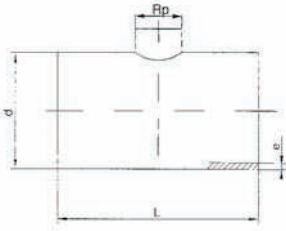
## Saddle-Tee, PP-H S5/SDR11 Outlet with female thread Rp, welded

- For IR, butt- and electro fusion
- Reduction factor = 0,8
- big dimensions on request

d [mm]	Thread 1 Code	Thread 11/4 Code	L [mm]	e [mm]
110	<b>700 649 588</b>	<b>700 649 600</b>	260	10,0
125	<b>700 649 589</b>	<b>700 649 601</b>	260	11,4
140	<b>700 649 590</b>	<b>700 649 602</b>	260	12,8
160	<b>700 649 591</b>	<b>700 649 603</b>	260	14,6
180	<b>700 649 592</b>	<b>700 649 604</b>	360	16,4
200	<b>700 649 593</b>	<b>700 649 605</b>	360	18,2
225	<b>700 649 594</b>	<b>700 649 606</b>	360	20,5
250	<b>700 649 595</b>	<b>700 649 607</b>	360	22,8
280	<b>700 649 596</b>	<b>700 649 608</b>	360	25,5

table continued next page

d [mm]	Thread 1 Code	Thread 11/4 Code	L [mm]	e [mm]
315	<b>700 649 597</b>	<b>700 649 609</b>	360	28,7
355	<b>700 649 598</b>	<b>700 649 610</b>	460	32,3
400	<b>700 649 599</b>	<b>700 649 611</b>	460	36,4



## Saddle-Tee, PP-H S8/SDR17.6 Outlet with female thread Rp, welded

- For IR, butt- and electro fusion
- Reduction factor = 0,8
- big dimensions on request

d [mm]	Thread 1" Code	Thread 11/4" Code	L [mm]	e [mm]
110	<b>700 649 612</b>	<b>700 649 624</b>	260	6,3
125	<b>700 649 613</b>	<b>700 649 625</b>	260	7,1
140	<b>700 649 614</b>	<b>700 649 626</b>	260	8,0
160	<b>700 649 615</b>	<b>700 649 627</b>	260	9,1
180	<b>700 649 616</b>	<b>700 649 628</b>	360	10,2
200	<b>700 649 617</b>	<b>700 649 629</b>	360	11,4
225	<b>700 649 618</b>	<b>700 649 630</b>	360	12,8
250	<b>700 649 619</b>	<b>700 649 631</b>	360	14,2
280	<b>700 649 620</b>	<b>700 649 632</b>	360	15,9
315	<b>700 649 621</b>	<b>700 649 633</b>	360	17,9
355	<b>700 649 622</b>	<b>700 649 634</b>	460	20,1
400	<b>700 649 623</b>	<b>700 649 635</b>	460	22,7

27 90 89

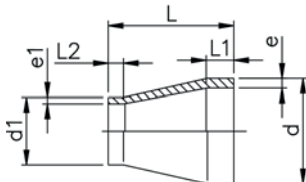


## PROGEF Standard reducer S5/SDR11

**Model:**

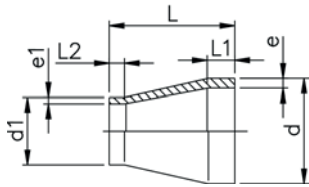
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H

<sup>1</sup> Material: PP-R



d [mm]	d1 [mm]	FM	Code	kg	L [mm]	L1 [mm]	L2 [mm]	e [mm]	e1 [mm]
25	20	IR	<b>727 908 537</b>	0.007	50	20	20	2.3	1.9
32	20	IR	<b>727 908 542</b>	0.010	50	20	20	2.9	1.9
32	25	IR	<b>727 908 541</b>	0.010	50	20	20	2.9	2.3
40	20	IR	<b>727 908 548</b>	0.016	58	20	23	3.7	1.9
40	25	IR	<b>727 908 547</b>	0.016	55	20	20	3.7	2.3
40	32	IR	<b>727 908 546</b>	0.018	55	20	20	3.7	2.9
50	25	IR	<b>727 908 554</b>	0.024	60	20	20	4.6	2.3
50	32	IR	<b>727 908 553</b>	0.027	60	20	20	4.6	2.9
50	40	IR	<b>727 908 552</b>	0.030	60	20	20	4.6	3.7
63	32	IR	<b>727 908 560</b>	0.043	65	20	20	5.8	2.9
63	40	IR	<b>727 908 559</b>	0.047	65	20	20	5.8	3.7
63	50	IR	<b>727 908 558</b>	0.051	65	20	20	5.8	4.6
75	40	IR	<b>727 908 566</b>	0.062	68	20	20	6.8	3.7
75	50	IR	<b>727 908 565</b>	0.071	65	20	20	6.8	4.6
75	63	IR	<b>727 908 564</b>	0.075	65	20	20	6.8	5.8
90	63	IR	<b>727 908 571</b>	0.115	75	22	19	8.2	5.8
90	75	IR	<b>727 908 570</b>	0.130	75	22	19	8.2	6.8
110	75	IR	<b>727 908 577</b>	0.215	90	28	18	10.0	6.8
110	90	IR	<b>727 908 576</b>	0.225	90	28	30	10.0	8.2
125	110	IR	<b>727 908 580</b>	0.335	100	32	30	11.4	10.0
140	110	IR	<b>727 908 585</b>	0.423	110	33	29	12.7	10.0
140	125	IR	<b>727 908 584</b>	0.462	110	34	30	12.7	11.4
160	110	IR	<b>727 908 590</b>	0.586	120	39	27	14.6	10.0
160	140	IR	<b>727 908 588</b>	0.647	120	40	35	14.6	12.7
180	90	IR	<b>727 908 978</b>	0.968	157	45	22	16.4	8.8
180	110	IR	<b>727 908 977</b>	0.987	157	45	28	16.4	10.0
180	125	IR	<b>727 908 976</b>	0.890	136	45	32	16.4	11.4
180	140	IR	<b>727 908 975</b>	0.917	136	45	35	16.4	12.7
180	160	IR	<b>727 908 974</b>	1.031	136	45	35	16.4	14.6
200	160	IR	<b>727 908 592</b>	1.149	145	50	40	18.2	14.6

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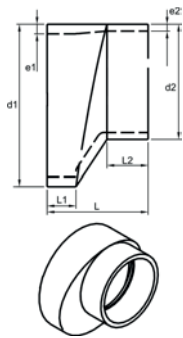


d [mm]	d1 [mm]	FM	Code	kg	L [mm]	L1 [mm]	L2 [mm]	e [mm]	e1 [mm]
200	180	IR	<b>727 908 979</b>	1.350	151	50	45	18,2	16,4
225	110	IR	<b>727 908 595</b>	1.485	160	55	35	20,5	10,0
225	160	IR	<b>727 908 596</b>	1.563	160	55	40	20,5	14,6
225	180	IR	<b>727 908 983</b>	1.893	171	55	45	20,5	16,4
225	200	IR	<b>727 908 597</b>	1.723	160	55	50	20,5	18,2
250	160	--	<b>727 908 990</b>	1.483	194	60	55	22,7	14,6
250	225	--	<b>727 908 987</b>	2.592	182	60	55	22,7	20,5
280	225	--	<b>727 908 992</b>	1.854	105	30	20	25,4	20,5
280	250	--	<b>727 908 991</b>	1.311	70	30	18	25,4	22,7
315	225	--	<b>727 908 997</b>	2.857	130	30	20	28,6	20,5
315	250	--	<b>727 908 996</b>	3.500	100	30	20	28,6	22,7
315	280	--	<b>727 908 995</b>	1.577	63	30	18	28,6	25,4
355	250	--	<b>727 908 963</b>	5.490	245	90	60	32,3	22,7
355	280	--	<b>727 908 962</b>	5.462	245	90	70	32,2	25,4
355	315	--	<b>727 908 961</b>	3.700	245	90	80	32,2	28,6
400	315	--	<b>727 908 966</b>	5.300	260	95	80	36,3	28,6
400	355	--	<b>727 908 965</b>	4.800	260	95	90	36,3	32,2
450	280	--	<b>727 908 960</b>	9.000	230	60	70	40,9	25,4
450	315	--	<b>727 908 948</b>	8.000	230	60	80	40,9	28,6
450	355	--	<b>727 908 950</b>	7.400	230	60	90	40,9	32,2
450	400	--	<b>727 908 951</b>	6.000	230	60	95	40,9	36,3
500	315	--	<b>727 908 953</b>	12.000	230	60	80	45,4	28,6
500	355	--	<b>727 908 954</b>	10.800	230	60	90	45,4	32,2
500	400	--	<b>727 908 956</b>	10.000	230	60	95	45,4	36,3
500	450	--	<b>727 908 964</b>	8.300	230	60	60	45,4	40,9

## Reducing Bushes eccentric, PP-H SDR11

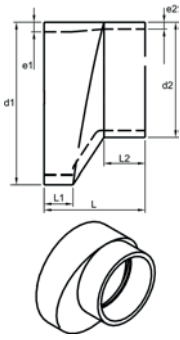
### Model:

- Conventional butt fusion according to DVS2207
- Machined



d1 [mm]	d2 [mm]	PN	Code	kg	L [mm]	L1 [mm]	L2 [mm]	e1 [mm]	e2 [mm]
63	50	10	<b>700 647 700</b>	1.000	120	35	35	5,8	4,6
75	50	10	<b>700 647 701</b>	1.000	120	40	35	6,8	4,6
75	63	10	<b>700 647 702</b>	1.000	120	40	35	6,8	5,8
90	63	10	<b>700 647 703</b>	0.253	140	50	50	8,2	5,8
90	75	10	<b>700 647 704</b>	1.000	140	50	50	8,2	6,8
110	75	10	<b>700 647 705</b>	0.378	140	50	50	10	6,8
110	90	10	<b>700 647 706</b>	1.000	140	50	50	10	8,2
125	90	10	<b>700 647 707</b>	1.000	140	50	50	11,4	5,1
125	110	10	<b>700 647 708</b>	1.000	140	50	50	11,4	10
140	90	10	<b>700 647 709</b>	1.000	140	50	50	12,7	8,2
140	110	10	<b>700 647 710</b>	1.000	140	50	50	12,7	10
160	90	10	<b>700 647 711</b>	1.000	140	50	54	14,6	8,2
160	110	10	<b>700 647 712</b>	1.000	120	40	45	14,6	10
160	125	10	<b>700 647 713</b>	1.000	110	40	44	14,6	11,4
160	140	10	<b>700 647 714</b>	1.000	90	40	33	14,6	12,7
180	125	10	<b>700 647 715</b>	1.000	130	40	52	16,4	11,4
180	140	10	<b>700 647 716</b>	1.000	110	40	41	16,4	12,7
180	160	10	<b>700 647 717</b>	1.000	90	40	33	16,4	16,4
200	140	10	<b>700 647 718</b>	1.000	140	40	50	18,2	12,7
200	160	10	<b>700 647 719</b>	1.000	120	40	41	18,2	14,6
200	180	10	<b>700 647 720</b>	1.000	100	40	43	18,2	16,4
225	160	10	<b>700 647 721</b>	1.000	140	40	57	20,5	14,6
225	180	10	<b>700 647 722</b>	1.000	120	40	48	20,5	16,4
225	200	10	<b>700 647 723</b>	1.000	100	40	40	20,5	18,2
250	180	10	<b>700 647 724</b>	1.000	150	40	54	22,7	16,4
250	200	10	<b>700 647 725</b>	1.000	130	40	55	22,7	18,2
250	225	10	<b>700 647 726</b>	1.000	110	40	40	22,7	20,5
280	200	10	<b>700 647 727</b>	1.000	160	40	58	25,4	18,2
280	225	10	<b>700 647 728</b>	1.000	130	40	52	25,4	20,5
280	250	10	<b>700 647 729</b>	1.000	110	40	47	25,4	22,7
315	225	10	<b>700 647 730</b>	1.000	160	40	62	28,6	20,5
315	250	10	<b>700 647 731</b>	1.000	140	40	57	28,6	22,7
315	280	10	<b>700 647 732</b>	1.000	120	40	54	28,6	25,4

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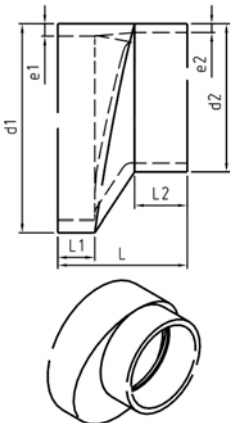


d1 [mm]	d2 [mm]	PN	Code	kg	L [mm]	L1 [mm]	L2 [mm]	e1 [mm]	e2 [mm]
355	250	10	<b>700 647 733</b>	1.000	180	40	74	32,2	22,7
355	280	10	<b>700 647 734</b>	1.000	150	40	61	32,2	25,4
355	315	10	<b>700 647 735</b>	1.000	120	40	51	32,2	28,6
400	280	10	<b>700 647 736</b>	1.000	200	40	85	36,3	25,4
400	315	10	<b>700 647 737</b>	4.793	170	40	75	36,3	28,6
400	355	10	<b>700 647 738</b>	1.000	130	40	58	36,3	32,2
450	315	10	<b>700 647 739</b>	1.000	210	40	86	40,9	28,6
450	355	10	<b>700 647 740</b>	1.000	180	40	79	40,9	32,2
450	400	10	<b>700 647 741</b>	1.000	140	40	65	40,9	36,3
500	315	10	<b>700 647 742</b>	12.810	260	40	107	45,4	28,6
500	355	10	<b>700 647 743</b>	8.550	220	40	91	45,4	32,2
500	400	10	<b>700 647 744</b>	10.063	190	40	86	45,4	36,3
500	450	10	<b>700 647 745</b>	1.000	140	40	65	45,4	40,9
560	450	10	<b>700 647 746</b>	1.000	200	40	91	50,8	40,9
560	500	10	<b>700 647 747</b>	1.000	150	40	70	50,8	45,4
630	500	10	<b>700 647 748</b>	1.000	220	40	99	57,2	45,4
630	560	10	<b>700 647 749</b>	1.000	170	40	84	57,2	50,8

## Reducing Bushes eccentric, PP-H SDR17.6

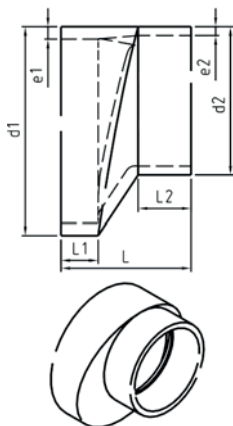
### Model:

- Conventional butt fusion according to DVS2207
- Machined



d1 [mm]	d2 [mm]	PN	Code	kg	L [mm]	L1 [mm]	L2 [mm]	e1 [mm]	e2 [mm]
63	50	6	<b>700 647 750</b>	1.000	120	35	35	3,6	2,9
75	50	6	<b>700 647 751</b>	1.000	120	40	35	4,3	2,9
75	63	6	<b>700 647 752</b>	1.000	120	40	35	4,3	3,6
90	63	6	<b>700 647 753</b>	1.000	140	50	50	5,1	3,6
90	75	6	<b>700 647 754</b>	1.000	140	50	50	5,1	4,3
110	75	6	<b>700 647 755</b>	0.300	140	50	50	6,3	4,3
110	90	6	<b>700 647 756</b>	1.000	140	50	50	6,3	5,1
125	90	6	<b>700 647 757</b>	1.000	140	50	50	7,1	5,1
125	110	6	<b>700 647 758</b>	1.000	140	50	50	7,1	6,3
140	90	6	<b>700 647 759</b>	1.000	140	50	50	8,0	5,1
140	110	6	<b>700 647 760</b>	1.000	140	50	50	8,0	6,3
160	90	6	<b>700 647 761</b>	1.000	140	50	54	9,5	5,4
160	90	6	<b>700 647 762</b>	1.000	120	40	45	9,5	6,6
160	125	6	<b>700 647 763</b>	1.000	110	40	44	9,5	7,4
160	140	6	<b>700 647 764</b>	1.000	90	40	33	9,5	8,3
180	125	6	<b>700 647 765</b>	1.000	130	40	52	10,7	7,4
180	140	6	<b>700 647 766</b>	1.000	110	40	41	10,7	8,3
180	160	6	<b>700 647 767</b>	1.000	90	40	33	10,7	9,5
200	140	6	<b>700 647 768</b>	1.000	140	40	50	11,9	8,3
200	160	6	<b>700 647 769</b>	1.000	120	40	41	11,9	9,5
200	180	6	<b>700 647 770</b>	1.000	100	40	43	11,9	10,7
225	160	6	<b>700 647 771</b>	1.000	140	40	57	13,4	9,5
225	180	6	<b>700 647 772</b>	1.000	120	40	48	13,4	10,7
225	200	6	<b>700 647 773</b>	1.000	100	40	40	13,4	11,9
250	180	6	<b>700 647 774</b>	1.000	150	40	54	14,8	10,7
250	200	6	<b>700 647 775</b>	1.000	130	40	55	14,8	11,9
250	225	6	<b>700 647 776</b>	1.000	110	40	40	14,8	13,4
280	200	6	<b>700 647 777</b>	1.000	160	40	58	16,6	11,9
280	225	6	<b>700 647 778</b>	1.000	130	40	52	16,6	13,4
280	250	6	<b>700 647 779</b>	1.000	110	40	47	16,6	14,8
315	225	6	<b>700 647 780</b>	1.000	160	40	62	18,7	13,4
315	250	6	<b>700 647 781</b>	1.000	140	40	57	18,7	14,8
315	280	6	<b>700 647 782</b>	1.000	120	40	54	18,7	16,6
355	250	6	<b>700 647 783</b>	1.000	180	40	74	21,1	14,8
355	280	6	<b>700 647 784</b>	1.000	150	40	61	21,1	16,6
355	315	6	<b>700 647 785</b>	1.000	120	40	51	21,1	18,7
400	280	6	<b>700 647 786</b>	1.000	200	40	85	23,7	16,6
400	315	6	<b>700 647 787</b>	1.000	170	40	75	23,7	18,7
400	355	6	<b>700 647 788</b>	1.000	130	40	58	23,7	21,1
450	315	6	<b>700 647 789</b>	1.000	210	40	86	26,7	18,7

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d1 [mm]	d2 [mm]	PN	Code	kg	L [mm]	L1 [mm]	L2 [mm]	e1 [mm]	e2 [mm]
450	355	6	<b>700 647 790</b>	1.000	180	40	79	26,7	21,1
450	400	6	<b>700 647 791</b>	1.000	140	40	65	26,7	23,7
500	315	6	<b>700 647 792</b>	1.000	260	40	107	29,7	18,7
500	355	6	<b>700 647 793</b>	1.000	220	40	91	29,7	21,1
500	400	6	<b>700 647 794</b>	1.000	190	40	86	29,7	23,7
500	450	6	<b>700 647 795</b>	1.000	140	40	65	29,7	26,7
560	450	6	<b>700 647 796</b>	1.000	200	40	91	33,2	26,7
560	500	6	<b>700 647 797</b>	1.000	150	40	70	33,2	29,7
630	500	6	<b>700 647 798</b>	1.000	220	40	99	37,4	29,7
630	560	6	<b>700 647 799</b>	1.000	170	40	84	37,4	33,2

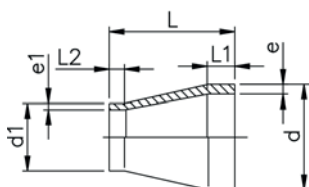
27 90 89

## PROGEF Standard reducer S8.3/SDR17.6

### Model:

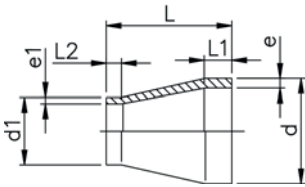
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H

<sup>1</sup> Material: PP-R



d [mm]	d1 [mm]	FM	Code	kg	L [mm]	L1 [mm]	L2 [mm]	e [mm]	e1 [mm]
50	40	IR	<b>727 908 949</b>	0.010	55	12	12	2,9	2,3
63	40	IR	<b>727 908 901</b>	0.020	65	16	12	3,6	2,3
63	50	IR	<b>727 908 900</b>	0.020	65	16	12	3,6	2,9
75	40	IR	<b>727 908 904</b>	0.041	65	20	20	4,3	2,3
75	50	IR	<b>727 908 465</b>	0.047	65	20	20	4,8	3,2
75	63	IR	<b>727 908 464</b>	0.053	65	20	20	4,3	3,6
90	63	IR	<b>727 908 471</b>	0.079	75	22	19	5,1	3,6
90	75	IR	<b>727 908 470</b>	0.090	75	21	19	5,1	4,3
110	75	IR	<b>727 908 477</b>	0.144	90	28	18	6,3	4,3
110	90	IR	<b>727 908 476</b>	0.158	90	28	20	6,3	5,1
125	110	IR	<b>727 908 912</b>	0.190	108	32	28	7,1	6,3
140	110	IR	<b>727 908 917</b>	0.322	115	35	28	8,0	6,3
140	125	IR	<b>727 908 916</b>	0.353	115	35	32	8,0	7,1
160	110	IR	<b>727 908 922</b>	0.454	124	40	28	9,1	6,3
160	140	IR	<b>727 908 920</b>	0.482	124	40	35	9,1	8,0
180	90	IR	<b>727 908 928</b>	0.866	157	45	22	10,2	5,1
180	110	IR	<b>727 908 927</b>	0.698	157	45	28	10,2	6,3
180	125	IR	<b>727 908 926</b>	0.596	136	45	32	10,2	7,1
180	140	IR	<b>727 908 925</b>	0.632	136	45	35	10,2	8,0
180	160	IR	<b>727 908 924</b>	0.677	136	45	40	10,2	9,1
200	160	IR	<b>727 908 930</b>	0.805	151	50	40	11,4	9,1
200	180	IR	<b>727 908 929</b>	0.895	151	50	45	11,4	10,2
225	110	IR	<b>727 908 936</b>	1.001	171	55	40	12,8	6,3
225	160	IR	<b>727 908 934</b>	1.082	171	55	45	12,8	9,1
225	180	IR	<b>727 908 933</b>	1.337	171	55	45	12,8	10,2
225	200	IR	<b>727 908 932</b>	1.184	184	60	40	12,8	11,4
250	160	--	<b>727 908 940</b>	2.062	194	60	40	14,2	9,1
250	225	--	<b>727 908 937</b>	1.792	182	60	55	14,2	12,8
<sup>1</sup> 280	225	--	<b>727 908 942</b>	1.365	105	30	20	15,9	12,8
<sup>1</sup> 280	250	--	<b>727 908 941</b>	0.858	70	30	18	15,9	14,2
<sup>1</sup> 315	225	--	<b>727 908 947</b>	2.062	130	30	20	17,9	12,8
<sup>1</sup> 315	250	--	<b>727 908 946</b>	1.578	100	30	20	17,9	14,2
<sup>1</sup> 315	280	--	<b>727 908 945</b>	1.156	63	30	18	17,9	15,9
<sup>1</sup> 355	250	--	<b>727 908 959</b>	3.000	245	90	60	20,1	14,2
<sup>1</sup> 355	280	--	<b>727 908 958</b>	2.700	245	90	70	20,1	15,9
<sup>1</sup> 355	315	--	<b>727 908 957</b>	2.400	245	90	80	20,1	17,9
<sup>1</sup> 400	315	--	<b>727 908 972</b>	3.600	260	95	80	22,7	17,9
<sup>1</sup> 400	355	--	<b>727 908 971</b>	3.100	260	95	90	22,7	20,1
450	280	--	<b>727 908 967</b>	6.000	230	60	70	25,5	15,9
450	315	--	<b>727 908 984</b>	5.400	230	60	80	25,5	17,9
450	355	--	<b>727 908 988</b>	5.000	230	60	90	25,5	20,1
450	400	--	<b>727 908 989</b>	5.000	230	60	95	25,5	22,7
500	315	--	<b>727 908 993</b>	8.100	230	60	80	28,4	17,9

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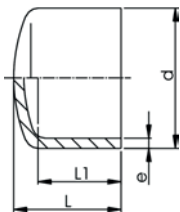
d [mm]	d1 [mm]	FM	Code	kg	L [mm]	L1 [mm]	L2 [mm]	e [mm]	e1 [mm]
500	355	--	<b>727 908 994</b>	7.300	230	60	95	28,4	20,1
500	400	--	<b>727 908 998</b>	6.700	230	60	95	28,4	22,7
500	450	--	<b>727 908 999</b>	5.500	230	60	60	28,4	25,5

27 96 89

## PROGEF Standard end cap S5/SDR11

### Model:

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



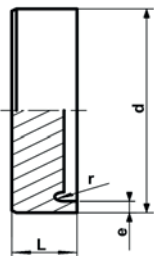
d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
20	IR	<b>727 968 931</b>	0.005	42	30	1.9
25	IR	<b>727 968 932</b>	0.005	50	35	2.3
32	IR	<b>727 968 933</b>	0.013	55	40	2.9
40	IR	<b>727 968 934</b>	0.018	65	45	3.7
50	IR	<b>727 968 935</b>	0.043	70	50	4.6
63	IR	<b>727 968 936</b>	0.080	80	55	5.8
75	IR	<b>727 968 937</b>	0.126	90	60	6.8
90	IR	<b>727 968 938</b>	0.107	105	70	8.2
110	IR	<b>727 968 939</b>	0.384	120	80	10.0
125	IR	<b>727 968 940</b>	0.237	50	25	11.4
140	IR	<b>727 968 941</b>	0.350	60	30	12.7
160	IR	<b>727 968 942</b>	0.684	76	40	14.6
180	IR	<b>727 968 943</b>	1.103	125	88	16.4
200	IR	<b>727 968 944</b>	1.089	100	50	18.2
225	IR	<b>727 968 945</b>	1.531	103	60	20.5

27 96 89

## PROGEF Standard end cap S5/SDR11

### Model:

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



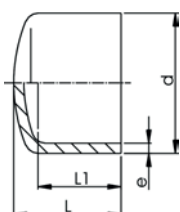
d [mm]	Code	kg	L [mm]	e [mm]
250	<b>727 968 846</b>	1.900	60	22,7
280	<b>727 968 847</b>	2.600	65	25,4
315	<b>727 968 848</b>	3.600	70	28,6
355	<b>727 968 849</b>	5.100	80	32,2
400	<b>727 968 850</b>	7.200	85	36,3
450	<b>727 968 851</b>	10.200	95	40,9
500	<b>727 968 852</b>	14.000	105	74,5

27 96 89

## PROGEF Standard end cap S8.3/SDR17.6

### Model:

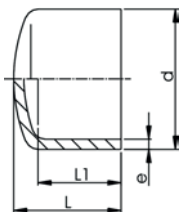
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H



d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
50	IR	<b>727 968 910</b>	0.054	75	53	2,9
63	IR	<b>727 968 911</b>	0.056	85	58	3,6
75	IR	<b>727 968 912</b>	0.045	90	60	4,3
90	IR	<b>727 968 913</b>	0.145	105	70	5,1
110	IR	<b>727 968 914</b>	0.262	120	80	6,3
125	IR	<b>727 968 915</b>	0.161	50	25	7,1
140	IR	<b>727 968 916</b>	0.251	60	30	8,0
160	IR	<b>727 968 917</b>	0.401	76	40	9,1

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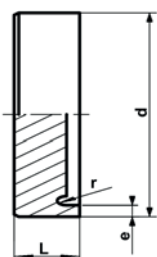
d [mm]	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
180	IR	<b>727 968 918</b>	0.769	125	88	10,2
200	IR	<b>727 968 919</b>	0.751	100	50	11,4
225	IR	<b>727 968 920</b>	1.060	103	60	12,8

27 96 89

## PROGEF Standard end cap S8.3/SDR17.6

### Model:

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

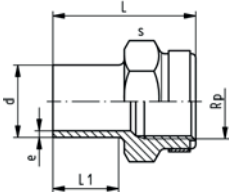


d [mm]	Code	kg	L [mm]	e [mm]
250	<b>727 968 821</b>	1.600	55	14,2
280	<b>727 968 822</b>	2.100	60	15,9
315	<b>727 968 823</b>	3.000	65	17,9
355	<b>727 968 824</b>	4.200	70	20,1
400	<b>727 968 825</b>	6.000	75	22,7
450	<b>727 968 826</b>	8.600	85	25,5
500	<b>727 968 827</b>	11.600	90	28,3

# Adaptor fittings for butt fusion

27 91 02

## PROGEF Standard adaptor socket metric Rp



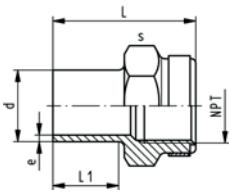
**Model:**

- Material: PP-H
- With butt fusion spigot **SDR11** and BSP parallel female thread Rp, reinforced
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- 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	<b>727 910 266</b>	0.017	49	23	32	1,9
25	¾	10	IR	<b>727 910 267</b>	0.022	50	23	36	2,3
32	1	10	IR	<b>727 910 268</b>	0.038	54	23	46	2,9
40	1 ¼	10	IR	<b>727 910 269</b>	0.066	56	23	55	3,7
50	1 ½	10	IR	<b>727 910 270</b>	0.090	60	23	65	4,6
63	2	10	IR	<b>727 910 271</b>	0.123	62	23	80	5,8

27 91 43

## PROGEF Standard adaptor socket metric NPT



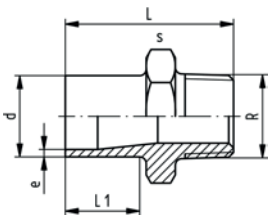
**Model:**

- Material: PP-H
- With butt fusion spigot **SDR11** and NPT tapered female thread, reinforced
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- 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	<b>727 914 356</b>	0.017	49	23	32	1,9
25	¾	10	IR	<b>727 914 357</b>	0.022	51	23	36	2,3
32	1	10	IR	<b>727 914 358</b>	0.039	54	23	46	2,9
40	1 ¼	10	IR	<b>727 914 359</b>	0.057	56	23	55	3,7
50	1 ½	10	IR	<b>727 914 360</b>	0.085	60	23	65	4,6
63	2	10	IR	<b>727 914 361</b>	0.122	62	23	80	5,8

27 91 05

## PROGEF Standard adaptor nipple metric R

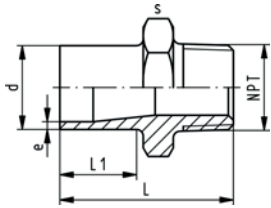


**Model:**

- Material: PP-H
- With butt fusion spigot and BSP tapered male thread
- 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	<b>727 910 556</b>	0.013	51	23	32	1,9
25	¾	10	IR	<b>727 910 557</b>	0.014	52	23	36	2,3
32	1	10	IR	<b>727 910 558</b>	0.027	55	23	46	2,9
40	1 ¼	10	IR	<b>727 910 559</b>	0.041	58	23	55	3,7
50	1 ½	10	IR	<b>727 910 560</b>	0.062	60	23	65	4,6
63	2	10	IR	<b>727 910 561</b>	0.096	67	26	80	5,8

27 91 46



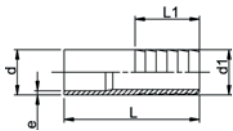
## PROGEF Standard adaptor nipple metric NPT

### Model:

- Material: PP-H
- With butt fusion spigot **SDR11** and NPT tapered male thread
- 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	1/2	10	IR	<b>727 914 656</b>	0.013	51	23	32	1.9
25	3/4	10	IR	<b>727 914 657</b>	0.026	52	23	36	2.3
32	1	10	IR	<b>727 914 658</b>	0.026	55	23	46	2.9
40	1 1/4	10	IR	<b>727 914 659</b>	0.041	58	24	55	3.7
50	1 1/2	10	IR	<b>727 914 660</b>	0.062	60	23	65	4.6
63	2	10	IR	<b>727 914 661</b>	0.097	67	26	80	5.8

27 96 86



## PROGEF Standard hose connector metric

### Model:

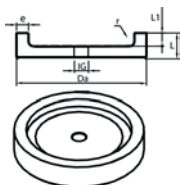
- Material: PP-H
- With butt fusion spigot **SDR11** and parallel hose connection

d [mm]	d1 [mm]	PN	FM	Code	kg	L [mm]	L1 [mm]	e [mm]
20	20	10	IR	<b>727 968 606</b>	0.007	64	27	1.9
25	25	10	IR	<b>727 968 607</b>	0.014	75	36	2.3
32	32	10	IR	<b>727 968 608</b>	0.022	82	36	2.9
40	40	10	IR	<b>727 968 609</b>	0.032	84	42	3.7
50	50	10	IR	<b>727 968 610</b>	0.053	90	48	4.6
63	60	10	IR	<b>727 968 611</b>	0.088	100	50	5.8

## End Cap PP-H, SDR11 with female thread

### Model:

- Conventional butt fusion according to DVS2207
- Machined
- metric - Rp
- other thread-dimensions and NPT-thread available on request



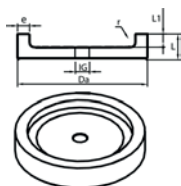
d [mm]	Rp [inch]	PN	Code	kg	L [mm]	L1 [mm]	e [mm]	r [mm]
63	1/2	10	<b>700 647 924</b>	1.000	35	10	5,8	5
75	1/2	10	<b>700 647 925</b>	1.000	35	10	6,8	5
90	1/2	10	<b>700 647 926</b>	1.000	35	10	8,2	5
110	1/2	10	<b>700 647 927</b>	1.000	35	10	10	5
125	1/2	10	<b>700 647 928</b>	1.000	36	10	11,4	5
140	1/2	10	<b>700 647 929</b>	1.000	38	10	12,7	5
160	1/2	10	<b>700 647 930</b>	1.000	40	10	14,6	6
180	1/2	10	<b>700 647 931</b>	1.000	41	10	16,4	6
200	1/2	10	<b>700 647 932</b>	1.000	45	11	18,2	6
225	1/2	10	<b>700 647 933</b>	1.000	52	12	20,5	10
250	1/2	10	<b>700 647 934</b>	1.000	57	14	22,7	11
280	1/2	10	<b>700 647 935</b>	1.000	63	15	25,4	13
315	1/2	10	<b>700 647 936</b>	1.000	72	17	28,6	14
355	1/2	10	<b>700 647 937</b>	1.000	80	19	32,2	16
400	1/2	10	<b>700 647 938</b>	1.000	90	22	36,3	18
450	1/2	10	<b>700 647 939</b>	1.000	102	25	40,9	20
500	1/2	10	<b>700 647 940</b>	1.000	113	27	45,4	23
560	1/2	10	<b>700 647 941</b>	1.000	127	30	50,8	25
630	1/2	10	<b>700 647 942</b>	1.000	143	34	57,2	29



## End Cap PP-H, SDR17.6 with female thread

### Model:

- Conventional butt fusion according to DVS2207
- Machined
- metric - Rp
- other thread-dimensions and NPT-thread available on request

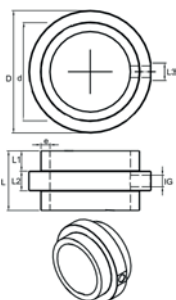


d [mm]	Rp [inch]	PN	Code	kg	L [mm]	L1 [mm]	e [mm]	r [mm]
63	½	6	<b>700 665 127</b>	1.000	35	10	3,6	5
75	½	6	<b>700 665 128</b>	1.000	35	10	4,3	5
90	½	6	<b>700 665 129</b>	1.000	35	10	5,1	5
110	½	6	<b>700 665 130</b>	1.000	35	10	6,3	5
125	½	6	<b>700 665 131</b>	1.000	35	10	7,1	5
140	½	6	<b>700 665 132</b>	1.000	35	10	8,0	5
160	½	6	<b>700 665 133</b>	1.000	35	10	9,1	6
180	½	6	<b>700 665 134</b>	1.000	35	10	10,2	6
200	½	6	<b>700 665 135</b>	1.000	35	10	11,4	6
225	½	6	<b>700 665 136</b>	1.000	35	10	12,8	8
250	½	6	<b>700 665 137</b>	1.000	35	10	14,2	8
280	½	6	<b>700 665 138</b>	1.000	40	10	15,9	8
315	½	6	<b>700 665 139</b>	1.000	45	11	17,9	8
355	½	6	<b>700 665 140</b>	1.000	50	12	20,1	8
400	½	6	<b>700 665 141</b>	1.000	57	14	22,7	10
450	½	6	<b>700 665 142</b>	1.000	67	16	26,7	10
500	½	6	<b>700 665 143</b>	1.000	75	18	29,7	10
560	½	6	<b>700 665 144</b>	1.000	83	20	33,2	10
630	½	6	<b>700 665 145</b>	1.000	93	22	37,2	10

## Instrument Installation Fittings PP-H, SDR11 with female thread

### Model:

- Conventional butt fusion according to DVS2207
- Machined
- metric - Rp
- other thread-dimensions and NPT-thread available on request



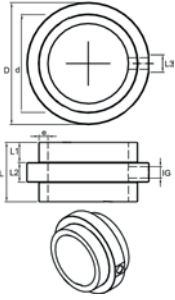
d [mm]	Rp [inch]	PN	Code	kg	L [mm]	L1 [mm]	L2 [mm]	D [mm]	e [mm]
63	½	10	<b>700 665 351</b>	1.000	90	30	30	90	5,8
75	½	10	<b>700 665 352</b>	1.000	90	30	30	110	6,8
90	½	10	<b>700 665 353</b>	1.000	100	30	40	125	8,2
110	½	10	<b>700 665 354</b>	1.000	100	30	40	140	10
125	½	10	<b>700 665 355</b>	1.000	110	35	40	160	11,4
140	½	10	<b>700 665 356</b>	1.000	125	40	45	180	12,7
160	½	10	<b>700 665 357</b>	1.000	125	40	45	200	14,6
180	½	10	<b>700 665 358</b>	1.000	135	45	45	225	16,4
200	½	10	<b>700 665 359</b>	1.000	135	45	45	250	18,2
225	½	10	<b>700 665 360</b>	1.000	135	45	45	280	20,5
250	½	10	<b>700 665 361</b>	1.000	145	50	45	280	22,7
280	½	10	<b>700 665 362</b>	1.000	155	50	55	315	25,4
315	½	10	<b>700 665 363</b>	1.000	155	50	55	355	28,6
355	½	10	<b>700 665 364</b>	1.000	115	30	55	400	32,2
400	½	10	<b>700 665 365</b>	1.000	130	30	70	450	36,3

## Instrument Installation Fittings PP-H, SDR17.6 with female thread



### Model:

- Conventional butt fusion according to DVS2207
- Machined
- metric - Rp
- other thread-dimensions and NPT-thread available on request



d [mm]	Rp [inch]	PN	Code	kg	L [mm]	L1 [mm]	L2 [mm]	D [mm]	e [mm]
63	½	6	<b>700 665 388</b>	1.000	90	30	30	90	3,6
75	½	6	<b>700 665 389</b>	1.000	90	30	30	110	4,3
90	½	6	<b>700 665 390</b>	1.000	100	30	40	125	5,1
110	½	6	<b>700 665 391</b>	1.000	100	30	40	140	6,3
125	½	6	<b>700 665 392</b>	1.000	110	35	40	160	7,1
140	½	6	<b>700 665 393</b>	1.000	125	40	45	180	8,0
160	½	6	<b>700 665 394</b>	1.000	125	40	45	200	9,1
180	½	6	<b>700 665 395</b>	1.000	135	45	45	225	10,2
200	½	6	<b>700 665 396</b>	1.000	135	45	45	250	11,4
225	½	6	<b>700 665 397</b>	1.000	135	45	45	280	12,8
250	½	6	<b>700 665 398</b>	1.000	145	50	45	280	14,2
280	½	6	<b>700 665 399</b>	1.000	155	50	55	315	15,9
315	½	6	<b>700 665 400</b>	1.000	155	50	55	355	17,9
355	½	6	<b>700 665 401</b>	1.000	115	30	55	400	20,1
400	½	6	<b>700 665 402</b>	1.000	130	30	70	450	22,7

27 31 10

# SIGNET Sensor installation fittings

## PROGEF Standard installation fitting type 311



**Model:**

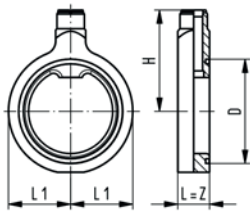
- Material: PP-H
- Threaded outlet 1 ¼" NPSM
- Suitable for backing flanges metric and inch
- Suitable for SDR 11 - SDR 17.6
- Delivered with profile O-ring

**Range of use:**

- compatible signet flow sensors: type 2551, 2537, 515, 8510, 2536, 8512

**Attention:**

- sensor length depends on installation fitting



d [mm]	DN [mm]	d [inch]	PN	EPDM Code	FPM Code	kg
75	65	2 ½	16	<b>727 311 012</b>	<b>727 311 042</b>	0.460
90	80	3	16	<b>727 311 013</b>	<b>727 311 043</b>	0.542
110	100	4	16	<b>727 311 014</b>	<b>727 311 044</b>	0.668
125	100	16	16	<b>727 311 015</b>	<b>727 311 045</b>	0.595
140	125	5	16	<b>727 311 016</b>	<b>727 311 046</b>	0.842
160	150	6	16	<b>727 311 017</b>	<b>727 311 047</b>	1.023
180	150	16	16	<b>727 311 018</b>	<b>727 311 048</b>	0.868
200	200	8	16	<b>727 311 019</b>	<b>727 311 049</b>	1.578
225	200	8	16	<b>727 311 020</b>	<b>727 311 050</b>	1.332
250	250	10	16	<b>727 311 021</b>	<b>727 311 051</b>	2.209
280	250	10	16	<b>727 311 022</b>	<b>727 311 052</b>	1.836
315	300	12	16	<b>727 311 023</b>	<b>727 311 053</b>	2.495

d [mm]	D [mm]	H [mm]	L [mm]	L1 [mm]	Sensor Type
75	88	133	48	61	flow X1
90	102	140	48	69	flow X1
110	132	149	48	79	flow X1
125	132	144	48	79	flow X1
140	157	149	48	94	flow X1
160	182	156	48	106	flow X1
180	182	163	48	106	flow X1
200	236	170	48	134	flow X1
225	236	178	48	134	flow X1
250	289	263	48	160	flow X2
280	289	273	48	160	flow X2
315	329	285	48	185	flow X2

## PROGEF Standard installation fitting type 312 metric



### Model:

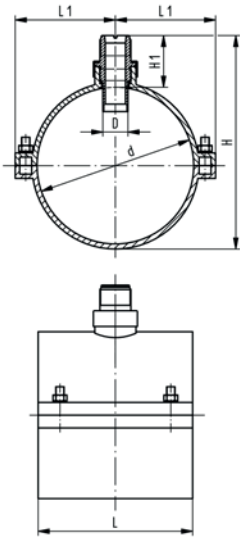
- Material: PP-H
- Threaded outlet 1 1/4" NPSM
- Top saddle with EPDM gasket
- Stainless steel bolts and nuts

### Range of use:

- compatible signet flow sensors: type 2551, 2537, 515, 8510, 2536, 8512

### Attention:

- sensor length depends on installation fitting
- working temperature max. +40°C (water)



d [mm]	DN [mm]	PN	Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]	Sensor Type
75	65	8	<b>727 312 072</b>	0.488	34	78	62	172	88	flow X1
90	80	8	<b>727 312 073</b>	0.514	34	86	69	186	87	flow X1
110	100	8	<b>727 312 074</b>	0.602	34	98	79	206	86	flow X1
125	100	8	<b>727 312 075</b>	0.667	34	101	85	212	78	flow X1
140	125	6	<b>727 312 076</b>	0.949	34	114	104	227	75	flow X1
160	150	6	<b>727 312 077</b>	0.985	34	114	114	243	72	flow X1
180	150	6	<b>727 312 078</b>	2.118	34	168	134	348	144	flow X2
200	200	6	<b>727 312 079</b>	2.045	34	168	132	357	142	flow X2
225	200	5	<b>727 312 080</b>	2.211	34	174	146	375	136	flow X2
250	250	5	<b>727 312 081</b>	2.616	34	179	159	397	131	flow X2
280	250	5	<b>727 312 082</b>	3.583	34	179	167	426	127	flow X2
315	300	5	<b>727 312 083</b>	4.311	34	248	202	450	120	flow X2

## PROGEF Standard installation fitting type 314

### Model:

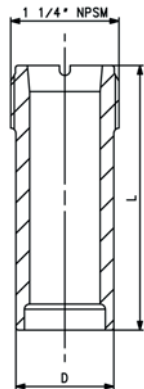
- Material: PP-H
- Threaded outlet 1 1/4" NPSM
- for conventional hot gas back welding according to DVS 2207 part 3

### Range of use:

- compatible signet flow sensors: type 2551, 2537, 515, 8510, 2536, 8512
- compatible signet pH/ORP sensors: type 2724, 2725, 2726

### Attention:

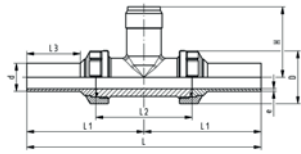
- only for pressureless or low pressure application
- pressure rate depends on quality of hot gas back welding
- please consult the instruction manual
- Installation by trained and certified welders only
- sensor length depends on installation fitting



d [mm]	DN	PN* [bar]	Code	kg	D [mm]	L [mm]	Sensor Type
75 - 180	65 - 150	-	<b>727 314 000</b>	0.050	37.5	68	flow X0, pH XX
200 - 355	200 - 350	-	<b>727 314 001</b>	0.057	37.5	102	flow X1
400 - 630	350 - 600	-	<b>727 314 002</b>	0.885	37.5	178	flow X2

27 31 80

## PROGEF Standard installation fitting type 318 S5/SDR11 for butt fusion systems metric



### Model:

- Material: PP-H
- Threaded outlet 1 ¼" NPSM
- Union end with butt fusion spigot PP-H

### Range of use:

- compatible signet flow sensors: type 2551, 2537, 515, 8510, 2536, 8512
- compatible signet pH/ORP sensors: type 2724, 2725, 2726

### Attention:

- sensor length depends on installation fitting

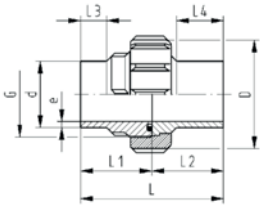
d [mm]	DN [mm]	PN	FM	EPDM Code	FPM Code	kg
20	15	10	IR	<b>727 318 006</b>	<b>727 318 036</b>	0.136
25	20	10	IR	<b>727 318 007</b>	<b>727 318 037</b>	0.208
32	25	10	IR	<b>727 318 008</b>	<b>727 318 038</b>	0.250
40	32	10	IR	<b>727 318 009</b>	<b>727 318 039</b>	0.356
50	40	10	IR	<b>727 318 010</b>	<b>727 318 040</b>	0.510
63	50	10	IR	<b>727 318 011</b>	<b>727 318 041</b>	0.800

d [mm]	e [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	Sensor Type
20	1.9	48	224	112	90	52	76	flow X0, pH XX
25	2.3	58	242	121	100	53	78	flow X0, pH XX
32	2.9	65	256	128	110	55	81	flow X0, pH XX
40	3.7	79	272	136	110	60	85	flow X0, pH XX
50	4.6	91	294	147	120	66	89	flow X0, pH XX
63	5.8	105	316	158	130	70	95	flow X0, pH XX



# Unions for butt fusion

EPDM 27 51 85  
FPM 27 52 85



## PROGEF Standard union S5/SDR11

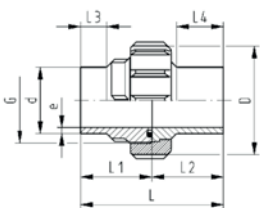
### Model:

- Material: PP-H
- With butt fusion ends
- Conventional butt fusion and (IR Plus®) compatible
- Gasket: O-Ring EPDM No. 48 41 00
- **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	0.047
25	10	IR	727 518 507	727 528 507	0.072
32	10	IR	727 518 508	727 528 508	0.100
40	10	IR	727 518 509	727 528 509	0.145
50	10	IR	727 518 510	727 528 510	0.190
63	10	IR	727 518 511	727 528 511	0.332
75	10	IR	727 518 512	727 528 512	0.520
90	10	IR	727 518 513	727 528 513	0.539
110	10	IR	727 518 514	727 528 514	0.758

d [mm]	D [mm]	G [inch]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	e [mm]
20	48	1	107	54.0	53.0	13	26	1.9
25	58	1 1/4	113	57.0	56.0	12	26	2.3
32	65	1 1/2	119	60.0	59.0	14	26	2.9
40	79	2	126	63.0	63.0	16	26	3.7
50	91	2 1/4	131	65.5	65.5	19	26	4.6
63	111	2 3/4	137	69.0	68.0	20	26	5.8
75	135	S107,5x3,6	131	66.0	65.5	22	24	6.8
90	135	S107,5x3,6	131	65.5	65.5	22	24	8.2
110	158	S127,5x3,6	131	65.5	65.5	22	25	10.0

EPDM 27 51 84  
FPM 27 52 84



## PROGEF Standard union S8.3/SDR17.6

### Model:

- Material: PP-H
- With butt fusion ends
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- Jointing face: With O-ring groove
- **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	0.664

d [mm]	D [mm]	G [inch]	L [mm]	L1 [mm]	L2 [mm]	e [mm]
75	135	S107,5x3,6	132	66.0	66.0	4,3
90	135	S107,5x3,6	131	65.5	65.5	5,1
110	158	S127,5x3,6	131	65.5	65.5	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.

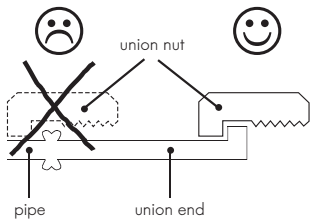


Fig. 1

- ② For the dimensions d90 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.

## 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)

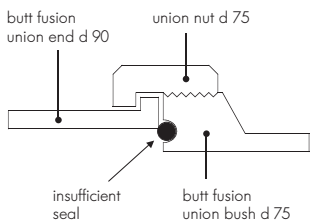


Fig. 2

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

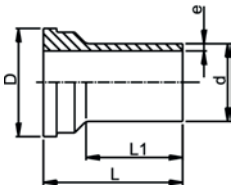
O-Rings for PP-H, PE 100

d	BF/ST	SF/MS	SDR	PN	Code O-Ring EPDM <sup>1</sup>	Code O-Ring FPM <sup>1</sup>
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

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

27 60 85



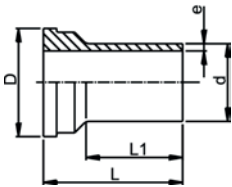
## PROGEF Standard union end IR plus SDR11

**Model:**

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H
- 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	727 508 506	0.009	30	54	38	1.9
25	10	IR	727 508 507	0.017	39	57	42	2.3
32	10	IR	727 508 508	0.026	45	60	41	2.9
40	10	IR	727 508 509	0.043	57	63	42	3.7
50	10	IR	727 508 510	0.058	63	66	44	4.6
63	10	IR	727 508 511	0.095	78	69	45	5.8
75	10	IR	727 508 512	0.146	101	66	34	6.8
90	10	IR	727 508 513	0.158	101	66	45	8.2
110	10	IR	727 508 514	0.233	121	66	40	10.0

27 60 84



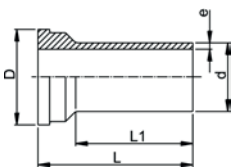
## PROGEF Standard union end IR plus SDR17.6

**Model:**

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H
- 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	0.121	101	66	34	4,3
90	6	IR	727 608 413	0.113	101	66	45	5,1
110	6	IR	727 608 414	0.163	121	66	40	6,3

27 60 85



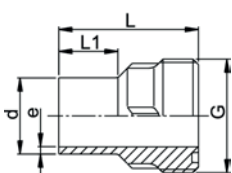
## PROGEF Standard union end long SDR11

**Model:**

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. 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	0.011	30	67	52	1,9
25	10	IR	727 608 517	0.018	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	0.122	78	93	70	5,8

27 64 85



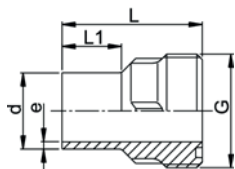
## PROGEF Standard union bush SDR11

**Model:**

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

d [mm]	PN	FM	Code	kg	G [inch]	L [mm]	L1 [mm]	e [mm]
20	10	IR	727 848 506	0.012		1	54	26
25	10	IR	727 848 507	0.020		1 1/4	57	26
32	10	IR	727 848 508	0.029		1 1/2	60	25
40	10	IR	727 848 509	0.047		2	63	25
50	10	IR	727 848 510	0.062		2 1/4	66	25
63	10	IR	727 848 511	0.107		2 3/4	69	25

table continued next page



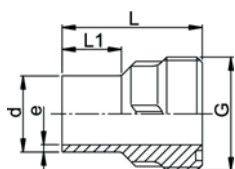
d [mm]	PN	FM	Code	kg	G [inch]	L [mm]	L1 [mm]	e [mm]
75	10	IR	<b>727 848 512</b>	0.172	S107.5x3.6	66	24	6.8
90	10	IR	<b>727 848 513</b>	0.182	S107.5x3.6	66	24	8.2
110	10	IR	<b>727 848 514</b>	0.258	S127.5x3.6	66	25	10.0



## Union Bushes, PP-H SDR17,6

### Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H
- Gasket: O-Ring EPDM No. 48 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	<b>727 648 412</b>	0.150	S127.5x3.6	65.5	24	4.3
90	6	IR	<b>727 648 413</b>	0.147	S107.5x3.6	66.0	24	5.1
110	6	IR	<b>727 648 414</b>	0.200	S127.5x3.6	66.0	24	6.3

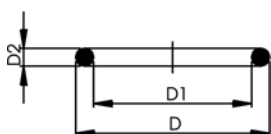
EPDM 48 41 00  
FPM 49 41 00

## O-Ring gasket

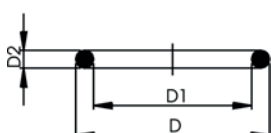
### Model:

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

\* for unions PVC-U, PVC-C and ABS: 21 51 01, 21 51 11, 21 53 03, 21 53 08, 21 55 04, 21 55 13, 21 55 18, 23 51 01 and 29 51 01 only



d [mm]	DN [mm]	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	D2 [mm]
10 - 12	8	<b>748 410 004</b>	<b>749 410 004</b>	0.001	18	12	2.62
16	10	<b>748 410 005</b>	<b>749 410 005</b>	0.001	21	16	2.62
20	15	<b>748 410 006</b>	<b>749 410 006</b>	0.001	27	20	3.53
25	20	<b>748 410 007</b>	<b>749 410 007</b>	0.002	35	28	3.53
32	25	<b>748 410 008</b>	<b>749 410 008</b>	0.002	40	33	3.53
40	32	<b>748 410 009</b>	<b>749 410 009</b>	0.007	51	41	5.34
50	40	<b>748 410 010</b>	<b>749 410 010</b>	0.060	58	47	5.34
63	50	<b>748 410 011</b>	<b>749 410 011</b>	0.003	70	60	5.34
75	65	<b>748 410 014</b>	<b>749 410 014</b>	0.012	93	82	5.34
90	80	<b>748 410 015</b>	<b>749 410 015</b>	0.015	112	101	5.34
* 90	80	<b>748 410 248</b>	<b>749 410 248</b>	0.020	105	95	5.34
110	100	<b>748 410 016</b>	<b>749 410 016</b>	0.031	134	120	6.99

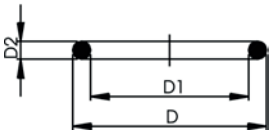


## O-Ring Gasket, FPM black

### 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]
<b>748 410 013</b>	<b>749 410 013</b>	0.011	80		
<b>748 410 014</b>	<b>749 410 014</b>	0.012	93		
<b>748 410 015</b>	<b>749 410 015</b>	0.015	112		



## O-Ring Gaskets

### Model:

- For unions and adaptor unions
- Hardness approx. 75° Shore
- FFPM minimum temperature -20°C

d [mm]	DN [mm]	FFPM Code	kg	D [mm]	D1 [mm]	D2 [mm]	
20	15	<b>700 245 481</b>	0.002	27	20	4	
25	20	<b>700 245 482</b>	0.002	35	28	4	
32	25	<b>700 245 483</b>	0.002	40	33	4	
40	32	<b>700 245 484</b>	0.006	51	41	5	
50	40	<b>700 245 485</b>	0.007	58	47	5	
63	50	<b>700 245 486</b>	0.010	70	60	5	

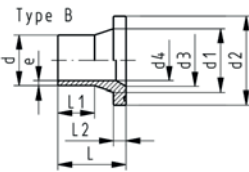
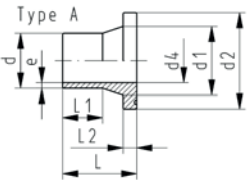
# Flange Adaptors, Flanges and Gaskets for Butt Fusion

27 79 87

Type A



Type B



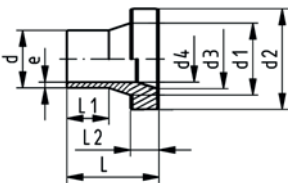
## PROGEF Standard flange adaptor S5/SDR11 Combined jointing face: flat and serrated

### Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. 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  
Above use PROGEF Standard Adaptor for butterfly valves SDR11 (d355-d500)
- Up to d280, suitable for butterfly valve type 037/038/039  
Above use PROGEF Standard Adaptor for butterfly valves SDR11 (d315-d500)
- Gasket: Profile flange gasket EPDM No. 48 44 07, FPM No. 49 44 07
- Type A without chamfer, Type B with chamfer

d [mm]	DN [mm]	FM	Code	kg	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	L [mm]	L1 [mm]	L2 [mm]	e [mm]	Type
20	15	IR	<b>727 798 706</b>	0.015	26	45		16	50	29	7	1.9	A
25	20	IR	<b>727 798 707</b>	0.029	32	58		20	52	27	9	2.3	A
32	25	IR	<b>727 798 708</b>	0.042	40	68		26	54	28	10	2.9	A
40	32	IR	<b>727 798 709</b>	0.064	49	78		32	56	25	11	3.7	A
50	40	IR	<b>727 798 710</b>	0.091	60	88		40	62	32	12	4.6	A
63	50	IR	<b>727 798 711</b>	0.144	75	102		51	68	38	14	5.8	A
75	65	IR	<b>727 798 712</b>	0.243	89	122	66	61	80	43	16	6.9	B
90	80	IR	<b>727 798 713</b>	0.324	105	138	78	73	80	41	17	8.2	B
110	100	IR	<b>727 798 714</b>	0.441	125	158	100	90	80	40	18	10.0	B
125	100	IR	<b>727 798 715</b>	0.487	132	158	114	102	82	35	25	11.4	B
140	125	IR	<b>727 798 716</b>	0.800	155	188	127	114	89	39	25	12.8	B
160	150	IR	<b>727 798 717</b>	0.920	175	212	151	131	92	45	25	14.6	B
180	150	IR	<b>727 798 718</b>	0.892	180	212	154	147	80	45	30	16.4	B
200	200	IR	<b>727 798 719</b>	1.670	232	268	203	163	100	30	32	18.2	B
225	200	IR	<b>727 798 720</b>	1.665	235	268	210	184	100	35	32	20.5	B
250	250		<b>727 798 721</b>	2.630	285	320	250	204	100	25	35	22.7	B
280	250		<b>727 798 722</b>	2.521	291	320	265	229	100	35	35	25.4	B
315	300		<b>727 798 723</b>	3.247	335	370	300	257	100	25	35	28.6	B
355	350		<b>727 798 724</b>	7.572	373	430	340	290	180	40	40	32.2	B
400	400		<b>727 798 725</b>	10.201	427	482	385	327	187	46	46	36.3	B
450	500		<b>727 798 726</b>	13.800	514	585	400	368	141	64	60	40.9	B
500	500		<b>727 798 727</b>	12.553	530	587	440	409	138	62	61	45.4	B

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## PROGEF Standard adaptor for butterfly valves SDR11 Jointing face flat metric

### Model:

- Material: Polypropylene, PP-R
- Conventional butt-welding according to DVS 2207 part 11
- Suitable for butterfly valves type 567/568 and 037/038/039

### Note:

\* available starting Q1 2013

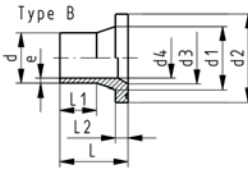
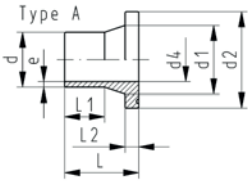
d [mm]	DN [mm]	Code	kg	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	L [mm]	L1 [mm]	L2 [mm]	e [mm]
* 315	300	<b>727 798 623</b>									
355	350	<b>727 798 624</b>	7.435	373	430	346	312	180	90	65	32.2
400	400	<b>727 798 625</b>	9.618	427	482	404	352	196	95	69	36.3
450	450	<b>727 798 626</b>	12.810	467	533	460	396	195	60	108	40.9
500	500	<b>727 798 627</b>	14.267	530	585	500	440	188	60	90	45.4

# PROGEF Standard flange adaptor S5/SDR11 Combined jointing face: flat and serrated

## Model:

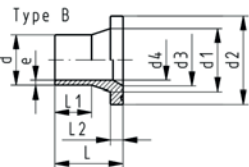
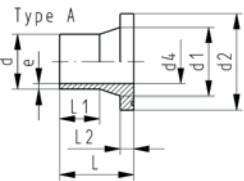
- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. Choose fusion parameters: PP-H
- Suitable for flange connections to **ANSI/ASME B 16.5**
- Up to d280, suitable for butterfly valve type 567/568 and 037/038/039
- Gasket: Profile flange gasket EPDM No. 48 44 07, FPM No. 49 44 07

## \* Type B with chamfer



d [mm]	DN [mm]	FM	Code	kg	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	L [mm]	L1 [mm]	L2 [mm]	e [mm]
20	15	IR	<b>727 798 706</b>	0.015	26	45		16	50	29	7	1.9
25	20	IR	<b>727 798 757</b>	0.022	33	54		20	52	27	9	2.3
32	25	IR	<b>727 798 758</b>	0.039	40	63		26	54	28	10	3.0
40	32	IR	<b>727 798 759</b>	0.056	50	73		32	56	25	11	3.7
50	40	IR	<b>727 798 760</b>	0.087	61	82		40	62	32	12	4.6
63	50	IR	<b>727 798 711</b>	0.144	75	102		51	68	38	14	5.8
75	65	IR	<b>727 798 712</b>	0.243	89	122	66	61	80	43	16	6.9
* 90	80	IR	<b>727 798 763</b>	0.310	105	133	78	73	80	41	17	8.2
110	100	IR	<b>727 798 714</b>	0.441	125	158	100	90	80	40	18	10.0
125	100	IR	<b>727 798 715</b>	0.487	132	158	114	102	82	35	25	11.4
140	125	IR	<b>727 798 716</b>	0.800	155	188	127	114	89	39	25	12.8
160	150	IR	<b>727 798 717</b>	0.920	175	212	151	131	92	45	25	14.6
180	150	IR	<b>727 798 718</b>	0.892	180	212	154	147	80	45	30	16.4
200	200	IR	<b>727 798 719</b>	1.670	232	268	203	163	100	30	32	18.2
225	200	IR	<b>727 798 720</b>	1.665	235	268	210	184	100	35	32	20.5
250	250		<b>727 798 721</b>	2.630	285	320	250	204	100	25	35	22.7
280	250		<b>727 798 722</b>	2.521	291	320	265	229	100	35	35	25.4
315	300		<b>727 798 723</b>	3.247	335	370	300	257	100	25	35	28.6
355	350		<b>727 798 724</b>	7.572	373	430	340	290	180	40	40	32.2
400	400		<b>727 798 725</b>	10.201	427	482	385	327	187	46	46	36.3





## PROGEF Standard flange adaptor S8.3/SDR17.6 Combined jointing face: flat and serrated

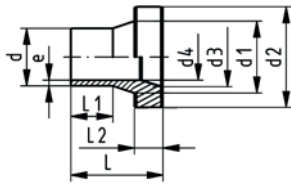
### Model:

- Material: PP-H
- Conventional butt-welding according to DVS 2207 part 11
- IR = Infrared-(IR Plus®) compatible. 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  
Above use PROGEF Standard Adaptor for butterfly valves SDR17.6 (d355-d500)
- Up to d280, suitable for butterfly valve type 037/038/039  
Above use PROGEF Standard Adaptor for butterfly valves SDR17.6 (d315-d500)
- Gasket: Profile flange gasket EPDM No. 48 44 07, FPM No. 49 44 07
- Type A without chamfer, Type B with chamfer

d [mm]	DN [mm]	FM	Code	kg
50	40	IR	<b>727 798 785</b>	0.077
63	50	IR	<b>727 798 786</b>	0.116
75	65	IR	<b>727 798 787</b>	0.204
90	80	IR	<b>727 798 788</b>	0.273
110	100	IR	<b>727 798 789</b>	0.361
125	100	IR	<b>727 798 790</b>	0.356
140	125	IR	<b>727 798 791</b>	0.526
160	150	IR	<b>727 798 792</b>	0.761
180	150	IR	<b>727 798 793</b>	0.630
200	200	IR	<b>727 798 794</b>	1.462
225	200	IR	<b>727 798 795</b>	1.330
250	250		<b>727 798 796</b>	1.800
280	250		<b>727 798 797</b>	1.785
315	300		<b>727 798 798</b>	2.499
355	350		<b>727 798 799</b>	5.251
400	400		<b>727 798 800</b>	7.700
450	500		<b>727 798 801</b>	10.200
500	500		<b>727 798 802</b>	9.300

d [mm]	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	L [mm]	L1 [mm]	L2 [mm]	e [mm]	Type
50	61	88		42	50	21	12	2.9	A
63	75	102		53	50	16	14	3.6	A
75	89	122		65	80	43	16	4.3	A
90	105	138		78	80	41	17	5.1	A
110	125	158		96	80	40	18	6.3	A
125	132	158	114	107	80	42	18	7.4	B
140	155	188	127	120	80	34	18	8.0	B
160	175	212	158	142	92	45	25	9.1	B
180	180	212		156	80	30	20	10.2	A
200	232	268	203	177	100	30	32	11.4	B
225	235	268	210	199	100	35	32	12.8	B
250	285	320	250	216	100	25	25	14.2	B
280	291	320	265	243	100	45	25	15.9	B
315	335	370	300	274	100	35	25	17.9	B
355	374	431	340	314	182	100	30	20.1	B
400	428	484	385	353	199	110	33	22.7	B
450	514	585		396	140	586	46	25.5	A
500	530	585		440	141	585	47	28.3	A

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## PROGEF Standard adaptor for butterfly valves SDR17.6 Jointing face flat metric

### Model:

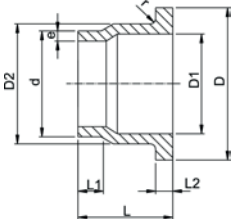
- Material: Polypropylene, PP-R
- Conventional butt-welding according to DVS 2207 part 11
- Suitable for butterfly valves type 567/568 and 037/038/039

### Note:

\* available starting Q1 2013

d [mm]	DN [mm]	Code	kg	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	L [mm]	L1 [mm]	L2 [mm]	e [mm]
* 315	300	<b>727 798 648</b>									
355	350	<b>727 798 649</b>	6.010	373	430	346	312	180	90	65	20.1
400	400	<b>727 798 650</b>	7.884	427	482	404	352	196	95	69	22.7
450	450	<b>727 798 651</b>	8.951	467	533	460	396	195	60	108	25.5
500	500	<b>727 798 652</b>	7.737	530	585	500	440	144	60	90	28.3

27 80 80



## PROGEF Standard outlet flange adaptor S5/SDR11

### Model:

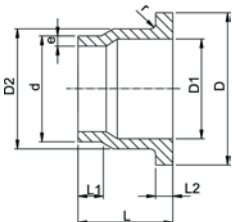
- Material: Polypropylene, PP-R
- Conventional butt-welding according to DVS 2207 part 11
- To wafer check valves Type 369

### 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	<b>727 808 034</b>	0.064	80	37	50	64	30	11	3,7	3
50	40	<b>727 808 035</b>	0.096	90	43	61	67	30	12	4,6	3
63	50	<b>727 808 036</b>	0.157	105	54	76	74	30	14	5,8	4
75	65	<b>727 808 037</b>	0.223	125	70	90	78	30	16	6,8	4
90	80	<b>727 808 038</b>	0.325	140	82	108	87	35	17	8,2	4
110	100	<b>727 808 039</b>	0.475	160	105	131	102	41	18	10,0	4
140	125	<b>727 808 041</b>	0.899	190	130	165	124	47	25	12,7	4
160	150	<b>727 808 042</b>	1.246	215	158	188	149	52	25	14,6	4
225	200	<b>727 808 045</b>	2.638	270	206	248	180	55	32	20,5	4
280	250	<b>727 808 047</b>	4.088	325	259	308	240	63	35	25,4	4
315	300	<b>727 808 048</b>	4.960	375	308	346	272	66	35	28,6	4

27 80 80



## PROGEF Standard outlet flange adaptor S8.3/SDR17.6

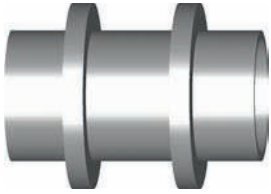
### Model:

- Material: Polypropylene, PP-R
- 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.

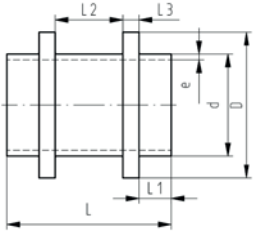
d [mm]	DN [mm]	Code	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	e [mm]	r [mm]
40	32	<b>727 808 009</b>	0.048	80	37	50	64	30	11	2,3	3
50	40	<b>727 808 010</b>	0.091	90	43	61	67	30	12	2,9	3
63	50	<b>727 808 011</b>	0.096	105	54	76	74	30	14	3,6	4
75	65	<b>727 808 012</b>	0.170	125	70	90	78	30	16	4,3	4
90	80	<b>727 808 013</b>	0.260	140	82	108	87	35	17	5,1	4
110	100	<b>727 808 014</b>	0.355	160	105	131	102	41	18	6,3	4
140	125	<b>727 808 016</b>	0.808	190	130	165	124	47	18	8,0	4
160	150	<b>727 808 017</b>	1.107	215	158	188	149	52	18	9,1	4
225	200	<b>727 808 020</b>	1.225	270	206	248	180	55	24	12,7	4
280	250	<b>727 808 022</b>	3.563	325	259	308	240	63	25	15,9	4
315	300	<b>727 808 023</b>	2.450	375	308	346	272	66	25	17,9	4



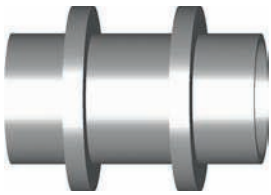
## PROGEF Standard fixed point fitting S5/SDR11

### Model:

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



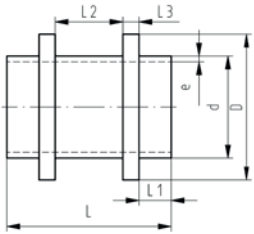
d [mm]	FM	Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	e [mm]
63	IR	<b>727 665 520</b>	0.175	90	122	30	42	10	5.8
75	IR	<b>727 665 521</b>	0.254	110	122	30	42	10	6.8
90	IR	<b>727 665 522</b>	0.342	125	122	30	42	10	8.2
110	IR	<b>727 665 523</b>	0.567	140	142	30	52	15	10.0
125	IR	<b>727 665 524</b>	0.777	160	152	35	52	15	11.4
140	IR	<b>727 665 525</b>	1.023	180	162	40	52	15	12.7
160	IR	<b>727 665 526</b>	1.292	200	162	40	52	15	14.6
180	IR	<b>727 665 527</b>	1.917	225	182	45	52	20	16.4
200	IR	<b>727 665 528</b>	2.365	250	182	45	52	20	18.2
225	IR	<b>727 665 529</b>	3.294	280	192	45	52	25	20.5
250	--	<b>727 665 530</b>	3.695	280	212	50	62	25	22.7
280	--	<b>727 665 531</b>	4.997	315	222	50	62	30	25.4
315	--	<b>727 665 532</b>	6.348	355	222	50	62	30	28.6
355	--	<b>727 665 533</b>	7.405	400	192	30	62	35	32.2
400	--	<b>727 665 534</b>	10.432	450	212	30	72	40	36.3
450	--	<b>727 665 535</b>	14.153	500	232	35	72	45	40.9
500	--	<b>727 665 536</b>	19.414	560	252	40	72	50	45.4



## PROGEF Standard fixed point fitting S8 3/SDR17 6

### Model:

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



d [mm]	FM	Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	e [mm]
63	IR	<b>727 665 539</b>	0.138	90	122	30	42	10	3.8
75	IR	<b>727 665 540</b>	0.203	110	122	30	42	10	4.5
90	IR	<b>727 665 541</b>	0.267	125	122	30	42	10	5.4
110	IR	<b>727 665 542</b>	0.438	140	142	30	52	15	6.6
125	IR	<b>727 665 543</b>	0.592	160	152	35	52	15	7.4
140	IR	<b>727 665 544</b>	0.781	180	162	40	52	15	8.3
160	IR	<b>727 665 545</b>	0.971	200	162	40	52	15	9.5
180	IR	<b>727 665 546</b>	1.464	225	182	45	52	20	10.7
200	IR	<b>727 665 547</b>	1.808	250	182	45	52	20	11.9
225	IR	<b>727 665 548</b>	2.549	280	192	45	52	25	13.4
250	--	<b>727 665 549</b>	2.678	280	212	50	62	25	14.8
280	--	<b>727 665 550</b>	3.668	315	222	50	62	30	16.6
315	--	<b>727 665 551</b>	4.666	355	222	50	62	30	18.7
355	--	<b>727 665 552</b>	5.567	400	192	30	62	35	21.1
400	--	<b>727 665 553</b>	7.835	450	212	30	72	40	23.7
450	--	<b>727 665 554</b>	10.552	500	232	35	72	45	26.7
500	--	<b>727 665 555</b>	14.608	560	252	40	72	50	29.7

27 70 06



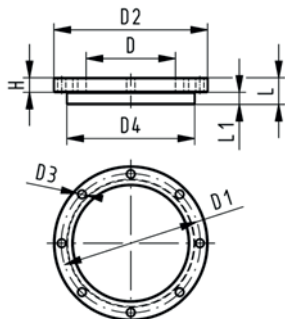
## Blanking flange set PP-H Combined jointing face flat and serrated metric

### 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

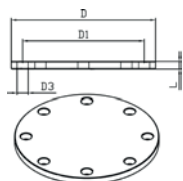


d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	H [mm]	L [mm]	L1 [mm]	AL
63	50	10	<b>727 700 611</b>	0.531	75	125	165	18	102	24	30	14	4
75	65	10	<b>727 700 612</b>	0.901	89	145	185	18	122	26	30	16	4
90	80	10	<b>727 700 613</b>	1.054	105	160	200	18	138	27	30	17	8
110	100	10	<b>727 700 614</b>	1.199	125	180	220	18	158	28	30	18	8
125	100	10	<b>727 700 615</b>	1.201	132	180	220	18	158	28	35	25	8
140	125	10	<b>727 700 616</b>	1.748	155	210	250	18	188	30	40	25	8
160	150	10	<b>727 700 617</b>	2.312	175	240	285	22	212	32	40	25	8
180	150	10	<b>727 700 618</b>	2.443	180	240	285	22	212	32	45	30	8
200	200	10	<b>727 700 619</b>	3.961	232	295	340	22	268	34	50	32	8
225	200	10	<b>727 700 620</b>	3.956	235	295	340	22	268	34	50	32	8
250	250	10	<b>727 700 621</b>	5.425	285	350	395	22	320	38	55	35	12
280	250	10	<b>727 700 622</b>	19.781	291	350	395	22	320	38	60	35	12
315	300	10	<b>727 700 623</b>	8.602	335	400	445	22	370	42	65	35	12
355	350	10	<b>727 700 624</b>	23.184	373	460	515	22	430	40	70	40	16
400	400	10	<b>727 700 625</b>	30.304	427	515	574	26	482	40	75	46	16
450	500	10	<b>727 700 626</b>	43.485	510	620	684	26	585	49	80	60	20
500	500	10	<b>727 700 627</b>	46.203	530	620	684	26	585	49	90	60	20
560	600	10	<b>727 700 628</b>	65.823	615	725	796	30	685	58	100	60	20
630	600	10	<b>727 700 629</b>	67.056	642	725	796	30	685	58	110	60	20

## Blanking Flanges PP-H

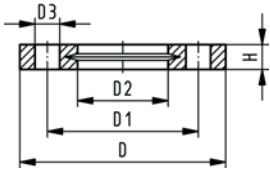
### Model:

- made out of sheet material
- **Bolt circle PN 10**



d [mm]	DN [mm]	PN	Code	L [mm]	D [mm]	D1 [mm]	D3 [mm]	AL
63	50	2,5	<b>700 647 829</b>	15	165	125	18	4
75	65	2,5	<b>700 647 830</b>	15	185	145	18	4
90	80	2,5	<b>700 647 831</b>	15	200	160	18	8
110	100	2,5	<b>700 647 832</b>	15	220	180	18	8
125	100	2,5	<b>700 647 833</b>	20	220	180	18	8
140	125	2,5	<b>700 647 834</b>	25	250	210	18	8
160	150	2,5	<b>700 647 835</b>	25	285	240	22	8
180	150	2,5	<b>700 647 836</b>	30	285	240	22	8
200	200	2,5	<b>700 647 837</b>	35	340	295	22	8
225	200	2,5	<b>700 647 838</b>	35	340	295	22	8
250	250	2,5	<b>700 647 839</b>	40	395	350	22	12
280	250	2,5	<b>700 647 840</b>	45	395	350	22	12
315	300	2,5	<b>700 647 841</b>	50	445	400	22	12
355	350	2,5	<b>700 647 842</b>	55	515	460	22	16
400	400	2,5	<b>700 647 843</b>	65	574	515	26	16
450	500	2,5	<b>700 647 844</b>	65	670	620	26	20
500	500	2,5	<b>700 647 845</b>	75	670	620	26	20
560	600	2,5	<b>700 647 846</b>	85	780	725	30	20
630	600	2,5	<b>700 647 847</b>	95	780	725	30	20

27 70 04  
27 70 05



## Backing flange 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
- UV-resistant. Applicable for outside applications
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**

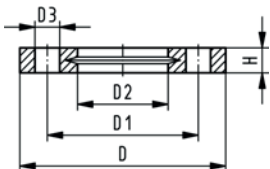
\* Combined version, metric-ANSI

AL: number of holes

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

d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
1) 20	15	16	<b>727 700 406</b>	0.093	95	65.0	28	14	16	4	M12
1) 25	20	16	<b>727 700 407</b>	0.120	105	75.0	34	14	17	4	M12
1) 32	25	16	<b>727 700 408</b>	0.151	115	85.0	42	14	18	4	M12
1) 40	32	16	<b>727 700 409</b>	0.244	140	100.0	51	18	20	4	M16
1) 50	40	16	<b>727 700 410</b>	0.297	150	110.0	62	18	22	4	M16
1) 63	50	16	<b>727 700 411</b>	0.362	165	125.0	78	18	24	4	M16
1) 75	65	16	<b>727 700 412</b>	0.487	185	145.0	92	18	26	4	M16
90	80	16	<b>727 700 513</b>	0.544	200	160.0	108	18	27	8	M16
110	100	16	<b>727 700 514</b>	0.643	220	180.0	128	18	28	8	M16
125	100	16	<b>727 700 515</b>	0.635	220	180.0	135	18	28	8	M16
140	125	16	<b>727 700 516</b>	0.842	250	210.0	158	18	30	8	M16
180	150	16	<b>727 700 518</b>	1.200	285	240.0	188	22	32	8	M20
250	250	16	<b>727 700 521</b>	2.052	395	350.0	288	22	38	12	M20
280	250	16	<b>727 700 522</b>	1.700	395	350.0	294	22	38	12	M20
315	300	16	<b>727 700 523</b>	2.400	445	400.0	338	22	42	12	M20
355	350	10	<b>727 700 524</b>	4.440	515	460.0	376	22	46	16	M20
400	400	10	<b>727 700 525</b>	5.624	574	515.0	430	26	50	16	M24

27 70 04  
27 70 05



## Backing flange 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
- UV-resistant. Applicable for outside applications
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**

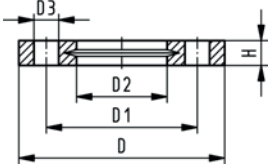
\* Combined version, metric-ANSI

AL: number of holes

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

d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
1) 20	15	16	<b>727 700 406</b>	0.093	95	65.0	28	14	16	4	M12
1) 25	20	16	<b>727 700 407</b>	0.120	105	75.0	34	14	17	4	M12
1) 32	25	16	<b>727 700 408</b>	0.151	115	85.0	42	14	18	4	M12
1) 40	32	16	<b>727 700 409</b>	0.244	140	100.0	51	18	20	4	M16
1) 50	40	16	<b>727 700 410</b>	0.297	150	110.0	62	18	22	4	M16
1) 63	50	16	<b>727 700 411</b>	0.362	165	125.0	78	18	24	4	M16
1) 75	65	16	<b>727 700 412</b>	0.487	185	145.0	92	18	26	4	M16
90	80	16	<b>727 700 413</b>	0.550	200	160.0	110	18	27	8	M16
110	100	16	<b>727 700 414</b>	0.640	220	180.0	133	18	28	8	M16

27 70 14  
27 70 15



## Backing flange 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
- UV-resistant. Applicable for outside applications
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**

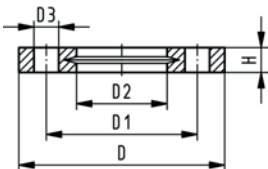
<sup>1)</sup> Suitable for socket- and butt fusion systems (no pictograph on flange)

AL: number of holes

\* Combined version, metric-ANSI

Inch	DN [mm]	d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
1/2	15	20	16	<b>727 701 406</b>	0.091	95	60.0	28	16	16	4	M12
3/4	20	25	16	<b>727 701 407</b>	0.120	105	70.0	34	16	17	4	M12
1	25	32	16	<b>727 701 408</b>	0.147	115	79.0	42	16	18	4	M12
1 1/4	32	40	16	<b>727 701 409</b>	0.246	140	89.0	51	16	20	4	M16
1 1/2	40	50	16	<b>727 701 410</b>	0.299	150	98.0	62	16	22	4	M16
2	50	63	16	<b>727 701 411</b>	0.361	165	121.0	78	19	24	4	M16
2 1/2	65	75	16	<b>727 701 412</b>	0.492	185	140.0	92	19	26	4	M16
3	80	90	16	<b>727 701 513</b>	0.607	200	152.0	108	19	27	4	M16
4	100	110	16	<b>727 701 514</b>	0.736	229	190.0	128	19	28	8	M16
10	250	250	16	<b>727 701 521</b>	2.241	406	362.0	288	26	38	12	M20
10	250	280	16	<b>727 701 522</b>	2.173	406	362.0	294	26	38	12	M20
12	300	315	16	<b>727 701 523</b>	3.627	483	432.0	338	26	42	12	M20

27 70 14  
27 70 15



## Backing flange 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
- UV-resistant. Applicable for outside applications
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**
- 727701414, 727700417, 727700419: only for use with original metric flange adaptors

<sup>1)</sup> Suitable for socket- and butt fusion systems (no pictograph on flange)

AL: number of holes

\* Combined version, metric-ANSI

Inch	DN [mm]	d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
1/2	15	20	16	<b>727 701 406</b>	0.091	95	60.0	28	16	16	4	M12
3/4	20	25	16	<b>727 701 407</b>	0.120	105	70.0	34	16	17	4	M12
1	25	32	16	<b>727 701 408</b>	0.147	115	79.0	42	16	18	4	M12
1 1/4	32	40	16	<b>727 701 409</b>	0.246	140	89.0	51	16	20	4	M16
1 1/2	40	50	16	<b>727 701 410</b>	0.299	150	98.0	62	16	22	4	M16
2	50	63	16	<b>727 701 411</b>	0.361	165	121.0	78	19	24	4	M16
2 1/2	65	75	16	<b>727 701 412</b>	0.492	185	140.0	92	19	26	4	M16
3	80	90	16	<b>727 701 413</b>	0.605	200	152.0	110	19	27	4	M16
4	100	110	16	<b>727 701 414</b>	0.704	229	190.0	133	19	28	8	M16

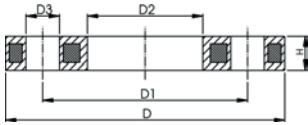
27 70 02  
27 70 03

## Backing flange PP-Steel For butt fusion systems metric

### Model:

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

AL: number of holes



d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20	15	16	<b>727 700 206</b>	0.216	95	65	28	14	12	4	M12
25	20	16	<b>727 700 207</b>	0.279	105	75	34	14	12	4	M12
32	25	16	<b>727 700 208</b>	0.429	115	85	42	14	16	4	M12
40	32	16	<b>727 700 209</b>	0.621	140	100	51	18	16	4	M16
50	40	16	<b>727 700 210</b>	0.722	150	110	62	18	20	4	M16
63	50	16	<b>727 700 211</b>	1.084	165	125	78	18	20	4	M16
75	65	16	<b>727 700 212</b>	1.349	185	145	92	18	20	4	M16
90	80	16	<b>727 700 313</b>	1.390	200	160	108	18	20	8	M16
110	100	16	<b>727 700 314</b>	1.407	220	180	128	18	20	8	M16
125	100	16	<b>727 700 315</b>	1.408	220	180	135	18	20	8	M16
140	125	16	<b>727 700 316</b>	2.318	250	210	158	18	24	8	M16
180	150	16	<b>727 700 318</b>	3.108	285	240	188	22	24	8	M20
200	200	16	<b>727 700 319</b>	5.600	340	295	235	22	27	8	M20
225	200	16	<b>727 700 320</b>	5.533	340	295	238	22	27	8	M20
250	250	16	<b>727 700 321</b>	6.632	395	350	288	22	30	12	M20
280	250	16	<b>727 700 322</b>	6.573	395	350	294	22	30	12	M20
315	300	16	<b>727 700 323</b>	7.903	445	400	338	22	34	12	M20
355	350	16	<b>727 700 324</b>	14.587	515	460	376	22	40	16	M20
400	400	16	<b>727 700 325</b>	20.034	574	515	430	26	40	16	M24

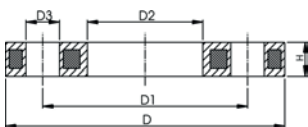
27 70 12

## Backing flange PP-Steel For butt fusion systems Inch ANSI

### Model:

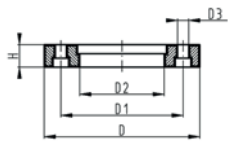
- Material: PP (30 % glass-fibre reinforced) with steel ring
- UV-resistant. Applicable for outside applications
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**

AL: number of holes



d [inch]	DN [mm]	d [mm]	PN	Code	kg	D1 [mm]	D2 [mm]	D3 [mm]	D [mm]	H [mm]	AL	SC
½	15	20	16	<b>727 701 206</b>	0.213	60	28	16	95	12	4	M12
¾	20	25	16	<b>727 701 207</b>	0.260	70	34	16	105	12	4	M12
1	25	32	16	<b>727 701 208</b>	0.416	79	42	16	115	16	4	M12
1 ¼	32	40	16	<b>727 701 209</b>	0.730	89	51	16	140	16	4	M16
1 ½	40	50	16	<b>727 701 210</b>	0.809	98	62	16	150	18	4	M16
2	50	63	16	<b>727 701 211</b>	0.866	121	78	19	165	18	4	M16
2 ½	65	75	16	<b>727 701 212</b>	1.117	140	92	19	185	18	4	M16
3	80	90	16	<b>727 701 313</b>	1.499	152	108	19	200	20	4	M16
4	100	110	16	<b>727 701 314</b>	1.739	190	128	19	229	20	8	M16
8	200	200	16	<b>727 701 319</b>	5.440	298	235	22	340	27	8	M20
8	200	225	16	<b>727 701 320</b>	5.621	298	238	22	340	27	8	M20

24 70 04



## Profiled backing flange PP/Steel For butt fusion systems metric

### Model:

- PP with glass-fibre reinforcement and GGG 50 insert
- UV-resistant. Applicable for outside applications
- Connecting dimensions: ISO 7005, EN 1092, DIN 2501
- **Bolt circle PN 10**

### Note:

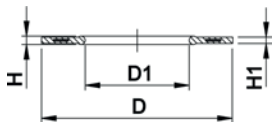
flat side = bolt side  
profiled side = flange adaptor side

AL: number of holes

\* Galvanized steel, suitable for underground laying

d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
450	500	10	<b>724 700 426</b>	25.600	685	620	517	26	54	20	M24
500	500	10	<b>724 700 427</b>	21.061	685	620	533	26	54	20	M24
560	600	10	<b>724 700 428</b>	35.000	796	725	618	30	64	20	M27
630	600	10	<b>724 700 429</b>	32.500	800	725	645	30	58	20	M27
710	700	6	<b>724 700 430</b>	28.600	912	840	740	30	49	24	M27
800	800	6	<b>724 700 431</b>	39.300	1026	950	843	33	58	24	M30
900	900	6	<b>724 700 432</b>	48.500	1129	1050	947	33	62	28	M30

EPDM 48 44 07  
FPM 49 44 07



## Profile flange gasket metric

### Model:

- For all metric GF Flange Adaptors
- Profile Gasket with steel insert (type G-ST-P/K)
- Hardness: 70° Shore **EPDM**, 75° Shore **FPM**
- **EPDM**: approved acc. to DVGW W 270, KTW recommendation
- Centering on the inner diameter of the screw crown
- material steel insert: carbon steel

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]
16	10	16	<b>748 440 705</b>	<b>749 440 705</b>	0.012	46	16	4	3	6 - 16
20	15	16	<b>748 440 706</b>	<b>749 440 706</b>	0.013	51	20	4	3	10 - 20
25	20	16	<b>748 440 707</b>	<b>749 440 707</b>	0.014	61	22	4	3	12 - 22
32	25	16	<b>748 440 708</b>	<b>749 440 708</b>	0.019	71	28	4	3	18 - 28
40	32	16	<b>748 440 709</b>	<b>749 440 709</b>	0.026	82	40	4	3	30 - 40
50	40	16	<b>748 440 710</b>	<b>749 440 710</b>	0.039	92	46	4	3	36 - 46
63	50	16	<b>748 440 711</b>	<b>749 440 711</b>	0.050	107	58	5	4	48 - 58
75	65	16	<b>748 440 712</b>	<b>749 440 712</b>	0.082	127	69	5	4	59 - 69
90	80	16	<b>748 440 713</b>	<b>749 440 713</b>	0.083	142	84	5	4	73 - 84
110	100	16	<b>748 440 714</b>	<b>749 440 714</b>	0.127	162	104	6	5	94 - 104
125	100	16	<b>748 440 715</b>	<b>749 440 715</b>	0.105	162	123	6	5	113 - 123
140	125	16	<b>748 440 716</b>	<b>749 440 716</b>	0.173	192	137	6	5	127 - 137
160 / 180	150	16	<b>748 440 717</b>	<b>749 440 717</b>	0.207	218	160	8	6	150 - 160
200	200	16	<b>748 440 719</b>	<b>749 440 719</b>	0.263	273	203	8	6	192 - 203
225	200	16	<b>748 440 720</b>	<b>749 440 720</b>	0.255	273	220	8	6	207 - 220
250	250	16	<b>748 440 721</b>	<b>749 440 721</b>	0.482	328	252	8	6	238 - 252
280	250	16	<b>748 440 722</b>	<b>749 440 722</b>	0.323	328	274	8	6	264 - 274
315	300	16	<b>748 440 723</b>	<b>749 440 723</b>	0.549	378	306	8	6	296 - 306
355	350	16	<b>748 440 724</b>	<b>749 440 724</b>	0.870	438	355	10	7	340 - 355
400	400	16	<b>748 440 725</b>	<b>749 440 725</b>	1.088	489	400	10	7	385 - 400
450	500	16	<b>748 440 726</b>	<b>749 440 726</b>	0.718	594	403	10	7	393 - 403
500	500	16	<b>748 440 727</b>	<b>749 440 727</b>	0.718	594	447	10	7	437 - 447
560	600	16	<b>748 440 728</b>	<b>749 440 728</b>	0.923	695	494	10	7	484 - 494
630	600	16	<b>748 440 729</b>	<b>749 440 729</b>	0.923	695	555	10	7	545 - 555



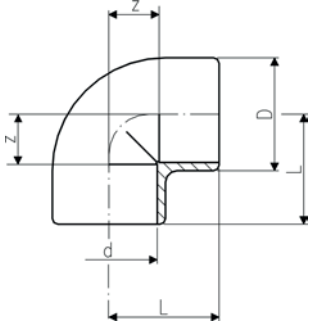
# Fittings for Socket Fusion

27 10 01

## PROGEF Standard elbow 90°

Model:

- Material: PP-H
- \* use pipe SDR 7.4



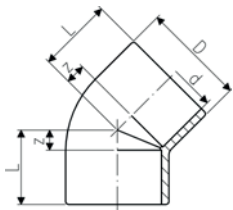
d [mm]	PN	Code	kg	D [mm]	L [mm]	z [mm]
* 16	10	<b>727 100 105</b>	0.014	26	25	12
20	10	<b>727 100 106</b>	0.020	31	28	14
25	10	<b>727 100 107</b>	0.029	36	32	16
32	10	<b>727 100 108</b>	0.044	44	38	20
40	10	<b>727 100 109</b>	0.071	54	44	24
50	10	<b>727 100 110</b>	0.121	66	51	28
63	10	<b>727 100 111</b>	0.228	82	62	35
75	10	<b>727 100 112</b>	0.301	93	76	45
90	10	<b>727 100 113</b>	0.477	110	88	53
110	10	<b>727 100 114</b>	0.869	134	106	65

27 15 01

## PROGEF Standard elbow 45°

Model:

- Material: PP-H
- \* use pipe SDR 7.4



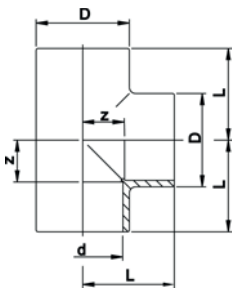
d [mm]	PN	Code	kg	D [mm]	L [mm]	z [mm]
* 16	10	<b>727 150 105</b>	0.009	23	20	7
20	10	<b>727 150 106</b>	0.016	31	21	7
25	10	<b>727 150 107</b>	0.024	36	24	8
32	10	<b>727 150 108</b>	0.036	44	28	10
40	10	<b>727 150 109</b>	0.059	53	33	13
50	10	<b>727 150 110</b>	0.084	64	36	13
63	10	<b>727 150 111</b>	0.183	82	43	16
75	10	<b>727 150 112</b>	0.219	93	51	20
90	10	<b>727 150 113</b>	0.336	114	58	23
110	10	<b>727 150 114</b>	0.657	134	68	27

27 20 01

## PROGEF Standard tee 90° equal

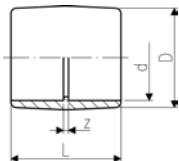
Model:

- Material: PP-H
- \* use pipe SDR 7.4



d [mm]	PN	Code	kg	D [mm]	L [mm]	z [mm]
* 16	10	<b>727 200 105</b>	0.020	26	25	12
20	10	<b>727 200 106</b>	0.027	31	28	14
25	10	<b>727 200 107</b>	0.039	36	32	16
32	10	<b>727 200 108</b>	0.057	44	38	20
40	10	<b>727 200 109</b>	0.095	54	44	24
50	10	<b>727 200 110</b>	0.161	66	51	28
63	10	<b>727 200 111</b>	0.286	82	62	35
75	10	<b>727 200 112</b>	0.390	93	76	45
90	10	<b>727 200 113</b>	0.727	114	88	53
110	10	<b>727 200 114</b>	1.062	134	106	65

27 91 01



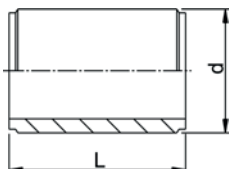
## PROGEF Standard socket equal

### Model:

- Material: PP-H
- \* use pipe SDR 7.4

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	0.041	54	48	8
50	10	727 910 110	0.072	66	54	8
63	10	727 910 111	0.118	82	62	8
75	10	727 910 112	0.147	93	70	8
90	10	727 910 113	0.238	112	81	11
110	10	727 910 114	0.425	134	96	14

27 91 09



## PROGEF Standard barrel nipple

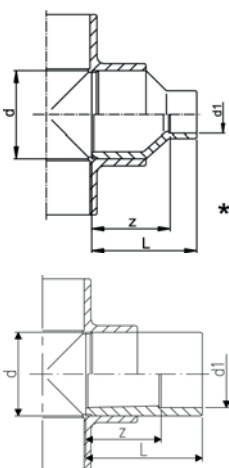
### Model:

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

\* In these two sizes, stiffeners Code No. 727 900 006 (20 x 1.9) and 727 900 007 (25 x 2.3), or pipe SDR 7.4 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	0.095	76	6.8
90	10	727 910 913	0.163	90	8.2
110	10	727 910 914	0.305	108	10.0

27 91 03



## PROGEF Standard reducer

### Model:

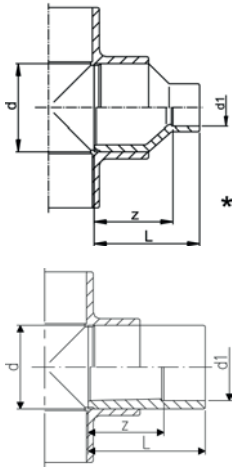
- Material: PP-H

### Note:

\* Fusion spigot and socket

d [mm]	d1 [mm]	PN	Code	kg	L [mm]	z [mm]
20	16	10	727 910 334	0.013	35	22
25	16	10	727 910 338	0.010	38	25
25	20	10	727 910 337	0.012	37	23
32	20	10	727 910 342	0.016	43	29
32	25	10	727 910 341	0.019	43	27
* 40	20	10	727 910 348	0.022	48	34
* 40	25	10	727 910 347	0.025	48	32
40	32	10	727 910 346	0.030	48	30
* 50	20	10	727 910 355	0.034	54	40
* 50	25	10	727 910 354	0.034	54	38
* 50	32	10	727 910 353	0.039	54	36
50	40	10	727 910 352	0.048	54	34
* 63	25	10	727 910 361	0.054	64	46
* 63	32	10	727 910 360	0.062	64	46
* 63	40	10	727 910 359	0.069	64	44
63	50	10	727 910 358	0.083	64	41
75	63	10	727 910 364	0.098	62	35

table continued next page



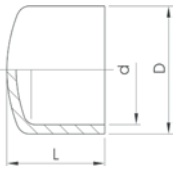
d [mm]	d1 [mm]	PN	Code	kg	L [mm]	z [mm]
* 90	63	10	<b>727 910 371</b>	0.170	88	61
90	75	10	<b>727 910 370</b>	0.142	70	39
110	90	10	<b>727 910 376</b>	0.235	81	46

27 96 01

## PROGEF Standard end cap

### Model:

- Material: PP-H
- \* use pipe SDR 7.4



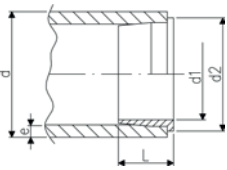
d [mm]	PN	Code	kg	D [mm]	L [mm]
* 16	10	<b>727 960 105</b>	0.006	25	20
20	10	<b>727 960 106</b>	0.009	30	27
25	10	<b>727 960 107</b>	0.015	36	30
32	10	<b>727 960 108</b>	0.023	44	34
40	10	<b>727 960 109</b>	0.035	53	38
50	10	<b>727 960 110</b>	0.061	65	44
63	10	<b>727 960 111</b>	0.102	80	51
75	10	<b>727 960 112</b>	0.149	91	65
90	10	<b>727 960 113</b>	0.277	111	77
110	10	<b>727 960 114</b>	0.411	137	93

27 90 00

## PROGEF Standard stiffener

### Model:

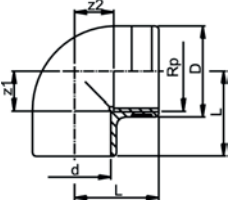
- Material: PP-H
- Used as support during d20 and d25 socket fusion jointing to prevent the pipe from collapsing during the heating and jointing process.



d [mm]	e [mm]	Code	kg	L [mm]	d1 [mm]	d2 [mm]
20	1,9	<b>727 900 006</b>	0.001	10	14	18
25	2,3	<b>727 900 007</b>	0.004	11	18	23

# Adaptor fittings for socket fusion

27 10 02



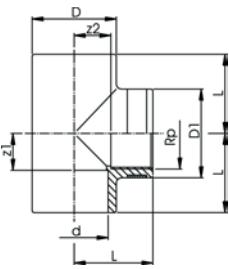
## PROGEF Standard elbow 90° metric Rp

### Model:

- Material: PP-H
- With fusion socket metric and parallel female thread Rp, reinforced
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- 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	Code	kg	D [mm]	L [mm]	z1 [mm]	z2 [mm]
20	½	10	<b>727 100 206</b>	0.022	30	28	14	14
25	¾	10	<b>727 100 207</b>	0.035	35	32	16	16
32	1	10	<b>727 100 208</b>	0.057	44	38	20	20
40	1 ¼	10	<b>727 100 209</b>	0.087	54	44	24	24

27 20 02



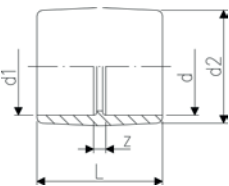
## PROGEF Standard tee 90° metric Rp

### Model:

- Material: PP-H
- Line, with fusion socket metric
- Branch, with BSP parallel female thread Rp, reinforced
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- 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	Code	kg	D [mm]	D1 [mm]	L [mm]	z1 [mm]	z2 [mm]
20	½	10	<b>727 200 206</b>	0.030	31	30	28	14	14
25	¾	10	<b>727 200 207</b>	0.042	36	35	32	16	16
32	1	10	<b>727 200 208</b>	0.071	44	45	38	20	20
40	1 ¼	10	<b>727 200 209</b>	0.107	54	55	44	24	24

27 91 30



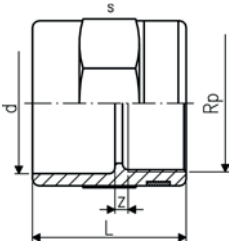
## PROGEF Standard adaptor socket Metric Inch BS

### 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	½	10	<b>727 913 006</b>	0.014	31	35	7
25	¾	10	<b>727 913 007</b>	0.019	36	39	7
32	1	10	<b>727 913 008</b>	0.025	44	43	7
40	1 ¼	10	<b>727 913 009</b>	0.040	54	48	8
50	1 ½	10	<b>727 913 010</b>	0.100	66	54	8
63	2	10	<b>727 913 011</b>	0.130	82	62	8
90	3	10	<b>727 913 013</b>	0.260	112	81	10
110	4	10	<b>727 913 014</b>	0.389	134	96	12

27 91 02



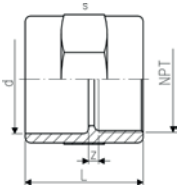
## PROGEF Standard adaptor socket metric Rp

### Model:

- Material: PP-H
- With fusion socket metric and parallel female thread Rp, reinforced
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- 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	Code	kg	L [mm]	s [mm]	z [mm]
20	3/8	10	<b>727 910 205</b>	0.017	35	32	7
20	1/2	10	<b>727 910 206</b>	0.018	40	32	7
25	3/4	10	<b>727 910 207</b>	0.025	42	36	7
32	1	10	<b>727 910 208</b>	0.040	48	46	7
40	1 1/4	10	<b>727 910 209</b>	0.064	53	55	7
50	1 1/2	10	<b>727 910 210</b>	0.089	54	65	9
63	2	10	<b>727 910 211</b>	0.144	62	80	9

27 91 42



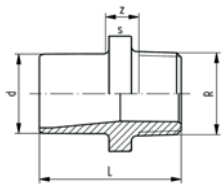
## Adaptor Sockets, PP-H metric - NPT

### Model:

- Material: PP-H
- With fusion socket metric and NPT tapered female thread, reinforced
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- 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	Code	kg	L [mm]	s [mm]	z [mm]
20	1/2	10	<b>727 914 266</b>	0.018	40	32	7
25	3/4	10	<b>727 914 267</b>	0.023	42	36	7
32	1	10	<b>727 914 268</b>	0.039	48	46	7
40	1 1/4	10	<b>727 914 269</b>	0.056	53	55	7
50	1 1/2	10	<b>727 914 270</b>	0.095	54	65	9
63	2	10	<b>727 914 271</b>	0.145	62	80	9

27 91 05



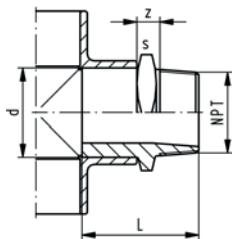
## PROGEF Standard adaptor nipple metric R

### Model:

- Material: PP-H
- With fusion spigot metric and R tapered male thread
- Connection to plastic threads 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	Code	kg	L [mm]	s [mm]	z [mm]
16	3/8	10	<b>727 910 505</b>	0.008	37	27	13
20	1/2	10	<b>727 910 506</b>	0.011	42	32	13
25	3/4	10	<b>727 910 507</b>	0.015	46	36	13
32	1	10	<b>727 910 508</b>	0.027	52	46	12
40	1 1/4	10	<b>727 910 509</b>	0.040	56	55	14
50	1 1/2	10	<b>727 910 510</b>	0.061	60	65	15
63	2	10	<b>727 910 511</b>	0.100	69	80	16

27 91 45



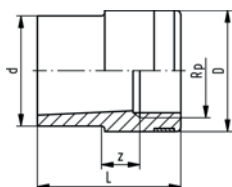
## PROGEF Standard adaptor nipple metric NPT

### Model:

- Material: PP-H
- With fusion spigot metric and NPT tapered male thread
- Connection to plastic threads 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	Code	kg	s [mm]	L [mm]	z [mm]
16	3/8	10	<b>727 914 555</b>	0.008	27	37	13
20	1/2	10	<b>727 914 556</b>	0.013	32	42	13
25	3/4	10	<b>727 914 557</b>	0.015	36	46	13
32	1	10	<b>727 914 558</b>	0.026	46	52	12
40	1 1/4	10	<b>727 914 559</b>	0.041	55	56	14
50	1 1/2	10	<b>727 914 560</b>	0.061	65	60	15
63	2	10	<b>727 914 561</b>	0.185	80	69	16

27 91 04



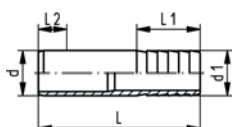
## PROGEF Standard reducing bush metric Rp

### Model:

- Material: PP-H
- With fusion spigot metric and BSP parallel female thread, reinforced
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- 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	Code	kg	L [mm]	z [mm]
20	1/4	10	<b>727 910 433</b>	0.011	36	7
20	3/8	10	<b>727 910 434</b>	0.011	36	7
25	1/2	10	<b>727 910 437</b>	0.015	45	6
32	3/4	10	<b>727 910 441</b>	0.022	47	8
40	1	10	<b>727 910 446</b>	0.039	53	9
50	1 1/4	10	<b>727 910 452</b>	0.061	55	10

27 96 04



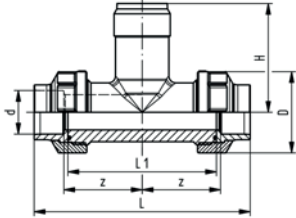
## PROGEF Standard hose connector metric

### 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	<b>727 960 406</b>	0.008	78	27	14
25	25	10	<b>727 960 407</b>	0.014	91	36	16
32	32	10	<b>727 960 408</b>	0.025	100	36	18
40	40	10	<b>727 960 409</b>	0.038	104	42	20
50	50	10	<b>727 960 410</b>	0.061	90	48	23
63	60	10	<b>727 960 411</b>	0.084	100	50	27

27 31 00



## PROGEF Standard installation fitting type 310 S5/SDR11 for socket systems metric

### Model:

- Material: PP-H
- Threaded outlet 1 ¼" NPSM
- Union end with fusion socket PP-H

### Range of use:

- compatible signet flow sensors: type 2551, 2537, 515, 8510, 2536, 8512
- compatible signet pH/ORP sensors: type 2724, 2725, 2726

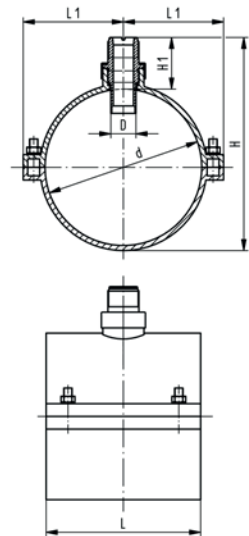
### Attention:

- sensor length depends on installation fitting

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	0.645

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

27 31 20



## PROGEF Standard installation fitting type 312 metric

### Model:

- Material: PP-H
- Threaded outlet 1 ¼" NPSM
- Top saddle with EPDM gasket
- Stainless steel bolts and nuts

### Range of use:

- compatible signet flow sensors: type 2551, 2537, 515, 8510, 2536, 8512

### Attention:

- sensor length depends on installation fitting
- working temperature max. +40°C (water)

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	0.488	34	78	62	172	88	flow X1
90	80	8	727 312 073	0.514	34	86	69	186	87	flow X1
110	100	8	727 312 074	0.602	34	98	79	206	86	flow X1

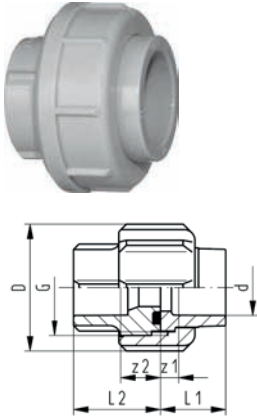
# Unions for socket fusion

EPDM 27 51 01  
FPM 27 52 01

## PROGEF Standard union metric

### Model:

- Material: PP-H
- Fusion socket 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



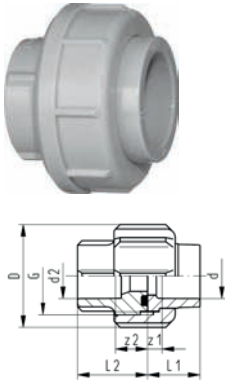
d [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	G [inch]	L1 [mm]	L2 [mm]	z [mm]	z1 [mm]
16	10	727 510 155	727 520 155	0.020	35	3/4	18	24	5	11
20	10	727 510 156	727 520 156	0.038	48	1	19	26	5	12
25	10	727 510 157	727 520 157	0.062	58	1 1/4	21	28	5	12
32	10	727 510 158	727 520 158	0.080	65	1 1/2	23	30	5	12
40	10	727 510 159	727 520 159	0.137	79	2	25	34	5	14
50	10	727 510 160	727 520 160	0.136	91	2 1/4	28	39	5	16
63	10	727 510 161	727 520 161	0.251	111	2 3/4	32	47	5	20
75	10	727 510 172	727 520 172	0.432	135	S107,5x3,6	36	51	5	20
90	10	727 510 173	727 520 173	0.625	158	S127,5x3,6	42	55	7	20
110	10	727 510 174	727 520 174	1.009	188	S152,5x3,6	49	54	7	12

27 51 30

## PROGEF Standard adapter union metric BS Inch / ASTM

### Model:

- Material: PP-H
- Fusion socket metric
- Jointing face: With O-ring groove



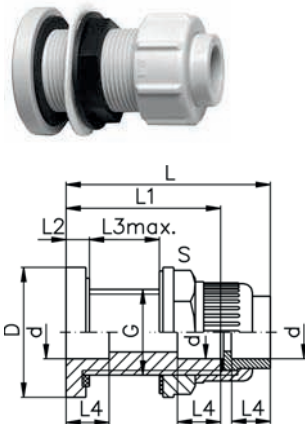
d [mm]	d2	PN	Code	kg	D [mm]	G [inch]	L1 [mm]	L2 [mm]	z1 [mm]	z2 [mm]
20	1/2	10	727 513 006	0.041	48	1	19	26	5	12
25	3/4	10	727 513 007	0.061	58	1 1/4	21	28	5	12
32	1	10	727 513 008	0.028	65	1 1/2	23	30	5	12
40	1 1/4	10	727 513 009	0.108	79	2	25	34	5	14
50	1 1/2	10	727 513 010	0.133	91	2 1/4	28	39	5	16
63	2	10	727 513 011	0.252	111	2 3/4	32	47	5	20

67 05 02

## PROGEF Standard tank adaptor

### 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	0.098	1	56	89	67	11	30	16	38	35
25	167 050 227	0.153	1 1/4	65	96	72	12	32	18	47	43
32	167 050 228	0.185	1 1/2	70	100	75	12	33	20	53	49
40	167 050 229	0.292	2	95	106	78	12	32	22	75	61
50	167 050 230	0.308	2 1/4	95	112	82	13	32	25	75	67
63	167 050 231	0.493	2 3/4	115	112	87	13	33	29	101	83



# 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.

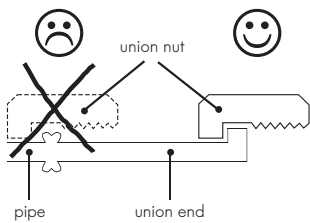


Fig. 1

- ② For the dimensions d90 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.

## 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)

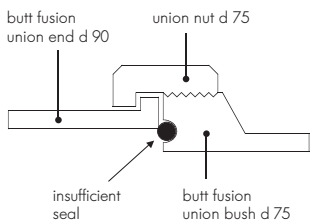


Fig. 2

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 <sup>1</sup>	Code O-Ring FPM <sup>1</sup>
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

<sup>1</sup> 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

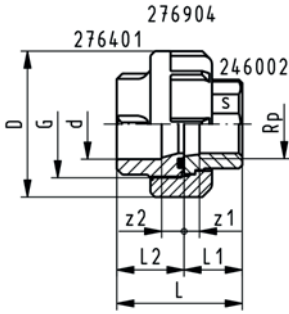
27 53 03



## PROGEF Standard adaptor union PP-H/malleable iron galvanised Metric Rp

### Model:

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



d [mm]	Rp [inch]	PN	Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z1 [mm]	z2 [mm]	G [inch]	s [mm]
20	1/2	10	727 530 306	0.073	43	48	22	26	9	10	1	25
25	3/4	10	727 530 307	0.118	51	50	22	28	7	10	1 1/4	31
32	1	10	727 530 308	0.199	58	56	26	30	9	10	1 1/2	38
40	1 1/4	10	727 530 309	0.276	72	65	31	34	12	12	2	48
50	1 1/2	10	727 530 310	0.317	83	72	33	39	14	14	2 1/4	54
63	2	10	727 530 311	0.579	100	82	35	47	11	18	2 3/4	67

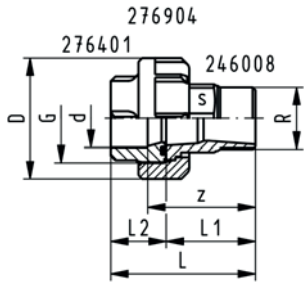
27 53 08



## PROGEF Standard adaptor union PP-H/malleable iron galvanised Metric R

### Model:

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



d [mm]	R [inch]	PN	Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z [mm]	G [inch]	s [mm]
20	1/2	10	727 530 806	0.112	43	66	40	26	50	1	25
25	3/4	10	727 530 807	0.171	51	71	43	28	53	1 1/4	31
32	1	10	727 530 808	0.236	58	78	48	30	58	1 1/2	38
40	1 1/4	10	727 530 809	0.379	72	91	57	34	69	2	48
50	1 1/2	10	727 530 810	0.512	83	98	59	39	73	2 1/4	54
63	2	10	727 530 811	0.763	100	109	62	47	80	2 3/4	67

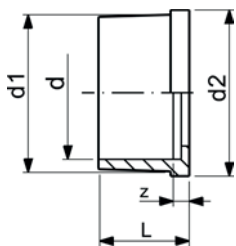
34 60 01



## Union Ends, PE80

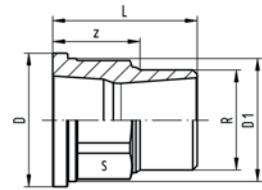
### Model:

- With fusion socket metric
- Suitable for unions, tank connectors and diaphragm valves Type 514



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	0.013	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	0.025	59	63	28	7	5
63	10	734 600 111	0.044	74	79	32	8	5

24 60 08



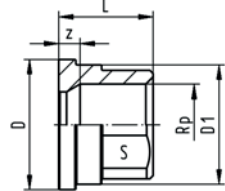
## Union end malleable iron galvanized R

**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	½	<b>724 600 806</b>	0.069	30	27	40	25	23
25	¾	<b>724 600 807</b>	0.115	39	36	43	27	30
32	1	<b>724 600 808</b>	0.161	44	41	48	29	36
40	1 ¼	<b>724 600 809</b>	0.294	56	52	57	36	48
50	1 ½	<b>724 600 810</b>	0.353	62	58	59	37	54
63	2	<b>724 600 811</b>	0.570	78	73	62	36	66

24 60 02



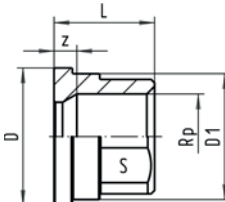
## Union end malleable iron galvanized Rp

**Model:**

- Union End: malleable iron with parallel female thread Rp

d [mm]	Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	z [mm]	s [mm]
20	½	16	<b>724 600 206</b>	0.037	30	27	22	9	25
25	¾	16	<b>724 600 207</b>	0.072	39	36	22	7	31
32	1	16	<b>724 600 208</b>	0.088	44	41	26	9	38
40	1 ¼	16	<b>724 600 209</b>	0.172	56	52	31	12	48
50	1 ½	16	<b>724 600 210</b>	0.210	62	58	33	14	54
63	2	16	<b>724 600 211</b>	0.331	78	73	35	11	67

20 60 02



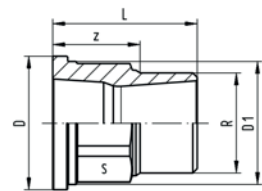
## Union end brass Rp

**Model:**

- Union End: Brass with parallel female thread Rp

d [mm]	Rp [inch]	Code	kg	D [mm]	D1 [mm]	z [mm]	L [mm]	s [mm]
20	½	<b>720 600 236</b>	0.059	30	28	5	22	25
25	¾	<b>720 600 237</b>	0.100	39	36	6	25	30
32	1	<b>720 600 238</b>	0.128	45	42	6	27	36
40	1 ¼	<b>720 600 239</b>	0.211	56	53	7	31	46
50	1 ½	<b>720 600 240</b>	0.324	62	59	7	35	55
63	2	<b>720 600 241</b>	0.510	78	74	8	40	65
75	2 ½	<b>720 600 242</b>	0.893	100	92	10	47	85
90	3	<b>720 600 243</b>	1.395	121	110	11	52	95

20 60 02



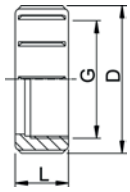
## Union end brass R

**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	½	<b>720 600 246</b>	0.092	30	28	37	22	25
25	¾	<b>720 600 247</b>	0.151	39	36	42	25	30
32	1	<b>720 600 248</b>	0.216	45	42	46	28	36
40	1 ¼	<b>720 600 249</b>	0.408	56	53	52	32	46
50	1 ½	<b>720 600 250</b>	0.538	62	59	56	36	55
63	2	<b>720 600 251</b>	0.859	78	74	67	42	65
75	2 ½	<b>720 600 252</b>	1.446	100	92	77	49	85
90	3	<b>720 600 253</b>	2.063	121	110	86	54	95

27 69 04



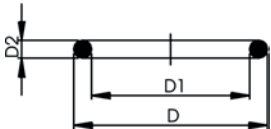
## Union Nut, PP-GF

### Model:

- Material: 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	<b>727 890 405</b>	0.007	35	21
20	20	10	1	<b>727 890 406</b>	0.023	48	24
25	25	10	1 1/4	<b>727 890 407</b>	0.035	58	26
32	32	10	1 1/2	<b>727 890 408</b>	0.044	65	28
40	40	10	2	<b>727 890 409</b>	0.044	77	27
50	50	10	2 1/4	<b>727 890 410</b>	0.062	84	30
63	63	10	2 3/4	<b>727 890 411</b>	0.119	111	39
75	75 - 90	10	S107,5x3,6	<b>727 890 422</b>	0.205	135	40
90	110	10	S127,5x3,6	<b>727 890 423</b>	0.730	158	43
110	-	10	S152,5x3,6	<b>727 890 424</b>	0.499	188	48

EPDM 48 41 00  
FPM 49 41 00



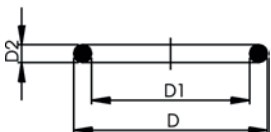
## O-Ring gasket

### Model:

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

\* for unions PVC-U, PVC-C and ABS: 21 51 01, 21 51 11, 21 53 03, 21 53 08, 21 55 04, 21 55 13, 21 55 18, 23 51 01 and 29 51 01 only

d [mm]	DN [mm]	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	D2 [mm]
16	10	<b>748 410 005</b>	<b>749 410 005</b>	0.001	21	16	2.62
20	15	<b>748 410 006</b>	<b>749 410 006</b>	0.001	27	20	3.53
25	20	<b>748 410 007</b>	<b>749 410 007</b>	0.002	35	28	3.53
32	25	<b>748 410 008</b>	<b>749 410 008</b>	0.002	40	33	3.53
40	32	<b>748 410 009</b>	<b>749 410 009</b>	0.007	51	41	5.34
50	40	<b>748 410 010</b>	<b>749 410 010</b>	0.060	58	47	5.34
63	50	<b>748 410 011</b>	<b>749 410 011</b>	0.003	70	60	5.34
75	65	<b>748 410 014</b>	<b>749 410 014</b>	0.012	93	82	5.34
90	80	<b>748 410 015</b>	<b>749 410 015</b>	0.015	112	101	5.34
110	100	<b>748 410 016</b>	<b>749 410 016</b>	0.031	134	120	6.99



## O-Ring Gaskets

### Model:

- For unions and adaptor unions
- Hardness approx. 75° Shore
- FFPM minimum temperature -20°C

d [mm]	DN [mm]	FFPM Code	kg	D [mm]	D1 [mm]	D2 [mm]
20	15	<b>700 245 481</b>	0.002	27	20	4
25	20	<b>700 245 482</b>	0.002	35	28	4
32	25	<b>700 245 483</b>	0.002	40	33	4
40	32	<b>700 245 484</b>	0.006	51	41	5
50	40	<b>700 245 485</b>	0.007	58	47	5
63	50	<b>700 245 486</b>	0.010	70	60	5

# Flange Adaptors, Flanges and Gaskets for Socket Fusion

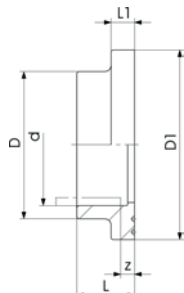
27 79 02

## PROGEF Standard flange adaptor Joining 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]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
20	15	10	<b>727 790 206</b>	0.011	27	45	19	7	5
25	20	10	<b>727 790 207</b>	0.022	33	58	21	9	5
32	25	10	<b>727 790 208</b>	0.033	41	68	23	10	5
40	32	10	<b>727 790 209</b>	0.046	50	78	25	11	5
50	40	10	<b>727 790 210</b>	0.060	61	88	28	12	5
63	50	10	<b>727 790 211</b>	0.090	76	102	32	14	5
75	65	10	<b>727 790 212</b>	0.155	90	122	36	16	5
90	80	10	<b>727 790 213</b>	0.204	108	138	42	17	7
110	100	10	<b>727 790 214</b>	0.286	131	158	48	18	7

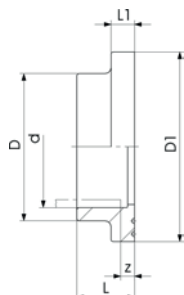
27 79 02

## PROGEF Standard flange adaptor Joining face serrated ANSI



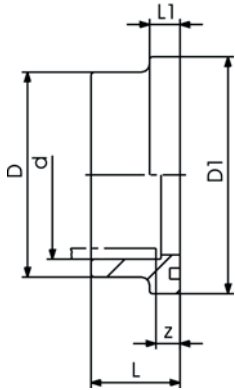
### Model:

- 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	<b>727 790 257</b>	0.018	33	54	21	7	5
32	10	<b>727 790 258</b>	0.026	41	63	23	7	5
40	10	<b>727 790 259</b>	0.041	50	73	25	8	5
50	10	<b>727 790 260</b>	0.055	61	82	28	8	5
90	10	<b>727 790 263</b>	0.189	108	133	36	16	5

27 81 01



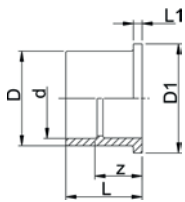
## PROGEF Standard flange adaptor Joining face with o-ring groove

### Model:

- Material: PP-H
- Counterpart: Flange adaptor flat/serrated, No. 27 79 02
- Gasket: O-ring EPDM No. 48 41 01, FPM No. 49 41 01
- Flanges: PP with steel core, No. 27 70 02 (mm) or No. 27 70 12 (ANSI), PP-V, No. 27 70 04

d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
20	15	10	<b>727 810 106</b>	0.007	27	34	22	9	8
25	20	10	<b>727 810 107</b>	0.012	33	41	24	10	8
32	25	10	<b>727 810 108</b>	0.018	41	50	26	10	8
40	32	10	<b>727 810 109</b>	0.027	50	61	30	13	10
50	40	10	<b>727 810 110</b>	0.043	61	73	33	13	10
63	50	10	<b>727 810 111</b>	0.070	76	90	37	14	10
75	65	10	<b>727 810 112</b>	0.105	90	106	40	15	10
90	80	10	<b>727 810 113</b>	0.170	108	125	47	16	12
110	100	10	<b>727 810 114</b>	0.263	131	150	55	18	13

27 80 00



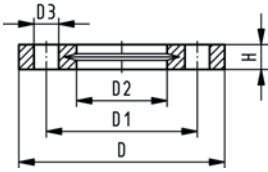
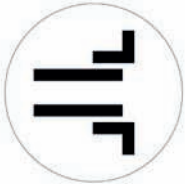
## PROGEF Standard outlet flange adaptor Joining face flat

### Model:

- Material: PP-H
- With fusion socket metric
- Suitable for wafer check valves Type 369
- To be installed on the outlet side of the valve
- Use flanges PP-V 27 70 04

d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
40	32	6	<b>727 800 009</b>	0.068	50	78	55	11	35
50	40	6	<b>727 800 010</b>	0.087	61	88	61	12	38
63	50	6	<b>727 800 011</b>	0.136	76	102	69	14	41
75	65	6	<b>727 800 012</b>	0.214	90	122	79	16	49
90	80	6	<b>727 800 013</b>	0.350	107	138	100	17	65
110	100	6	<b>727 800 014</b>	0.468	130	158	105	18	62

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
- UV-resistant. Applicable for outside applications
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**

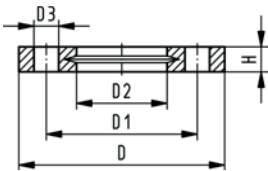
\* Combined version, metric-ANSI

AL: number of holes

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

d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
1) 20	15	16	<b>727 700 406</b>	0.093	95	65.0	28	14	16	4	M12
1) 25	20	16	<b>727 700 407</b>	0.120	105	75.0	34	14	17	4	M12
1) 32	25	16	<b>727 700 408</b>	0.151	115	85.0	42	14	18	4	M12
1) 40	32	16	<b>727 700 409</b>	0.244	140	100.0	51	18	20	4	M16
1) 50	40	16	<b>727 700 410</b>	0.297	150	110.0	62	18	22	4	M16
1) 63	50	16	<b>727 700 411</b>	0.362	165	125.0	78	18	24	4	M16
1) 75	65	16	<b>727 700 412</b>	0.487	185	145.0	92	18	26	4	M16
90	80	16	<b>727 700 413</b>	0.550	200	160.0	110	18	27	8	M16
110	100	16	<b>727 700 414</b>	0.640	220	180.0	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
- UV-resistant. Applicable for outside applications
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**
- 727701414, 727700417, 727700419: only for use with original metric flange adaptors

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

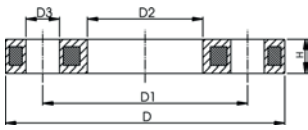
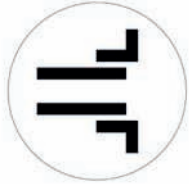
AL: number of holes

\* Combined version, metric-ANSI

Inch	DN [mm]	d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
1/2	15	20	16	<b>727 701 406</b>	0.091	95	60.0	28	16	16	4	M12
3/4	20	25	16	<b>727 701 407</b>	0.120	105	70.0	34	16	17	4	M12
1	25	32	16	<b>727 701 408</b>	0.147	115	79.0	42	16	18	4	M12
1 1/4	32	40	16	<b>727 701 409</b>	0.246	140	89.0	51	16	20	4	M16
1 1/2	40	50	16	<b>727 701 410</b>	0.299	150	98.0	62	16	22	4	M16
2	50	63	16	<b>727 701 411</b>	0.361	165	121.0	78	19	24	4	M16
2 1/2	65	75	16	<b>727 701 412</b>	0.492	185	140.0	92	19	26	4	M16
3	80	90	16	<b>727 701 413</b>	0.605	200	152.0	110	19	27	4	M16
4	100	110	16	<b>727 701 414</b>	0.704	229	190.0	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
- UV-resistant. Applicable for outside applications
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**

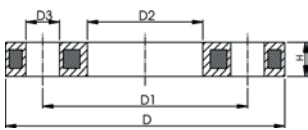
<sup>1</sup> Connecting dimension: ISO 2536, bolt circle acc. DN125, suitable for flange adaptor d125/DN100

<sup>2</sup> Connecting dimension: ISO 2536, bolt circle acc. DN225, suitable for flange adaptor d250/DN250

AL: number of holes

d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20	15	16	<b>727 700 206</b>	0.216	95	65	28	14	12	4	M12
25	20	16	<b>727 700 207</b>	0.279	105	75	34	14	12	4	M12
32	25	16	<b>727 700 208</b>	0.429	115	85	42	14	16	4	M12
40	32	16	<b>727 700 209</b>	0.621	140	100	51	18	16	4	M16
50	40	16	<b>727 700 210</b>	0.722	150	110	62	18	20	4	M16
63	50	16	<b>727 700 211</b>	1.084	165	125	78	18	20	4	M16
75	65	16	<b>727 700 212</b>	1.349	185	145	92	18	20	4	M16
90	80	16	<b>727 700 213</b>	1.369	200	160	110	18	20	8	M16
110	100	16	<b>727 700 214</b>	1.522	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
- UV-resistant. Applicable for outside applications
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**
- 727701214, 727700217: 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	SC
½	15	20	16	<b>727 701 206</b>	0.213	60	28	16	95	12	4	M12
¾	20	25	16	<b>727 701 207</b>	0.260	70	34	16	105	12	4	M12
1	25	32	16	<b>727 701 208</b>	0.416	79	42	16	115	16	4	M12
1 ¼	32	40	16	<b>727 701 209</b>	0.730	89	51	16	140	16	4	M16
1 ½	40	50	16	<b>727 701 210</b>	0.809	98	62	16	150	18	4	M16
2	50	63	16	<b>727 701 211</b>	0.866	121	78	19	165	18	4	M16
2 ½	65	75	16	<b>727 701 212</b>	1.117	140	92	19	185	18	4	M16
3	80	90	16	<b>727 701 213</b>	1.492	152	110	19	200	20	4	M16
4	100	110	16	<b>727 701 214</b>	1.695	190	133	19	229	20	8	M16

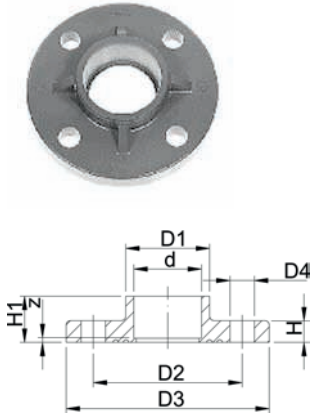
27 30 10  
27 40 10

## Fixed Flanges, PP-H metric Jointing face flat

### Model:

- Material: PP-H
- 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	<b>727 730 106</b>	0.069	27	65	94	14	12	19	4	5
25	20	3/4	10	<b>727 730 107</b>	0.094	33	75	103	14	13	21	4	5
32	25	1	10	<b>727 730 108</b>	0.129	40	85	115	14	14	23	4	5
40	32	1 1/4	10	<b>727 730 109</b>	0.203	50	100	138	18	15	25	4	5
50	40	1 1/2	10	<b>727 730 110</b>	0.246	61	110	148	18	16	27	4	5
63	50	2	10	<b>727 730 111</b>	0.330	76	125	163	18	18	31	4	5

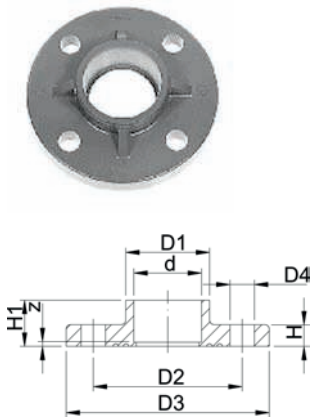
27 30 10  
27 40 10

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

### Model:

- Material: PP-H
- 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



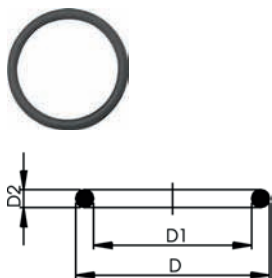
d [mm]	DN [mm]	Inch	PN	Code	kg	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	AL	z [mm]
20	15	1/2	10	<b>727 740 106</b>	0.065	27	65	94	14	12	19	4	5
25	20	3/4	10	<b>727 740 107</b>	0.074	33	75	103	14	13	21	4	5
32	25	1	10	<b>727 740 108</b>	0.115	40	85	115	14	14	23	4	5
40	32	1 1/4	10	<b>727 740 109</b>	0.175	50	100	138	18	15	25	4	5
50	40	1 1/2	10	<b>727 740 110</b>	0.210	61	110	148	18	16	27	4	5
63	50	2	10	<b>727 740 111</b>	0.286	76	125	163	18	18	31	4	5

EPDM 48 41 01  
FPM 49 41 01

## O-Ring gasket

### 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	<b>748 410 001</b>	<b>749 410 001</b>	0.002	31	23	3.53
25	20	<b>748 410 007</b>	<b>749 410 007</b>	0.002	35	28	3.53
32	25	<b>748 410 002</b>	<b>749 410 002</b>	0.003	43	36	3.53
40	32	<b>748 410 003</b>	<b>749 410 003</b>	0.001	55	44	5.34
50	40	<b>748 410 012</b>	<b>749 410 012</b>	0.008	64	53	5.34
63	50	<b>748 410 013</b>	<b>749 410 013</b>	0.011	80	69	5.34
75	65	<b>748 410 014</b>	<b>749 410 014</b>	0.012	93	82	5.34
90	80	<b>748 410 015</b>	<b>749 410 015</b>	0.015	112	101	5.34
110	100	<b>748 410 016</b>	<b>749 410 016</b>	0.031	134	120	6.99



# PROGEF Standard Hand-Operated and Actuated Valves

		Page
	Ball Valves 546	78
 <small>DN10/15 - 50</small>	Accessories for Ball Valve 546	94
	Ball Valves 523	99
	Ball Valves 543	101
	Diaphragm Valves 514	118
	Diaphragm Valves 515	121
	Diaphragm Valves 517	123
	Diaphragm Valves 519	127
	Butterfly valves	128
	Cone check valves	138
	Air release valve	146
	Wafer Check Valves 369	148
	Strainers 305	153

		Page
	Ball Valves Electric	156
	Ball Valves Pneumatic	198
	Diaphragm valves pneumatic New generation	244
	Butterfly Valves Electric	276
	Butterfly Valves Pneumatic	289
	Variable area flow meters	298
	Process control valves	311
	Solenoid valves	317

# Hand-Operated Valves

## General Information

### Material

The material PP-H conforms with the corresponding recommendations of the German Federal board of Health.

### Standards

All the main dimensions, such as nominal bore, z dimensions, socket depth and diameter, are in accordance with ISO Recommendations, ISO Draft Resolutions for millimetre pipes and DIN 3442.

Fusion joints
EN 558-1 DIN 3442

Thread joint	Flange joint	
ISO 7/1 DIN 2999 BSI 21	DIN 2501/8063	on request ANSI B 16.5 JIS

### Jointing

Fusion jointing:  
Pipes with outside diameter tolerances in accordance with DIN 8077 can be readily jointed with GF Piping Systems Valves.

### Threaded joint:

BSP parallel female threads are in accordance with ISO 7/1 or DIN 2999. Threaded plastic Valves should be jointed to plastics pipe or to other plastics parts. Jointing to metal pipe or fittings is permissible only where there is little stress, and should be carried out with great care.

### Nominal Pressure

see column PN

### Marking

GF Piping Systems valves are marked as follows:

- +GF+
- pipe o.d.
- pipe nominal bore
- material
- pressure rating: PN ...

### Overall length

When used with flange adaptors or union ends from GF Piping Systems, the lengths of valves correspond to EN 558-1 (org. DIN 3202) or VSM standard 19431 and NF.E 29492.

### Dimensions

All dimensions are given in mm.

### Information Service

For detailed information see our Catalogue "Plastic Piping Systems".

### Quality control conforming to DIN 3442, Part 1

The function and tightness of every valve are factory-tested. Testing is carried out with air under water.

### Orders

Always quote the GF Piping Systems code number when placing orders.

### Ordering example

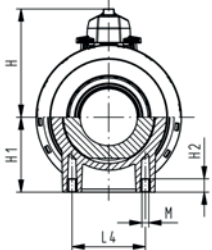
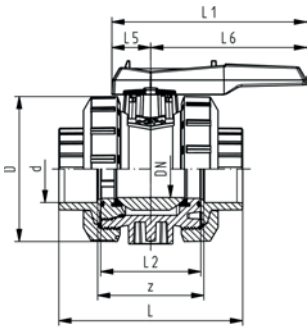
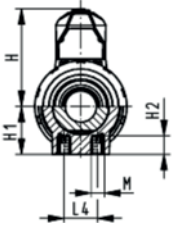
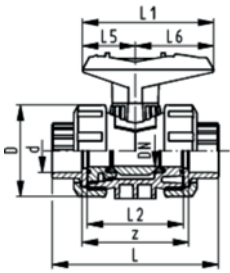
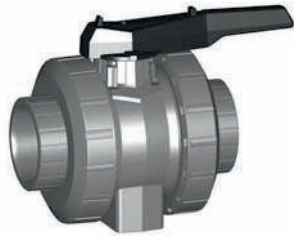
8 ball valves      167 346 005

# Ball Valves 546

## Ball valve type 546 PP-H With mounting inserts With fusion sockets metric



DN10/15 - 50



### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	71	<b>167 546 401</b>	<b>167 546 411</b>	0.115
20	15	10	185	<b>167 546 402</b>	<b>167 546 412</b>	0.123
25	20	10	350	<b>167 546 403</b>	<b>167 546 413</b>	0.184
32	25	10	700	<b>167 546 404</b>	<b>167 546 414</b>	0.258
40	32	10	1000	<b>167 546 405</b>	<b>167 546 415</b>	0.451
50	40	10	1600	<b>167 546 406</b>	<b>167 546 416</b>	0.617
63	50	10	3100	<b>167 546 407</b>	<b>167 546 417</b>	1.130
75	65	10	5000	<b>167 546 408</b>	<b>167 546 418</b>	3.335
90	80	10	7000	<b>167 546 409</b>	<b>167 546 419</b>	5.500
110	100	10	11000	<b>167 546 410</b>	<b>167 546 420</b>	8.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
16	50	57	27	12	93	77	56	25	32	45	M6	67
20	50	57	27	12	95	77	56	25	32	45	M6	66
25	58	67	30	12	109	97	65	25	39	58	M6	77
32	68	73	36	12	119	97	71	25	39	58	M6	83
40	84	90	44	15	135	128	85	45	54	74	M8	99
50	97	97	51	15	147	128	89	45	54	74	M8	105
63	124	116	64	15	168	152	101	45	66	87	M8	117
75	166	149	85	15	233	270	136	70	64	206	M8	167
90	200	161	105	15	254	270	141	70	64	206	M8	180
110	238	178	123	22	301	320	164	120	64	256	M12	215



DN10/15 - 50



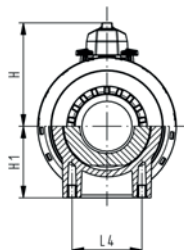
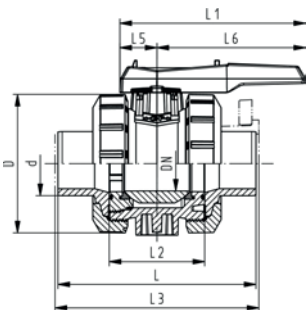
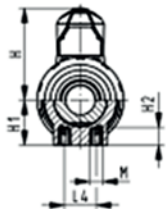
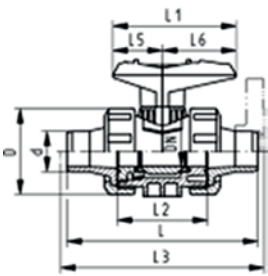
## Ball valve type 546 PP-H With mounting inserts With socket fusion spigots metric

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



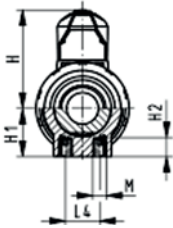
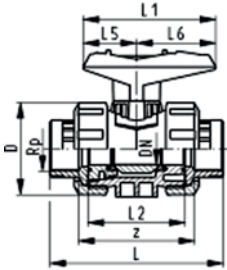
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	71	<b>167 546 041</b>	<b>167 546 051</b>	0.120
20	15	10	185	<b>167 546 042</b>	<b>167 546 052</b>	0.120
25	20	10	350	<b>167 546 043</b>	<b>167 546 053</b>	0.180
32	25	10	700	<b>167 546 044</b>	<b>167 546 054</b>	0.260
40	32	10	1000	<b>167 546 045</b>	<b>167 546 055</b>	0.450
50	40	10	1600	<b>167 546 046</b>	<b>167 546 056</b>	0.640
63	50	10	3100	<b>167 546 047</b>	<b>167 546 057</b>	1.210
75	65	10	5000	<b>167 546 048</b>	<b>167 546 058</b>	3.800
90	80	10	7000	<b>167 546 049</b>	<b>167 546 059</b>	5.600
110	100	10	11000	<b>167 546 050</b>	<b>167 546 060</b>	8.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M
16	50	57	27	12	110	77	56		25	32	45	M6
20	50	57	27	12	120	77	56	130	25	32	45	M6
25	58	67	30	12	139	97	65	150	25	39	58	M6
32	68	73	36	12	150	97	71	160	25	39	58	M6
40	84	90	44	15	170	128	85	180	45	54	74	M8
50	97	97	51	15	190	128	89	200	45	54	74	M8
63	124	116	64	15	220	152	101	230	45	66	87	M8
75	166	149	85	15	280	270	136	290	70	64	206	M8
90	200	161	105	15	296	270	141	310	70	64	206	M8
110	238	178	123	22	336	320	164	350	120	64	256	M12





DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With threaded sockets reinforced Rp

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

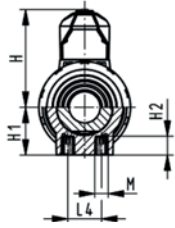
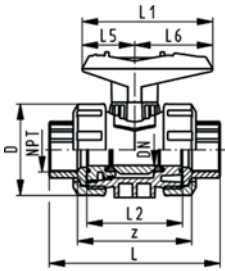
- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	71	<b>167 546 021</b>	<b>167 546 031</b>	0.120
1/2	15	10	185	<b>167 546 022</b>	<b>167 546 032</b>	0.120
3/4	20	10	350	<b>167 546 023</b>	<b>167 546 033</b>	0.180
1	25	10	700	<b>167 546 024</b>	<b>167 546 034</b>	0.270
1 1/4	32	10	1000	<b>167 546 025</b>	<b>167 546 035</b>	0.460
1 1/2	40	10	1600	<b>167 546 026</b>	<b>167 546 036</b>	0.635
2	50	10	3100	<b>167 546 027</b>	<b>167 546 037</b>	1.190

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	57	27	12	96	77	56	25	32	45	M6	69
1/2	50	57	27	12	99	77	56	25	32	45	M6	67
3/4	58	67	30	12	111	97	65	25	39	58	M6	78
1	68	73	36	12	127	97	71	25	39	58	M6	85
1 1/4	84	90	44	15	146	128	85	45	54	74	M8	100
1 1/2	97	97	51	15	157	128	89	45	54	74	M8	106
2	124	116	64	15	183	152	101	45	66	87	M8	121



DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With threaded sockets reinforced NPT

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	71	<b>167 546 321</b>	<b>167 546 331</b>	0.120
1/2	15	10	185	<b>167 546 322</b>	<b>167 546 332</b>	0.120
3/4	20	10	350	<b>167 546 323</b>	<b>167 546 333</b>	0.180
1	25	10	700	<b>167 546 324</b>	<b>167 546 334</b>	0.270
1 1/4	32	10	1000	<b>167 546 325</b>	<b>167 546 335</b>	0.460
1 1/2	40	10	1600	<b>167 546 326</b>	<b>167 546 336</b>	0.635
2	50	10	3100	<b>167 546 327</b>	<b>167 546 337</b>	1.190

NPT [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	57	27	12	96	77	56	25	32	45	M6	71
1/2	50	57	27	12	99	77	56	25	32	45	M6	64
3/4	58	67	30	12	111	97	65	25	39	58	M6	76
1	68	73	36	12	127	97	71	25	39	58	M6	83
1 1/4	84	90	44	15	146	128	85	45	54	74	M8	100
1 1/2	97	97	51	15	157	128	89	45	54	74	M8	111
2	124	116	64	15	183	152	101	45	66	87	M8	134



DN10/15 - 50



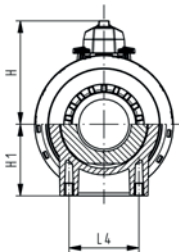
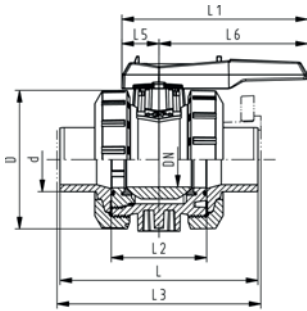
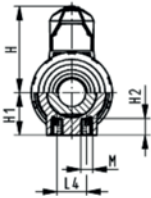
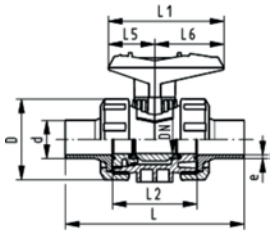
## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots IR-Plus SDR11 metric

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

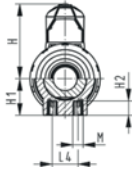
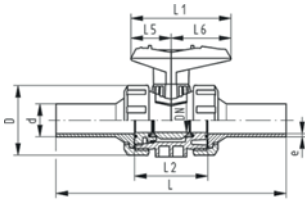


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	167 546 442	167 546 452	0.123
25	20	10	350	167 546 443	167 546 453	0.185
32	25	10	700	167 546 444	167 546 454	0.263
40	32	10	1000	167 546 445	167 546 455	0.456
50	40	10	1600	167 546 446	167 546 456	0.642
63	50	10	3100	167 546 447	167 546 457	1.180
75	65	10	5000	167 546 448	167 546 458	2.602
90	80	10	7000	167 546 449	167 546 459	5.500
110	100	10	11000	167 546 450	167 546 460	8.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	50	57	27	12	130	77	56	25	32	45	M6	1.9
25	58	67	30	12	143	97	65	25	39	58	M6	2.3
32	68	73	36	12	150	97	71	25	39	58	M6	2.9
40	84	90	44	15	171	128	85	45	54	74	M8	3.7
50	97	97	51	15	191	128	89	45	54	74	M8	4.6
63	124	116	64	15	220	152	101	45	66	87	M8	5.8
75	166	149	85	15	266	270	136	70	64	206	M8	6.8
90	200	161	105	15	264	270	141	70	64	206	M8	8.2
110	238	178	123	22	301	320	164	120	64	256	M12	10.0



DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots long SDR11 metric

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
20	15	10	185	<b>167 546 262</b>	<b>167 546 272</b>	0.130	
25	20	10	350	<b>167 546 263</b>	<b>167 546 273</b>	0.195	
32	25	10	700	<b>167 546 264</b>	<b>167 546 274</b>	0.280	
40	32	10	1000	<b>167 546 265</b>	<b>167 546 275</b>	0.480	
50	40	10	1600	<b>167 546 266</b>	<b>167 546 276</b>	0.700	
63	50	10	3100	<b>167 546 267</b>	<b>167 546 277</b>	1.288	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]	
20	50	57	27	12	193	77	56	25	32	45	M6	2,3	
25	58	67	30	12	216	97	65	25	39	58	M6	2,3	
32	68	73	36	12	223	97	71	25	39	58	M6	2,9	
40	84	90	44	15	249	128	85	45	54	74	M8	3,7	
50	97	97	51	15	271	128	89	45	54	74	M8	4,6	
63	124	116	64	15	321	152	101	45	66	87	M8	5,8	



DN10/15 - 50



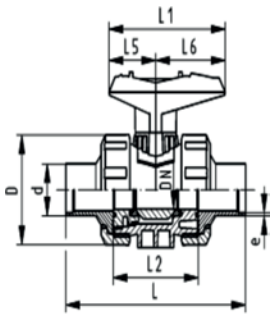
## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots SDR17.6 metric

### Model:

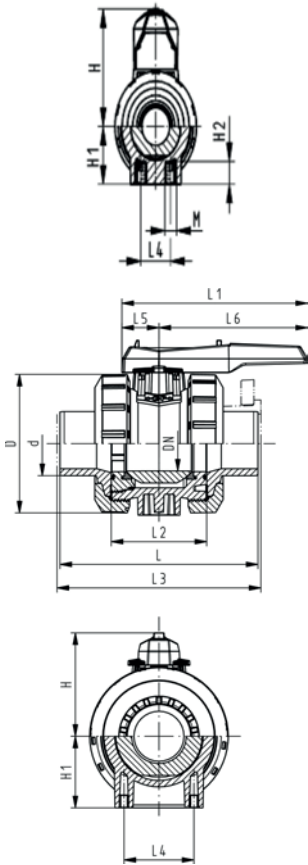
- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



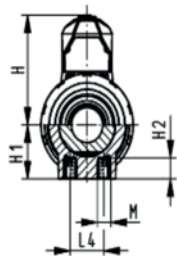
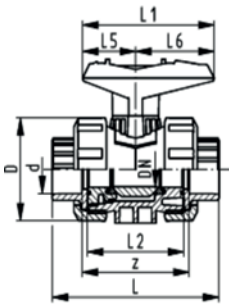
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
50	40	6	1600	<b>167 546 066</b>	<b>167 546 076</b>	0.635
63	50	6	3100	<b>167 546 067</b>	<b>167 546 077</b>	1.200
75	65	6	5000	<b>167 546 068</b>	<b>167 546 078</b>	3.387
90	80	6	7000	<b>167 546 069</b>	<b>167 546 079</b>	5.500
110	100	6	11000	<b>167 546 070</b>	<b>167 546 080</b>	8.600



d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
50	97	97	51	15	191	128	89	45	54	74	M8	2,9
63	124	116	64	15	220	152	101	45	66	87	M8	3,6
75	166	149	85	15	266	270	136	70	64	206	M8	4,7
90	200	161	105	15	264	270	141	70	64	206	M8	5,5
110	238	178	123	22	301	320	164	120	64	256	M12	6,8



DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With fusion sockets PE100 metric

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

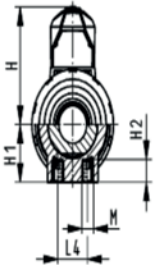
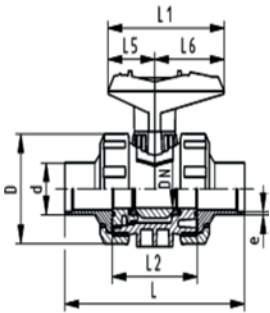
- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	71	<b>167 546 161</b>	<b>167 546 171</b>	0.120
20	15	10	185	<b>167 546 162</b>	<b>167 546 172</b>	0.120
25	20	10	350	<b>167 546 163</b>	<b>167 546 173</b>	0.180
32	25	10	700	<b>167 546 164</b>	<b>167 546 174</b>	0.260
40	32	10	1000	<b>167 546 165</b>	<b>167 546 175</b>	0.450
50	40	10	1600	<b>167 546 166</b>	<b>167 546 176</b>	0.630
63	50	10	3100	<b>167 546 167</b>	<b>167 546 177</b>	1.195

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
16	50	57	27	12	93	77	56	25	32	45	M6	67
20	50	57	27	12	95	77	56	25	32	45	M6	67
25	58	67	30	12	109	97	65	25	39	58	M6	77
32	68	73	36	12	119	97	71	25	39	58	M6	83
40	84	90	44	15	135	128	85	45	54	74	M8	99
50	97	97	51	15	147	128	89	45	54	74	M8	105
63	124	116	64	15	168	152	101	45	66	87	M8	113



DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots PE100 SDR11 metric

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
20	15	10	185	<b>167 546 142</b>	<b>167 546 152</b>	0.120	
25	20	10	350	<b>167 546 143</b>	<b>167 546 153</b>	0.180	
32	25	10	700	<b>167 546 144</b>	<b>167 546 154</b>	0.255	
40	32	10	1000	<b>167 546 145</b>	<b>167 546 155</b>	0.440	
50	40	10	1600	<b>167 546 146</b>	<b>167 546 156</b>	0.620	
63	50	10	3100	<b>167 546 147</b>	<b>167 546 157</b>	1.200	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]	
20	50	57	27	12	130	77	56	130	25	32	45	M6	1,9	
25	58	67	30	12	143	97	65	150	25	39	58	M6	2,3	
32	68	73	36	12	150	97	71	160	25	39	58	M6	2,9	
40	84	90	44	15	171	128	85	180	45	54	74	M8	3,7	
50	97	97	51	15	191	128	89	200	45	54	74	M8	4,6	
63	124	116	64	15	220	152	101	230	45	66	87	M8	5,8	

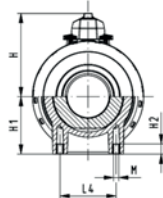
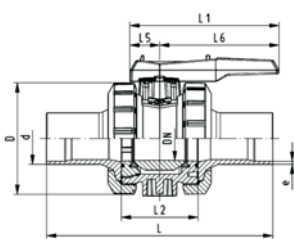
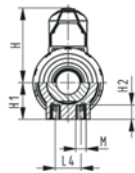
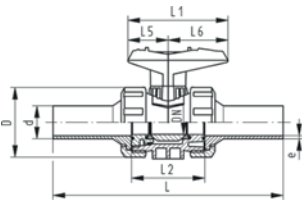
# Ball valve type 546 PP-H

## With mounting inserts

### With butt fusion spigots long PE100 SDR11 metric



DN10/15 - 50



#### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

#### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

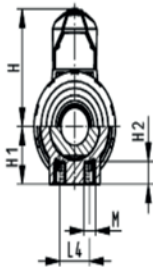
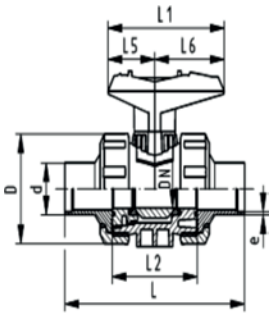
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>167 546 282</b>	<b>167 546 292</b>	0.130
25	20	10	350	<b>167 546 283</b>	<b>167 546 293</b>	0.195
32	25	10	700	<b>167 546 284</b>	<b>167 546 294</b>	0.280
40	32	10	1000	<b>167 546 285</b>	<b>167 546 295</b>	0.485
50	40	10	1600	<b>167 546 286</b>	<b>167 546 296</b>	0.695
63	50	10	3100	<b>167 546 287</b>	<b>167 546 297</b>	1.309
75	65	10	5000	<b>167 546 288</b>	<b>167 546 298</b>	3.900
90	80	10	7000	<b>167 546 289</b>	<b>167 546 299</b>	5.900
110	100	10	11000	<b>167 546 290</b>	<b>167 546 300</b>	9.300

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	50	57	27	12	193	77	56	25	32	45	M6	2,3
25	58	67	30	12	216	97	65	25	39	58	M6	2,3
32	68	73	36	12	223	97	71	25	39	58	M6	2,9
40	84	90	44	15	249	128	85	45	54	74	M8	3,7
50	97	97	51	15	271	128	89	45	54	74	M8	4,6
63	124	116	64	15	321	152	101	45	66	87	M8	5,8
75	166	149	85	15	386	270	136	70	64	206	M8	6,8
90	200	161	105	15	421	270	141	70	64	206	M8	8,2
110	238	178	123	22	484	320	164	120	64	256	M12	10,0





DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots PE100 SDR17.6 metric

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
50	40	6	1600	<b>167 546 126</b>	<b>167 546 136</b>	0.620
63	50	6	3100	<b>167 546 127</b>	<b>167 546 137</b>	1.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
50	97	97	51	15	191	128	89	45	54	74	M8	2,9
63	124	116	64	15	220	152	101	45	66	87	M8	3,6



## PROGEF Standard Ball valve type 546 With mounting inserts With butt fusion spigots long PE100 SDR17,6 metric

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>167 546 308</b>	<b>167 546 318</b>	3.900
90	80	10	7000	<b>167 546 309</b>	<b>167 546 319</b>	2.026
110	100	10	11000	<b>167 546 310</b>	<b>167 546 320</b>	9.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
75	166	149	85	15	386	270	136	70	64	206	8	4.3
90	200	161	105	15	421	270	141	70	64	206	8	5.1
110	238	178	123	22	484	320	164	120	64	256	12	6.3



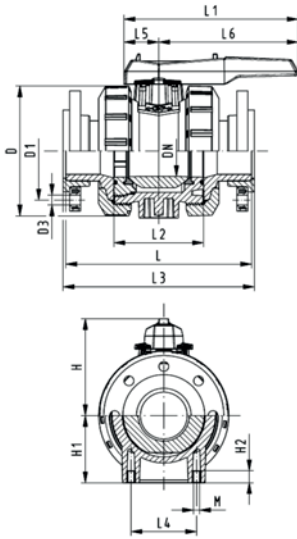
## PROGEF Standard Ball valve type 546 With mounting inserts With backing flanges PP-st metric

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

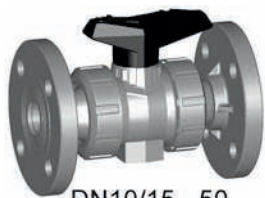
### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

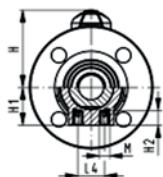
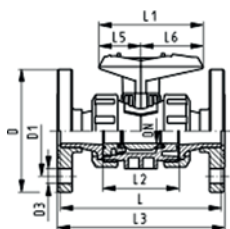


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>167 546 808</b>	<b>167 546 818</b>	5.417
90	80	10	7000	<b>167 546 809</b>	<b>167 546 819</b>	7.941
110	100	10	11000	<b>167 546 810</b>	<b>167 546 820</b>	9.928

d [mm]	D [mm]	D1 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	M
75	166	145	18	280	270	136	290	70	64	206	149	85	8
90	200	160	18	296	270	141	310	70	64	206	161	105	8
110	238	180	18	336	320	164	350	120	64	256	178	123	12



DN10/15 - 50



## PROGEF Standard Ball valve type 546 With mounting inserts With fixed flanges PP-H serrated metric

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>167 546 182</b>	<b>167 546 192</b>	0.245
25	20	¾	10	350	<b>167 546 183</b>	<b>167 546 193</b>	0.345
32	25	1	10	700	<b>167 546 184</b>	<b>167 546 194</b>	0.495
40	32	1 ¼	10	1000	<b>167 546 185</b>	<b>167 546 195</b>	0.824
50	40	1 ½	10	1600	<b>167 546 186</b>	<b>167 546 196</b>	1.066
63	50	2	10	3100	<b>167 546 187</b>	<b>167 546 197</b>	1.751

d [mm]	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M
20	95	65	14	57	27	12	120	77	56	130	25	32	45	M6
25	105	75	14	67	30	12	140	97	65	150	25	39	58	M6
32	115	85	14	73	36	12	150	97	71	160	25	39	58	M6
40	140	100	18	90	44	15	170	128	85	180	45	54	74	M8
50	150	110	18	97	51	15	190	128	89	200	45	54	74	M8
63	165	125	18	116	64	15	220	152	101	230	45	66	87	M8



DN10/15 - 50



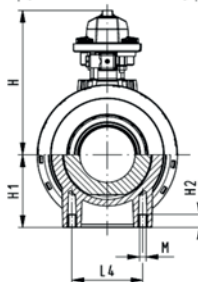
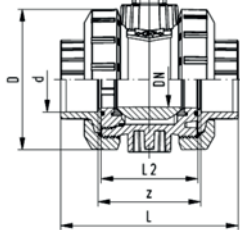
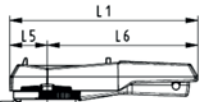
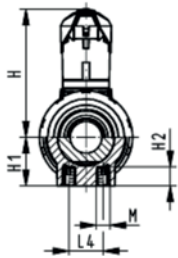
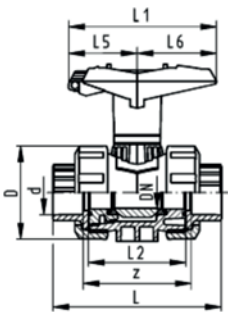
## Ball valve type 546 PP-H With lockable handle With fusion sockets metric

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Lockable hand lever with ratchet settings

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

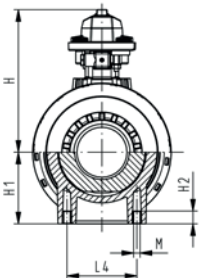
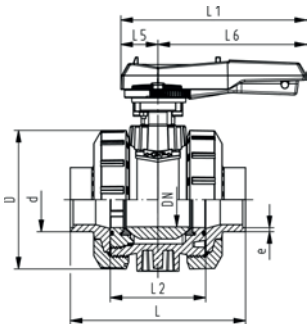
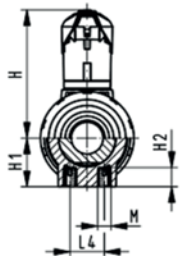
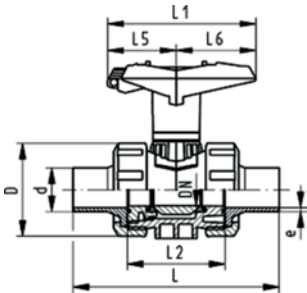


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	71	<b>167 546 421</b>	<b>167 546 431</b>	0.125
20	15	10	185	<b>167 546 422</b>	<b>167 546 432</b>	0.125
25	20	10	350	<b>167 546 423</b>	<b>167 546 433</b>	0.195
32	25	10	700	<b>167 546 424</b>	<b>167 546 434</b>	0.270
40	32	10	1000	<b>167 546 425</b>	<b>167 546 435</b>	0.465
50	40	10	1600	<b>167 546 426</b>	<b>167 546 436</b>	0.635
63	50	10	3100	<b>167 546 427</b>	<b>167 546 437</b>	1.175
75	65	10	5000	<b>167 546 428</b>	<b>167 546 438</b>	4.000
90	80	10	7000	<b>167 546 429</b>	<b>167 546 439</b>	4.715
110	100	10	11000	<b>167 546 430</b>	<b>167 546 440</b>	7.252

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
16	50	79	27	12	93	77	56	25	32	45	M6	67
20	50	79	27	12	95	77	56	25	32	45	M6	66
25	58	88	30	12	109	97	65	25	39	58	M6	77
32	68	94	36	12	119	97	71	25	39	58	M6	83
40	84	113	44	15	135	128	85	45	54	74	M8	99
50	97	119	51	15	147	128	89	45	54	74	M8	105
63	124	141	64	15	168	152	101	45	66	87	M8	117
75	166	224	85	15	233	270	136	70	64	206	M8	167
90	200	235	105	15	254	270	141	70	64	206	M8	180
110	238	245	123	22	301	320	164	120	64	256	M12	215



DN10/15 - 50



## Ball valve type 546 PP-H With lockable handle With butt fusion spigots IR-Plus SDR11 metric

### Model:

- Material: PP-H
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Lockable hand lever with ratchet settings

### Option:

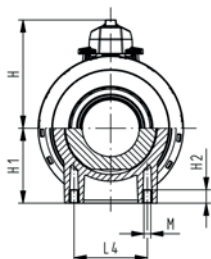
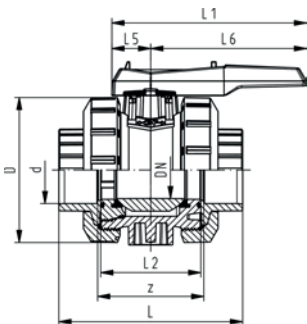
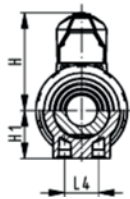
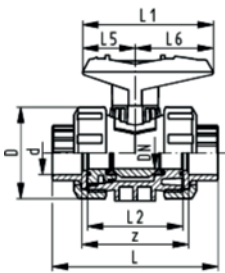
- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	167 546 462	167 546 472	0.130
25	20	10	350	167 546 463	167 546 473	0.195
32	25	10	700	167 546 464	167 546 474	0.270
40	32	10	1000	167 546 465	167 546 475	0.465
50	40	10	1600	167 546 466	167 546 476	0.645
63	50	10	3100	167 546 467	167 546 477	1.213
75	65	10	5000	167 546 468	167 546 478	4.100
90	80	10	7000	167 546 469	167 546 479	5.900
110	100	10	11000	167 546 470	167 546 480	9.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	50	79	27	12	130	87	56	25	42	45	M6	1,9
25	58	88	30	12	143	108	65	25	50	58	M6	2,3
32	68	94	36	12	150	108	71	25	50	58	M6	2,9
40	84	113	44	15	171	140	85	45	66	75	M8	3,7
50	97	119	51	15	191	140	89	45	66	75	M8	4,6
63	124	141	64	15	220	165	101	45	78	87	M8	5,8
75	166	149	85	15	266	270	136	70	64	206	M8	6,8
90	200	161	105	15	264	270	141	70	64	206	M8	8,2
110	238	178	123	22	301	320	164	120	64	256	M12	10,0



DN10/15 - 50



## Ball valve type 546 PP-H With fusion sockets metric

### Model:

- Material: PP-H
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	71	<b>167 546 001</b>	<b>167 546 011</b>	0.115
20	15	10	185	<b>167 546 002</b>	<b>167 546 012</b>	0.115
25	20	10	350	<b>167 546 003</b>	<b>167 546 013</b>	0.178
32	25	10	700	<b>167 546 004</b>	<b>167 546 014</b>	0.253
40	32	10	1000	<b>167 546 005</b>	<b>167 546 015</b>	0.442
50	40	10	1600	<b>167 546 006</b>	<b>167 546 016</b>	0.607
63	50	10	3100	<b>167 546 007</b>	<b>167 546 017</b>	1.118
75	65	10	5000	<b>167 546 008</b>	<b>167 546 018</b>	3.345
90	80	10	7000	<b>167 546 009</b>	<b>167 546 019</b>	5.500
110	100	10	11000	<b>167 546 010</b>	<b>167 546 020</b>	8.700

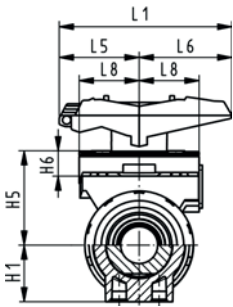
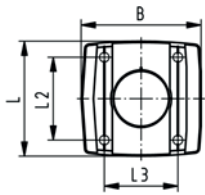
d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	z [mm]
16	50	57	27	93	77	56	25	32	45	67
20	50	57	27	95	77	56	25	32	45	66
25	58	67	30	109	97	65	25	39	58	77
32	68	73	36	119	97	71	25	39	58	83
40	84	90	44	135	128	85	45	54	74	99
50	97	97	51	147	128	89	45	54	74	105
63	124	116	64	168	152	101	45	66	87	117
75	166	149	85	233	270	136	70	64	206	167
90	200	161	105	254	270	141	70	64	206	180
110	238	178	123	301	320	164	120	64	256	215

# Accessories for Ball Valve 546

## Multifunctional module (I02) PP-GF Module empty



DN10/15 - 50



### Model:

- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- For operation with handle, multifunctional handle has to be ordered separately.
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100
- The multifunctional module from d75 - d110 has a master gauge F07 according to EN ISO 5211.

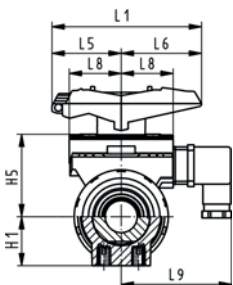
d-d [mm]	Inch [inch]	DN-DN [mm]	Code	kg
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 680</b>	0.069
25 - 32	3/4 - 1	20 - 25	<b>167 482 681</b>	0.149
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 682</b>	0.168
- 63	2	- 50	<b>167 482 683</b>	0.209
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 684</b>	0.379
- 110	4	- 100	<b>167 482 685</b>	0.607

d-d [mm]	B [mm]	H1 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L5 [mm]	L6 [mm]	L8 [mm]
16 - 20	67	27	50	17	72	87	54	40	42	45	34
25 - 32	75	30	53	16	72	108	52	46	50	58	38
40 - 50	81	44	72	16	80	140	60	50	66	75	41
- 63	91	64	94	19	93	165	68	65	78	87	46
75 - 90	90	85	157	23	85	270			64	206	
- 110	106	123	175	23	97	320			64	256	

## Multifunctional module (I03) PP-GF With mechanical limit switches Ag Ni



DN10/15 - 50



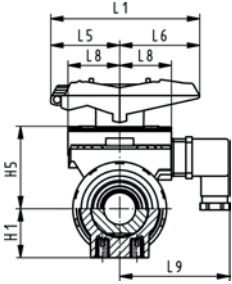
### Model:

- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- For operation with handle, multifunctional handle has to be ordered separately.
- Including Plug 3P+E / Protection: IP65
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

d-d [mm]	Inch [inch]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 626</b>	0.104	27	50	87	42	45	34	73
25 - 32	3/4 - 1	20 - 25	<b>167 482 627</b>	0.118	30	53	108	50	58	38	77
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 628</b>	0.140	44	72	140	66	75	41	80
- 63	2	- 50	<b>167 482 629</b>	0.257	64	94	165	78	87	46	85
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 630</b>	0.478	85	157	270	64	206		
- 110	4	- 100	<b>167 482 631</b>	0.480	123	175	320	64	256		



DN10/15 - 50



## Multifunctional module (I04) PP-GF With mechanical limit switches Au

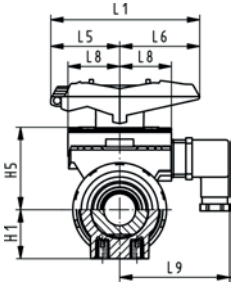
### Model:

- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- For operation with handle, multifunctional handle has to be ordered separately.
- Including Plug 3P+E / Protection: IP65
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

d-d [mm]	Inch [inch]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 635</b>	0.103	27	50	87	42	45	34	73
25 - 32	3/4 - 1	20 - 25	<b>167 482 636</b>	0.120	30	53	108	50	58	38	77
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 637</b>	0.138	44	72	140	66	75	41	80
- 63	2	- 50	<b>167 482 638</b>	0.175	64	94	165	78	87	46	85
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 639</b>	0.460	85	157	270	64	206		
- 110	4	- 100	<b>167 482 640</b>	0.480	123	175	320	64	256		



DN10/15 - 50



## Multifunctional module (I05) PP-GF With inductive limit switches Namur

### Model:

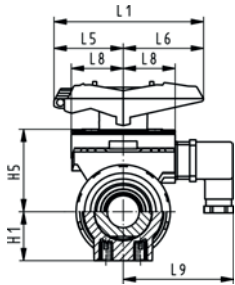
- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- For operation with handle, multifunctional handle has to be ordered separately.
- Including Plug 3P+E / Protection: IP65
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

d-d [mm]	Inch [inch]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 671</b>	0.097	27	50	87	42	45	34	73
25 - 32	3/4 - 1	20 - 25	<b>167 482 672</b>	0.107	30	53	108	50	58	38	77
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 673</b>	0.135	44	72	140	66	75	41	80
- 63	2	- 50	<b>167 482 674</b>	0.257	64	94	165	78	87	46	85
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 675</b>	0.460	85	157	270	64	206		
- 110	4	- 100	<b>167 482 676</b>	0.480	123	175	320	64	256		





DN10/15 - 50



## Multifunctional module (I06) PP-GF With inductive limit switches PNP

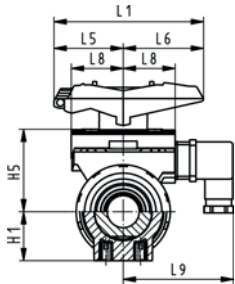
### Model:

- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- For operation with handle, multifunctional handle has to be ordered separately.
- Including Plug 3P+E / Protection: IP65
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

d-d [mm]	Inch [inch]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 662</b>	0.182	27	50	87	42	45	34	73
25 - 32	3/4 - 1	20 - 25	<b>167 482 663</b>	0.197	30	53	108	50	58	38	77
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 664</b>	0.215	44	72	140	66	75	41	80
- 63	2	- 50	<b>167 482 665</b>	0.175	64	94	165	78	87	46	85
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 666</b>	0.460	85	157	270	64	206		
- 110	4	- 100	<b>167 482 667</b>	0.480	123	175	320	64	256		



DN10/15 - 50



## Multifunctional module (I07) PP-GF With inductive limit switches NPN

### Model:

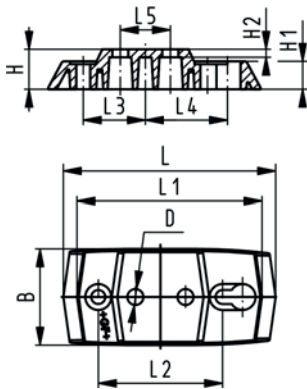
- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- For operation with handle, multifunctional handle has to be ordered separately.
- Including Plug 3P+E / Protection: IP65
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

d-d [mm]	Inch [inch]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 653</b>	0.110	27	50	87	42	45	34	73
25 - 32	3/4 - 1	20 - 25	<b>167 482 654</b>	0.120	30	53	108	50	58	38	77
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 655</b>	0.135	44	72	140	66	75	41	80
- 63	2	- 50	<b>167 482 656</b>	0.175	64	94	165	78	87	46	85
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 657</b>	0.460	85	157	270	64	206		
- 110	4	- 100	<b>167 482 658</b>	0.480	123	175	320	64	256		



## Mounting plate 546 PP-GF (L02)

- 2 mounting screws inclusive



d-d [mm]	Inch [inch]	DN-DN [mm]	Code	kg
16 - 32	¾ - 1	10 - 25	<b>167 484 110</b>	0.054
40 - 63	1 ¼ - 2	32 - 50	<b>167 484 111</b>	0.066

d-d [mm]	B [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]
16 - 32	48	8	20	14	4	106	92	62	31	41	25
40 - 63	54	9	20	14	4	149	134	104	52	62	45

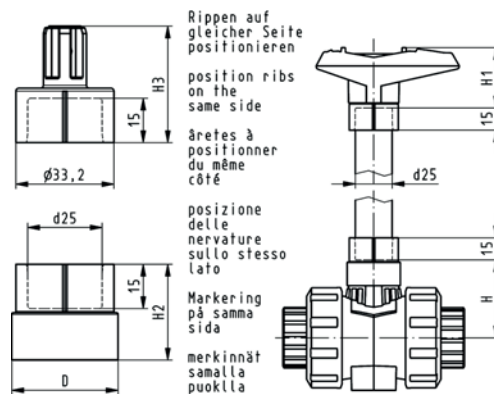


## Handle extension 546 PVC-U metric

### Model:

- For ball valve type 546 and 543
- Composed of adapter sockets for handle connection and stem connection
- PVC-U pipe in suitable length has to be obtained on site

d-d [mm]	DN-DN [mm]	Code	kg	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	D [mm]
16 - 20	10 - 15	<b>161 486 435</b>	0.030	41	52	29	36	26
25 - 32	20 - 25	<b>161 486 436</b>	0.029	50	62	32	39	36
40 - 50	32 - 40	<b>161 486 437</b>	0.045	65	76	34	44	40
- 63	- 50	<b>161 486 438</b>	0.059	84	87	37	48	44



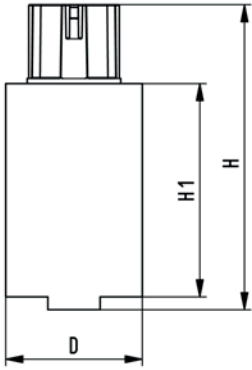


## Handle extension for ball valve type 546 PVC-U DN65 - DN100

### Model:

- Multiple use in succession possible
- Height variable

d-d [mm]	DN-DN [mm]	Code	kg	D [mm]	H [mm]	H1 [mm]
75 - 90	65 - 80	<b>161 490 920</b>	0.323	58	143	100
- 110	- 100	<b>161 490 921</b>	0.413	64	143	100



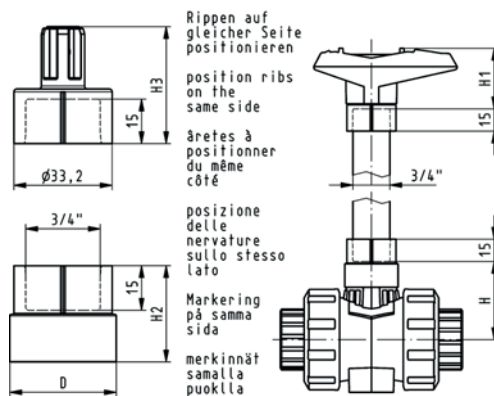
## Handle extension 546 PVC-U inch BS/ASTM

### Model:

- For Ball Valve Type 546

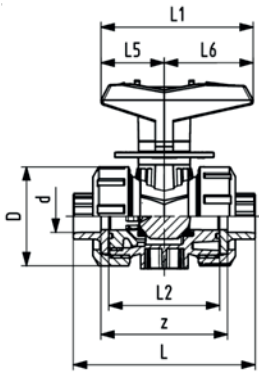
Includes upper and lower extension adapter, does not include 3/4" pipe

DN-DN [mm]	Inch	Code	kg	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	D [mm]
10 - 15	3/8-1/2	<b>161 486 443</b>	0.032	41	52	29	36	26
20 - 25	3/4-1	<b>161 486 444</b>	0.030	50	62	32	39	36
32 - 40	1 1/4-1 1/2	<b>161 486 445</b>	0.047	65	76	34	44	40
50 -	2	<b>161 486 446</b>	0.058	84	87	37	48	44



# Ball Valves 523

## PROGEF Standard Metering ball valve type 523 With mounting inserts With fusion sockets metric



### Model:

- Material: PP-H
- Micro-doser
- Excellent control characteristics
- Designed for easy installation and removal
- Angle of operation 180° with scale
- Integrated stainless steel mounting inserts
- Ball seals PTFE
- Z-length, end connectors and union nuts **not compatible** to Type 323

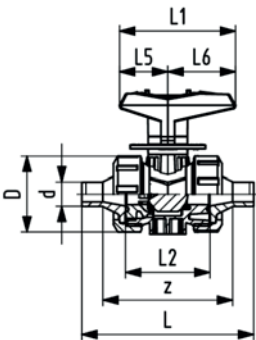
### Option:

- Other materials on demand

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	11	167 523 401	167 523 411	0.130
20	15	10	20	167 523 402	167 523 412	0.130

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	z [mm]
16	50	68	27	93	77	56	25	32	45	67
20	50	68	27	95	77	56	25	32	45	66

## PROGEF Standard Metering ball valve type 523 With mounting inserts With socket fusion spigots metric



### Model:

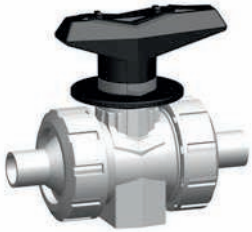
- Material: PP-H
- Micro-doser
- Excellent control characteristics
- Designed for easy installation and removal
- Angle of operation 180° with scale
- Integrated stainless steel mounting inserts
- Ball seals PTFE
- Z-length, end connectors and union nuts **not compatible** to Type 323

### Option:

- Other materials on demand

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	11	167 523 441	167 523 451	0.130
20	15	10	20	167 523 442	167 523 452	0.130

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M
16	50	68	27	12	110	77	56		25	32	45	M6
20	50	68	27	12	120	77	56	130	25	32	45	M6



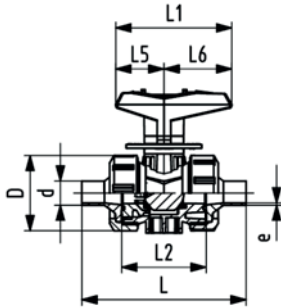
## PROGEF Standard Metering ball valve type 523 With mounting inserts With butt fusion spigots IR-Plus SDR11 metric

### Model:

- Material: PP-H
- Micro-doser
- Excellent control characteristics
- Designed for easy installation and removal
- Angle of operation 180° with scale
- Integrated stainless steel mounting inserts
- Ball seals PTFE
- Z-length, end connectors and union nuts **not compatible** to Type 323

### Option:

- Other materials on demand

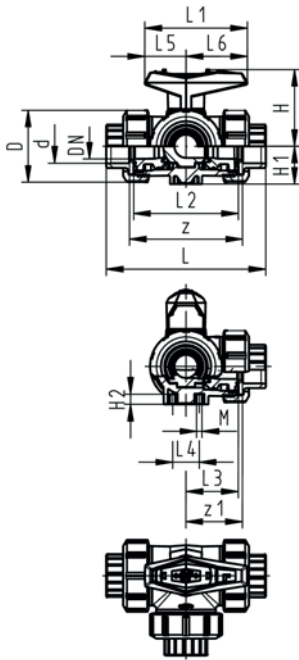
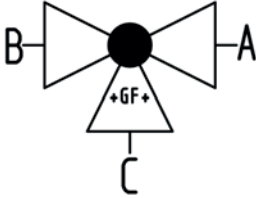


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	11	167 523 482	167 523 492	0.130

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	50	68	27	12	130	77	56	25	32	45	M6	1.9

# Ball Valves 543

## PROGEF Standard 3-Way ball valve type 543 Horizontal/L-port With fusion sockets metric



### Model:

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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	167 543 001	167 543 011	0.161
20	15	10	75	167 543 002	167 543 012	0.165
25	20	10	150	167 543 003	167 543 013	0.237
32	25	10	280	167 543 004	167 543 014	0.361
40	32	10	480	167 543 005	167 543 015	0.616
50	40	10	620	167 543 006	167 543 016	0.912
63	50	10	1230	167 543 007	167 543 017	1.882

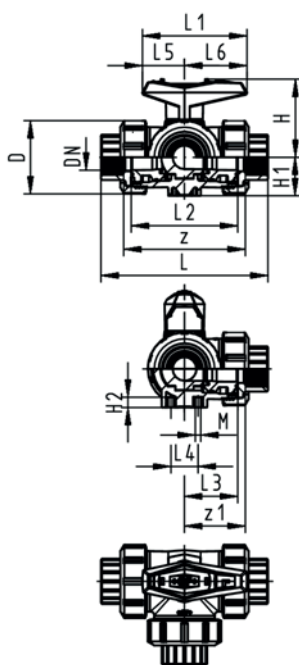
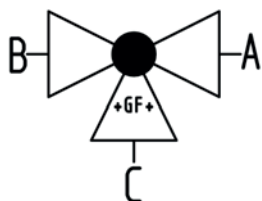
d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
16	50	110	77	72	36	25	32	45	57	28	8	6	82	41
20	50	112	77	72	36	25	32	45	57	28	8	6	82	41
25	58	129	97	85	43	25	39	58	67	32	8	6	97	49
32	68	146	97	98	49	25	39	58	73	36	8	6	110	55
40	84	170	128	118	59	45	54	74	90	45	9	8	132	66
50	97	193	128	135	68	45	54	74	97	51	9	8	151	76
63	124	244	152	176	88	45	66	87	116	65	9	8	188	94



# PROGEF Standard 3-Way ball valve type 543 Horizontal/L-port With threaded sockets reinforced Rp

## Model:

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



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	<b>167 543 081</b>	<b>167 543 091</b>	0.161
1/2	15	10	75	<b>167 543 082</b>	<b>167 543 092</b>	0.165
3/4	20	10	150	<b>167 543 083</b>	<b>167 543 093</b>	0.237
1	25	10	280	<b>167 543 084</b>	<b>167 543 094</b>	0.361
1 1/4	32	10	480	<b>167 543 085</b>	<b>167 543 095</b>	0.616
1 1/2	40	10	620	<b>167 543 086</b>	<b>167 543 096</b>	0.912
2	50	10	1230	<b>167 543 087</b>	<b>167 543 097</b>	1.773

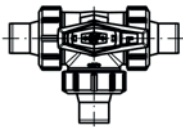
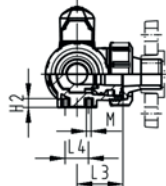
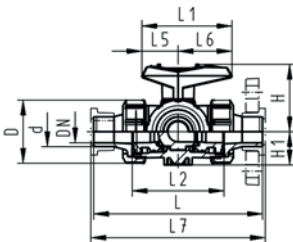
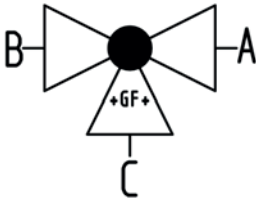
Rp [inch]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	112	77	72	36	25	32	45	57	28	8	6	86	43
1/2	50	114	77	72	36	25	32	45	57	28	8	6	84	42
3/4	58	131	97	85	43	25	39	58	67	32	8	6	99	50
1	68	154	97	98	49	25	39	58	73	36	8	6	112	56
1 1/4	84	180	128	118	59	45	54	74	90	45	9	8	132	66
1 1/2	97	203	128	135	68	45	54	74	97	51	9	8	153	77
2	124	258	152	176	88	45	66	87	116	65	9	8	196	98



# PROGEF Standard 3-Way ball valve type 543 Horizontal/L-port With socket fusion spigots metric

## Model:

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



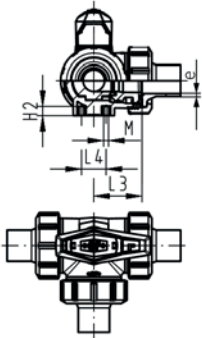
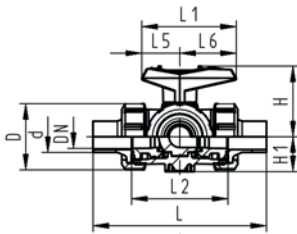
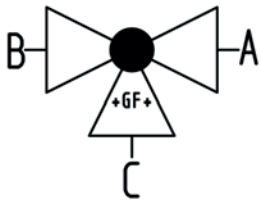
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	<b>167 543 021</b>	<b>167 543 031</b>	0.165
20	15	10	75	<b>167 543 022</b>	<b>167 543 032</b>	0.171
25	20	10	150	<b>167 543 023</b>	<b>167 543 033</b>	0.247
32	25	10	280	<b>167 543 024</b>	<b>167 543 034</b>	0.377
40	32	10	480	<b>167 543 025</b>	<b>167 543 035</b>	0.629
50	40	10	620	<b>167 543 026</b>	<b>167 543 036</b>	0.953
63	50	10	1230	<b>167 543 027</b>	<b>167 543 037</b>	1.855

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
16	50	126	77	72	36	25	32	45	133	57	28	8	6
20	50	136	77	72	36	25	32	45	144	57	28	8	6
25	58	159	97	85	43	25	39	58	170	67	32	8	6
32	68	178	97	98	49	25	39	58	191	73	36	8	6
40	84	204	128	118	59	45	54	74	223	90	45	9	8
50	97	237	128	135	68	45	54	74	256	97	51	9	8
63	124	296	152	176	88	45	66	87	319	116	65	9	8





**PROGEF Standard**  
**3-Way ball valve type 543**  
**Horizontal/L-port**  
**With butt fusion spigots IR-Plus**  
**SDR11 metric**



**Model:**

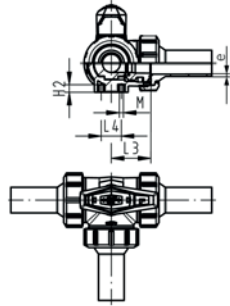
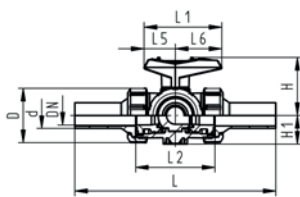
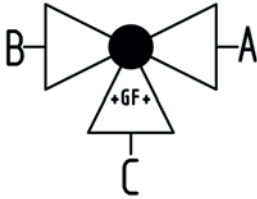
- Material: PP-H
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	75	<b>167 543 062</b>	<b>167 543 072</b>	0.171
25	20	10	150	<b>167 543 063</b>	<b>167 543 073</b>	0.247
32	25	10	280	<b>167 543 064</b>	<b>167 543 074</b>	0.377
40	32	10	480	<b>167 543 065</b>	<b>167 543 075</b>	0.629
50	40	10	620	<b>167 543 066</b>	<b>167 543 076</b>	0.953
63	50	10	1230	<b>167 543 067</b>	<b>167 543 077</b>	1.855

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M [mm]	e [mm]
20	50	146	77	72	36	25	32	45	57	28	8	6	1.9
25	58	163	97	85	43	25	39	58	67	32	8	6	2.3
32	68	178	97	98	49	25	39	58	73	36	8	6	2.9
40	84	204	128	118	59	45	54	74	90	45	9	8	3.7
50	97	237	128	135	68	45	54	74	97	51	9	8	4.6
63	124	296	152	176	88	45	66	87	116	65	9	8	5.8



**PROGEF Standard  
3-Way ball valve type 543  
Horizontal/L-port  
With butt fusion spigots long  
SDR11 metric**



**Model:**

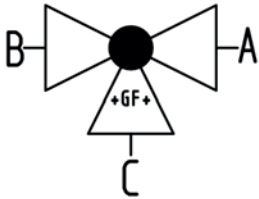
- Material: PP-H
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	75	<b>167 543 102</b>	<b>167 543 112</b>	0.179
25	20	10	150	<b>167 543 103</b>	<b>167 543 113</b>	0.262
32	25	10	280	<b>167 543 104</b>	<b>167 543 114</b>	0.399
40	32	10	480	<b>167 543 105</b>	<b>167 543 115</b>	0.675
50	40	10	620	<b>167 543 106</b>	<b>167 543 116</b>	1.032
63	50	10	1230	<b>167 543 107</b>	<b>167 543 117</b>	2.221

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M [mm]	e [mm]
20	50	210	77	72	36	25	32	45	57	28	8	6	2.3
25	58	237	97	85	43	25	39	58	67	32	8	6	2.3
32	68	250	97	98	49	25	39	58	73	36	8	6	2.9
40	84	282	128	118	59	45	54	74	90	45	9	8	3.7
50	97	317	128	135	68	45	54	74	97	51	9	8	4.6
63	124	396	152	176	88	45	66	87	116	65	9	8	5.8

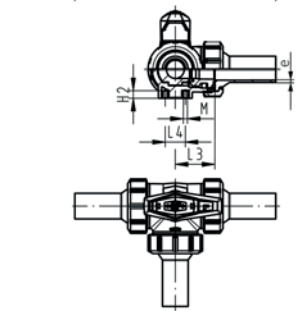
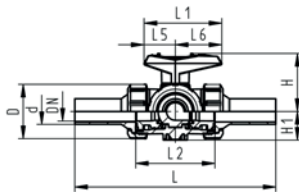


**PROGEF Standard**  
**3-Way ball valve type 543**  
**Horizontal/L-port**  
**With butt fusion spigots long**  
**PE100 SDR11 metric**



**Model:**

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



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	75	<b>167 543 122</b>	<b>167 543 132</b>	0.179
25	20	10	150	<b>167 543 123</b>	<b>167 543 133</b>	0.262
32	25	10	280	<b>167 543 124</b>	<b>167 543 134</b>	0.399
40	32	10	480	<b>167 543 125</b>	<b>167 543 135</b>	0.675
50	40	10	620	<b>167 543 126</b>	<b>167 543 136</b>	1.032
63	50	10	1230	<b>167 543 127</b>	<b>167 543 137</b>	2.221

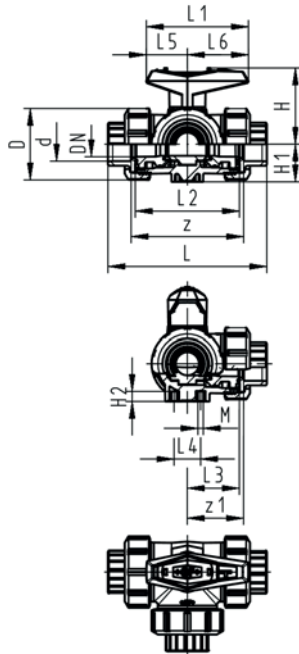
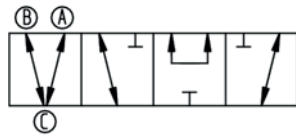
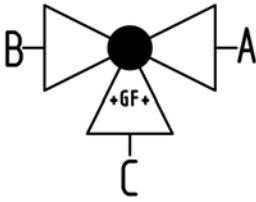
d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	e [mm]
20	50	210	77	72	36	25	32	45	57	28	8	6	2.3
25	58	237	97	85	43	25	39	58	67	32	8	6	2.3
32	68	250	97	98	49	25	39	58	73	36	8	6	2.9
40	84	282	128	118	59	45	54	74	90	45	9	8	3.7
50	97	317	128	135	68	45	54	74	97	51	9	8	4.6
63	124	396	152	176	88	45	66	87	116	65	9	8	5.8



## PROGEF Standard 3-Way ball valve type 543 Horizontal/T-port With fusion sockets metric

### Model:

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



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>167 543 201</b>	<b>167 543 211</b>	0.160
20	15	10	200	<b>167 543 202</b>	<b>167 543 212</b>	0.164
25	20	10	470	<b>167 543 203</b>	<b>167 543 213</b>	0.236
32	25	10	793	<b>167 543 204</b>	<b>167 543 214</b>	0.357
40	32	10	1290	<b>167 543 205</b>	<b>167 543 215</b>	0.609
50	40	10	1910	<b>167 543 206</b>	<b>167 543 216</b>	0.898
63	50	10	3100	<b>167 543 207</b>	<b>167 543 217</b>	1.857

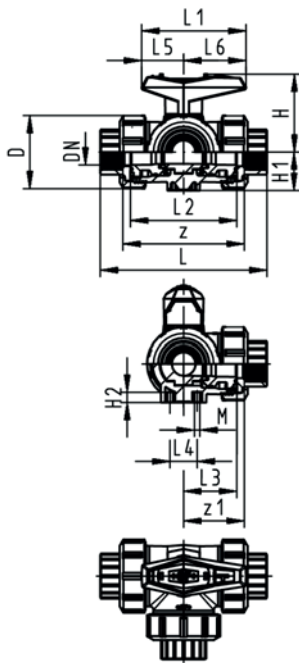
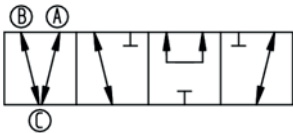
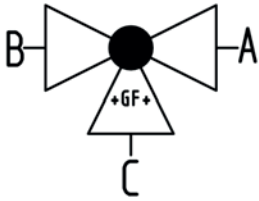
d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
16	50	110	77	72	36	25	32	45	57	28	8	6	82	41
20	50	112	77	72	36	25	32	45	57	28	8	6	82	41
25	58	129	97	85	43	25	39	58	67	32	8	6	97	49
32	68	146	97	98	49	25	39	58	73	36	8	6	110	55
40	84	170	128	118	59	45	54	74	90	45	9	8	132	66
50	97	193	128	135	68	45	54	74	97	51	9	8	151	76
63	124	244	152	176	88	45	66	87	116	65	9	8	188	94



# PROGEF Standard 3-Way ball valve type 543 Horizontal/T-port With threaded sockets reinforced Rp

## Model:

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



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>167 543 281</b>	<b>167 543 291</b>	0.160
1/2	15	10	200	<b>167 543 282</b>	<b>167 543 292</b>	0.164
3/4	20	10	470	<b>167 543 283</b>	<b>167 543 293</b>	0.236
1	25	10	793	<b>167 543 284</b>	<b>167 543 294</b>	0.357
1 1/4	32	10	1290	<b>167 543 285</b>	<b>167 543 295</b>	0.609
1 1/2	40	10	1910	<b>167 543 286</b>	<b>167 543 296</b>	0.898
2	50	10	3100	<b>167 543 287</b>	<b>167 543 297</b>	1.744

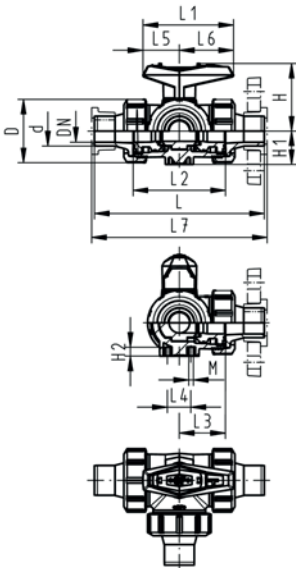
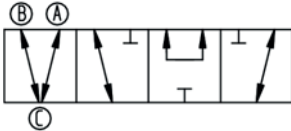
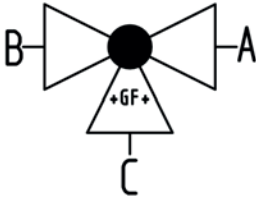
Rp [inch]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	112	77	72	36	25	32	45	57	28	8	6	86	43
1/2	50	114	77	72	36	25	32	45	57	28	8	6	84	42
3/4	58	131	97	85	43	25	39	58	67	32	8	6	99	50
1	68	154	97	98	49	25	39	58	73	36	8	6	112	56
1 1/4	84	180	128	118	59	45	54	74	90	45	9	8	132	66
1 1/2	97	203	128	135	68	45	54	74	97	51	9	8	153	77
2	124	258	152	176	88	45	66	87	116	65	9	8	196	98



# PROGEF Standard 3-Way ball valve type 543 Horizontal/T-port With socket fusion spigots metric

## Model:

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

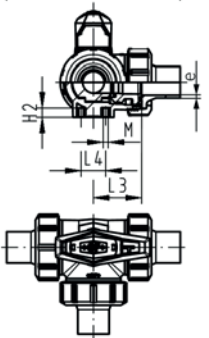
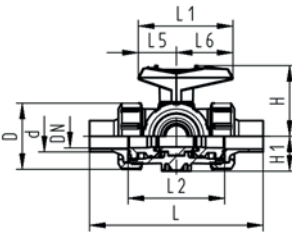
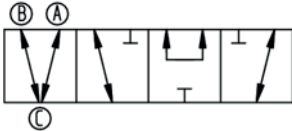
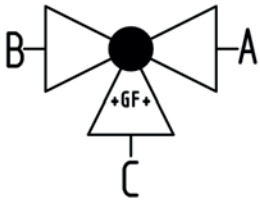


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>167 543 221</b>	<b>167 543 231</b>	0.164
20	15	10	200	<b>167 543 222</b>	<b>167 543 232</b>	0.170
25	20	10	470	<b>167 543 223</b>	<b>167 543 233</b>	0.245
32	25	10	793	<b>167 543 224</b>	<b>167 543 234</b>	0.372
40	32	10	1290	<b>167 543 225</b>	<b>167 543 235</b>	0.622
50	40	10	1910	<b>167 543 226</b>	<b>167 543 236</b>	0.939
63	50	10	3100	<b>167 543 227</b>	<b>167 543 237</b>	1.826

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	H [mm]	H1 [mm]	H2 [mm]	M [mm]
16	50	126	77	72	36	25	32	45	133	57	28	8	6
20	50	136	77	72	36	25	32	45	144	57	28	8	6
25	58	159	97	85	43	25	39	58	170	67	32	8	6
32	68	178	97	98	49	25	39	58	191	73	36	8	6
40	84	204	128	118	59	45	54	74	223	90	45	9	8
50	97	237	128	135	68	45	54	74	256	97	51	9	8
63	124	296	152	176	88	45	66	87	319	116	65	9	8



# PROGEF Standard 3-Way ball valve type 543 Horizontal/T-port With butt fusion spigots IR-Plus SDR11 metric



## Model:

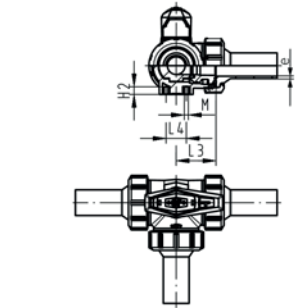
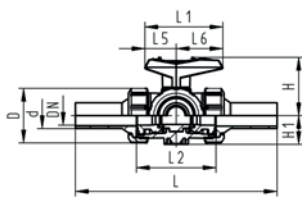
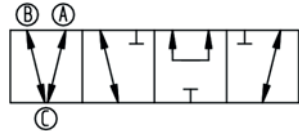
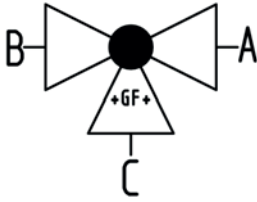
- Material: PP-H
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	200	<b>167 543 262</b>	<b>167 543 272</b>	0.170
25	20	10	470	<b>167 543 263</b>	<b>167 543 273</b>	0.245
32	25	10	793	<b>167 543 264</b>	<b>167 543 274</b>	0.372
40	32	10	1290	<b>167 543 265</b>	<b>167 543 275</b>	0.622
50	40	10	1910	<b>167 543 266</b>	<b>167 543 276</b>	0.939
63	50	10	3100	<b>167 543 267</b>	<b>167 543 277</b>	1.826

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M [mm]	e [mm]
20	50	146	77	72	36	25	32	45	57	28	8	6	1.9
25	58	163	97	85	43	25	39	58	67	32	8	6	2.3
32	68	178	97	98	49	25	39	58	73	36	8	6	2.9
40	84	204	128	118	59	45	54	74	90	45	9	8	3.7
50	97	237	128	135	68	45	54	74	97	51	9	8	4.6
63	124	296	152	176	88	45	66	87	116	65	9	8	5.8



**PROGEF Standard  
3-Way ball valve type 543  
Horizontal/T-port  
With butt fusion spigots long  
SDR11 metric**



**Model:**

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

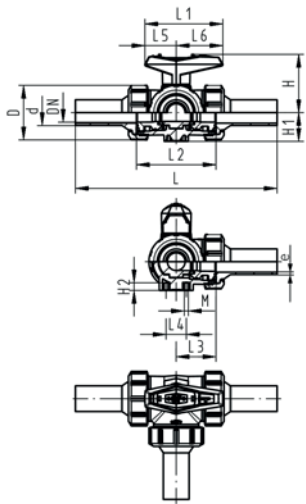
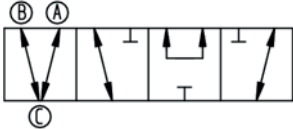
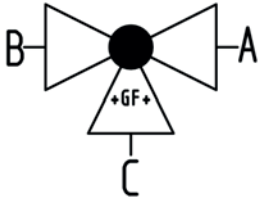
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	200	<b>167 543 302</b>	<b>167 543 312</b>	1.744
25	20	10	470	<b>167 543 303</b>	<b>167 543 313</b>	0.160
32	25	10	793	<b>167 543 304</b>	<b>167 543 314</b>	0.164
40	32	10	1290	<b>167 543 305</b>	<b>167 543 315</b>	0.236
50	40	10	1910	<b>167 543 306</b>	<b>167 543 316</b>	0.357
63	50	10	3100	<b>167 543 307</b>	<b>167 543 317</b>	0.609

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M [mm]	e [mm]
20	50	210	77	72	36	25	32	45	57	28	8	6	2.3
25	58	237	97	85	43	25	39	58	67	32	8	6	2.3
32	68	250	97	98	49	25	39	58	73	36	8	6	2.9
40	84	282	128	118	59	45	54	74	90	45	9	8	3.7
50	97	317	128	135	68	45	54	74	97	51	9	8	4.6
63	124	396	152	176	88	45	66	87	116	65	9	8	5.8





**PROGEF Standard**  
**3-Way ball valve type 543**  
**Horizontal/T-port**  
**With butt fusion spigots long**  
**PE100 SDR11 metric**



**Model:**

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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	200	<b>167 543 322</b>	<b>167 543 332</b>	0.179
25	20	10	470	<b>167 543 323</b>	<b>167 543 333</b>	0.261
32	25	10	793	<b>167 543 324</b>	<b>167 543 334</b>	0.395
40	32	10	1290	<b>167 543 325</b>	<b>167 543 335</b>	0.668
50	40	10	1910	<b>167 543 326</b>	<b>167 543 336</b>	1.019
63	50	10	3100	<b>167 543 327</b>	<b>167 543 337</b>	2.192

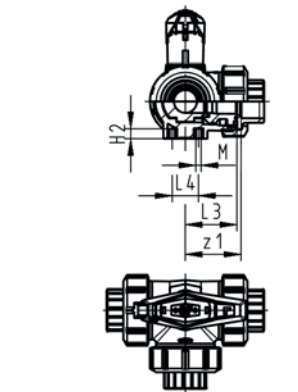
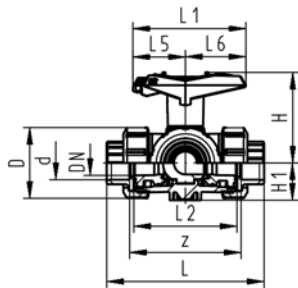
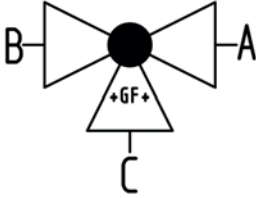
d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M [mm]	e [mm]
20	50	210	77	72	36	25	32	45	57	28	8	6	2.3
25	58	237	97	85	43	25	39	58	67	32	8	6	2.3
32	68	250	97	98	49	25	39	58	73	36	8	6	2.9
40	84	282	128	118	59	45	54	74	90	45	9	8	3.7
50	97	317	128	135	68	45	54	74	97	51	9	8	4.6
63	124	396	152	176	88	45	66	87	116	65	9	8	5.8



**PROGEF Standard**  
**3-Way ball valve type 543**  
**Horizontal/L-port**  
**With lockable handle**  
**With fusion sockets metric**

**Model:**

- Material: PP-H
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Multifunctional lever red with ratched setting 45°, lockable
- Delivery status A-C opened, see flow scheme

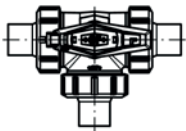
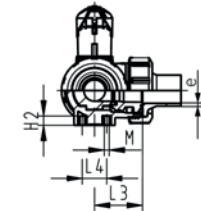
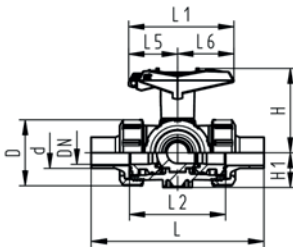
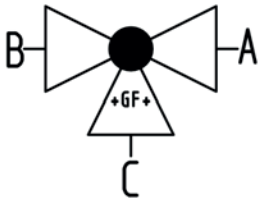


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	<b>167 543 561</b>	<b>167 543 571</b>	0.170
20	15	10	75	<b>167 543 562</b>	<b>167 543 572</b>	0.174
25	20	10	150	<b>167 543 563</b>	<b>167 543 573</b>	0.248
32	25	10	280	<b>167 543 564</b>	<b>167 543 574</b>	0.372
40	32	10	480	<b>167 543 565</b>	<b>167 543 575</b>	0.631
50	40	10	620	<b>167 543 566</b>	<b>167 543 576</b>	0.927
63	50	10	1230	<b>167 543 567</b>	<b>167 543 577</b>	1.793

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
16	50	110	87	72	36	25	42	45	79	28	8	6	82	41
20	50	112	87	72	36	25	42	45	79	28	8	6	82	41
25	58	129	108	85	43	25	50	58	88	32	8	6	97	49
32	68	146	108	98	49	25	50	58	94	36	8	6	110	55
40	84	170	141	118	59	45	66	75	113	45	9	8	132	66
50	97	193	141	135	68	45	66	75	119	51	9	8	151	76
63	124	244	165	176	88	45	78	87	141	65	9	8	188	94



**PROGEF Standard**  
**3-Way ball valve type 543**  
**Horizontal/L-port**  
**With lockable handle**  
**With butt fusion spigots IR-Plus**  
**SDR11 metric**



**Model:**

- Material: PP-H
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Multifunctional lever red with ratched setting 45°, lockable
- Delivery status A-C opened, see flow scheme

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	75	<b>167 543 602</b>	<b>167 543 612</b>	0.180
25	20	10	150	<b>167 543 603</b>	<b>167 543 613</b>	0.258
32	25	10	280	<b>167 543 604</b>	<b>167 543 614</b>	0.396
40	32	10	480	<b>167 543 605</b>	<b>167 543 615</b>	0.645
50	40	10	620	<b>167 543 606</b>	<b>167 543 616</b>	0.968
63	50	10	1230	<b>167 543 607</b>	<b>167 543 617</b>	1.876

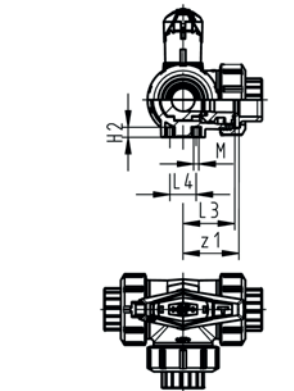
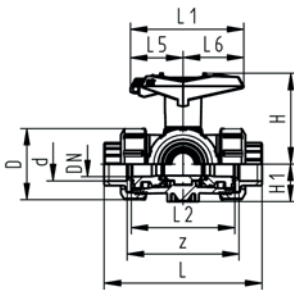
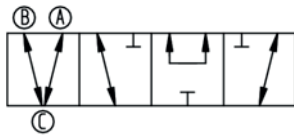
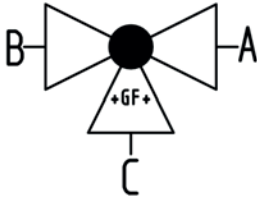
d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	e [mm]
20	50	146	87	72	36	25	42	45	79	28	8	6	1.9
25	58	163	108	85	43	25	50	58	88	32	8	6	2.3
32	68	178	108	98	49	25	50	58	94	36	8	6	2.9
40	84	204	141	118	59	45	66	75	113	45	9	8	3.7
50	97	237	141	135	68	45	66	75	119	51	9	8	4.6
63	124	296	165	176	88	45	78	87	141	65	9	8	5.8



**PROGEF Standard**  
**3-Way ball valve type 543**  
**Horizontal/T-port**  
**With lockable handle**  
**With fusion sockets metric**

**Model:**

- Material: PP-H
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Multifunctional lever red with ratched setting 45°, lockable
- Delivery status A-B-C opened, see flow scheme

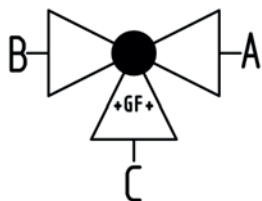


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>167 543 581</b>	<b>167 543 591</b>	0.169
20	15	10	200	<b>167 543 582</b>	<b>167 543 592</b>	0.173
25	20	10	470	<b>167 543 583</b>	<b>167 543 593</b>	0.247
32	25	10	793	<b>167 543 584</b>	<b>167 543 594</b>	0.368
40	32	10	1290	<b>167 543 585</b>	<b>167 543 595</b>	0.624
50	40	10	1910	<b>167 543 586</b>	<b>167 543 596</b>	0.913
63	50	10	3100	<b>167 543 587</b>	<b>167 543 597</b>	1.764

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
16	50	110	87	72	36	25	42	45	79	28	8	6	82	41
20	50	112	87	72	36	25	42	45	79	28	8	6	82	41
25	58	129	108	85	43	25	50	58	88	32	8	6	97	49
32	68	146	108	98	49	25	50	58	94	36	8	6	110	55
40	84	170	141	118	59	45	66	75	113	45	9	8	132	66
50	97	193	141	135	68	45	66	75	119	51	9	8	151	76
63	124	244	165	176	88	45	78	87	141	65	9	8	188	94

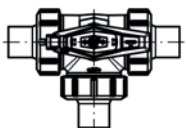
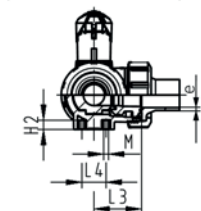
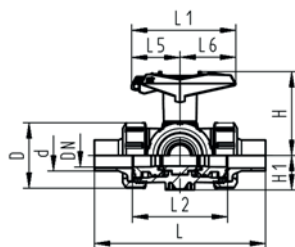
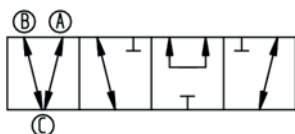


**PROGEF Standard**  
**3-Way ball valve type 543**  
**Horizontal/T-port**  
**With lockable handle**  
**With butt fusion spigots IR-Plus**  
**SDR11 metric**



**Model:**

- Material: PP-H
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Multifunctional lever red with ratched setting 45°, lockable
- Delivery status A-B-C opened, see flow scheme



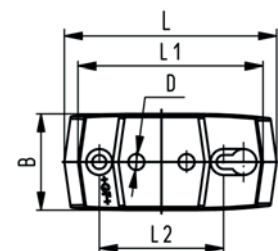
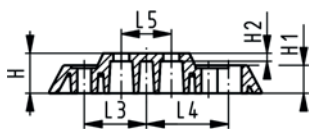
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	200	<b>167 543 622</b>	<b>167 543 632</b>	0.179
25	20	10	470	<b>167 543 623</b>	<b>167 543 633</b>	0.257
32	25	10	793	<b>167 543 624</b>	<b>167 543 634</b>	0.384
40	32	10	1290	<b>167 543 625</b>	<b>167 543 635</b>	0.637
50	40	10	1910	<b>167 543 626</b>	<b>167 543 636</b>	0.954
63	50	10	3100	<b>167 543 627</b>	<b>167 543 637</b>	1.846

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	e [mm]
20	50	146	87	72	36	25	42	45	79	28	8	6	1.9
25	58	163	108	85	43	25	50	58	88	32	8	6	2.3
32	68	178	108	98	49	25	50	58	94	36	8	6	2.9
40	84	204	141	118	59	45	66	75	113	45	9	8	3.7
50	97	237	141	135	68	45	66	75	119	51	9	8	4.6
63	124	296	165	176	88	45	78	87	141	65	9	8	5.8



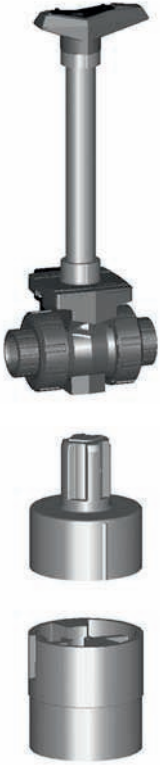
**Mounting plate 546 and 543 PP-GF (L02)**

- 2 mounting screws inclusive



d-d [mm]	Inch [inch]	DN-DN [mm]	Code	kg
16 - 32	3/8 - 1	10 - 25	<b>167 484 110</b>	0.054
40 - 63	1 1/4 - 2	32 - 50	<b>167 484 111</b>	0.066

d-d [mm]	B [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]
16 - 32	48	8	20	14	4	106	92	62	31	41	25
40 - 63	54	9	20	14	4	149	134	104	52	62	45

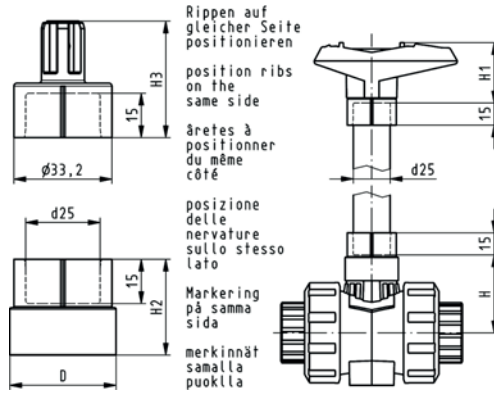


## Handle extension 546 and 543 PVC-U metric

### Model:

- For ball valve type 546 and 543
- Composed of adapter sockets for handle connection and stem connection
- PVC-U pipe in suitable length has to be obtained on site

d-d [mm]	DN-DN [mm]	Code	kg	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	D [mm]
16 - 20	10 - 15	<b>161 486 435</b>	0.030	41	52	29	36	26
25 - 32	20 - 25	<b>161 486 436</b>	0.029	50	62	32	39	36
40 - 50	32 - 40	<b>161 486 437</b>	0.045	65	76	34	44	40
- 63	- 50	<b>161 486 438</b>	0.059	84	87	37	48	44

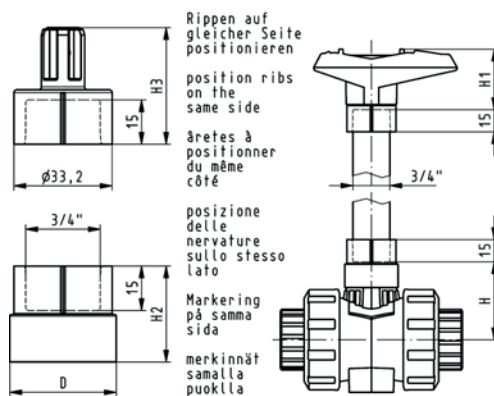


## Handle extension 546 PVC-U inch BS/ASTM

### Model:

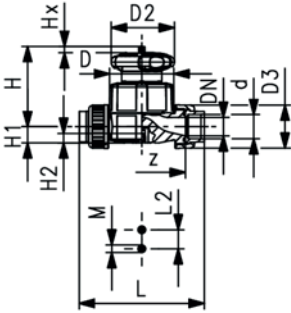
- For Ball Valve Type 546
- Includes upper and lower extension adapter, does not include 3/4" pipe

DN-DN [mm]	Inch	Code	kg	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	D [mm]
10 - 15	3/8-1/2	<b>161 486 443</b>	0.032	41	52	29	36	26
20 - 25	3/4-1	<b>161 486 444</b>	0.030	50	62	32	39	36
32 - 40	1 1/4-1 1/2	<b>161 486 445</b>	0.047	65	76	34	44	40
50 -	2	<b>161 486 446</b>	0.058	84	87	37	48	44



# Diaphragm Valves 514

## PROGEF Standard Diaphragm valve type 514 With fusion sockets metric



### Model:

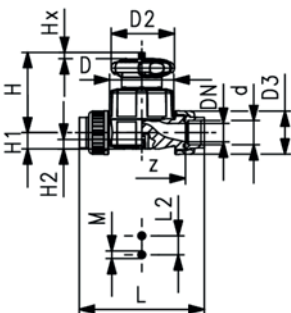
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	PTFE/EPDM Code	FPM Code	kg
20	15	10	125	<b>167 514 002</b>	<b>167 514 012</b>	<b>167 514 032</b>	<b>167 514 062</b>	0.267
25	20	10	271	<b>167 514 003</b>	<b>167 514 013</b>	<b>167 514 033</b>	<b>167 514 063</b>	0.391
32	25	10	481	<b>167 514 004</b>	<b>167 514 014</b>	<b>167 514 034</b>	<b>167 514 064</b>	1.080
40	32	10	759	<b>167 514 005</b>	<b>167 514 015</b>	<b>167 514 035</b>	<b>167 514 065</b>	1.277
50	40	10	1263	<b>167 514 006</b>	<b>167 514 016</b>	<b>167 514 036</b>	<b>167 514 066</b>	1.386
63	50	10	1728	<b>167 514 007</b>	<b>167 514 017</b>	<b>167 514 037</b>	<b>167 514 067</b>	3.030

d [mm]	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	Lift = Hx [mm]
20	65	65	48	128	25	73	14	12	M6	100	7
25	80	65	58	150	25	81	18	12	M6	118	10
32	88	87	65	162	25	107	22	12	M6	126	13
40	101	87	79	184	45	115	26	15	M8	144	15
50	117	135	91	210	45	148	32	15	M8	164	19
63	144	135	111	248	45	166	39	15	M8	194	25



## PROGEF Standard Diaphragm valve type 514 With fusion sockets PE80 metric

### Model:

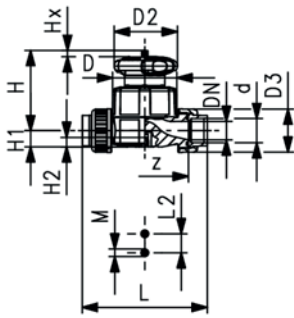
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	125	<b>167 514 212</b>	<b>167 514 232</b>	0.371
25	20	10	271	<b>167 514 213</b>	<b>167 514 233</b>	0.501
32	25	10	481	<b>167 514 214</b>	<b>167 514 234</b>	1.103
40	32	10	759	<b>167 514 215</b>	<b>167 514 235</b>	1.299
50	40	10	1263	<b>167 514 216</b>	<b>167 514 236</b>	2.289
63	50	10	1728	<b>167 514 217</b>	<b>167 514 237</b>	2.978

table continued next page



d [mm]	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	Lift = Hx [mm]
20	65	65	48	128	25	73	14	12	M6	100	7
25	80	65	58	150	25	81	18	12	M6	118	10
32	88	87	65	162	25	107	22	12	M6	126	13
40	101	87	79	184	45	115	26	15	M8	144	15
50	117	135	91	210	45	148	32	15	M8	164	19
63	144	135	111	248	45	166	39	15	M8	194	25



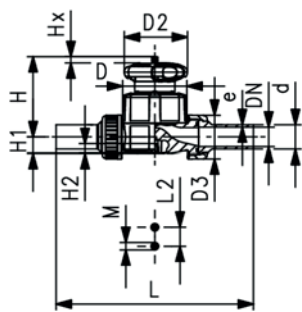
## PROGEF Standard Diaphragm valve type 514 With butt fusion spigots SDR11 metric

### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	PTFE/EPDM Code	FPM Code	kg
20	15	10	125	<b>167 514 102</b>	<b>167 514 112</b>	<b>167 514 132</b>	<b>167 514 162</b>	0.369
25	20	10	271	<b>167 514 103</b>	<b>167 514 113</b>	<b>167 514 133</b>	<b>167 514 163</b>	0.404
32	25	10	481	<b>167 514 104</b>	<b>167 514 114</b>	<b>167 514 134</b>	<b>167 514 164</b>	0.648
40	32	10	759	<b>167 514 105</b>	<b>167 514 115</b>	<b>167 514 135</b>	<b>167 514 165</b>	0.854
50	40	10	1263	<b>167 514 106</b>	<b>167 514 116</b>	<b>167 514 136</b>	<b>167 514 166</b>	2.313
63	50	10	1728	<b>167 514 107</b>	<b>167 514 117</b>	<b>167 514 137</b>	<b>167 514 167</b>	3.044

d [mm]	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]	e [mm]
20	65	65	48	196	25	73	14	12	M6	7	1.9
25	80	65	58	221	25	81	18	12	M6	10	2.3
32	88	87	65	234	25	107	22	12	M6	13	2.9
40	101	87	79	260	45	115	26	15	M8	15	3.7
50	117	135	91	284	45	148	32	15	M8	19	4.6
63	144	135	111	321	45	166	39	15	M8	25	5.8





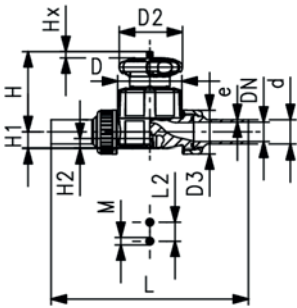
## PROGEF Standard Diaphragm valve type 514 With butt and electro fusion ends PE100 SDR11 metric

### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg	
20	15	10	125	<b>167 514 312</b>	<b>167 514 332</b>	0.381	
25	20	10	271	<b>167 514 313</b>	<b>167 514 333</b>	0.513	
32	25	10	481	<b>167 514 314</b>	<b>167 514 334</b>	1.127	
40	32	10	759	<b>167 514 315</b>	<b>167 514 335</b>	1.337	
50	40	10	1263	<b>167 514 316</b>	<b>167 514 336</b>	2.359	
63	50	10	1728	<b>167 514 317</b>	<b>167 514 337</b>	3.088	

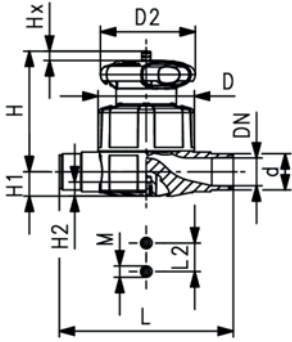
d [mm]	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]	e [mm]	
20	65	65	48	196	25	73	14	12	M6	7	1,9	
25	80	65	58	221	25	81	18	12	M6	10	2,3	
32	88	87	65	234	25	107	22	12	M6	13	2,9	
40	101	87	79	260	45	115	26	15	M8	15	3,7	
50	117	135	91	284	45	148	32	15	M8	19	4,6	
63	144	135	111	321	45	166	39	15	M8	25	5,8	

# Diaphragm Valves 515

## PROGEF Standard

### Diaphragm valve type 515

#### With socket fusion spigots metric



#### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Overall length EN 558

#### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	PTFE/EPDM Code	FPM Code	kg
20	15	10	125	167 515 002	167 515 012	167 515 032	167 515 062	0.298
25	20	10	271	167 515 003	167 515 013	167 515 033	167 515 063	0.293
32	25	10	481	167 515 004	167 515 014	167 515 034	167 515 064	0.949
40	32	10	759	167 515 005	167 515 015	167 515 035	167 515 065	1.108
50	40	10	1263	167 515 006	167 515 016	167 515 036	167 515 066	2.057
63	50	10	1728	167 515 007	167 515 017	167 515 037	167 515 067	2.604

d [mm]	D [mm]	D2 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]	e [mm]
20	65	65	124	25	73	14	12	M6	7	1.9
25	80	65	144	25	81	18	12	M6	10	2.3
32	88	87	154	25	107	22	12	M6	13	2.9
40	101	87	174	45	115	26	15	M8	15	3.7
50	117	135	194	45	148	32	15	M8	19	4.6
63	144	135	223	45	166	39	15	M8	25	5.8



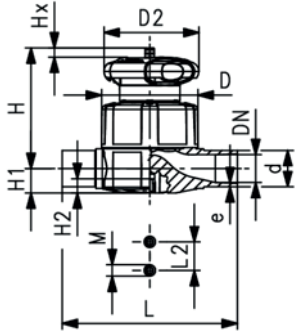
## PROGEF Standard Diaphragm valve type 515 With butt fusion spigots SDR11 metric

### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	PTFE/EPDM Code	FPM Code	kg
20	15	10	125	<b>167 515 102</b>	<b>167 515 112</b>	<b>167 515 132</b>	<b>167 515 162</b>	0.297
25	20	10	271	<b>167 515 103</b>	<b>167 515 113</b>	<b>167 515 133</b>	<b>167 515 163</b>	0.380
32	25	10	481	<b>167 515 104</b>	<b>167 515 114</b>	<b>167 515 134</b>	<b>167 515 164</b>	0.947
40	32	10	759	<b>167 515 105</b>	<b>167 515 115</b>	<b>167 515 135</b>	<b>167 515 165</b>	1.104
50	40	10	1263	<b>167 515 106</b>	<b>167 515 116</b>	<b>167 515 136</b>	<b>167 515 166</b>	2.052
63	50	10	1728	<b>167 515 107</b>	<b>167 515 117</b>	<b>167 515 137</b>	<b>167 515 167</b>	2.601

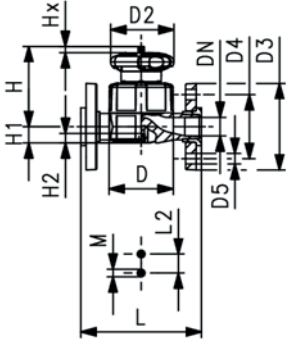
d [mm]	D [mm]	D2 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]	e [mm]
20	65	65	124	25	73	14	12	M6	7	1.9
25	80	65	144	25	81	18	12	M6	10	2.3
32	88	87	155	25	107	22	12	M6	13	2.9
40	101	87	176	45	115	26	15	M8	15	3.7
50	117	135	193	45	148	32	15	M8	19	4.6
63	144	135	223	45	166	39	15	M8	25	5.8

# Diaphragm Valves 517

## PROGEF Standard

### Diaphragm valve type 517

#### With backing flanges PP-V metric/BS



#### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10
- Flat sealing faces/serrated

#### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	PTFE/EPDM Code	FPM Code	kg
20	15	10	125	<b>167 517 102</b>	<b>167 517 112</b>	<b>167 517 132</b>	<b>167 517 162</b>	0.480
25	20	10	271	<b>167 517 103</b>	<b>167 517 113</b>	<b>167 517 133</b>	<b>167 517 163</b>	0.628
32	25	10	481	<b>167 517 104</b>	<b>167 517 114</b>	<b>167 517 134</b>	<b>167 517 164</b>	1.296
40	32	10	759	<b>167 517 105</b>	<b>167 517 115</b>	<b>167 517 135</b>	<b>167 517 165</b>	1.640
50	40	10	1263	<b>167 517 106</b>	<b>167 517 116</b>	<b>167 517 136</b>	<b>167 517 166</b>	2.601
63	50	10	1728	<b>167 517 107</b>	<b>167 517 117</b>	<b>167 517 137</b>	<b>167 517 167</b>	3.544

d [mm]	D [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]
20	65	65	95	65	14	130	25	73	14	12	M6	7
25	80	65	105	75	14	150	25	81	18	12	M6	10
32	88	87	115	85	14	160	25	107	22	12	M6	13
40	101	87	140	100	18	180	45	115	26	15	M8	15
50	117	135	150	110	18	200	45	148	32	15	M8	19
63	144	135	165	125	18	230	45	166	39	15	M8	25



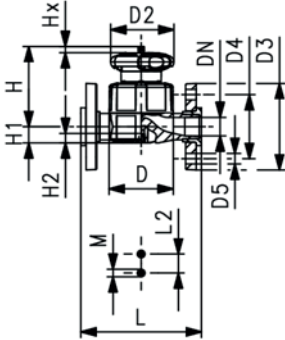
## PROGEF Standard Diaphragm valve type 517 With backing flanges PP-V Inch ANSI

### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- Flat sealing faces/serrated

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
½	15	10	125	<b>167 517 712</b>	<b>167 517 732</b>	0.490
¾	20	10	271	<b>167 517 713</b>	<b>167 517 733</b>	0.640
1	25	10	481	<b>167 517 714</b>	<b>167 517 734</b>	1.316
1 ¼	32	10	759	<b>167 517 715</b>	<b>167 517 735</b>	1.660
1 ½	40	10	1263	<b>167 517 716</b>	<b>167 517 736</b>	2.631
2	50	10	1728	<b>167 517 717</b>	<b>167 517 737</b>	3.572

Inch	D [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]
½	65	65	95	60	16	130	25	73	14	12	M6	7
¾	80	65	105	70	16	150	25	81	18	12	M6	10
1	88	87	115	79	16	160	25	107	22	12	M6	13
1 ¼	101	87	140	89	16	180	45	115	26	15	M8	15
1 ½	117	135	150	98	16	200	45	148	32	15	M8	19
2	144	135	165	121	19	230	45	166	39	15	M8	25



## PROGEF Standard Diaphragm valve type 317 With backing flanges PP-V Inch ANSI

### Model:

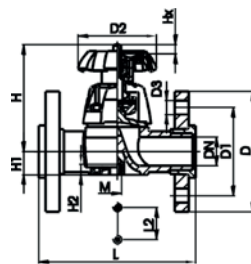
- Material: PP-H
- Jointing faces serrated
- With PP-V backing flanges DN 15-65
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

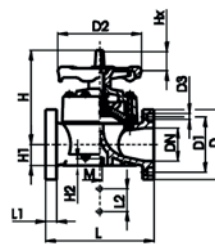
- Handwheel with built in locking mechanism
- \* With PP fixed flanges, jointing faces flat

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE with EPDM supporting di- aphragm Code	NBR Code	kg
2 1/2	65	10	992	<b>167 317 523</b>	<b>167 317 538</b>		4.000
* 3	80	10	1700	<b>167 317 024</b>	<b>167 317 039</b>	<b>167 317 009</b>	7.954
* 4	100	10	2700	<b>167 317 325</b>	<b>167 317 340</b>	<b>167 317 310</b>	11.360
* 6	150	7	6033	<b>167 317 027</b>	<b>167 317 042</b>	<b>167 317 012</b>	25.000

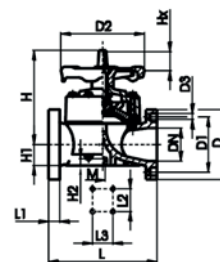
Inch	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	AL	Lift = Hx [mm]
2 1/2	185	140	152	19	290		70		210	46	15	M8	4	35
* 3	200	160	270	18	310	35	120		265	57	23	M12	8	40
* 4	225	190	270	19	350	38	120		304	69	23	M12	8	50
* 6	282	241	400	23	480	29	100	200	437	108	23	M12	8	70



DN 15-65



DN 80-100



DN 150



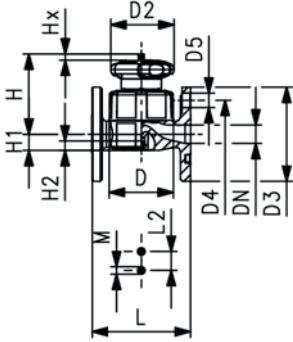
## PROGEF Standard Diaphragm valve type 517 With fixed flanges PP-H JIS

### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Connecting dimension: JIS B2238/39 10K
- Flat sealing faces/serrated

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10	125	<b>167 517 912</b>	<b>167 517 932</b>	0.434
3/4	20	10	271	<b>167 517 913</b>	<b>167 517 933</b>	0.514
1	25	10	481	<b>167 517 914</b>	<b>167 517 934</b>	1.168
1 1/4	32	10	759	<b>167 517 915</b>	<b>167 517 935</b>	1.462
1 1/2	40	10	1263	<b>167 517 916</b>	<b>167 517 936</b>	2.449
2	50	10	1728	<b>167 517 917</b>	<b>167 517 937</b>	3.082

Inch	D [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]
1/2	65	65	95	70	15	110	25	73	14	12	M6	7
3/4	80	65	100	75	15	120	25	81	18	12	M6	10
1	88	87	125	90	19	130	25	107	22	12	M6	13
1 1/4	101	87	135	100	19	180	45	115	26	15	M8	15
1 1/2	117	135	140	105	19	180	45	148	32	15	M8	19
2	144	135	155	120	19	210	45	166	39	15	M8	25

# Diaphragm Valves 519

## PROGEF Standard Diaphragm valve type 519 With butt fusion spigots metric

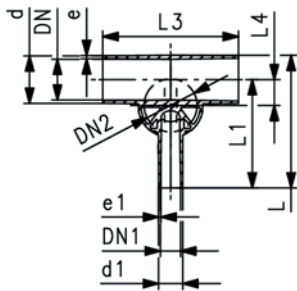
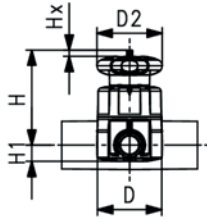


### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Smallest possible dead space

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches



d [mm]	d1 [mm]	Valve Size d [mm]	DN [mm]	DN1 [mm]	DN2 [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	20	20	15	15	15	10	57	167 519 101	167 519 301	0.321
25	20	25	20	15	20	10	89	167 519 103	167 519 303	0.397
25	25	25	20	20	20	10	118	167 519 104	167 519 304	0.399
32	20	25	25	15	20	10	80	167 519 107	167 519 307	0.424
32	25	25	25	20	20	10	105	167 519 108	167 519 308	0.426
32	32	32	25	25	25	10	231	167 519 109	167 519 309	0.980
40	20	32	32	15	25	10	85	167 519 112	167 519 312	1.008
50	20	25	40	15	20	10	86	167 519 118	167 519 318	0.485
50	25	32	40	20	25	10	160	167 519 119	167 519 319	1.054
50	32	32	40	25	25	10	206	167 519 120	167 519 320	1.056
63	20	25	50	15	20	10	84	167 519 125	167 519 325	0.524
63	25	32	50	20	25	10	150	167 519 126	167 519 326	1.097
63	32	32	50	25	25	10	184	167 519 127	167 519 327	1.100

d [mm]	D [mm]	D2 [mm]	L [mm]	L1 [mm]	L3 [mm]	L4 [mm]	H [mm]	Lift = Hx [mm]	e [mm]	e1 [mm]
20	65	65	117	96	162	12	75	7	1.9	1.9
25	80	65	133	108	162	16	80	10	2.3	1.9
25	80	65	133	108	162	16	80	10	2.3	2.3
32	80	65	142	120	162	19	84	10	2.9	1.9
32	80	65	142	120	162	19	84	10	2.9	2.3
32	88	87	145	120	160	19	107	13	2.9	2.9
40	88	87	149	128	180	23	115	13	3.7	1.9
50	80	65	160	134	180	27	97	10	4.6	1.9
50	88	87	160	134	180	28	120	13	4.6	2.3
50	88	87	160	134	180	28	120	13	4.6	2.9
63	80	65	177	144	180	33	104	10	5.8	1.9
63	88	87	177	144	180	35	127	13	5.8	2.3
63	88	87	177	144	180	35	127	13	5.8	2.9

## Electrical feedback module I40/I41 With limit switches Ag Ni or AU



### Model:

- Accessory to hand operated diaphragm valve 514 - 519
- No height increase
- Easy, fast and safe installation
- Self adjusting mechanism
- Including Plug 3P+E / Protection: IP65

d-d [mm]	DN-DN [mm]	Size	Ag Ni Code	AU Code	kg
10 - 25	10 - 20	1	198 151 335	198 151 336	0.120
32 - 40	25 - 32	2	198 151 337	198 151 338	0.101
50 - 63	40 - 50	3	198 151 339	198 151 340	0.120



# Butterfly valves

## PROGEF Standard

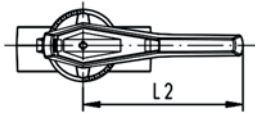
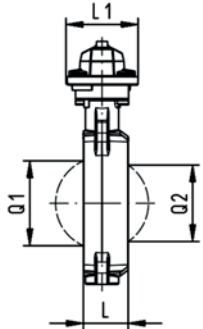
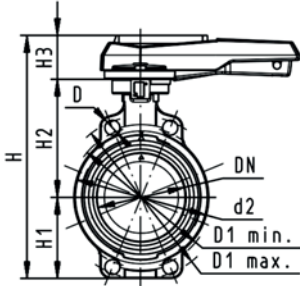
### Butterfly valve type 567

#### Hand lever with ratchet settings



#### Model:

- Material: PP-H, DN350-DN600 material PP-R
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Up to DN 300: Overall length according to EN558 (DN 50-200: line 25, DN250, 300 line 16), ISO 5752
- We recommend for the dimensions DN250 and DN300 only 6 bar maximum system pressure for the hand lever version



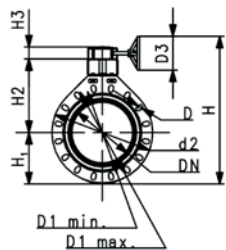
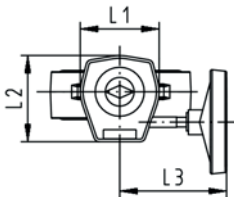
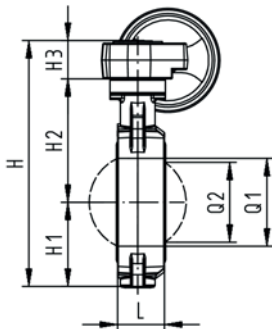
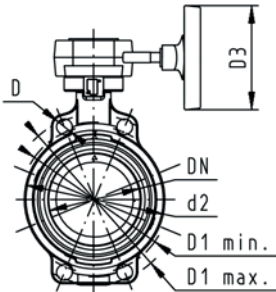
d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	<b>167 567 002</b>	<b>167 567 022</b>	<b>167 567 202</b>	1.170
75	65	2 ½	10	2200	<b>167 567 003</b>	<b>167 567 023</b>	<b>167 567 203</b>	1.254
90	80	3	10	3000	<b>167 567 004</b>	<b>167 567 024</b>	<b>167 567 204</b>	1.384
110	100	4	10	6500	<b>167 567 005</b>	<b>167 567 025</b>	<b>167 567 205</b>	1.961
140	125	5	10	11500	<b>167 567 006</b>	<b>167 567 026</b>	<b>167 567 206</b>	2.367
160	150	6	10	16600	<b>167 567 007</b>	<b>167 567 027</b>	<b>167 567 207</b>	3.741
225	200	8	10	39600	<b>167 567 008</b>	<b>167 567 028</b>	<b>167 567 208</b>	5.545
280	250	10	8	55200	<b>167 567 009</b>	<b>167 567 029</b>	<b>167 567 209</b>	11.061
315	300	12	8	80000	<b>167 567 010</b>	<b>167 567 030</b>	<b>167 567 210</b>	16.548

d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	19	120.0	125.0	104	264	77	134	54	45	106	205	40	
75	19	139.7	145.0	115	277	83	140	54	46	106	205	54	35
90	19	150.0	160.0	131	289	89	146	54	49	106	205	67	50
110	19	175.0	190.5	161	325	104	167	55	56	106	255	88	74
140	23	210.0	215.9	187	352	117	181	55	64	106	255	113	97
160	24	241.3	241.3	215	373	130	189	55	72	106	255	139	123
225	23	290.0	295.0	267	435	158	210	67	73	140	408	178	169
280	25	353.0	362.0	329	554	205	264	85	113	149	408	210	207
315	25	400.0	432.0	379	598	228	285	85	113	149	408	256	253

# PROGEF Standard Butterfly valve type 567 Reduction gear with handwheel

## Model:

- Material: PP-H, DN350-DN600 material PP-R
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Up to DN 300: Overall length according to EN558 (DN 50-200: line 25, DN250, 300 line 16), ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	<b>167 567 042</b>	<b>167 567 062</b>	<b>167 567 242</b>	3.003
75	65	2 ½	10	2200	<b>167 567 043</b>	<b>167 567 063</b>	<b>167 567 243</b>	2.781
90	80	3	10	3000	<b>167 567 044</b>	<b>167 567 064</b>	<b>167 567 244</b>	3.301
110	100	4	10	6500	<b>167 567 045</b>	<b>167 567 065</b>	<b>167 567 245</b>	3.736
140	125	5	10	11500	<b>167 567 046</b>	<b>167 567 066</b>	<b>167 567 246</b>	2.770
160	150	6	10	16600	<b>167 567 047</b>	<b>167 567 067</b>	<b>167 567 247</b>	4.969
225	200	8	10	39600	<b>167 567 048</b>	<b>167 567 068</b>	<b>167 567 248</b>	8.538
280	250	10	8	51000	<b>167 567 049</b>	<b>167 567 069</b>	<b>167 567 249</b>	12.884
315	300	12	8	73000	<b>167 567 050</b>	<b>167 567 070</b>	<b>167 567 250</b>	16.442
355	350	14	6	90000	<b>167 567 051</b>	<b>167 567 071</b>		40.000
400	400	16	6	115000	<b>167 567 052</b>	<b>167 567 072</b>		50.000
450	450	18	5	155000	<b>167 567 053</b>	<b>167 567 073</b>		70.000
500	500	20	4	204000	<b>167 567 054</b>	<b>167 567 074</b>		90.000
630	600	24	4	265000	<b>167 567 055</b>	<b>167 567 075</b>		125.000

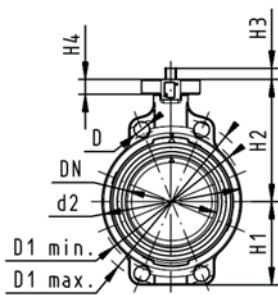
d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	D3 [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	19	120	125	104	150	77	134	50	45	110	120	155	40	
75	19	140	145	115	150	83	140	50	46	110	120	155	54	35
90	19	150	160	131	150	89	146	50	49	110	120	155	67	50
110	19	175	191	160	150	104	167	50	56	110	120	155	88	74
140	23	210	216	187	150	117	181	50	64	110	120	155	113	97
160	24	241	241	215	150	130	189	50	72	110	120	155	139	123
225	23	290	295	267	150	158	210	50	73	110	120	155	178	169
280	25	353	362	329	200	205	264	55	113	130	140	200	210	207
315	25	400	432	379	200	228	285	55	113	130	140	200	256	253
355	29	445	477	535	200	268	410	69	129	180	168	218	325	305
400	29	510	540	595	200	300	435	69	169	180	195	218	353	350
450	32	565	578	635	250	320	520	81	179	220	195	240	393	390
500	32	620	635	700	350	350	550	94	190	220	226	260	444	440
630	35	725	750	813	350	420	610	94	209	220	260	260	530	527



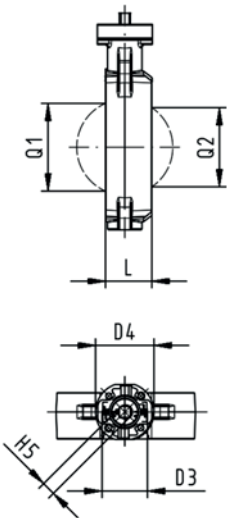
## Butterfly valve type 567 PP-H Bare shaft

### Model:

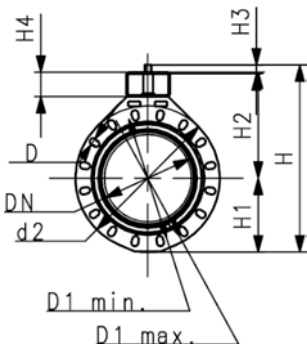
- Material: PP-H, DN350-DN600 material PP-R
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Up to DN 300: Overall length according to EN558 (DN 50-200: line 25, DN250, 300 line 16), ISO 5752
- Interface F07 for the dimensions DN50-200 according to DIN/ISO 5211
- Interface F10 for the dimensions DN250-300 according to DIN/ISO 5211
- Interface F12 for the Dimensions DN350-400 according to DIN/ISO 5211
- Interface F14 for the Dimensions DN450-600 according to DIN/ISO 5211



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	167 567 802	167 567 822	167 567 840	0.699
75	65	2 ½	10	2200	167 567 803	167 567 823	167 567 841	0.793
90	80	3	10	3000	167 567 804	167 567 824	167 567 842	0.913
110	100	4	10	6500	167 567 805	167 567 825	167 567 843	1.409
140	125	5	10	11500	167 567 806	167 567 826	167 567 844	1.831
160	150	6	10	16600	167 567 807	167 567 827	167 567 845	2.641
225	200	8	10	39600	167 567 808	167 567 828	167 567 846	4.110
280	250	10	8	51000	167 567 809	167 567 829	167 567 847	9.412
315	300	12	8	73000	167 567 810	167 567 830	167 567 848	13.054
355	350	14	6	90000	167 567 811	167 567 831		35.000
400	400	16	6	115000	167 567 812	167 567 832		45.000
450	450	18	5	155000	167 567 813	167 567 833		60.000
500	500	20	4	204000	167 567 814	167 567 834		75.000
630	600	24	4	265000	167 567 815	167 567 835		110.000



d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	D3 [mm]	D4 [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	Q1 [mm]	Q2 [mm]
63	19	120	125	104	70	90	77	134	27	23	11	45	40	
75	19	140	145	115	70	90	83	140	27	23	11	46	54	35
90	19	150	160	131	70	90	89	146	27	23	11	49	67	50
110	19	175	191	161	70	90	104	167	16	23	14	56	88	74
140	23	210	216	187	70	90	117	181	16	23	14	64	113	97
160	24	241	241	215	70	90	130	189	19	23	17	72	139	123
225	23	290	295	267	70	90	158	210	19	23	17	73	178	169
280	25	353	362	329	102	125	205	264	40	23	22	113	210	207
315	25	400	432	379	102	125	228	285	40	23	22	113	256	253
355	29	445	477	535	125	180	268	410	31	100	27	129	325	305
400	29	510	540	595	125	180	300	435	31	100	27	169	353	350
450	32	565	578	635	140	220	320	520	35	120	36	179	393	390
500	32	620	635	700	140	220	350	550	35	120	36	190	444	440
630	35	725	750	813	140	220	420	610	35	120	36	209	530	527





## Integrated position indicator Automatic AU

Size	DN-DN [mm]	Code	kg
1	50 - 80	<b>161 486 858</b>	0.072
2	100 - 125	<b>161 486 304</b>	0.055
3	150 - 200	<b>161 486 009</b>	0.063



## Integrated position indicator Automatic AG NI

Size	DN-DN [mm]	Code	kg
1	50 - 80	<b>161 486 859</b>	0.063
2	100 - 125	<b>161 486 305</b>	0.068
3	150 - 200	<b>161 486 010</b>	0.063



## Integrated position indicator Electric Namur

Size	DN-DN [mm]	Code	kg
1	50 - 80	<b>161 486 855</b>	0.050
2	100 - 125	<b>161 486 301</b>	0.050
3	150 - 200	<b>161 486 006</b>	0.050



## Integrated position indicator Electric PNP

Size	DN-DN [mm]	Code	kg
1	50 - 80	<b>161 486 856</b>	0.056
2	100 - 125	<b>161 486 302</b>	0.056
3	150 - 200	<b>161 486 007</b>	0.056



## Integrated position indicator Electric NPN

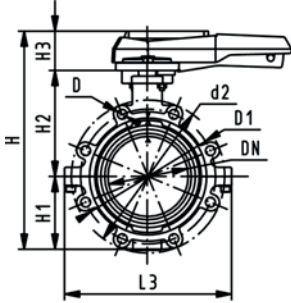
Size	DN-DN [mm]	Code	kg
1	50 - 80	<b>161 486 857</b>	0.056
2	100 - 125	<b>161 486 303</b>	0.056
3	150 - 200	<b>161 486 008</b>	0.056



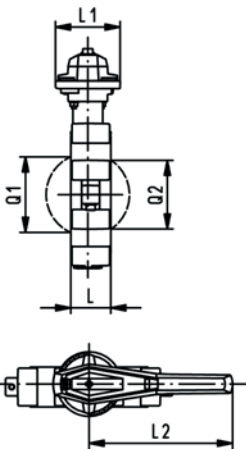
## PROGEF Standard Lugstyle butterfly valve type 568 Hand lever with ratchet settings

### Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg	
63	50	2	10	1470	167 568 002	167 568 022	167 568 202	3.374	
75	65	2 ½	10	2200	167 568 003	167 568 023	167 568 203	3.397	
90	80	3	10	3000	167 568 004	167 568 024	167 568 204	4.817	
110	100	4	10	6500	167 568 005	167 568 025	167 568 205	5.835	
140	125	5	10	11500	167 568 006	167 568 026	167 568 206	7.665	
160	150	6	10	16600	167 568 007	167 568 027	167 568 207	10.588	
225	200	8	10	39600	167 568 008	167 568 028	167 568 208	18.188	



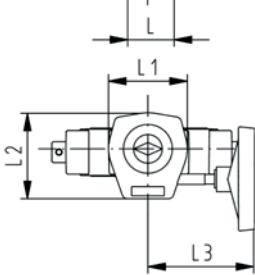
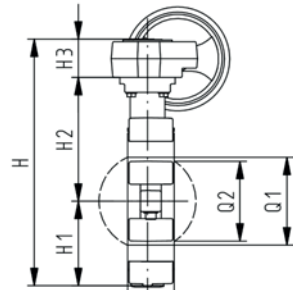
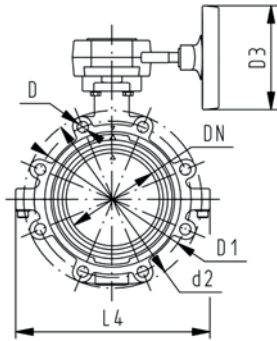
d [mm]	d2 [mm]	D	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]	
63	150	M16	125	265	77	134	54	45	106	205	150	40		
75	170	M16	145	277	83	140	54	46	106	205	160	54	35	
90	184	M16	160	289	89	146	54	49	106	205	205	67	50	
110	216	M16	180	326	104	167	55	56	106	255	244	88	74	
140	246	M16	210	353	117	181	55	64	106	255	272	113	97	
160	273	M20	240	374	130	189	55	72	106	255	297	139	123	
225	334	M20	295	435	158	210	67	73	140	408	360	178	169	



## PROGEF Standard Lugstyle butterfly valve type 568 Reduction gear with handwheel

### Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	<b>167 568 042</b>	<b>167 568 062</b>	<b>167 568 242</b>	5.093
75	65	2 ½	10	2200	<b>167 568 043</b>	<b>167 568 063</b>	<b>167 568 243</b>	5.435
90	80	3	10	3000	<b>167 568 044</b>	<b>167 568 064</b>	<b>167 568 244</b>	6.440
110	100	4	10	6500	<b>167 568 045</b>	<b>167 568 065</b>	<b>167 568 245</b>	8.239
140	125	5	10	11500	<b>167 568 046</b>	<b>167 568 066</b>	<b>167 568 246</b>	10.544
160	150	6	10	16600	<b>167 568 047</b>	<b>167 568 067</b>	<b>167 568 247</b>	12.255
225	200	8	10	39600	<b>167 568 048</b>	<b>167 568 068</b>	<b>167 568 248</b>	16.107

d [mm]	d2 [mm]	D	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	Q1 [mm]
63	150	M16	125	150	279	77	134	50	45	110	120	155	150	40
75	170	M16	145	150	291	83	140	50	46	110	120	155	160	54
90	184	M16	160	150	303	89	146	50	49	110	120	155	205	67
110	216	M16	180	150	339	104	167	50	56	110	120	155	244	88
140	246	M16	210	150	366	117	181	50	64	110	120	155	272	113
160	273	M20	240	150	387	130	189	50	72	110	120	155	297	139
225	334	M20	295	150	436	158	210	50	73	110	120	155	360	178

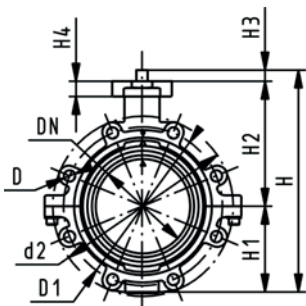
d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169



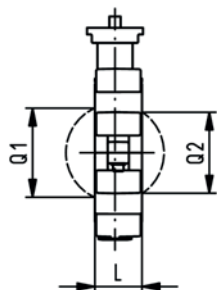
# PROGEF Standard Lugstyle butterfly valve type 568 Bare shaft

## Model:

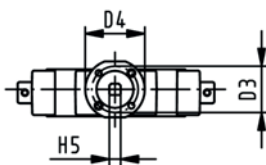
- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Interface F07 according to DIN/ISO 5211



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	167 568 802	167 568 822	167 568 840	2.833
75	65	2 ½	10	2200	167 568 803	167 568 823	167 568 841	3.175
90	80	3	10	3000	167 568 804	167 568 824	167 568 842	4.180
110	100	4	10	6500	167 568 805	167 568 825	167 568 843	5.565
140	125	5	10	11500	167 568 806	167 568 826	167 568 844	7.395
160	150	6	10	16600	167 568 807	167 568 827	167 568 845	9.179
225	200	8	10	39600	167 568 808	167 568 828	167 568 846	13.847



d [mm]	d2 [mm]	D	D1 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	Q1 [mm]	Q2 [mm]
63	150	M16	125	70	90	222	77	134	27	23	45	40	
75	170	M16	145	70	90	235	83	140	27	23	46	54	35
90	184	M16	160	70	90	247	89	146	27	23	49	67	50
110	216	M16	180	70	90	287	104	167	16	23	56	88	74
140	246	M16	210	70	90	313	117	181	16	23	64	113	97
160	273	M20	240	70	90	335	130	189	19	23	72	139	123
225	334	M20	295	70	90	387	158	210	19	23	73	178	169

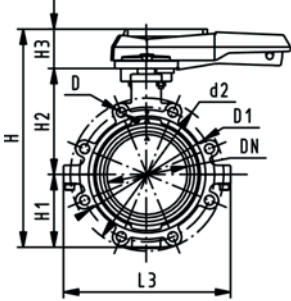




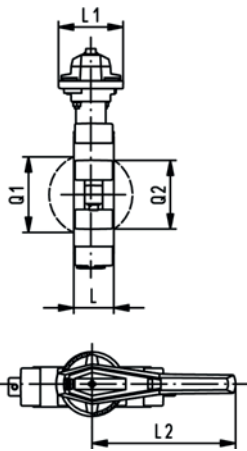
## PROGEF Standard Lugstyle butterfly valve type 568 Hand lever with ratchet settings

### Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
2	50	10	1470	<b>167 568 102</b>	<b>167 568 122</b>	<b>167 568 302</b>	3.055
2 ½	65	10	2200	<b>167 568 103</b>	<b>167 568 123</b>	<b>167 568 303</b>	3.397
3	80	10	3000	<b>167 568 104</b>	<b>167 568 124</b>	<b>167 568 304</b>	3.773
4	100	10	6500	<b>167 568 105</b>	<b>167 568 125</b>	<b>167 568 305</b>	5.835
5	125	10	11500	<b>167 568 106</b>	<b>167 568 126</b>	<b>167 568 306</b>	7.665
6	150	10	16600	<b>167 568 107</b>	<b>167 568 127</b>	<b>167 568 307</b>	9.449
8	200	10	39600	<b>167 568 108</b>	<b>167 568 128</b>	<b>167 568 308</b>	14.654



Inch	d2 [mm]	D	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	UNC 5/8	121	265	77	134	54	45	106	205	150	40	
2 ½	170	UNC 5/8	138	277	83	140	54	46	106	205	160	54	35
3	177	UNC 5/8	152	289	89	146	54	49	106	205	175	67	50
4	216	UNC 5/8	191	326	104	167	55	56	106	255	244	88	74
5	246	UNC 3/4	216	353	117	181	55	64	106	255	272	113	97
6	273	UNC 3/4	241	374	130	189	55	72	106	255	297	139	123
8	334	UNC 3/4	298	435	158	210	67	73	140	408	360	178	169

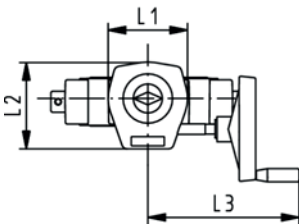
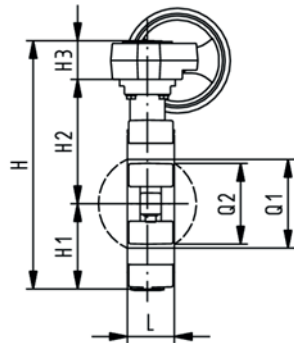
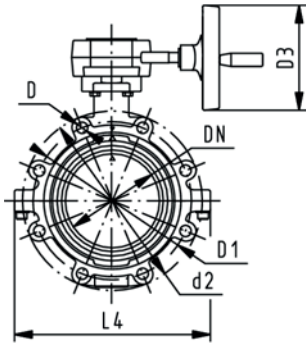




## PROGEF Standard Lugstyle butterfly valve type 568 Reduction gear with handwheel

### Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
2	50	10	1470	<b>167 568 142</b>	<b>167 568 162</b>	<b>167 568 342</b>	5.093
2 ½	65	10	2200	<b>167 568 143</b>	<b>167 568 163</b>	<b>167 568 343</b>	5.435
3	80	10	3000	<b>167 568 144</b>	<b>167 568 164</b>	<b>167 568 344</b>	5.955
4	100	10	6500	<b>167 568 145</b>	<b>167 568 165</b>	<b>167 568 345</b>	7.825
5	125	10	11500	<b>167 568 146</b>	<b>167 568 166</b>	<b>167 568 346</b>	9.655
6	150	10	16600	<b>167 568 147</b>	<b>167 568 167</b>	<b>167 568 347</b>	11.439
8	200	10	39600	<b>167 568 148</b>	<b>167 568 168</b>	<b>167 568 348</b>	16.107

Inch	d2 [mm]	D	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	Q1 [mm]
2	150	UNC 5/8	121	150	279	77	134	50	45	110	120	155	150	40
2 ½	170	UNC 5/8	138	150	291	83	140	50	46	110	120	155	160	54
3	177	UNC 5/8	152	150	303	89	146	50	49	110	120	155	175	67
4	216	UNC 5/8	191	150	339	104	167	50	56	110	120	155	244	88
5	246	UNC 3/4	216	150	366	117	181	50	64	110	120	155	272	113
6	273	UNC 3/4	241	150	387	130	189	50	72	110	120	155	297	139
8	334	UNC 3/4	298	150	436	158	210	50	73	110	120	155	360	178

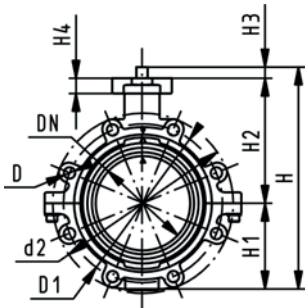
Inch	Q2 [mm]
2	
2 ½	35
3	50
4	74
5	97
6	123
8	169



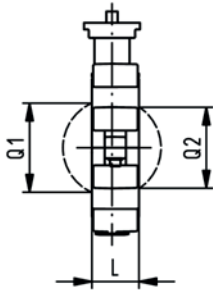
## PROGEF Standard Lugstyle butterfly valve type 568 Bare shaft

### Model:

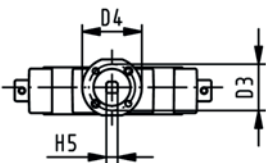
- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Interface F07 according to DIN/ISO 5211



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
2	50	10	1470	<b>167 568 902</b>	<b>167 568 922</b>	<b>167 568 942</b>	2.833
2 ½	65	10	2200	<b>167 568 903</b>	<b>167 568 923</b>	<b>167 568 943</b>	3.175
3	80	10	3000	<b>167 568 904</b>	<b>167 568 924</b>	<b>167 568 944</b>	3.551
4	100	10	6500	<b>167 568 905</b>	<b>167 568 925</b>	<b>167 568 945</b>	5.565
5	125	10	11500	<b>167 568 906</b>	<b>167 568 926</b>	<b>167 568 946</b>	7.395
6	150	10	16600	<b>167 568 907</b>	<b>167 568 927</b>	<b>167 568 947</b>	9.179
8	200	10	39600	<b>167 568 908</b>	<b>167 568 928</b>	<b>167 568 948</b>	13.847



Inch	d2 [mm]	D	D1 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	Q1 [mm]	Q2 [mm]
2	150	UNC 5/8	121	70	90	222	77	134	27	23	45	40	
2 ½	170	UNC 5/8	138	70	90	235	83	140	27	23	46	54	35
3	177	UNC 5/8	152	70	90	247	89	146	27	23	49	67	50
4	216	UNC 5/8	191	70	90	287	104	167	16	23	56	88	74
5	246	UNC 3/4	216	70	90	313	117	181	16	23	64	113	97
6	273	UNC 3/4	241	70	90	335	130	189	19	23	72	139	123
8	334	UNC 3/4	298	70	90	387	158	210	19	23	73	178	169



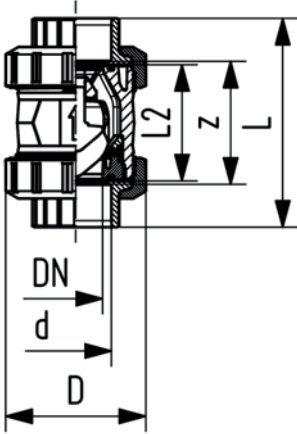
# Cone check valves

## PROGEF Standard Check valve type 561 With fusion sockets metric



### Model:

- Material: PP-H
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



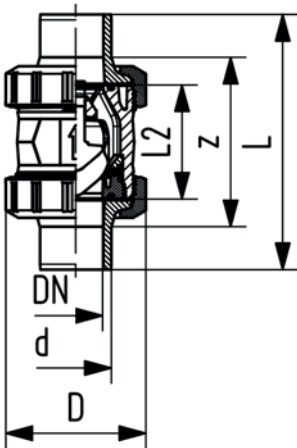
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	z [mm]
16	10	10	190	167 561 001	167 561 011	0.080	50	93	56	67
20	15	10	180	167 561 002	167 561 012	0.080	50	95	56	66
25	20	10	380	167 561 003	167 561 013	0.180	58	109	65	77
32	25	10	460	167 561 004	167 561 014	0.190	68	119	71	83
40	32	10	850	167 561 005	167 561 015	0.340	84	135	85	99
50	40	10	1080	167 561 006	167 561 016	0.480	97	147	89	105
63	50	10	1670	167 561 007	167 561 017	0.974	124	168	101	117
75	65	10	2950	167 561 008	167 561 018	2.310	166	233	136	167
90	80	10	3600	167 561 009	167 561 019	3.580	200	254	141	180
110	100	10	4150	167 561 010	167 561 020	5.930	238	301	164	215

## PROGEF Standard Check valve type 561 With socket fusion spigots metric



### Model:

- Material: PP-H
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



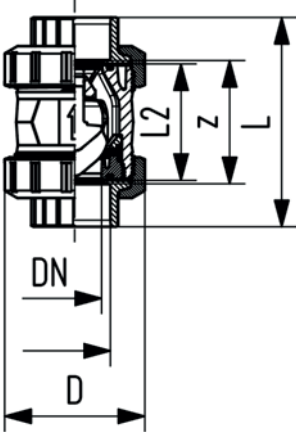
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]
16	10	10	190	167 561 041	167 561 051	0.080	50	110	56
20	15	10	180	167 561 042	167 561 052	0.090	50	120	56
25	20	10	380	167 561 043	167 561 053	0.190	58	139	65
32	25	10	460	167 561 044	167 561 054	0.200	68	150	71
40	32	10	850	167 561 045	167 561 055	0.350	84	170	85
50	40	10	1080	167 561 046	167 561 056	0.510	97	190	89
63	50	10	1670	167 561 047	167 561 057	0.950	124	220	101
75	65	10	2950	167 561 048	167 561 058	2.370	166	280	136
90	80	10	3600	167 561 049	167 561 059	3.750	200	296	141
110	100	10	4150	167 561 050	167 561 060	5.980	238	336	164



## PROGEF Standard Check valve type 561 With threaded sockets reinforced Rp

### Model:

- Material: PP-H
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



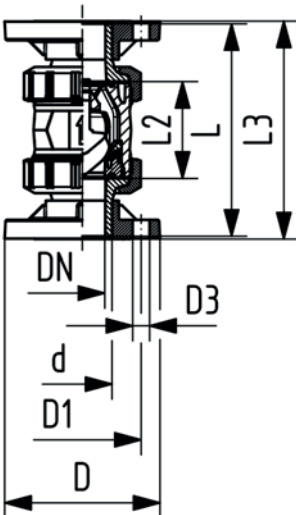
Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	z [mm]
3/8	10	10	190	167 561 021	167 561 031	0.080	50	96	56	69
1/2	15	10	180	167 561 022	167 561 032	0.090	50	99	56	67
3/4	20	10	380	167 561 023	167 561 033	0.180	58	111	65	78
1	25	10	460	167 561 024	167 561 034	0.210	68	127	71	85
1 1/4	32	10	850	167 561 025	167 561 035	0.360	84	146	85	100
1 1/2	40	10	1080	167 561 026	167 561 036	0.510	97	157	89	106
2	50	10	1670	167 561 027	167 561 037	0.920	124	183	101	121



## PROGEF Standard Check valve type 561 With fixed flanges metric

### Model:

- Material: PP-H
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360
- Installation length according to EN 558-1
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	180	167 561 182	167 561 192	0.220
25	20	10	380	167 561 183	167 561 193	0.350
32	25	10	460	167 561 184	167 561 194	0.440
40	32	10	850	167 561 185	167 561 195	0.730
50	40	10	1080	167 561 186	167 561 196	0.970
63	50	10	1670	167 561 187	167 561 197	1.600

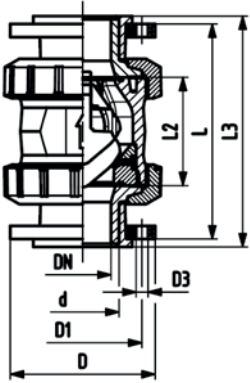
d [mm]	D [mm]	D1 [mm]	D3 [mm]	L [mm]	L2 [mm]	L3 [mm]
20	95	65	14	120	56	130
25	105	75	14	140	65	150
32	115	85	14	150	71	160
40	140	100	18	170	85	180
50	150	110	18	190	89	200
63	165	125	18	220	101	230



## PROGEF Standard Check valve type 561 With backing flanges PP-st metric

### Model:

- Material: PP-H
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	2950	<b>167 561 428</b>	<b>167 561 438</b>	4.720
90	80	10	3600	<b>167 561 429</b>	<b>167 561 439</b>	6.860
110	100	10	4150	<b>167 561 430</b>	<b>167 561 440</b>	9.300

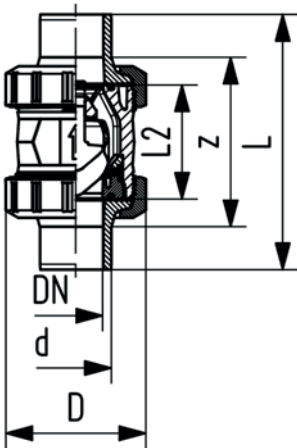
d [mm]	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M
75	166	145	18	149	85	280	270	136	290	70	64	206	M8
90	200	160	18	161	105	296	270	141	310	70	64	206	M8
110	238	180	18	178	123	336	320	164	350	120	64	256	M12



## PROGEF Standard Check valve type 561 With butt fusion spigots SDR17,6 metric

### Model:

- Material: PP-H
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



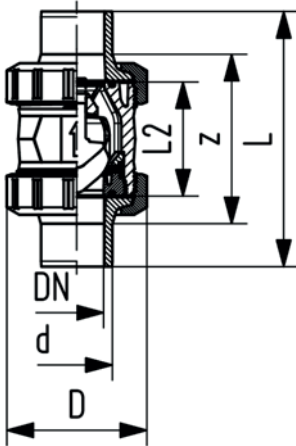
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	e [mm]
50	40	10	1080	<b>167 561 066</b>	<b>167 561 076</b>	0.510	97	191	89	2.9
63	50	10	1670	<b>167 561 067</b>	<b>167 561 077</b>	0.940	124	220	101	3.6
75	65	10	2950	<b>167 561 068</b>	<b>167 561 078</b>	2.360	166	266	136	4.7
90	80	10	3600	<b>167 561 069</b>	<b>167 561 079</b>	3.670	200	264	141	5.5
110	100	10	4150	<b>167 561 070</b>	<b>167 561 080</b>	5.820	238	301	164	6.8



## PROGEF Standard Check valve type 561 With butt fusion spigots IR-Plus SDR11 metric

### Model:

- Material: PP-H
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



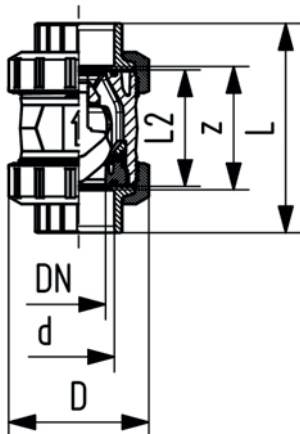
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	e [mm]
20	15	10	180	<b>167 561 082</b>	<b>167 561 092</b>	0.080	50	130	56	1.9
25	20	10	380	<b>167 561 083</b>	<b>167 561 093</b>	0.180	58	143	65	2.3
32	25	10	460	<b>167 561 084</b>	<b>167 561 094</b>	0.190	68	150	71	2.9
40	32	10	850	<b>167 561 085</b>	<b>167 561 095</b>	0.340	84	171	85	3.7
50	40	10	1080	<b>167 561 086</b>	<b>167 561 096</b>	0.490	97	191	89	4.6
63	50	10	1670	<b>167 561 087</b>	<b>167 561 097</b>	0.930	124	220	101	5.8
75	65	10	2950	<b>167 561 088</b>	<b>167 561 098</b>	2.360	166	266	136	6.8
90	80	10	3600	<b>167 561 089</b>	<b>167 561 099</b>	3.680	200	264	141	8.2
110	100	10	4150	<b>167 561 090</b>	<b>167 561 100</b>	5.830	238	301	164	10.0



## PROGEF Standard Check valve type 562 With fusion sockets metric

### Model:

- Material: PP-H
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For horizontal or vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



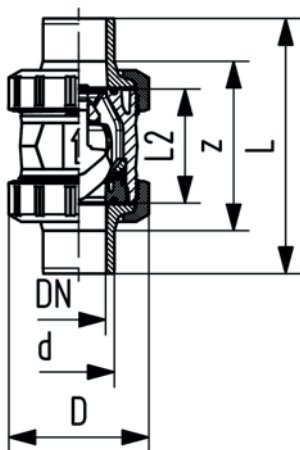
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	z [mm]
16	10	10	190	167 562 001	167 562 011	0.080	50	93	56	67
20	15	10	180	167 562 002	167 562 012	0.080	50	95	56	66
25	20	10	380	167 562 003	167 562 013	0.180	58	109	65	77
32	25	10	460	167 562 004	167 562 014	0.190	68	119	71	83
40	32	10	850	167 562 005	167 562 015	0.340	84	135	85	99
50	40	10	1080	167 562 006	167 562 016	0.480	97	147	89	105
63	50	10	1670	167 562 007	167 562 017	0.880	124	168	101	117
75	65	10	2950	167 562 008	167 562 018	2.310	166	233	136	167
90	80	10	3600	167 562 009	167 562 019	3.580	200	254	141	180
110	100	10	4150	167 562 010	167 562 020	5.930	238	301	164	215



## PROGEF Standard Check valve type 562 With socket fusion spigots metric

### Model:

- Material: PP-H
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For horizontal or vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



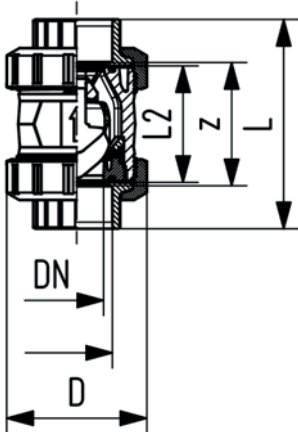
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]
16	10	10	190	167 562 041	167 562 051	0.080	50	110	56
20	15	10	180	167 562 042	167 562 052	0.090	50	120	56
25	20	10	380	167 562 043	167 562 053	0.190	58	139	65
32	25	10	460	167 562 044	167 562 054	0.200	68	150	71
40	32	10	850	167 562 045	167 562 055	0.350	84	170	85
50	40	10	1080	167 562 046	167 562 056	0.510	97	190	89
63	50	10	1670	167 562 047	167 562 057	0.950	124	220	101
75	65	10	2950	167 562 048	167 562 058	2.370	166	280	136
90	80	10	3600	167 562 049	167 562 059	3.750	200	296	141
110	100	10	4150	167 562 050	167 562 060	5.980	238	336	164



## PROGEF Standard Check valve type 562 With threaded sockets reinforced Rp

### Model:

- Material: PP-H
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For horizontal or vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



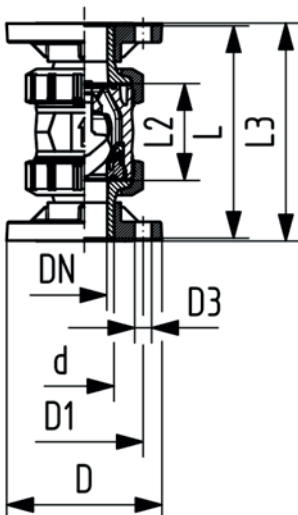
Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	z [mm]
3/8	10	10	190	<b>167 562 021</b>	<b>167 562 031</b>	0.080	50	96	56	69
1/2	15	10	180	<b>167 562 022</b>	<b>167 562 032</b>	0.090	50	99	56	67
3/4	20	10	380	<b>167 562 023</b>	<b>167 562 033</b>	0.180	58	111	65	78
1	25	10	460	<b>167 562 024</b>	<b>167 562 034</b>	0.210	68	127	71	85
1 1/4	32	10	850	<b>167 562 025</b>	<b>167 562 035</b>	0.360	84	146	85	100
1 1/2	40	10	1080	<b>167 562 026</b>	<b>167 562 036</b>	0.510	97	157	89	106
2	50	10	1670	<b>167 562 027</b>	<b>167 562 037</b>	0.920	124	183	101	121



## PROGEF Standard Check valve type 562 With fixed flanges metric

### Model:

- Material: PP-H
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For horizontal or vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360
- Installation length according to EN 558-1
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	180	<b>167 562 182</b>	<b>167 562 192</b>	0.220
25	20	10	380	<b>167 562 183</b>	<b>167 562 193</b>	0.350
32	25	10	460	<b>167 562 184</b>	<b>167 562 194</b>	0.440
40	32	10	850	<b>167 562 185</b>	<b>167 562 195</b>	0.730
50	40	10	1080	<b>167 562 186</b>	<b>167 562 196</b>	0.970
63	50	10	1670	<b>167 562 187</b>	<b>167 562 197</b>	1.600

d [mm]	D [mm]	D1 [mm]	D3 [mm]	L [mm]	L2 [mm]	L3 [mm]
20	95	65	14	120	56	130
25	105	75	14	140	65	150
32	115	85	14	150	71	160
40	140	100	18	170	85	180
50	150	110	18	190	89	200
63	165	125	18	220	101	230

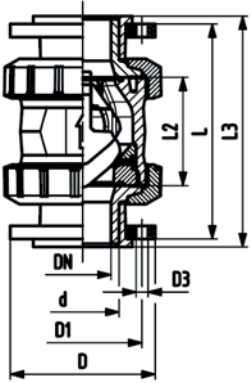




## PROGEF Standard Check valve type 562 With backing flanges PP-st metric

### Model:

- Material: PP-H
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For horizontal or vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	2950	<b>167 562 428</b>	<b>167 562 438</b>	4.720
90	80	10	3600	<b>167 562 429</b>	<b>167 562 439</b>	6.860
110	100	10	4150	<b>167 562 430</b>	<b>167 562 440</b>	9.300

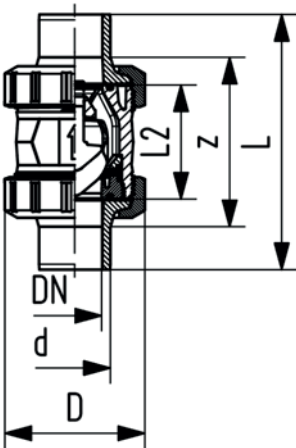
d [mm]	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M
75	166	145	18	149	85	280	270	136	290	70	64	206	M8
90	200	160	18	161	105	296	270	141	310	70	64	206	M8
110	238	180	18	178	123	336	320	164	350	120	64	256	M12



## PROGEF Standard Check valve type 562 With butt fusion spigots SDR17,6 metric

### Model:

- Material: PP-H
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For horizontal or vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



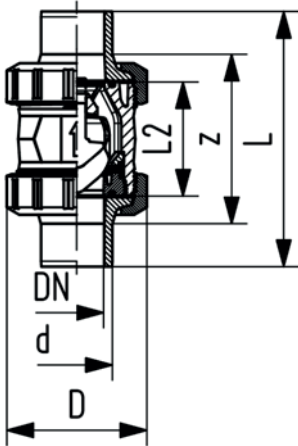
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	e [mm]
50	40	10	1080	<b>167 562 066</b>	<b>167 562 076</b>	0.510	97	191	89	2.9
63	50	10	1670	<b>167 562 067</b>	<b>167 562 077</b>	0.940	124	220	101	3.6
75	65	10	2950	<b>167 562 068</b>	<b>167 562 078</b>	2.360	166	266	136	4.7
90	80	10	3600	<b>167 562 069</b>	<b>167 562 079</b>	3.670	200	264	141	5.5
110	100	10	4150	<b>167 562 070</b>	<b>167 562 080</b>	5.820	238	301	164	6.8



## PROGEF Standard Check valve type 562 With butt fusion spigots IR-Plus SDR11 metric

### Model:

- Material: PP-H
- Spring loaded, spring made of stainless steel (1.4310)
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Vibration free even at high flow velocity
- Flow-optimized return cone, double guided
- For horizontal or vertical installation
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	e [mm]
20	15	10	180	<b>167 562 082</b>	<b>167 562 092</b>	0.080	50	130	56	1.9
25	20	10	380	<b>167 562 083</b>	<b>167 562 093</b>	0.180	58	143	65	2.3
32	25	10	460	<b>167 562 084</b>	<b>167 562 094</b>	0.190	68	150	71	2.9
40	32	10	850	<b>167 562 085</b>	<b>167 562 095</b>	0.340	84	171	85	3.7
50	40	10	1080	<b>167 562 086</b>	<b>167 562 096</b>	0.490	97	191	89	4.6
63	50	10	1670	<b>167 562 087</b>	<b>167 562 097</b>	0.930	124	220	101	5.8
75	65	10	2950	<b>167 562 088</b>	<b>167 562 098</b>	2.360	166	266	136	6.8
90	80	10	3600	<b>167 562 089</b>	<b>167 562 099</b>	3.680	200	264	141	8.2
110	100	10	4150	<b>167 562 090</b>	<b>167 562 100</b>	5.830	238	301	164	10.0

# Air release valve

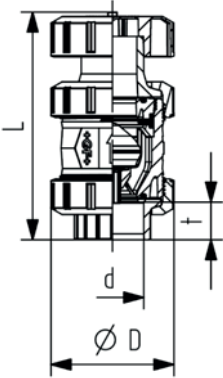
## PROGEF Standard Ventilating and bleed valve type 591 With fusion sockets metric



### Model:

- Material: PP-H
- With protection cap up to DN50 made of PP-GF, DN65-100 made of POM
- Floater made of PP-H
- Designed for easy installation and removal
- Compact installation length

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	L [mm]	t [mm]
16	10	10	167 591 001	167 591 011	0.097	50	126	14
20	15	10	167 591 002	167 591 012	0.097	50	127	15
25	20	10	167 591 003	167 591 013	0.203	58	142	16
32	25	10	167 591 004	167 591 014	0.224	68	153	18
40	32	10	167 591 005	167 591 015	0.392	84	171	19
50	40	10	167 591 006	167 591 016	0.549	97	190	21
63	50	10	167 591 007	167 591 017	0.986	124	219	28
75	65	10	167 591 008	167 591 018	2.310	166	256	29
90	80	10	167 591 009	167 591 019	3.580	200	275	33
110	100	10	167 591 010	167 591 020	5.930	238	318	39



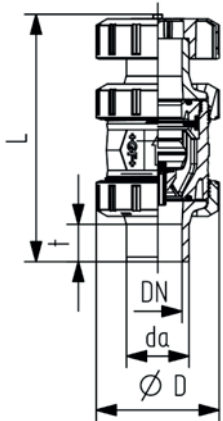
## PROGEF Standard Ventilating and bleed valve type 591 With socket fusion spigots metric



### Model:

- Material: PP-H
- With protection cap up to DN50 made of PP-GF, DN65-100 made of POM
- Floater made of PP-H
- Designed for easy installation and removal
- Compact installation length

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	L [mm]	t [mm]
16	10	10	167 591 041	167 591 051	0.097	50	135	13
20	15	10	167 591 042	167 591 052	0.107	50	140	14
25	20	10	167 591 043	167 591 053	0.213	58	157	16
32	25	10	167 591 044	167 591 054	0.234	68	168	18
40	32	10	167 591 045	167 591 055	0.402	84	189	20
50	40	10	167 591 046	167 591 056	0.579	97	211	23
63	50	10	167 591 047	167 591 057	1.056	124	245	27
75	65	10	167 591 048	167 591 058	2.370	166	280	48
90	80	10	167 591 049	167 591 059	3.750	200	296	49
110	100	10	167 591 050	167 591 060	5.980	238	336	54

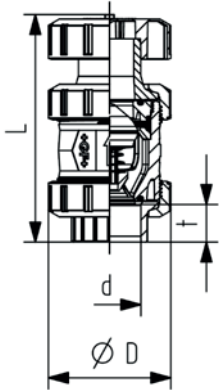




## PROGEF Standard Ventilating valve type 595 With fusion sockets metric

### Model:

- Material: PP-H
- With protection cap up to DN50 made of PP-GF, DN65-100 made of POM
- Spring loaded, spring made of NIMONIC 90, HALAR coated
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Compact installation length



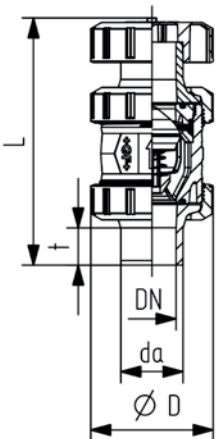
d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	L [mm]	t [mm]
16	10	10	167 595 001	167 595 011	0.097	50	126	14
20	15	10	167 595 002	167 595 012	0.097	50	127	15
25	20	10	167 595 003	167 595 013	0.203	58	142	16
32	25	10	167 595 004	167 595 014	0.224	68	153	18
40	32	10	167 595 005	167 595 015	0.392	84	171	19
50	40	10	167 595 006	167 595 016	0.549	97	190	21
63	50	10	167 595 007	167 595 017	0.986	124	219	28
75	65	10	167 595 008	167 595 018	2.310	166	256	29
90	80	10	167 595 009	167 595 019	3.580	200	275	33
110	100	10	167 595 010	167 595 020	5.930	238	318	39



## PROGEF Standard Ventilating valve type 595 With socket fusion spigots metric

### Model:

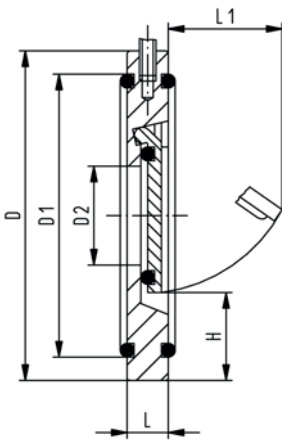
- Material: PP-H
- With protection cap up to DN50 made of PP-GF, DN65-100 made of POM
- Spring loaded, spring made of NIMONIC 90, HALAR coated
- Spring available in other materials, see spare parts
- Designed for easy installation and removal
- Compact installation length



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	L [mm]	t [mm]
16	10	10	167 595 041	167 595 051	0.097	50	135	13
20	15	10	167 595 042	167 595 052	0.107	50	140	14
25	20	10	167 595 043	167 595 053	0.213	58	157	16
32	25	10	167 595 044	167 595 054	0.234	68	168	18
40	32	10	167 595 045	167 595 055	0.402	84	189	20
50	40	10	167 595 046	167 595 056	0.579	97	211	23
63	50	10	167 595 047	167 595 057	1.056	124	245	27
75	65	10	167 595 048	167 595 058	2.370	166	280	48
90	80	10	167 595 049	167 595 059	3.750	200	296	49
110	100	10	167 595 050	167 595 060	5.980	238	336	54

# Wafer Check Valves 369

## PROGEF Standard Wafer check valve type 369 Without spring



### Model:

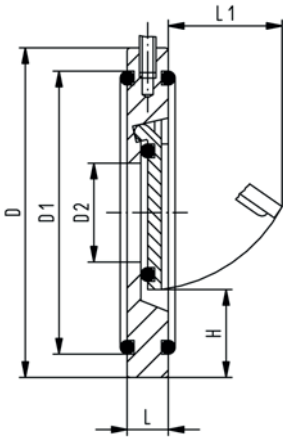
- Material: PP-H
- Supporting eyelets for simple fitting
- Suitable for vertical and horizontal mounting

### Installation instruction:

- Installation between ISO/DIN (all dimensions) and ANSI flange adaptors (all except DN32 and DN125)
- It is necessary to use a special outlet flange adaptor PP or PE on the outgoing side of the wafer check valve
- Centering by body diameter
- Sealing with special flange gasket (except DN32, o-ring)
- A stabilizing zone of at least 5 times nominal diameter (DN) should be provided before and after the wafer check valve (10 times DN is recommended)
- No direct installation on pump flange or following bend allowed
- Wafer check valves without reset spring are not recommended for pulsating flows (production of noise)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
40	32	6	167 369 002	167 369 022	0.084
50	40	10	167 369 003	167 369 023	0.110
63	50	10	167 369 004	167 369 024	0.159
75	65	10	167 369 005	167 369 025	0.232
90	80	10	167 369 006	167 369 026	0.264
110	100	10	167 369 007	167 369 027	0.405
140	125	10	167 369 009	167 369 029	0.594
160	150	6	167 369 010	167 369 030	0.805
225	200	6	167 369 011	167 369 031	1.400
280	250	6	167 369 012	167 369 032	2.400
315	300	6	167 369 013	167 369 033	3.520

d [mm]	D [mm]	D1 [mm]	D2 [mm]	H [mm]	L [mm]	L1 [mm]	Opening pressure vertical [mbar]	Opening pressure hor- izontal [mbar]	Minimum water col- umn for sealing [m]
40	85	59	18	25	15	22	10	1	3.0
50	95	72	22	28	16	27	10	1	3.0
63	109	86	32	29	18	40	10	1	3.0
75	129	105	40	31	20	55	10	1	3.0
90	144	119	54	32	20	67	10	1	3.0
110	164	146	70	31	23	67	10	1	3.0
140	195	173	92	35	23	94	10	1	3.0
160	220	197	105	42	26	100	10	1	3.0
225	275	255	154	38	35	152	18	1	3.0
280	330	312	192	41	40	180	18	1	3.0
315	380	363	227	41	45	215	18	1	3.0



## PROGEF Standard Wafer check valve type 369 With V4A spring (stainless steel 316)

### Model:

- Material: PP-H
- Supporting eyelets for simple fitting
- Suitable for vertical and horizontal mounting

### Installation instruction:

- Installation between ISO/DIN (all dimensions) and ANSI flange adaptors (all except DN32 and DN125)
- It is necessary to use a special outlet flange adaptor PP or PE on the outgoing side of the wafer check valve
- Centering by body diameter
- Sealing with special flange gasket (except DN32, o-ring)
- A stabilizing zone of at least 5 times nominal diameter (DN) should be provided before and after the wafer check valve (10 times DN is recommended)
- No direct installation on pump flange or following bend allowed

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
40	32	6	167 369 042	167 369 062	0.071
50	40	10	167 369 043	167 369 063	0.100
63	50	10	167 369 044	167 369 064	0.170
75	65	10	167 369 045	167 369 065	0.245
90	80	10	167 369 046	167 369 066	0.260
110	100	10	167 369 047	167 369 067	0.370
140	125	10	167 369 049	167 369 069	0.500
160	150	6	167 369 050	167 369 070	0.740
225	200	6	167 369 051	167 369 071	1.400
280	250	6	167 369 052	167 369 072	2.400
315	300	6	167 369 053	167 369 073	3.520

d [mm]	D [mm]	D1 [mm]	D2 [mm]	H [mm]	L [mm]	L1 [mm]	Opening pressure vertical [mbar]	Opening pressure hor- izontal [mbar]	Minimum water col- umn for sealing [m]
40	85	59	18	25	15	22	30	20	3.0
50	95	72	22	28	16	27	30	20	3.0
63	109	86	32	29	18	40	30	20	3.0
75	129	105	40	31	20	55	30	20	3.0
90	144	119	54	32	20	67	30	20	3.0
110	164	146	70	31	23	67	30	20	3.0
140	195	173	92	35	23	94	30	20	3.0
160	220	197	105	42	26	100	30	20	3.0
225	275	255	154	38	35	152	38	20	3.0
280	330	312	192	41	40	180	38	20	3.0
315	380	363	227	41	45	215	38	20	3.0



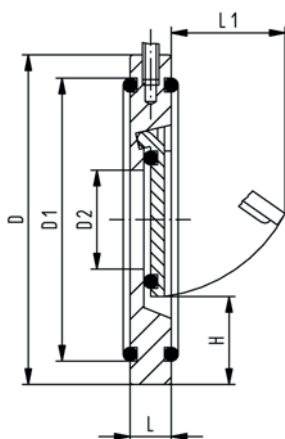
## PROGEF Standard Wafer check valve type 369 With Hastelloy C spring

### Model:

- Material: PP-H
- Supporting eyelets for simple fitting
- Suitable for vertical and horizontal mounting

### Installation instruction:

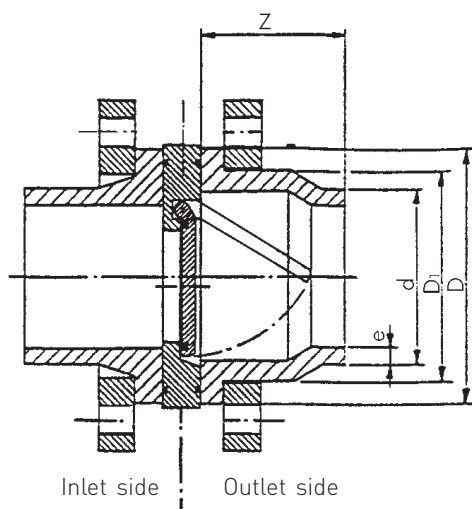
- Installation between ISO/DIN (all dimensions) and ANSI flange adaptors (all except DN32 and DN125)
- It is necessary to use a special outlet flange adaptor PP or PE on the outgoing side of the wafer check valve
- Centering by body diameter
- Sealing with special flange gasket (except DN32, o-ring)
- A stabilizing zone of at least 5 times nominal diameter (DN) should be provided before and after the wafer check valve (10 times DN is recommended)
- No direct installation on pump flange or following bend allowed



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
40	32	6	167 369 082	167 369 102	0.090
50	40	10	167 369 083	167 369 103	0.097
63	50	10	167 369 084	167 369 104	0.170
75	65	10	167 369 085	167 369 105	0.220
90	80	10	167 369 086	167 369 106	0.264
110	100	10	167 369 087	167 369 107	0.370
140	125	10	167 369 089	167 369 109	0.500
160	150	6	167 369 090	167 369 110	0.760
225	200	6	167 369 091	167 369 111	1.400
280	250	6	167 369 092	167 369 112	2.400
315	300	6	167 369 093	167 369 113	3.520

d [mm]	D [mm]	D1 [mm]	D2 [mm]	H [mm]	L [mm]	L1 [mm]	Opening pressure vertical [mbar]	Opening pressure hor- izontal [mbar]	Minimum water col- umn for sealing [m]
40	85	59	18	25	15	22	30	20	3.0
50	95	72	22	28	16	27	30	20	3.0
63	109	86	32	29	18	40	30	20	3.0
75	129	105	40	31	20	55	30	20	3.0
90	144	119	54	32	20	67	30	20	3.0
110	164	146	70	31	23	67	30	20	3.0
140	195	173	92	35	23	94	30	20	3.0
160	220	197	105	42	26	100	30	20	3.0
225	275	255	154	38	35	152	38	20	3.0
280	330	312	192	41	40	180	38	20	3.0
315	380	363	227	41	45	215	38	20	3.0

## Component Parts for Flange Assembly, Type 369 PP



**Warning:** This outlet flange adaptor has to be installed on the outlet side!

### Socket Fusion System PP/PE Inlet side

PP/PE  
Flange adaptor  
metric

d	DN	Inch	PP Code	PE Code				
40	32	1 <sup>1</sup> / <sub>4</sub>	727 790 209	753 790 209				
50	40	1 <sup>1</sup> / <sub>2</sub>	727 790 210	753 790 210				
63	50	2	727 790 211	753 790 211				
75	65	2 <sup>1</sup> / <sub>2</sub>	727 790 212	753 790 212				
90	80	3	727 790 213	753 790 213				
110	100	4	727 790 214	753 790 214				

Backing flange metric  
for socket fusion systems  
Connecting dimension  
DIN 2501 PN 10

d	DN	Inch	for flange adaptor metric PP-V black	for flange adaptor metric PP with steel ring				
40	32	1 <sup>1</sup> / <sub>4</sub>	727 700 409	727 700 209				
50	40	1 <sup>1</sup> / <sub>2</sub>	727 700 410	727 700 210				
63	50	2	727 700 411	727 700 211				
75	65	2 <sup>1</sup> / <sub>2</sub>	727 700 412	727 700 212				
90	80	3	727 700 413	727 700 213				
110	100	4	727 700 414	727 700 214				

### Outlet side

PP/PE  
Outlet flange adaptor  
with fusion socket  
metric

d	DN	Inch	Jointing face flat PP Code	Jointing face flat PE Code	D	D <sub>1</sub>	Z	
40	32	1 <sup>1</sup> / <sub>4</sub>	727 800 009	733 800 009	61	50	35	
50	40	1 <sup>1</sup> / <sub>2</sub>	727 800 010	733 800 010	73	61	38	
63	50	2	727 800 011	733 800 011	90	76	41	
75	65	2 <sup>1</sup> / <sub>2</sub>	727 800 012	733 800 012	106	90	49	
90	80	3	727 800 013	733 800 013	125	108	65	
110	100	4	727 800 014	733 800 014	150	130	62	

Backing flange metric  
for socket fusion systems  
Connecting dimension  
DIN 2501 PN 10

d	DN	Inch	for outlet flange adaptor PP-V black	for outlet flange adaptor PP with steel ring				
40	32	1 <sup>1</sup> / <sub>4</sub>	727 700 409	727 700 209				
50	40	1 <sup>1</sup> / <sub>2</sub>	727 700 410	727 700 210				
63	50	2	727 700 411	727 700 211				
75	65	2 <sup>1</sup> / <sub>2</sub>	727 700 412	727 700 212				
90	80	3	727 700 413	727 700 213				
110	100	4	727 700 414	727 700 214				



# Component Parts for Flange Assembly, Type 369 PP

## Butt Fusion System PP/PE Inlet side

	d	DN	Inch	PP Code		PE Code					
PP/PE Flange Adapter metric SDR 11	40	32	1 1/4	727 798 509		753 798 609					
	50	40	1 1/2	727 798 510		753 798 610					
	63	50	2	727 798 511		753 798 611					
	75	65	2 1/2	727 798 512		753 798 612					
	90	80	3	727 798 513		753 798 613					
	110	100	4	727 798 514		753 798 614					
	140	125	5	727 798 516		753 798 616					
	160	150	6	727 798 517		753 798 617					
	225	200	8	727 798 520		753 798 620					
	280	250	10	727 798 572		753 798 672					
	315	300	12	727 798 573		753 798 673					

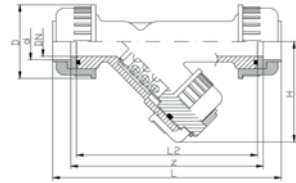
	d	DN	Inch	PP Code		PE Code					
PP/PE Flange Adapter metric SDR 17,6	40	32	1 1/4	--		--					
	50	40	1 1/2	727 798 535		753 798 535					
	63	50	2	727 798 536		753 798 536					
	75	65	2 1/2	727 798 412		753 798 512					
	90	80	3	727 798 413		753 798 513					
				727 798 414		753 798 514					
	110	100	4								
	140	125	5	727 798 541		753 798 541					
	160	150	6	727 798 542		753 798 542					
	225	200	8	727 798 545		753 798 545					
	280	250	10	727 798 547		753 798 547					
	315	300	12	727 798 548		753 798 548					

	d	DN	Inch	for Flange Adapter						
				PP-V black	PP with steel ring					
Backing flange metric for butt fusion systems Connecting dimension DIN 2501 PN 10	40	32	1 1/4	727 700 409	727 700 209					
	50	40	1 1/2	727 700 410	727 700 210					
	63	50	2	727 700 411	727 700 211					
	75	65	2 1/2	727 700 412	727 700 212					
	90	80	3	727 700 513	727 700 313					
	110	100	4	727 700 514	727 700 314					
	140	125	5	727 700 516	727 700 316					
	160	150	6	727 700 517	727 700 317					
	225	200	8	727 700 520	727 700 320					
	280	250	10	727 700 522	727 700 322					
	315	300	12	727 700 523	727 700 323					

# Strainers 305



## PROGEF Standard Line strainer type 305 With fusion sockets metric



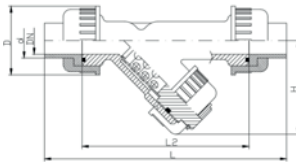
### Model:

- Material: PP-H
- For easy installation and removal
- Protects valves, pumps, etc. from becoming soiled
- Screen perforation 0.5 mm
- Overall length according to EN 558
- Easy dismantling for cleaning the screens

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	H [mm]	z [mm]
20	15	10	35	<b>167 305 000</b>	<b>167 305 049</b>	0.214	52	168	130	75	140
25	20	10	65	<b>167 305 050</b>	<b>167 305 099</b>	0.257	62	192	150	80	160
32	25	10	90	<b>167 305 100</b>	<b>167 305 149</b>	0.327	68	206	160	90	170
40	32	10	155	<b>167 305 150</b>	<b>167 305 199</b>	0.586	85	230	180	110	190
50	40	10	225	<b>167 305 200</b>	<b>167 305 249</b>	0.748	85	256	200	125	210
63	50	10	370	<b>167 305 250</b>	<b>167 305 299</b>	1.185	102	294	230	150	240



## PROGEF Standard Line strainer type 305 With butt fusion spigots IR-Plus SDR11 metric



### Model:

- Material: PP-H
- For easy installation and removal
- Protects valves, pumps, etc. from becoming soiled
- Screen perforation 0.5 mm
- Overall length according to EN 558
- Easy dismantling for cleaning the screens

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	H [mm]	e [mm]
20	15	10	35	<b>167 305 300</b>	<b>167 305 349</b>	0.219	52	238	130	75	1.9
25	20	10	65	<b>167 305 350</b>	<b>167 305 399</b>	0.268	62	264	150	80	2.3
32	25	10	90	<b>167 305 400</b>	<b>167 305 449</b>	0.354	68	280	160	90	3.0
40	32	10	155	<b>167 305 450</b>	<b>167 305 499</b>	0.660	85	306	180	110	3.7
50	40	10	225	<b>167 305 500</b>	<b>167 305 549</b>	0.816	85	332	200	125	4.6
63	50	10	370	<b>167 305 550</b>	<b>167 305 599</b>	1.295	102	368	230	150	5.8

# Copiable

## Configurator GF ball valve type 546 PROGEF Standard

### Ball Valve

- A01 Ball Valve 546
- A02 Linear Ball Valve

### Material

- B05 PP-H

### Dimension

- C05 d 16 DN 10 3/8"
- C06 d 20 DN 15 1/2"
- C07 d 25 DN 20 3/4"
- C08 d 32 DN 25 1"
- C09 d 40 DN 32 1 1/4"
- C10 d 50 DN 40 1 1/2"
- C11 d 63 DN 50 2"
- C12 DN 65 2 1/2"
- C13 DN 80 3"
- C14 DN 100 4"
- C15 DN 150 6"

### Version

- D01 Standard, PTFE ball seal
- D02 oilfree, PTFE ball seal (only with specific connecting parts)
- D03 silicon-free, PTFE ball seal (only with specific connecting parts)
- D04 silicon-free, PVDF ball seal for metric (only with specific connecting parts)

### Seals

- E01 EPDM seals
- E02 FPM seals
- E03 FPM/KALREZ® seals

### Threaded inserts

- F01 without threaded inserts
- F02 with threaded inserts

### Connecting parts

- G30 PP-H Fusion socket metric
- G32 PP-H Socket fusion spigot metric
- G33 PP-H Threaded socket Rp reinforced
- G34 PP-H Threaded socket NPT reinforced
- G35 PP-H Butt fusion spigot SDR 11 metric IR-PLUS®
- G36 PP-H Butt fusion spigot SDR 17.6 metric with this valve end the maximum nominal pressure is reduced to PN 6
- G37 PP-H Butt fusion spigot long SDR11 metric
- G43 PE-100 Butt fusion spigot long SDR11 metric
- G44 PE-100 Butt fusion spigot long SDR17.6 metric
- G63 Fixed flange PP-H serrated metric
- G72 Backing flange PP-steel metric
- G73 Backing flange PP-steel inch ANSI
- G77 Backing flange PP JIS with connecting parts
- G78 Backing flange PP-GF JIS
- G83 PP-H Valve end blank
- G40 PE-100 Fusion socket metric
- G41 PE-100 Butt fusion spigot SDR11 metric
- G42 PE-100 Butt fusion spigot SDR17.6 metric
- G43 PE-100 Butt fusion spigot long SDR11 metric
- G11 PVC-C Cement socket metric
- G13 PVC-C Cement socket inch ASTM
- G14 PVC-C Cement spigot metric
- G15 PVC-C Threaded socket Rp
- G16 PVC-C Threaded socket Rp reinforced
- G17 PVC-C Threaded socket NPT

### Multi-functional module

- I01 No multi-functional module
- I02 Empty module
- I03 Module with 2 end switches Ag, Ni
- I04 Module with 2 end switches Au
- I05 Module with 2 inductive switches Namur
- I06 Module with 2 inductive switches PNP
- I07 Module with 2 inductive switches NPN

### Lever

- K01 Standard lever red
- K02 Standard lever black
- K11 Multi-functional lever red

### Mounting plate

- L01 without mounting plate
- L02 with mounting plate

A01

B05

C

D

E

F

G

G

I

K

L

left

right

You will find a large selection of different versions in our range of products. New system elements also provide you with new opportunities for use. In order for us to supply exactly the ball valve you need for you application, we have created a selection menu for you. (Der maximal zulässige Betriebsdruck des Kugelhahns ist PN 10).

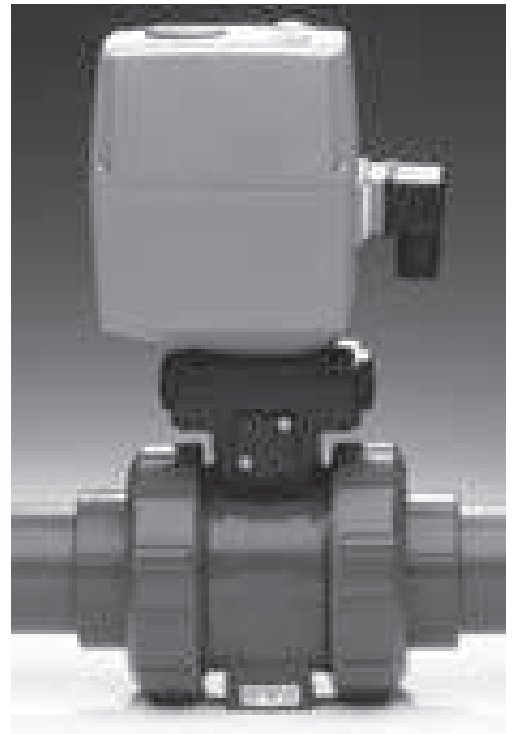
**We supply what you put together.**

# Copiable GF ball valve type 546 with electric Actuator

## It's so easy to actuate the type 546:

With the configurator, you have a choice of new electric actuators, the EA11 for standard applications and the EA21 with modular design and accessories, for practically any type of operation.

**We supply what you put together.**



### Electric Actuator EA11

- T01 EA11 24 V
- T02 EA11 100-230 V

### Accessories EA11

- U01 No accessories
- U02 2 limit switches Ag, Ni
- U03 Heating element
- U04 Fail-safe return
- U05 2 limit switches Ag, Ni normally open

### Electric Actuator EA21/31

- T03 EA21/31 24 V
- T04 EA21/31 100-230 V

### Accessories EA21

- W01 No accessories
- W02 Heating element
- W03 Cycle time module
- W04 Cycle time monitoring
- W05 Cycles monitoring
- W06 Motor current monitoring
- W07 2 limit switches Ag, Ni
- W08 2 limit switches Gold
- W09 2 limit switches NPN
- W10 2 limit switches PNP
- W11 Positioner
- W12 Electric position indicator
- W14 Fail-safe return unit
- W15 Switch intermediate position
- W27 2 limit switches Ag, Ni normally open with connector
- W31 Positioner PE25 with galv. separation

<b>T</b>	<b>U</b>	<b>T</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>

# Ball Valves Electric

## PROGEF Standard

### Ball valve type 107 100-230V

#### With manual emergency override

#### With fusion sockets metric



DN10/15 - 50

#### Model:

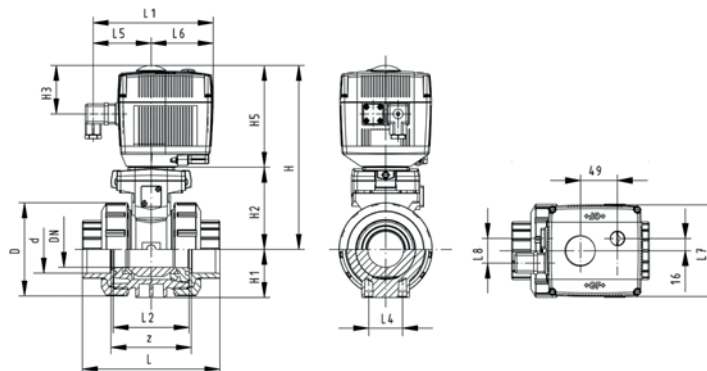
- Material: PP-H
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

#### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 107 502</b>	<b>199 107 512</b>	2.100
20	15	10	185	<b>199 107 503</b>	<b>199 107 513</b>	2.100
25	20	10	350	<b>199 107 504</b>	<b>199 107 514</b>	2.200
32	25	10	700	<b>199 107 505</b>	<b>199 107 515</b>	2.300
40	32	10	1000	<b>199 107 506</b>	<b>199 107 516</b>	2.600
50	40	10	1600	<b>199 107 507</b>	<b>199 107 517</b>	3.000
63	50	10	3100	<b>199 107 508</b>	<b>199 107 518</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	93	161	56	25	77	83	122	33	67
20	50	200	27	64	64	137	95	161	56	25	77	83	122	33	66
25	58	209	30	73	64	137	108	161	65	25	77	83	122	33	77
32	68	209	36	73	64	137	118	161	71	25	77	83	122	33	83
40	84	220	44	84	64	137	137	161	85	45	77	83	122	33	99
50	97	220	51	84	64	137	147	161	89	45	77	83	122	33	105
63	124	243	64	106	64	137	168	161	101	45	77	83	122	33	117





**PROGEF Standard**  
**Ball valve type 107 100-230V**  
**With manual emergency override**  
**With socket fusion spigots metric**

**Model:**

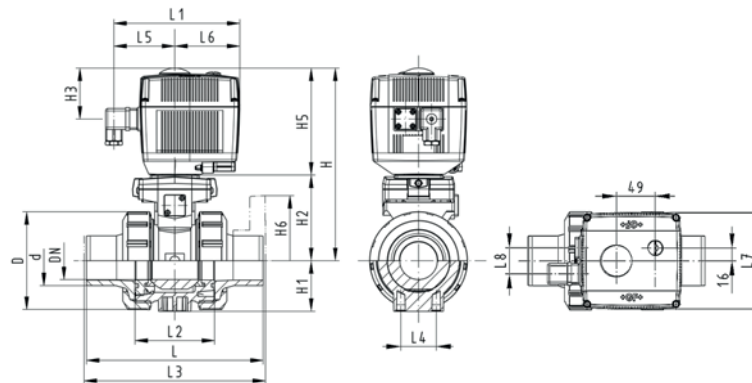
- Material: PP-H
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

**Option:**

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 107 522</b>	<b>199 107 532</b>	2.100
20	15	10	185	<b>199 107 523</b>	<b>199 107 533</b>	2.100
25	20	10	350	<b>199 107 524</b>	<b>199 107 534</b>	2.200
32	25	10	700	<b>199 107 525</b>	<b>199 107 535</b>	2.300
40	32	10	1000	<b>199 107 526</b>	<b>199 107 536</b>	2.600
50	40	10	1600	<b>199 107 527</b>	<b>199 107 537</b>	2.629
63	50	10	3100	<b>199 107 528</b>	<b>199 107 538</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	200	27	64	64	137	110	161	56	130	25	77	83	122	33
20	50	200	27	64	64	137	120	161	56	130	25	77	83	122	33
25	58	209	30	73	64	137	139	161	65	150	25	77	83	122	33
32	68	209	36	73	64	137	150	161	71	160	25	77	83	122	33
40	84	220	44	84	64	137	170	161	85	180	45	77	83	122	33
50	97	220	51	84	64	137	190	161	89	200	45	77	83	122	33
63	124	243	64	106	64	137	220	161	101	230	45	77	83	122	33





# PROGEF Standard

## Ball valve type 107 100-230V

### With manual emergency override

### With butt fusion spigots IR-Plus SDR11 metric

#### Model:

- Material: PP-H
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

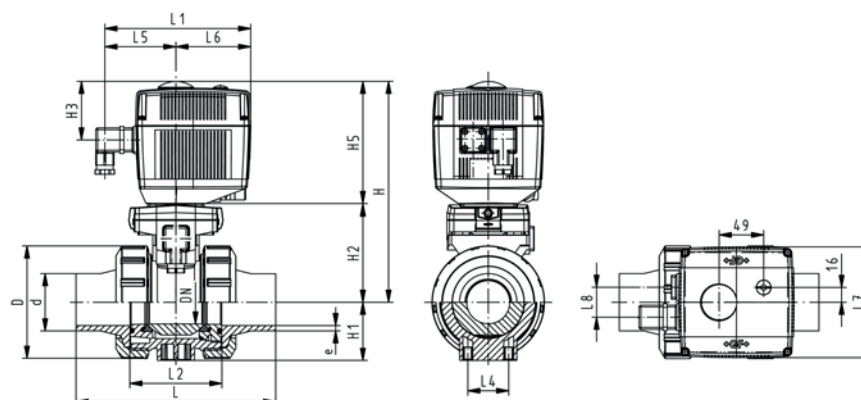
#### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>800 046 107</b>	<b>800 046 110</b>	0.000
25	20	10	350	<b>800 046 108</b>	<b>800 046 112</b>	0.000
32	25	10	700	<b>800 027 956</b>	<b>800 046 113</b>	0.000
40	32	10	1000	<b>800 046 109</b>	<b>800 046 114</b>	0.000
50	40	10	1600	<b>800 021 699</b>	<b>800 046 115</b>	0.000
63	50	10	3100	<b>800 027 113</b>	<b>800 046 116</b>	0.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
20	50	200	27	64	64	137	130	161	56	130	25	77	83	122	33
25	58	209	30	73	64	137	143	161	65	150	25	77	83	122	33
32	68	209	36	73	64	137	150	161	71	160	25	77	83	122	33
40	84	220	44	84	64	137	171	161	85	180	45	77	83	122	33
50	97	220	51	84	64	137	191	161	89	200	45	77	83	122	33
63	124	243	64	106	64	137	220	161	101	230	45	77	83	122	33

d [mm]	e [mm]
20	1.9
25	2.3
32	3.0
40	3.7
50	4.6
63	5.8





## PROGEF Standard Ball valve type 107 100-230V With manual emergency override With fixed flanges PP-H serrated metric

### Model:

- Material: PP-H
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

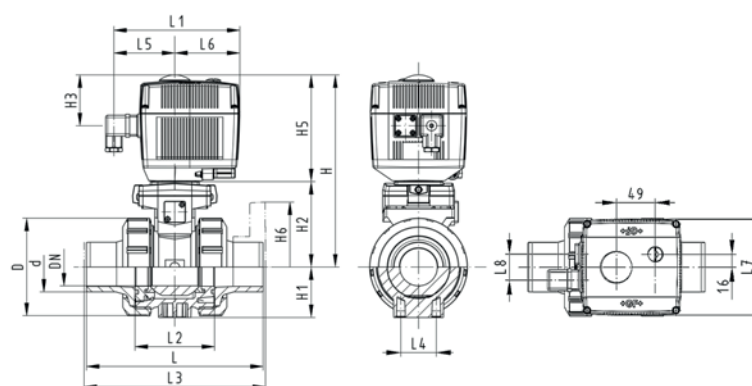
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 107 583</b>	<b>199 107 593</b>	2.300
25	20	¾	10	350	<b>199 107 584</b>	<b>199 107 594</b>	2.500
32	25	1	10	700	<b>199 107 585</b>	<b>199 107 595</b>	2.700
40	32	1 ¼	10	1000	<b>199 107 586</b>	<b>199 107 596</b>	3.200
50	40	1 ½	10	1600	<b>199 107 587</b>	<b>199 107 597</b>	3.700
63	50	2	10	3100	<b>199 107 588</b>	<b>199 107 598</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	200	27	64	64	137	48	120	161	56	130	25	77	83	122
25	58	209	30	73	64	137	53	140	161	65	150	25	77	83	122
32	68	209	36	73	64	137	58	150	161	71	160	25	77	83	122
40	84	220	44	84	64	137	70	170	161	85	180	45	77	83	122
50	97	220	51	84	64	137	75	190	161	89	200	45	77	83	122
63	124	243	64	106	64	137	165	220	161	101	230	45	77	83	122

d [mm]	L8 [mm]
20	33
25	33
32	33
40	33
50	33
63	33







DN10/15 - 50

## PROGEF Standard Ball valve type 107 24V With manual emergency override With fusion sockets metric

### Model:

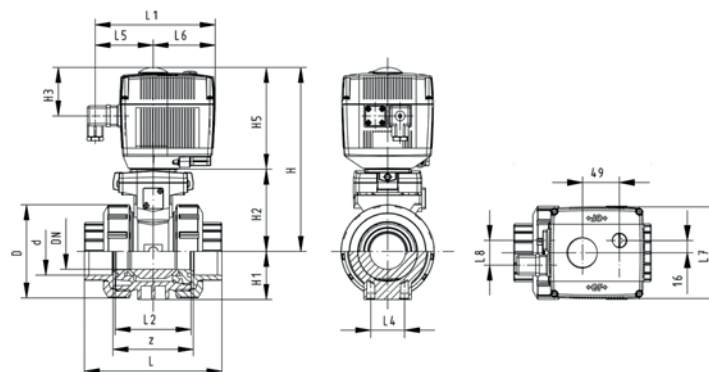
- Material: PP-H
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 107 542</b>	<b>199 107 552</b>	2.100
20	15	10	185	<b>199 107 543</b>	<b>199 107 553</b>	2.100
25	20	10	350	<b>199 107 544</b>	<b>199 107 554</b>	2.200
32	25	10	700	<b>199 107 545</b>	<b>199 107 555</b>	2.241
40	32	10	1000	<b>199 107 546</b>	<b>199 107 556</b>	2.600
50	40	10	1600	<b>199 107 547</b>	<b>199 107 557</b>	3.000
63	50	10	3100	<b>199 107 548</b>	<b>199 107 558</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	93	161	56	25	77	83	122	33	67
20	50	200	27	64	64	137	95	161	56	25	77	83	122	33	66
25	58	209	30	73	64	137	108	161	65	25	77	83	122	33	77
32	68	209	36	73	64	137	118	161	71	25	77	83	122	33	83
40	84	220	44	84	64	137	137	161	85	45	77	83	122	33	99
50	97	220	51	84	64	137	147	161	89	45	77	83	122	33	105
63	124	243	64	106	64	137	168	161	101	45	77	83	122	33	117





**PROGEF Standard  
Ball valve type 107 24V  
With manual emergency override  
With socket fusion spigots metric**

**Model:**

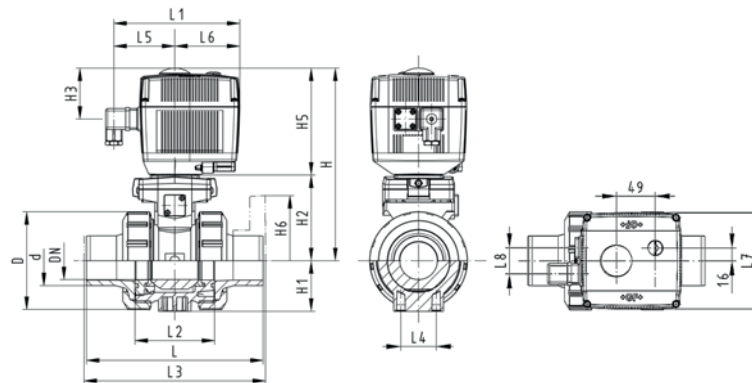
- Material: PP-H
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

**Option:**

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 107 562</b>	<b>199 107 572</b>	2.100
20	15	10	185	<b>199 107 563</b>	<b>199 107 573</b>	2.096
25	20	10	350	<b>199 107 564</b>	<b>199 107 574</b>	2.200
32	25	10	700	<b>199 107 565</b>	<b>199 107 575</b>	2.300
40	32	10	1000	<b>199 107 566</b>	<b>199 107 576</b>	2.600
50	40	10	1600	<b>199 107 567</b>	<b>199 107 577</b>	3.000
63	50	10	3100	<b>199 107 568</b>	<b>199 107 578</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	200	27	64	64	137	110	161	56	130	25	77	83	122	33
20	50	200	27	64	64	137	120	161	56	130	25	77	83	122	33
25	58	209	30	73	64	137	139	161	65	150	25	77	83	122	33
32	68	209	36	73	64	137	156	161	71	160	25	77	83	122	33
40	84	220	44	84	64	137	170	161	85	180	45	77	83	122	33
50	97	220	51	84	64	137	190	161	89	200	45	77	83	122	33
63	124	243	64	106	64	137	220	161	101	230	45	77	83	122	33





DN10/15 - 50

# PROGEF Standard

## Ball valve type 107 24V

### With manual emergency override

### With butt fusion spigots IR-Plus SDR11 metric

#### Model:

- Material: PP-H
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

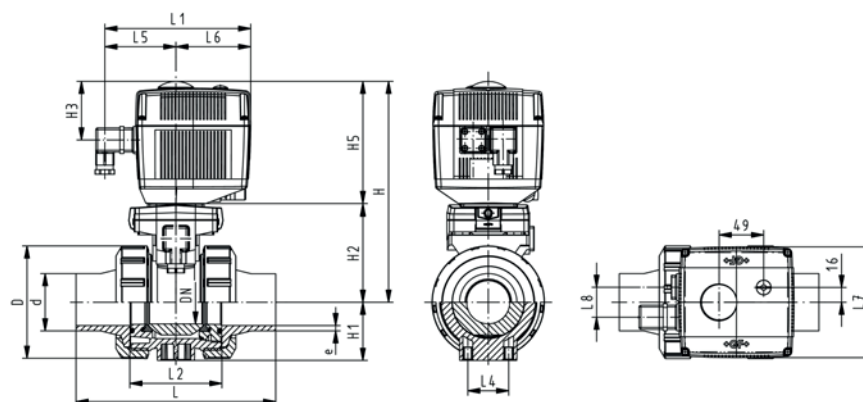
#### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	800 015 073	800 046 119	0.000
25	20	10	350	800 046 117	800 046 120	0.000
32	25	10	700	800 046 118	800 046 121	0.000
40	32	10	1000	800 021 702	800 046 122	0.000
50	40	10	1600	800 021 700	800 046 123	3.000
63	50	10	3100	800 021 701	800 046 124	3.910

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
20	50	200	27	64	64	137	130	161	56	130	25	77	83	122	33
25	58	209	30	73	64	137	143	161	65	150	25	77	83	122	33
32	68	209	36	73	64	137	150	161	71	160	25	77	83	122	33
40	84	220	44	84	64	137	171	161	85	180	45	77	83	122	33
50	97	220	51	84	64	137	191	161	89	200	45	77	83	122	33
63	124	243	64	106	64	137	220	161	101	230	45	77	83	122	33

d [mm]	e [mm]
20	1.9
25	2.3
32	3.0
40	3.7
50	4.6
63	5.8





DN10/15 - 50

## PROGEF Standard Ball valve type 107 24V With manual emergency override With fixed flanges PP-H serrated metric

### Model:

- Material: PP-H
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

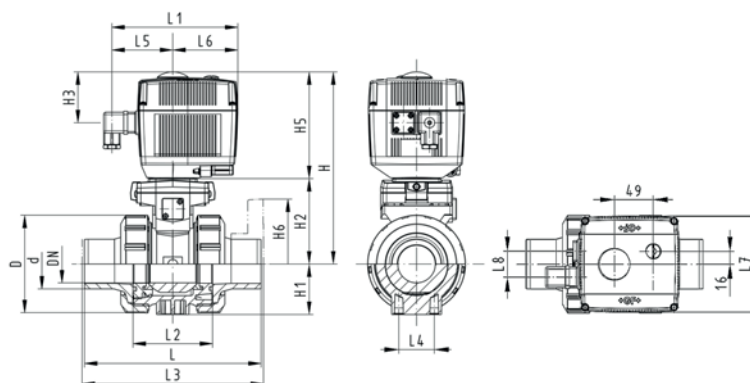
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 107 783</b>	<b>199 107 793</b>	2.300
25	20	¾	10	350	<b>199 107 784</b>	<b>199 107 794</b>	2.500
32	25	1	10	700	<b>199 107 785</b>	<b>199 107 795</b>	2.700
40	32	1 ¼	10	1000	<b>199 107 786</b>	<b>199 107 796</b>	3.200
50	40	1 ½	10	1600	<b>199 107 787</b>	<b>199 107 797</b>	3.700
63	50	2	10	3100	<b>199 107 788</b>	<b>199 107 798</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	200	27	64	64	137	48	120	161	56	130	25	77	83	122
25	58	209	30	73	64	137	53	140	161	65	150	25	77	83	122
32	68	209	36	73	64	137	58	150	161	71	160	25	77	83	122
40	84	220	44	84	64	137	70	170	161	85	180	45	77	83	122
50	97	220	51	84	64	137	75	190	161	89	200	45	77	83	122
63	124	243	64	106	64	137	165	220	161	101	230	45	77	83	122

d [mm]	L8 [mm]
20	33
25	33
32	33
40	33
50	33
63	33





DN10/15 - 50



## PROGEF Standard Ball valve type 131 100-230V With manual emergency override With fusion sockets metric

### Model:

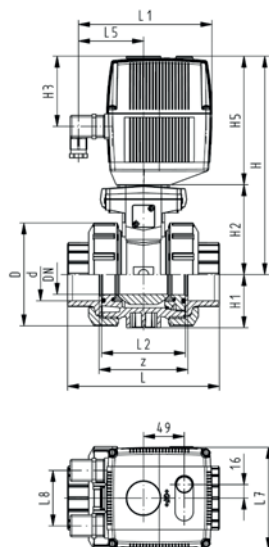
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

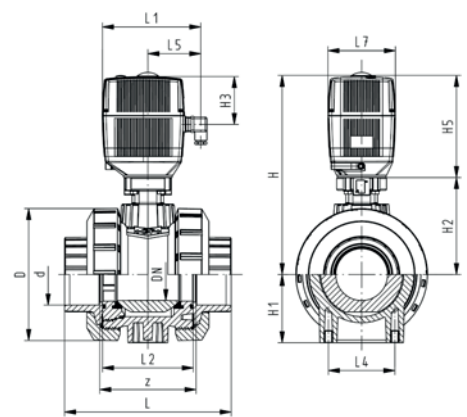
- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 131 002	199 131 012	2.100
20	15	10	185	199 131 003	199 131 013	2.100
25	20	10	350	199 131 004	199 131 014	2.200
32	25	10	700	199 131 005	199 131 015	2.589
40	32	10	1000	199 131 006	199 131 016	2.600
50	40	10	1600	199 131 007	199 131 017	3.000
63	50	10	3100	199 131 008	199 131 018	3.482
75	65	10	5000	199 131 009	199 131 019	6.200
90	80	10	7000	199 131 010	199 131 020	8.000
110	100	10	11000	199 131 011	199 131 021	11.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	z [mm]
16	50	231	27	64	94	167	93	180	56	25	97	122	67
20	50	231	27	64	94	167	95	180	56	25	97	122	66
25	58	240	30	73	94	167	108	180	65	25	97	122	77
32	68	240	36	73	94	167	118	180	71	25	97	122	83
40	84	251	44	84	94	167	137	180	85	45	97	122	99
50	97	251	51	84	94	167	147	180	89	45	97	122	105
63	124	273	64	106	94	167	168	180	101	45	97	122	117
75	166	346	85	156	94	190	233	180	136	70	98	122	167
90	200	358	105	168	94	190	254	180	141	70	98	122	180
110	238	365	123	175	94	190	301	180	164	120	98	122	215



DN10/15-50



DN65-100



DN10/15 - 50



## PROGEF Standard Ball valve type 131 100-230V With manual emergency override With socket fusion spigots metric

### Model:

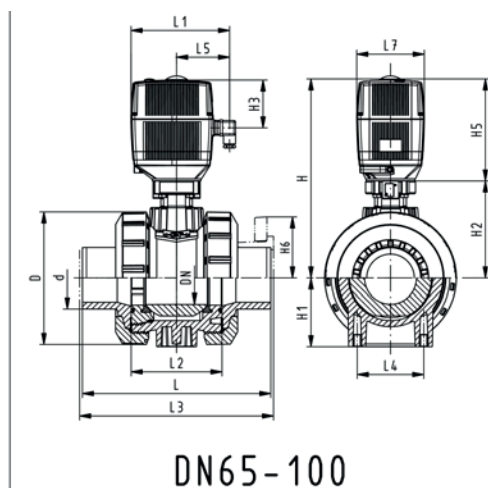
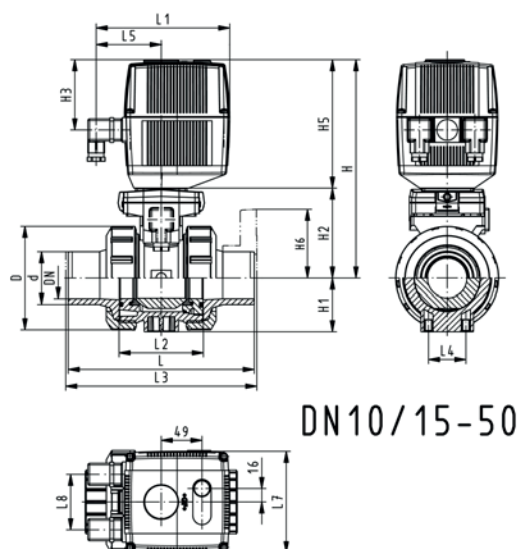
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 131 022	199 131 032	2.100
20	15	10	185	199 131 023	199 131 033	2.100
25	20	10	350	199 131 024	199 131 034	2.200
32	25	10	700	199 131 025	199 131 035	2.300
40	32	10	1000	199 131 026	199 131 036	2.600
50	40	10	1600	199 131 027	199 131 037	3.000
63	50	10	3100	199 131 028	199 131 038	3.800
75	65	10	5000	199 131 029	199 131 039	6.200
90	80	10	7000	199 131 030	199 131 040	8.000
110	100	10	11000	199 131 031	199 131 041	11.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L7 [mm]
16	50	231	27	64	94	167	110	180	56	130	25	97	122
20	50	231	27	64	94	167	120	180	56	130	25	97	122
25	58	240	30	73	94	167	139	180	65	150	25	97	122
32	68	240	36	73	94	167	150	180	71	160	25	97	122
40	84	251	44	84	94	167	170	180	85	180	45	97	122
50	97	251	51	84	94	167	190	180	89	200	45	97	122
63	124	273	64	106	94	167	220	180	101	230	45	97	122
75	166	346	85	156	94	190	280	180	136	290	70	98	122
90	200	358	105	168	94	190	296	180	141	310	70	98	122
110	238	365	123	175	94	190	336	180	164	350	120	98	122





## PROGEF Standard Ball valve type 131 100-230V With manual emergency override With fixed flanges PP-H serrated metric

### Model:

- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Built on with electric actuator EA21
- Control time 5 s/90°<
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

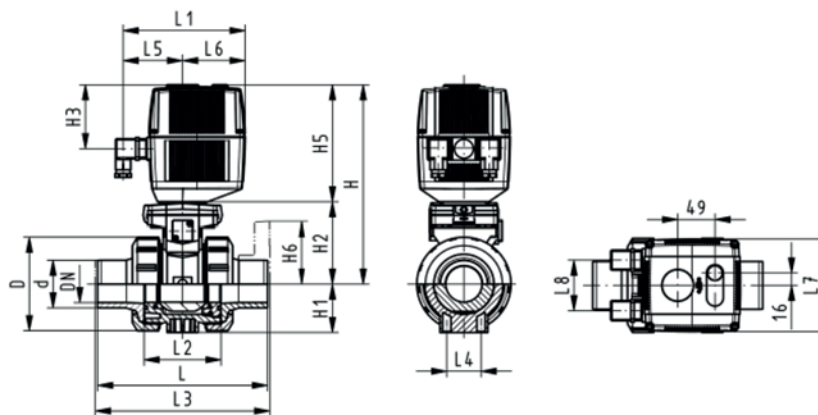
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 131 083</b>	<b>199 131 093</b>	2.300
25	20	¾	10	350	<b>199 131 084</b>	<b>199 131 094</b>	2.500
32	25	1	10	700	<b>199 131 085</b>	<b>199 131 095</b>	2.700
40	32	1 ¼	10	1000	<b>199 131 086</b>	<b>199 131 096</b>	3.200
50	40	1 ½	10	1600	<b>199 131 087</b>	<b>199 131 097</b>	3.700
63	50	2	10	3100	<b>199 131 088</b>	<b>199 131 098</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	27	64	94	167	48	120	180	56	130	25	97	83	122
25	58	240	30	73	94	167	53	140	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	150	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	170	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	190	180	89	200	45	97	83	122
63	124	273	64	106	94	167	165	220	180	101	230	45	97	83	122

d [mm]	L8 [mm]
20	66
25	66
32	66
40	66
50	66
63	66





## PROGEF Standard Ball valve type 131 100-230V With manual emergency override With backing flanges PP-st metric

### Model:

- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

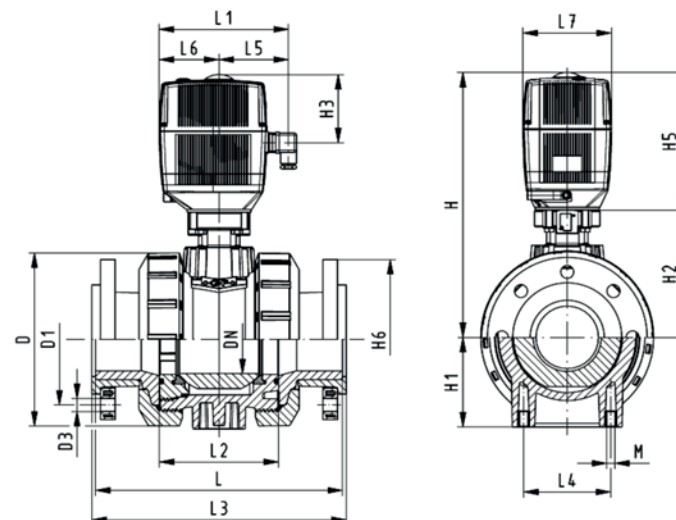
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	<b>199 131 129</b>	<b>199 131 139</b>	10.500
90	80	3	10	7000	<b>199 131 130</b>	<b>199 131 140</b>	13.200
110	100	4	10	11000	<b>199 131 131</b>	<b>199 131 141</b>	18.400

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
75	166	346	85	156	94	190	93	280	180	136	290	70	98	83	122
90	200	358	105	168	94	190	100	296	180	141	310	70	98	83	122
110	238	365	123	175	94	190	110	336	180	164	350	120	98	83	122

d [mm]	L8 [mm]
75	66
90	66
110	66







DN10/15 - 50



## PROGEF Standard Ball valve type 131 100-230V With manual emergency override With butt fusion spigots IR-Plus SDR11 metric

### Model:

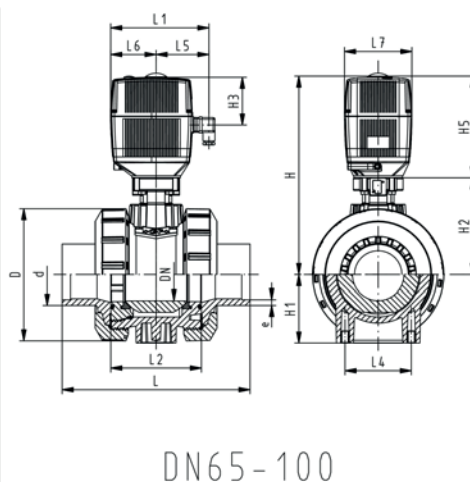
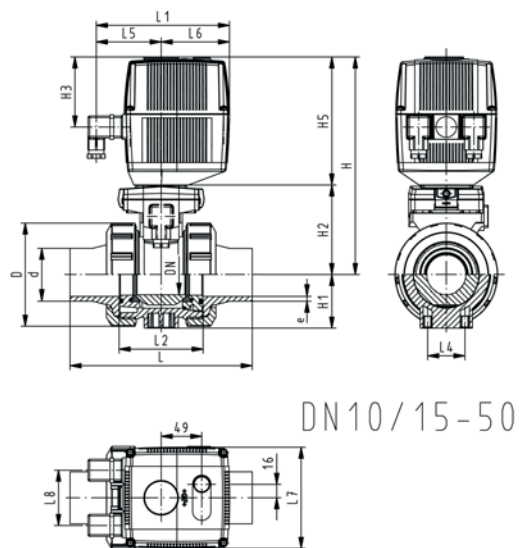
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>199 131 329</b>	<b>199 131 339</b>	6.200
90	80	10	7000	<b>199 131 330</b>	<b>199 131 340</b>	8.000
110	100	10	11000	<b>199 131 331</b>	<b>199 131 341</b>	11.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	e [mm]
75	166	346	85	156	94	190	266	180	136	290	70	98	122	8.2
90	200	358	105	168	94	190	264	180	141	310	70	98	122	9.9
110	238	365	123	175	94	190	301	180	164	350	120	98	122	12.0



# PROGEF Standard

## Ball valve type 131 100-230V

### With manual emergency override

### With butt fusion spigots SDR17.6 metric

#### Model:

- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

#### Option:

- Individual configuration of the valve (see diagram)

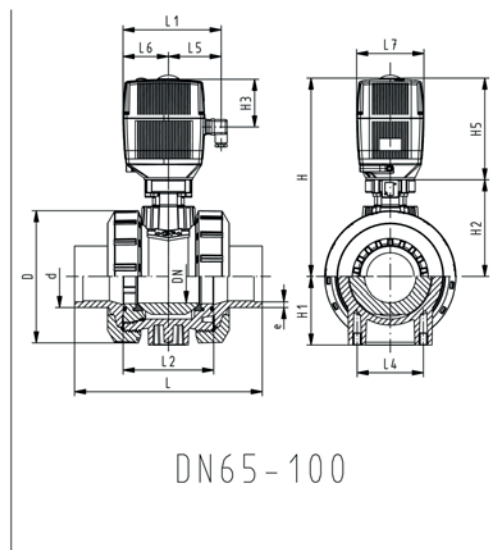
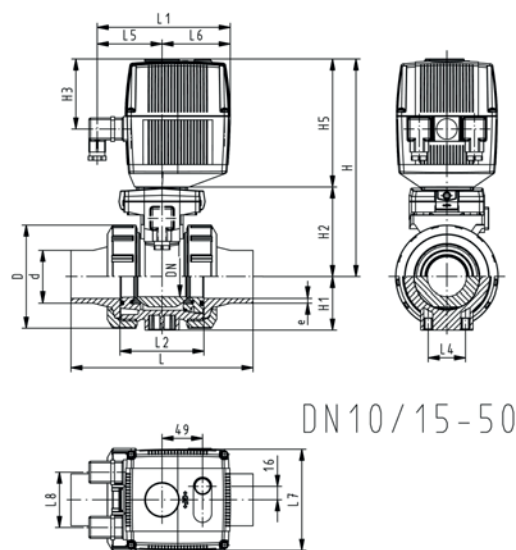


DN10/15 - 50



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>199 131 729</b>	<b>199 131 739</b>	6.200
90	80	10	7000	<b>199 131 730</b>	<b>199 131 740</b>	8.000
110	100	10	11000	<b>199 131 731</b>	<b>199 131 741</b>	11.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	e [mm]
75	166	346	85	156	94	190	266	180	136	290	70	98	122	4.6
90	200	358	105	168	94	190	264	180	141	310	70	98	122	5.5
110	238	365	123	175	94	190	301	180	164	350	120	98	122	6.7





DN10/15 - 50



## PROGEF Standard Ball valve type 131 24V With manual emergency override With fusion sockets metric

### Model:

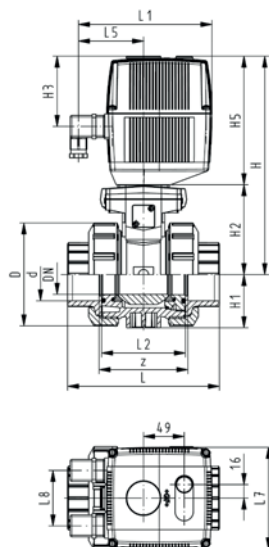
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

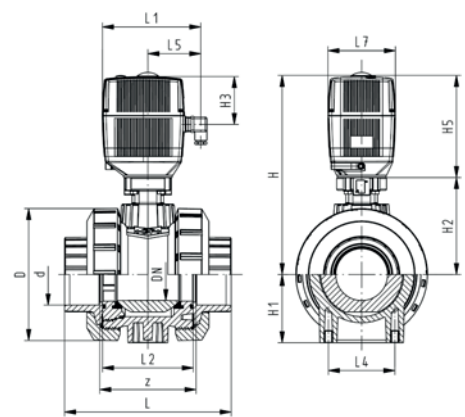
- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 131 042	199 131 052	2.100
20	15	10	185	199 131 043	199 131 053	2.100
25	20	10	350	199 131 044	199 131 054	2.200
32	25	10	700	199 131 045	199 131 055	2.300
40	32	10	1000	199 131 046	199 131 056	2.600
50	40	10	1600	199 131 047	199 131 057	3.000
63	50	10	3100	199 131 048	199 131 058	3.460
75	65	10	5000	199 131 049	199 131 059	6.200
90	80	10	7000	199 131 050	199 131 060	8.000
110	100	10	11000	199 131 051	199 131 061	11.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	z [mm]
16	50	231	27	64	94	167	93	180	56	25	97	122	67
20	50	231	27	64	94	167	95	180	56	25	97	122	66
25	58	240	30	73	94	167	108	180	65	25	97	122	77
32	68	240	36	73	94	167	118	180	71	25	97	122	83
40	84	251	44	84	94	167	137	180	85	45	97	122	99
50	97	251	51	84	94	167	147	180	89	45	97	122	105
63	124	273	64	106	94	167	168	180	101	45	97	122	117
75	166	346	85	156	94	190	233	180	136	70	98	122	167
90	200	358	105	168	94	190	254	180	141	70	98	122	180
110	238	365	123	175	94	190	301	180	164	120	98	122	215



DN10/15-50



DN65-100



DN10/15 - 50



## PROGEF Standard Ball valve type 131 24V With manual emergency override With socket fusion spigots metric

### Model:

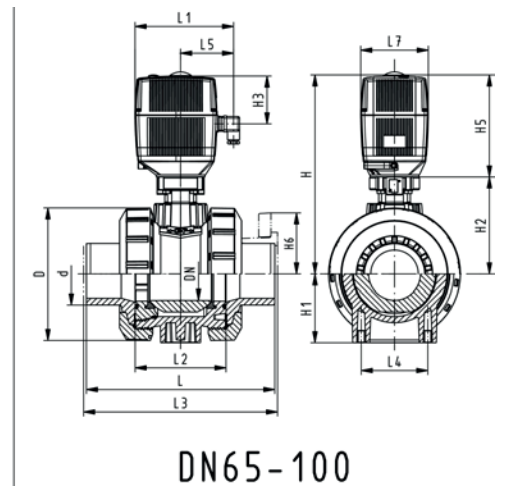
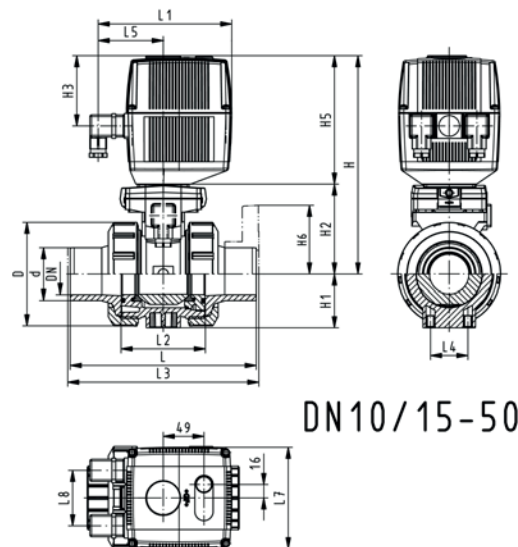
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

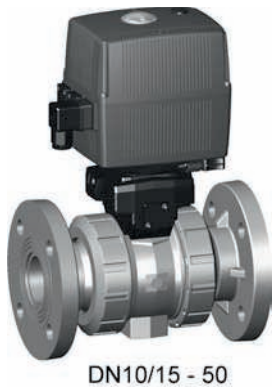
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 131 062	199 131 072	2.100
20	15	10	185	199 131 063	199 131 073	2.100
25	20	10	350	199 131 064	199 131 074	2.200
32	25	10	700	199 131 065	199 131 075	2.300
40	32	10	1000	199 131 066	199 131 076	2.600
50	40	10	1600	199 131 067	199 131 077	3.000
63	50	10	3100	199 131 068	199 131 078	3.800
75	65	10	5000	199 131 069	199 131 079	6.200
90	80	10	7000	199 131 070	199 131 080	8.000
110	100	10	11000	199 131 071	199 131 081	11.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L7 [mm]
16	50	231	27	64	94	167	110	180	56	130	25	97	122
20	50	231	27	64	94	167	120	180	56	130	25	97	122
25	58	240	30	73	94	167	139	180	65	150	25	97	122
32	68	240	36	73	94	167	150	180	71	160	25	97	122
40	84	251	44	84	94	167	170	180	85	180	45	97	122
50	97	251	51	84	94	167	190	180	89	200	45	97	122
63	124	273	64	106	94	167	220	180	101	230	45	97	122
75	166	346	85	156	94	190	280	180	136	290	70	98	122
90	200	358	105	168	94	190	296	180	141	310	70	98	122
110	238	365	123	175	94	190	336	180	164	350	120	98	122





## PROGEF Standard Ball valve type 131 24V With manual emergency override With fixed flanges PP-H serrated metric

### Model:

- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Built on with electric actuator EA21
- Control time 5 s/90°<
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

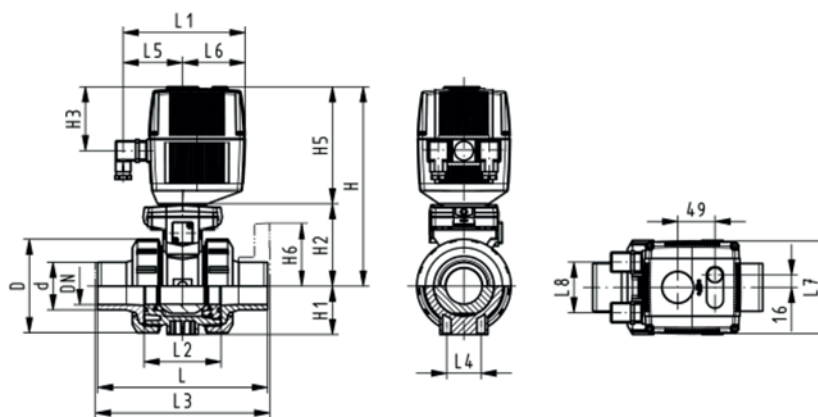
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 131 103</b>	<b>199 131 113</b>	2.300
25	20	¾	10	350	<b>199 131 104</b>	<b>199 131 114</b>	2.500
32	25	1	10	700	<b>199 131 105</b>	<b>199 131 115</b>	2.700
40	32	1 ¼	10	1000	<b>199 131 106</b>	<b>199 131 116</b>	3.200
50	40	1 ½	10	1600	<b>199 131 107</b>	<b>199 131 117</b>	3.700
63	50	2	10	3100	<b>199 131 108</b>	<b>199 131 118</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	27	64	94	167	48	120	180	56	130	25	97	83	122
25	58	240	30	73	94	167	53	140	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	150	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	170	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	190	180	89	200	45	97	83	122
63	124	273	64	106	94	167	165	220	180	101	230	45	97	83	122

d [mm]	L8 [mm]
20	66
25	66
32	66
40	66
50	66
63	66





## PROGEF Standard Ball valve type 131 24V With manual emergency override With backing flanges PP-st metric

### Model:

- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

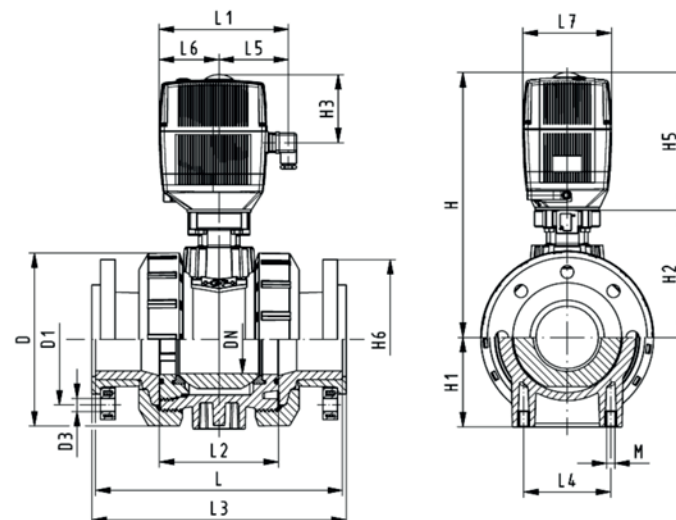
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	<b>199 131 149</b>	<b>199 131 159</b>	10.500
90	80	3	10	7000	<b>199 131 150</b>	<b>199 131 160</b>	13.200
110	100	4	10	11000	<b>199 131 151</b>	<b>199 131 161</b>	18.400

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
75	166	346	85	156	94	190	93	280	180	136	290	70	98	83	122
90	200	358	105	168	94	190	100	296	180	141	310	70	98	83	122
110	238	365	123	175	94	190	110	336	180	164	350	120	98	83	122

d [mm]	L8 [mm]
75	66
90	66
110	66





DN10/15 - 50



# PROGEF Standard

## Ball valve type 131 24V

### With manual emergency override

### With butt fusion spigots IR-Plus SDR11 metric

#### Model:

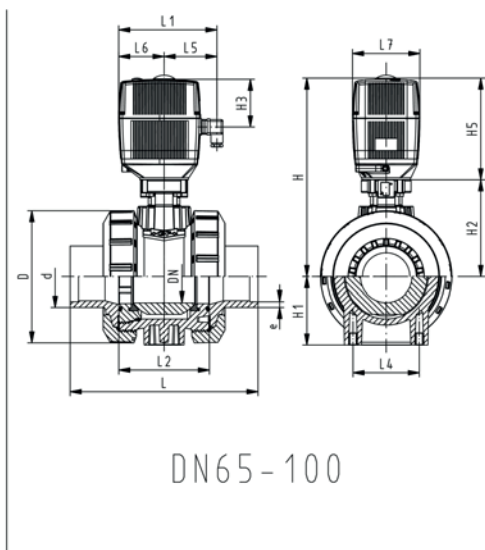
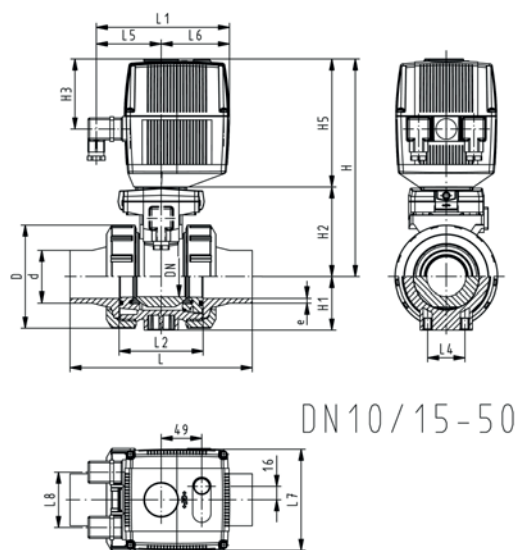
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

#### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>199 131 363</b>	<b>199 131 373</b>	2.100
25	20	10	350	<b>199 131 364</b>	<b>199 131 374</b>	2.200
32	25	10	700	<b>199 131 365</b>	<b>199 131 375</b>	2.300
40	32	10	1000	<b>199 131 366</b>	<b>199 131 376</b>	2.600
50	40	10	1600	<b>199 131 367</b>	<b>199 131 377</b>	3.000
63	50	10	3100	<b>199 131 368</b>	<b>199 131 378</b>	3.800
75	65	10	5000	<b>199 131 369</b>	<b>199 131 379</b>	6.200
90	80	10	7000	<b>199 131 370</b>	<b>199 131 380</b>	8.000
110	100	10	11000	<b>199 131 371</b>	<b>199 131 381</b>	11.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	e [mm]
20	50	231	27	64	94	167	130	180	56	130	25	97	122	1.9
25	58	240	30	73	94	167	143	180	65	150	25	97	122	2.3
32	68	240	36	73	94	167	150	180	71	160	25	97	122	3.0
40	84	251	44	84	94	167	171	180	85	180	45	97	122	3.7
50	97	251	51	84	94	167	191	180	89	200	45	97	122	4.6
63	124	273	64	106	94	167	220	180	101	230	45	97	122	5.8
75	166	346	85	156	94	190	266	180	136	290	70	98	122	8.2
90	200	358	105	168	94	190	264	180	141	310	70	98	122	9.9
110	238	365	123	175	94	190	301	180	164	350	120	98	122	12.0



# PROGEF Standard

## Ball valve type 131 24V

### With manual emergency override

### With butt fusion spigots SDR17.6 metric

#### Model:

- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

#### Option:

- Individual configuration of the valve (see diagram)

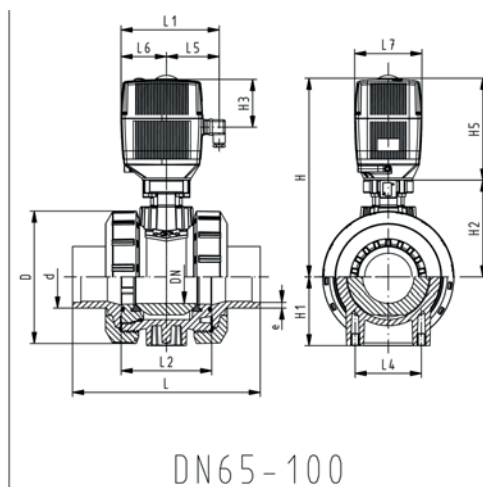
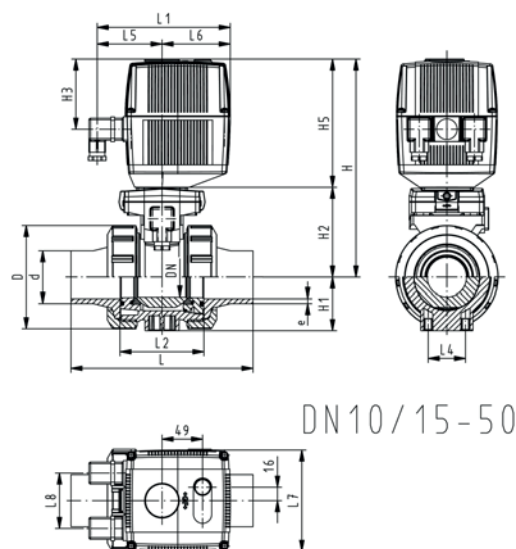


DN10/15 - 50



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
50	40	10	1600	<b>199 131 767</b>	<b>199 131 777</b>	6.200
63	50	10	3100	<b>199 131 768</b>	<b>199 131 778</b>	
75	65	10	5000	<b>199 131 769</b>	<b>199 131 779</b>	
90	80	10	7000	<b>199 131 770</b>	<b>199 131 780</b>	8.000
110	100	10	11000	<b>199 131 771</b>	<b>199 131 781</b>	11.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	e [mm]
50	97	251	51	84	94	167	191	180	89	200	45	97	122	2.9
63	124	273	64	106	94	167	220	180	101	230	45	97	122	3.6
75	166	346	85	156	94	190	266	180	136	290	70	98	122	4.6
90	200	358	105	168	94	190	264	180	141	310	70	98	122	5.5
110	238	365	123	175	94	190	301	180	164	350	120	98	122	6.7







## PROGEF Standard Ball valve type 131 100-230V With manual emergency override With backing flanges PP-st Inch ANSI

### Model:

- Material: PP-H
- For easy installation and removal
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Integrated stainless steel mounting inserts
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

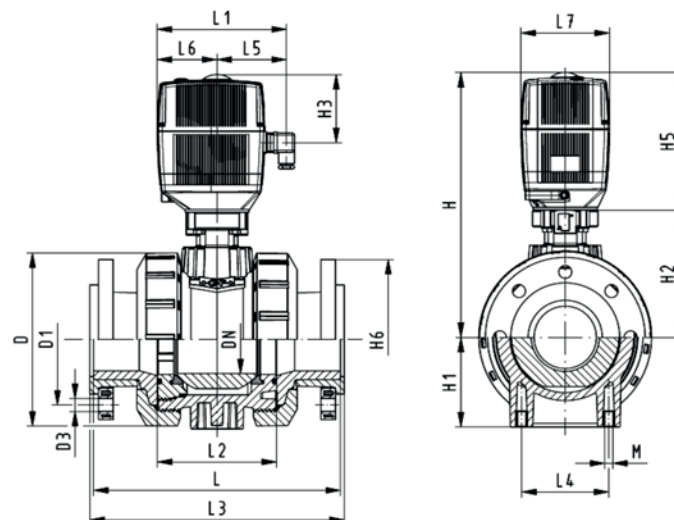
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	<b>199 131 529</b>	<b>199 131 539</b>	10.500
90	80	3	10	7000	<b>199 131 530</b>	<b>199 131 540</b>	13.200
110	100	4	10	11000	<b>199 131 531</b>	<b>199 131 541</b>	18.400

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
75	166	346	85	156	94	190	93	280	180	136	290	70	98	83	122
90	200	358	105	168	94	190	100	296	180	141	310	70	98	83	122
110	238	365	123	175	94	190	110	336	180	164	350	120	98	83	122

d [mm]	L8 [mm]
75	66
90	66
110	66





DN10/15 - 50

## PROGEF Standard Ball valve type 131 100-230V With manual emergency override With threaded sockets reinforced NPT

### Model:

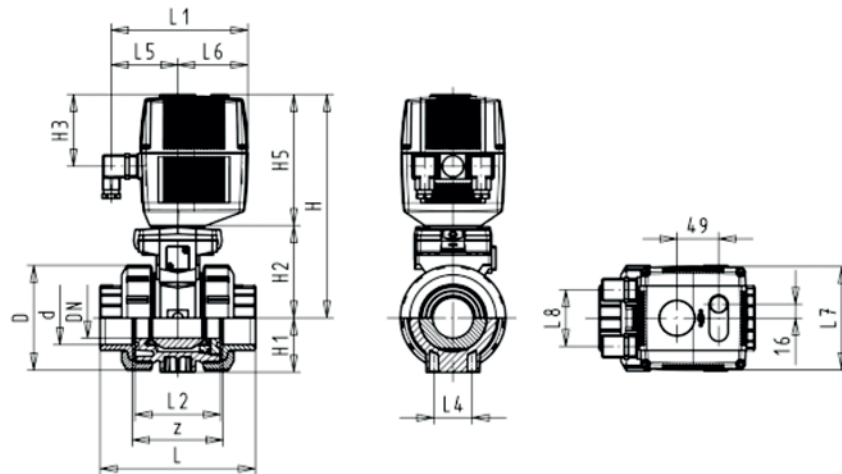
- Material: PP-H
- For easy installation and removal
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Integrated stainless steel mounting inserts
- Built on with electric actuator EA21
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 131 402	199 131 412	2.100
1/2	15	10	185	199 131 403	199 131 413	2.100
3/4	20	10	350	199 131 404	199 131 414	2.200
1	25	10	700	199 131 405	199 131 415	2.300
1 1/4	32	10	1000	199 131 406	199 131 416	2.600
1 1/2	40	10	1600	199 131 407	199 131 417	3.000
2	50	10	3100	199 131 408	199 131 418	4.285

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	231	27	64	94	167	96	180	56	25	97	83	122	71
1/2	50	231	27	64	94	167	99	180	56	25	97	83	122	64
3/4	58	240	30	73	94	167	111	180	65	25	97	83	122	76
1	68	240	36	73	94	167	127	180	71	25	97	83	122	83
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	100
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	111
2	124	273	64	106	94	167	183	180	101	45	97	83	122	134





## PROGEF Standard Ball valve type 131 24V With manual emergency override With backing flanges PP-st Inch ANSI

### Model:

- Material: PP-H
- Voltage 24 V AC/DC
- Control range 90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

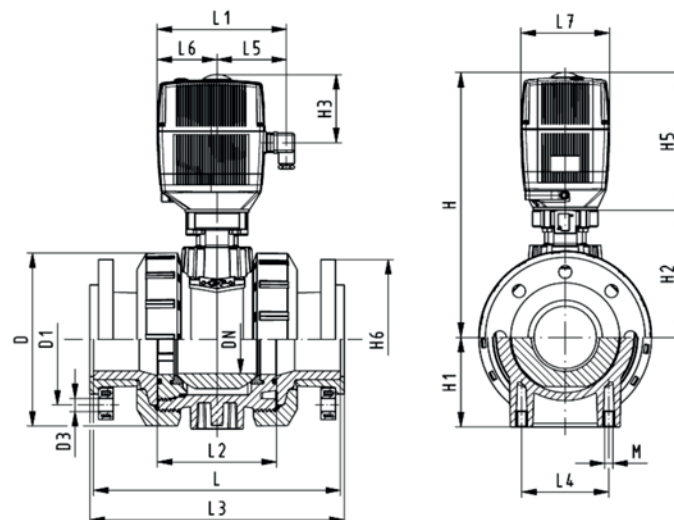
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	199 131 549	199 131 559	10.500
90	80	3	10	7000	199 131 550	199 131 560	13.200
110	100	4	10	11000	199 131 551	199 131 561	18.400

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
75	166	346	85	156	94	190	93	280	180	136	290	70	98	83	122
90	200	358	105	168	94	190	100	296	180	141	310	70	98	83	122
110	238	365	123	175	94	190	110	336	180	164	350	120	98	83	122

d [mm]	L8 [mm]
75	66
90	66
110	66





DN10/15 - 50

## PROGEF Standard Ball valve type 131 24V With manual emergency override With threaded sockets verstärkt NPT

### Model:

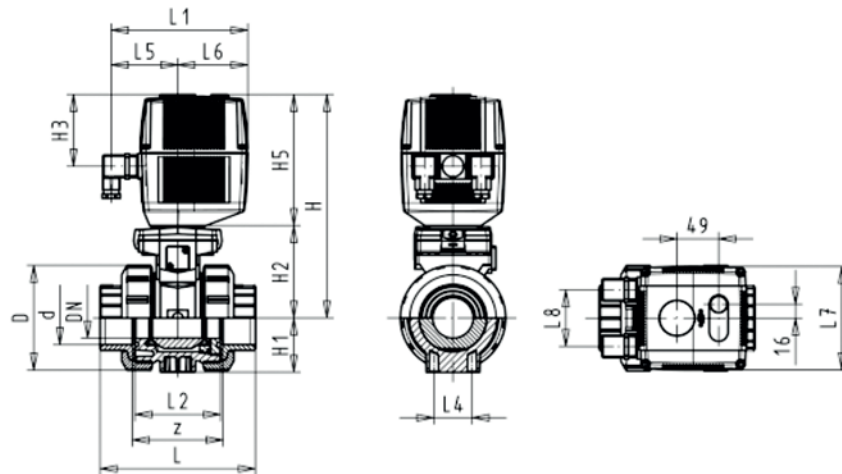
- Material: PP-H
- Voltage 24 V AC/DC
- Control range 90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Built on with electric actuator EA21
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 131 422	199 131 432	2.100
1/2	15	10	185	199 131 423	199 131 433	2.100
3/4	20	10	350	199 131 424	199 131 434	2.200
1	25	10	700	199 131 425	199 131 435	2.300
1 1/4	32	10	1000	199 131 426	199 131 436	2.600
1 1/2	40	10	1600	199 131 427	199 131 437	3.000
2	50	10	3100	199 131 428	199 131 438	3.800

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	231	27	64	94	167	96	180	56	25	97	83	122	71
1/2	50	231	27	64	94	167	99	180	56	25	97	83	122	64
3/4	58	240	30	73	94	167	111	180	65	25	97	83	122	76
1	68	240	36	73	94	167	127	180	71	25	97	83	122	83
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	100
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	111
2	124	273	64	106	94	167	183	180	101	45	97	83	122	134





# PROGEF Standard

## 3-Way ball valve type 186

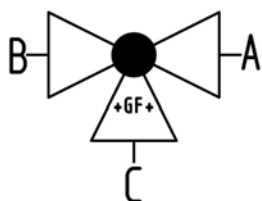
### Horizontal/L-port 100-230V

### With manual emergency override

### With fusion sockets metric

#### Model:

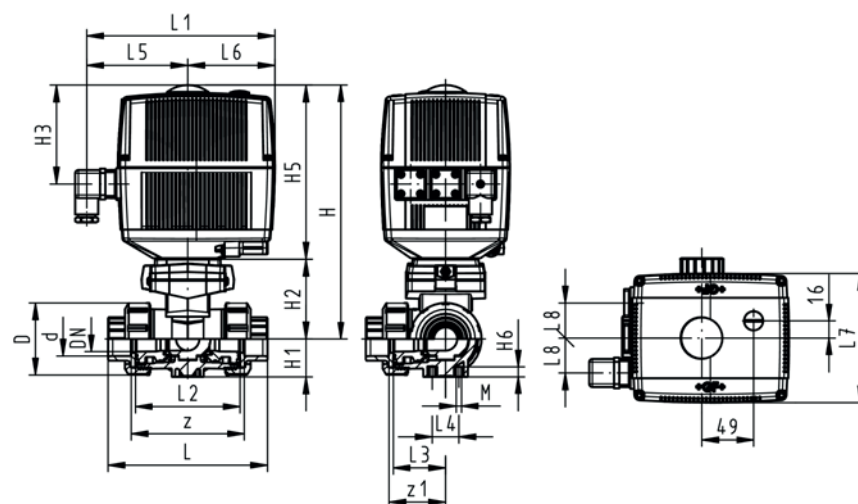
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 186 022	199 186 032	2.038
20	15	10	75	199 186 023	199 186 033	2.042
25	20	10	150	199 186 024	199 186 034	2.132
32	25	10	280	199 186 025	199 186 035	2.257
40	32	10	480	199 186 026	199 186 036	2.548
50	40	10	620	199 186 027	199 186 037	2.844
63	50	10	1230	199 186 028	199 186 038	3.751

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	110	180	72	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	129	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	146	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	170	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	193	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	244	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	82	41
20	33	6	82	41
25	33	6	97	49
32	33	6	110	55
40	33	8	132	66
50	33	8	151	76
63	33	8	188	94

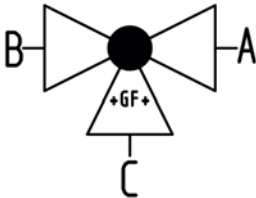




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/L-port 100-230V**  
**With manual emergency override**  
**With threaded sockets reinforced Rp**

**Model:**

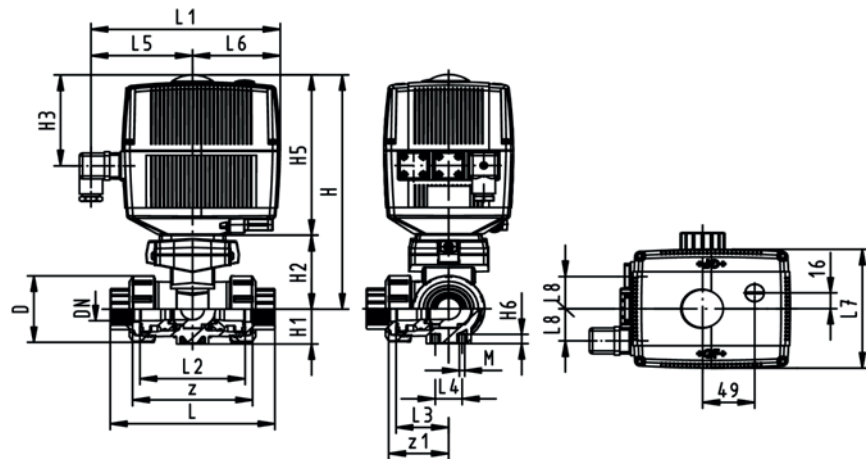
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 186 122	199 186 132	2.038
1/2	15	10	75	199 186 123	199 186 133	2.042
3/4	20	10	150	199 186 124	199 186 134	2.132
1	25	10	280	199 186 125	199 186 135	2.257
1 1/4	32	10	480	199 186 126	199 186 136	2.548
1 1/2	40	10	620	199 186 127	199 186 137	2.844
2	50	10	1230	199 186 128	199 186 138	3.751

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	112	180	72	36	25	97	83	122
1/2	50	231	28	64	94	167	8	114	180	72	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	85	43	25	97	83	122
1	68	240	36	73	94	167	8	154	180	98	49	25	97	83	122
1 1/4	84	251	45	84	94	167	9	180	180	118	59	45	97	83	122
1 1/2	97	251	51	84	94	167	9	203	180	135	68	45	97	83	122
2	124	273	65	106	94	167	9	258	180	176	88	45	97	83	122

Rp [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	86	43
1/2	33	6	84	42
3/4	33	6	99	50
1	33	6	112	56
1 1/4	33	8	132	66
1 1/2	33	8	153	77
2	33	8	196	98

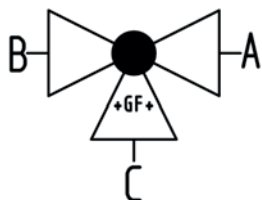




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/L-port 100-230V**  
**With manual emergency override**  
**With socket fusion spigots metric**

**Model:**

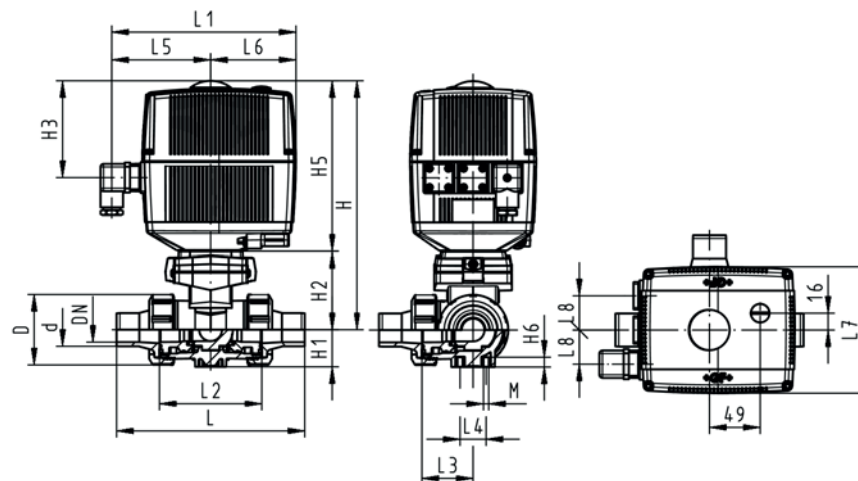
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 186 002	199 186 012	2.042
20	15	10	75	199 186 003	199 186 013	2.048
25	20	10	150	199 186 004	199 186 014	2.142
32	25	10	280	199 186 005	199 186 015	2.272
40	32	10	480	199 186 006	199 186 016	2.562
50	40	10	620	199 186 007	199 186 017	2.885
63	50	10	1230	199 186 008	199 186 018	3.833

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	126	180	72	36	25	97	83	122
20	50	231	28	64	94	167	8	136	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	159	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	178	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	204	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	237	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	296	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M
16	33	6
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8

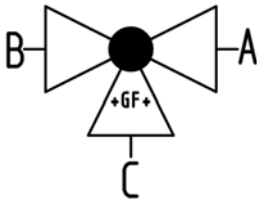




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/L-port 100-230V**  
**With manual emergency override**  
**With butt fusion spigots**  
**IR-Plus SDR11 metric**

**Model:**

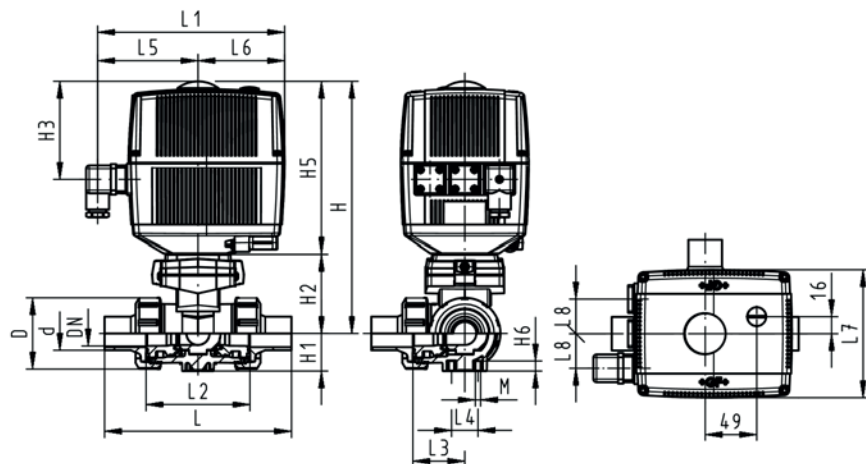
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	75	199 186 083	199 186 093	2.048
25	20	10	150	199 186 084	199 186 094	2.142
32	25	10	280	199 186 085	199 186 095	2.272
40	32	10	480	199 186 086	199 186 096	2.562
50	40	10	620	199 186 087	199 186 097	2.885
63	50	10	1230	199 186 088	199 186 098	3.833

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	28	64	94	167	8	146	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	163	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	178	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	204	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	237	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	296	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8



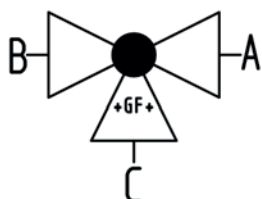




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/L-port 24V**  
**With manual emergency override**  
**With fusion sockets metric**

**Model:**

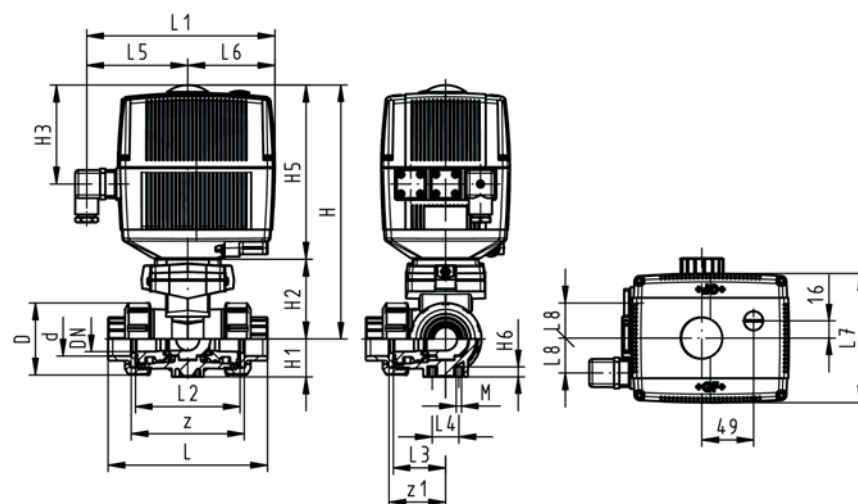
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	<b>199 186 182</b>	<b>199 186 192</b>	2.038
20	15	10	75	<b>199 186 183</b>	<b>199 186 193</b>	2.042
25	20	10	150	<b>199 186 184</b>	<b>199 186 194</b>	2.132
32	25	10	280	<b>199 186 185</b>	<b>199 186 195</b>	2.257
40	32	10	480	<b>199 186 186</b>	<b>199 186 196</b>	2.548
50	40	10	620	<b>199 186 187</b>	<b>199 186 197</b>	2.844
63	50	10	1230	<b>199 186 188</b>	<b>199 186 198</b>	3.751

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	110	180	72	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	129	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	146	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	170	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	193	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	244	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	82	41
20	33	6	82	41
25	33	6	97	49
32	33	6	110	55
40	33	8	132	66
50	33	8	151	76
63	33	8	188	94

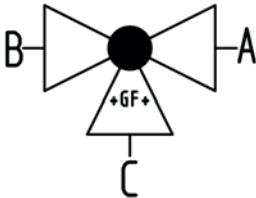




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/L-port 24V**  
**With manual emergency override**  
**With threaded sockets reinforced Rp**

**Model:**

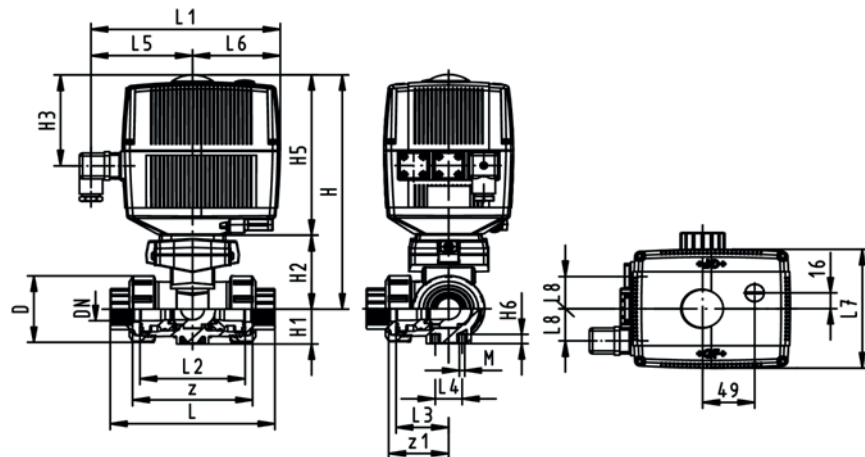
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 186 282	199 186 292	2.038
1/2	15	10	75	199 186 283	199 186 293	2.042
3/4	20	10	150	199 186 284	199 186 294	2.132
1	25	10	280	199 186 285	199 186 295	2.257
1 1/4	32	10	480	199 186 286	199 186 296	2.548
1 1/2	40	10	620	199 186 287	199 186 297	2.844
2	50	10	1230	199 186 288	199 186 298	3.751

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	112	180	72	36	25	97	83	122
1/2	50	231	28	64	94	167	8	114	180	72	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	85	43	25	97	83	122
1	68	240	36	73	94	167	8	154	180	98	49	25	97	83	122
1 1/4	84	251	45	84	94	167	9	180	180	118	59	45	97	83	122
1 1/2	97	251	51	84	94	167	9	203	180	135	68	45	97	83	122
2	124	273	65	106	94	167	9	258	180	176	88	45	97	83	122

Rp [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	86	43
1/2	33	6	84	42
3/4	33	6	99	50
1	33	6	112	56
1 1/4	33	8	132	66
1 1/2	33	8	153	77
2	33	8	196	98





# PROGEF Standard

## 3-Way ball valve type 186

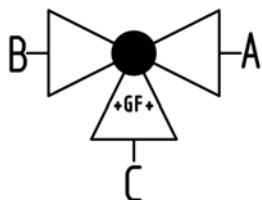
### Horizontal/L-port 24V

### With manual emergency override

### With socket fusion spigots metric

#### Model:

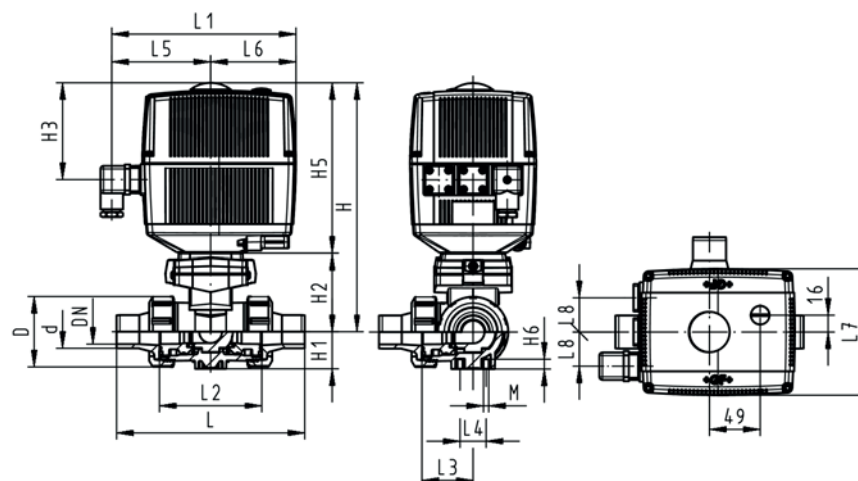
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	<b>199 186 162</b>	<b>199 186 172</b>	2.042
20	15	10	75	<b>199 186 163</b>	<b>199 186 173</b>	2.048
25	20	10	150	<b>199 186 164</b>	<b>199 186 174</b>	2.142
32	25	10	280	<b>199 186 165</b>	<b>199 186 175</b>	2.272
40	32	10	480	<b>199 186 166</b>	<b>199 186 176</b>	2.562
50	40	10	620	<b>199 186 167</b>	<b>199 186 177</b>	2.885
63	50	10	1230	<b>199 186 168</b>	<b>199 186 178</b>	3.833

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	126	180	72	36	25	97	83	122
20	50	231	28	64	94	167	8	136	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	159	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	178	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	204	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	237	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	296	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M
16	33	6
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8

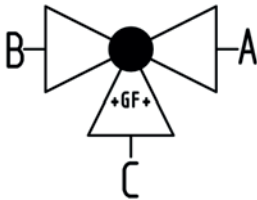




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/L-port 24V**  
**With manual emergency override**  
**With butt fusion spigots**  
**IR-Plus SDR11 metric**

**Model:**

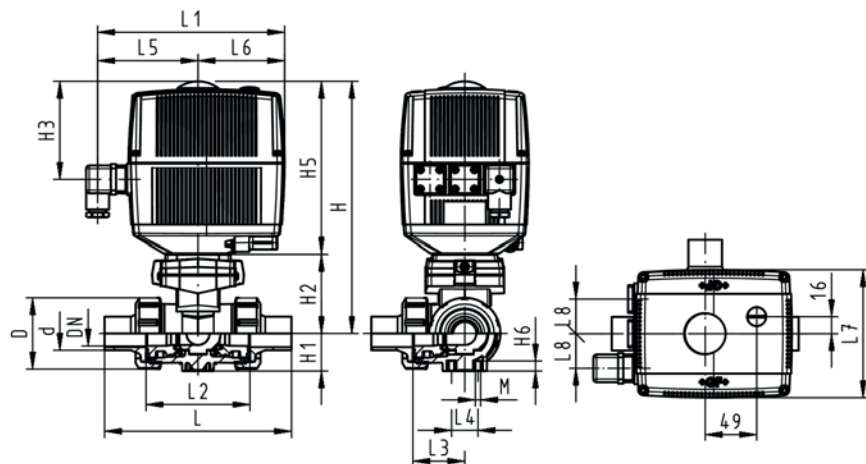
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	75	<b>199 186 243</b>	<b>199 186 253</b>	2.048
25	20	10	150	<b>199 186 244</b>	<b>199 186 254</b>	2.142
32	25	10	280	<b>199 186 245</b>	<b>199 186 255</b>	2.272
40	32	10	480	<b>199 186 246</b>	<b>199 186 256</b>	2.562
50	40	10	620	<b>199 186 247</b>	<b>199 186 257</b>	2.885
63	50	10	1230	<b>199 186 248</b>	<b>199 186 258</b>	3.833

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	28	64	94	167	8	146	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	163	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	178	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	204	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	237	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	296	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8

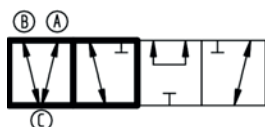
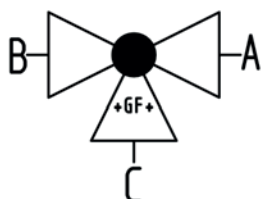




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/T-port 100-230V**  
**With manual emergency override**  
**With fusion sockets metric**

**Model:**

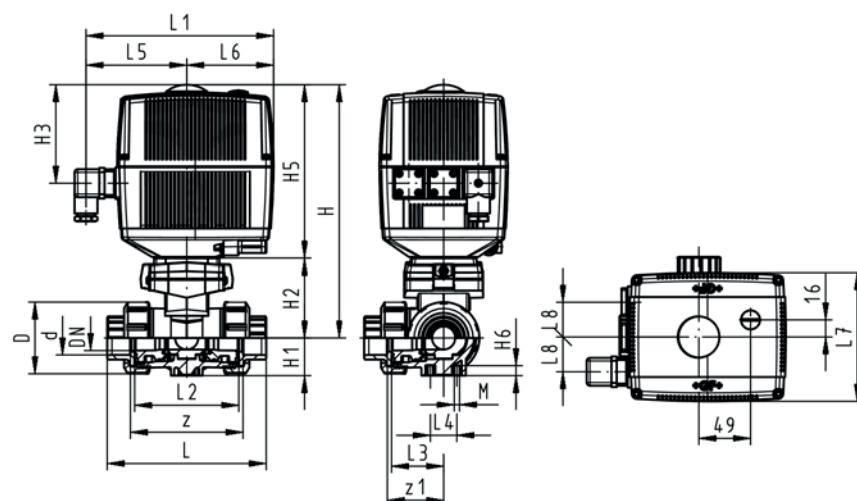
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>199 186 062</b>	<b>199 186 072</b>	2.038
20	15	10	200	<b>199 186 063</b>	<b>199 186 073</b>	2.481
25	20	10	470	<b>199 186 064</b>	<b>199 186 074</b>	2.131
32	25	10	793	<b>199 186 065</b>	<b>199 186 075</b>	2.252
40	32	10	1290	<b>199 186 066</b>	<b>199 186 076</b>	2.541
50	40	10	1910	<b>199 186 067</b>	<b>199 186 077</b>	2.830
63	50	10	3100	<b>199 186 068</b>	<b>199 186 078</b>	3.722

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	110	180	72	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	129	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	146	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	170	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	193	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	244	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	82	41
20	33	6	82	41
25	33	6	97	49
32	33	6	110	55
40	33	8	132	66
50	33	8	151	76
63	33	8	188	94

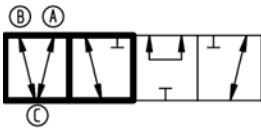
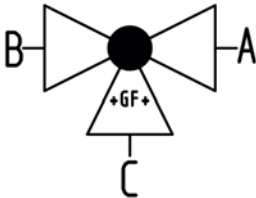




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/T-port 100-230V**  
**With manual emergency override**  
**With threaded sockets reinforced Rp**

**Model:**

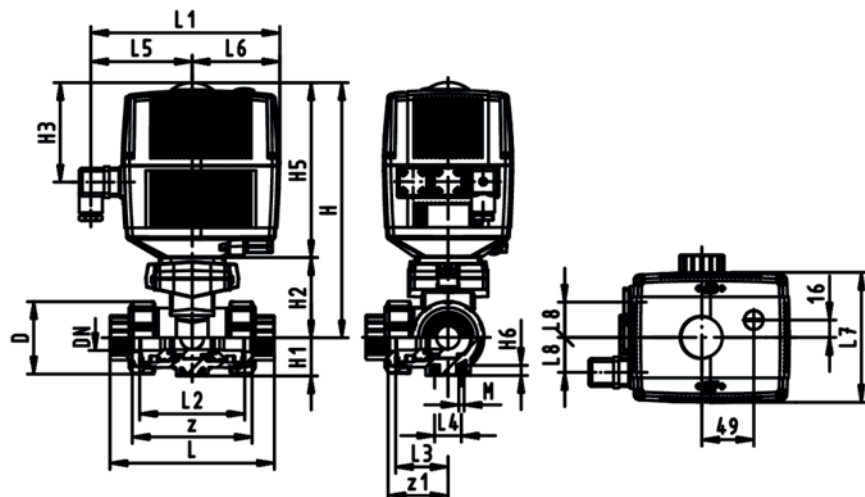
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	199 186 142	199 186 152	2.038
1/2	15	10	200	199 186 143	199 186 153	2.042
3/4	20	10	470	199 186 144	199 186 154	2.131
1	25	10	793	199 186 145	199 186 155	2.252
1 1/4	32	10	1290	199 186 146	199 186 156	2.541
1 1/2	40	10	1910	199 186 147	199 186 157	2.830
2	50	10	3100	199 186 148	199 186 158	3.722

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	112	180	72	36	25	97	83	122
1/2	50	231	28	64	94	167	8	114	180	72	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	85	43	25	97	83	122
1	68	240	36	73	94	167	8	154	180	98	49	25	97	83	122
1 1/4	84	251	45	84	94	167	9	180	180	118	59	45	97	83	122
1 1/2	97	251	51	84	94	167	9	203	180	135	68	45	97	83	122
2	124	273	65	106	94	167	9	258	180	176	88	45	97	83	122

Rp [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	86	43
1/2	33	6	84	42
3/4	33	6	99	50
1	33	6	112	56
1 1/4	33	8	132	66
1 1/2	33	8	153	77
2	33	8	196	98

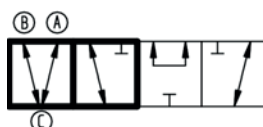
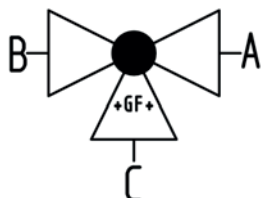




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/T-port 100-230V**  
**With manual emergency override**  
**With socket fusion spigots metric**

**Model:**

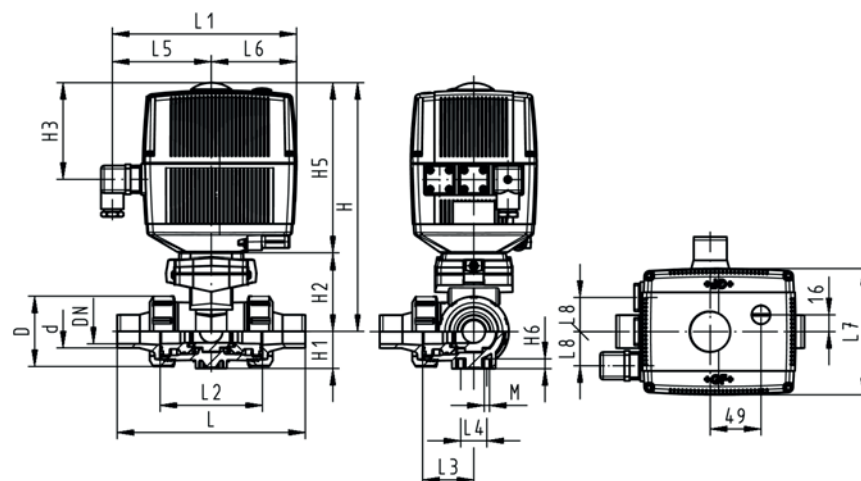
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>199 186 042</b>	<b>199 186 052</b>	2.042
20	15	10	200	<b>199 186 043</b>	<b>199 186 053</b>	2.048
25	20	10	470	<b>199 186 044</b>	<b>199 186 054</b>	2.141
32	25	10	793	<b>199 186 045</b>	<b>199 186 055</b>	2.268
40	32	10	1290	<b>199 186 046</b>	<b>199 186 056</b>	2.555
50	40	10	1910	<b>199 186 047</b>	<b>199 186 057</b>	2.872
63	50	10	3100	<b>199 186 048</b>	<b>199 186 058</b>	3.804

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	126	180	72	36	25	97	83	122
20	50	231	28	64	94	167	8	136	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	159	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	178	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	204	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	237	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	296	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M
16	33	6
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8

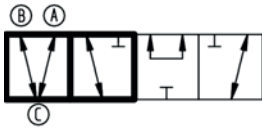
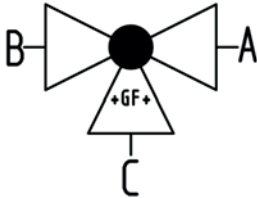




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/T-port 100-230V**  
**With manual emergency override**  
**With butt fusion spigots**  
**IR-Plus SDR11 metric**

**Model:**

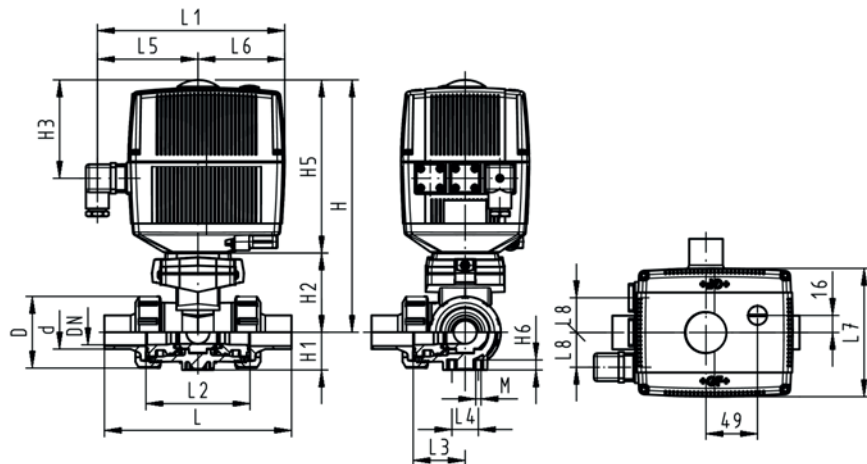
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	200	<b>199 186 103</b>	<b>199 186 113</b>	2.048
25	20	10	470	<b>199 186 104</b>	<b>199 186 114</b>	2.141
32	25	10	793	<b>199 186 105</b>	<b>199 186 115</b>	2.268
40	32	10	1290	<b>199 186 106</b>	<b>199 186 116</b>	2.555
50	40	10	1910	<b>199 186 107</b>	<b>199 186 117</b>	2.872
63	50	10	3100	<b>199 186 108</b>	<b>199 186 118</b>	3.804

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	28	64	94	167	8	146	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	163	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	178	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	204	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	237	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	296	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8







# PROGEF Standard

## 3-Way ball valve type 186

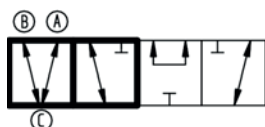
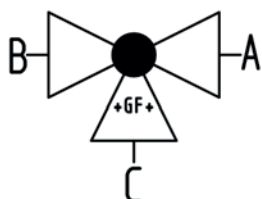
### Horizontal/T-port 24V

### With manual emergency override

### With fusion sockets metric

#### Model:

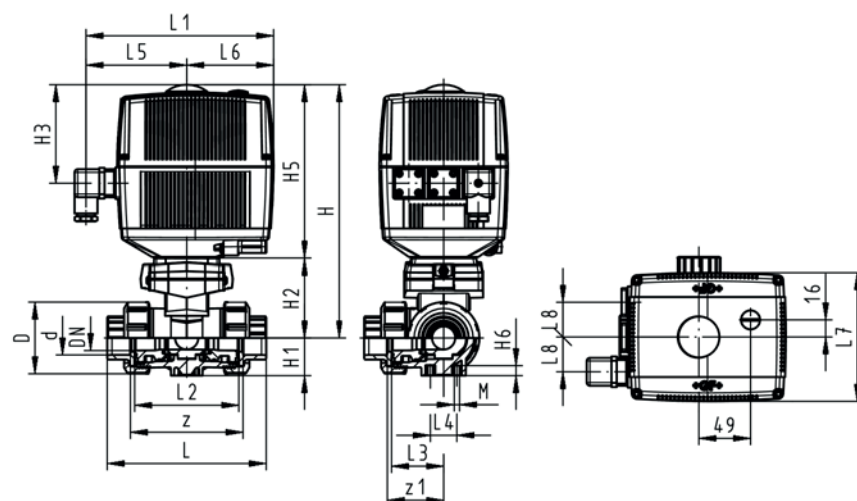
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>199 186 222</b>	<b>199 186 232</b>	2.038
20	15	10	200	<b>199 186 223</b>	<b>199 186 233</b>	2.042
25	20	10	470	<b>199 186 224</b>	<b>199 186 234</b>	2.131
32	25	10	793	<b>199 186 225</b>	<b>199 186 235</b>	2.252
40	32	10	1290	<b>199 186 226</b>	<b>199 186 236</b>	2.541
50	40	10	1910	<b>199 186 227</b>	<b>199 186 237</b>	2.830
63	50	10	3100	<b>199 186 228</b>	<b>199 186 238</b>	3.722

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	110	180	72	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	129	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	146	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	170	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	193	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	244	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	82	41
20	33	6	82	41
25	33	6	97	49
32	33	6	110	55
40	33	8	132	66
50	33	8	151	76
63	33	8	188	94

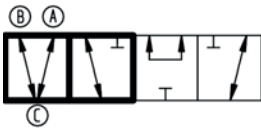
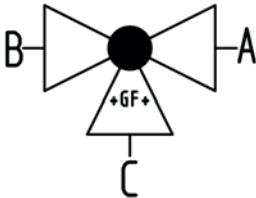




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/T-port 24V**  
**With manual emergency override**  
**With threaded sockets reinforced Rp**

**Model:**

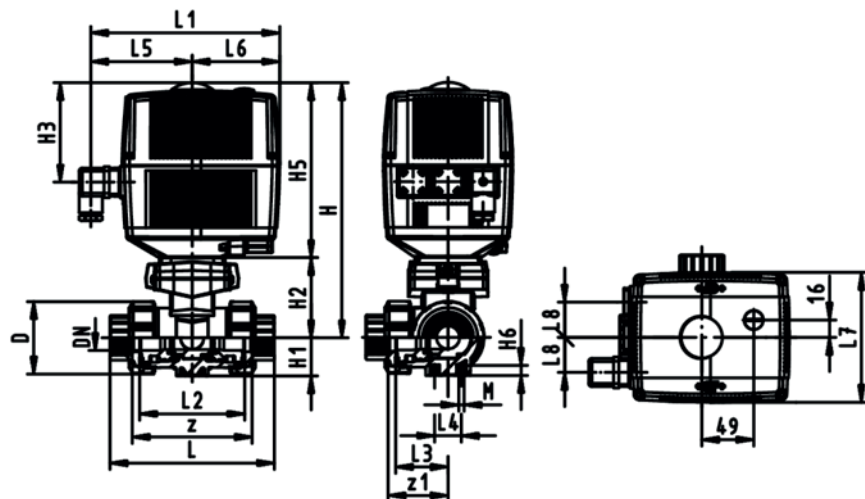
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	199 186 302	199 186 312	2.038
1/2	15	10	200	199 186 303	199 186 313	2.042
3/4	20	10	470	199 186 304	199 186 314	2.131
1	25	10	793	199 186 305	199 186 315	2.252
1 1/4	32	10	1290	199 186 306	199 186 316	2.541
1 1/2	40	10	1910	199 186 307	199 186 317	2.830
2	50	10	3100	199 186 308	199 186 318	3.722

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	112	180	72	36	25	97	83	122
1/2	50	231	28	64	94	167	8	114	180	72	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	85	43	25	97	83	122
1	68	240	36	73	94	167	8	154	180	98	49	25	97	83	122
1 1/4	84	251	45	84	94	167	9	180	180	118	59	45	97	83	122
1 1/2	97	251	51	84	94	167	9	203	180	135	68	45	97	83	122
2	124	273	65	106	94	167	9	258	180	176	88	45	97	83	122

Rp [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	86	43
1/2	33	6	84	42
3/4	33	6	99	50
1	33	6	112	56
1 1/4	33	8	132	66
1 1/2	33	8	153	77
2	33	8	196	98





# PROGEF Standard

## 3-Way ball valve type 186

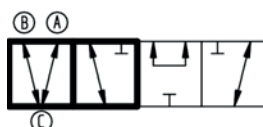
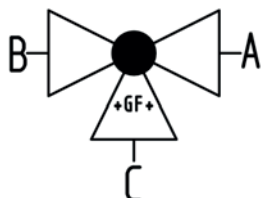
### Horizontal/T-port 24V

### With manual emergency override

### With socket fusion spigots metric

#### Model:

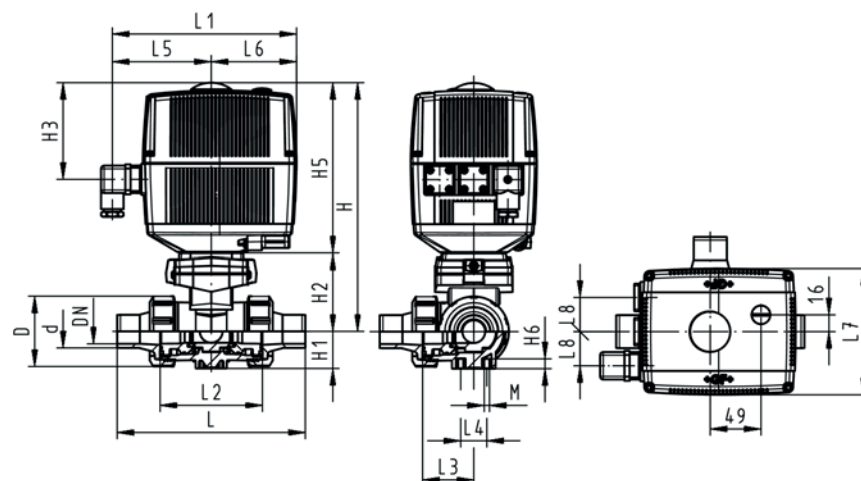
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>199 186 202</b>	<b>199 186 212</b>	2.042
20	15	10	200	<b>199 186 203</b>	<b>199 186 213</b>	2.048
25	20	10	470	<b>199 186 204</b>	<b>199 186 214</b>	2.141
32	25	10	793	<b>199 186 205</b>	<b>199 186 215</b>	2.268
40	32	10	1290	<b>199 186 206</b>	<b>199 186 216</b>	2.555
50	40	10	1910	<b>199 186 207</b>	<b>199 186 217</b>	2.872
63	50	10	3100	<b>199 186 208</b>	<b>199 186 218</b>	3.804

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	126	180	72	36	25	97	83	122
20	50	231	28	64	94	167	8	136	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	159	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	178	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	204	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	237	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	296	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M
16	33	6
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8

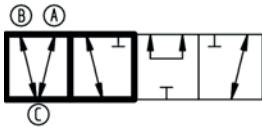
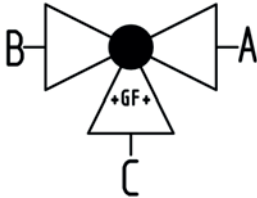




**PROGEF Standard**  
**3-Way ball valve type 186**  
**Horizontal/T-port 24V**  
**With manual emergency override**  
**With butt fusion spigots**  
**IR-Plus SDR11 metric**

**Model:**

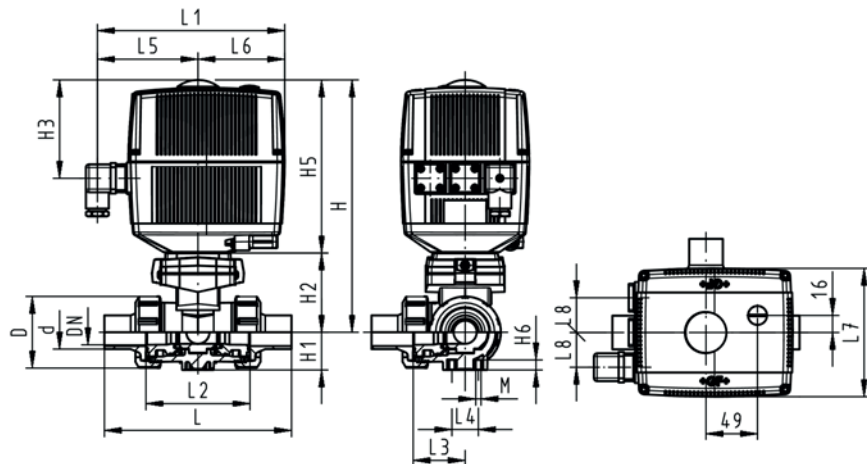
- Material: PP-H
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	200	<b>199 186 263</b>	<b>199 186 273</b>	2.048
25	20	10	470	<b>199 186 264</b>	<b>199 186 274</b>	2.141
32	25	10	793	<b>199 186 265</b>	<b>199 186 275</b>	2.268
40	32	10	1290	<b>199 186 266</b>	<b>199 186 276</b>	2.555
50	40	10	1910	<b>199 186 267</b>	<b>199 186 277</b>	2.872
63	50	10	3100	<b>199 186 268</b>	<b>199 186 278</b>	3.804

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	28	64	94	167	8	146	180	72	36	25	97	83	122
25	58	240	32	73	94	167	8	163	180	85	43	25	97	83	122
32	68	240	36	73	94	167	8	178	180	98	49	25	97	83	122
40	84	251	45	84	94	167	9	204	180	118	59	45	97	83	122
50	97	251	51	84	94	167	9	237	180	135	68	45	97	83	122
63	124	273	65	106	94	167	9	296	180	176	88	45	97	83	122

d [mm]	L8 [mm]	M
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8



# Copiable

## Configurator GF ball valve type 546 PROGEF Standard

### Ball Valve

- A01 Ball Valve 546
- A02 Linear Ball Valve

### Material

- B05 PP-H

### Dimension

- C05 d 16 DN 10 3/8"
- C06 d 20 DN 15 1/2"
- C07 d 25 DN 20 3/4"
- C08 d 32 DN 25 1"
- C09 d 40 DN 32 1 1/4"
- C10 d 50 DN 40 1 1/2"
- C11 d 63 DN 50 2"
- C12 DN 65 2 1/2"
- C13 DN 80 3"
- C14 DN 100 4"
- C15 DN 150 6"

### Version

- D01 Standard, PTFE ball seal
- D02 oilfree, PTFE ball seal (only with specific connecting parts)
- D03 silicon-free, PTFE ball seal (only with specific connecting parts)
- D04 silicon-free, PVDF ball seal for metric (only with specific connecting parts)

### Seals

- E01 EPDM seals
- E02 FPM seals
- E03 FPM/KALREZ® seals

### Threaded inserts

- F01 without threaded inserts
- F02 with threaded inserts

### Connecting parts

- G30 PP-H Fusion socket metric
- G32 PP-H Socket fusion spigot metric
- G33 PP-H Threaded socket Rp reinforced
- G34 PP-H Threaded socket NPT reinforced
- G35 PP-H Butt fusion spigot SDR 11 metric IR-PLUS®
- G36 PP-H Butt fusion spigot SDR 17.6 metric with this valve end the maximum nominal pressure is reduced to PN 6
- G37 PP-H Butt fusion spigot long SDR11 metric
- G43 PE-100 Butt fusion spigot long SDR11 metric
- G44 PE-100 Butt fusion spigot long SDR17.6 metric
- G63 Fixed flange PP-H serrated metric
- G72 Backing flange PP-steel metric
- G73 Backing flange PP-steel inch ANSI
- G77 Backing flange PP JIS with connecting parts
- G78 Backing flange PP-GF JIS
- G83 PP-H Valve end blank
- G40 PE-100 Fusion socket metric
- G41 PE-100 Butt fusion spigot SDR11 metric
- G42 PE-100 Butt fusion spigot SDR17.6 metric
- G43 PE-100 Butt fusion spigot long SDR11 metric
- G11 PVC-C Cement socket metric
- G13 PVC-C Cement socket inch ASTM
- G14 PVC-C Cement spigot metric
- G15 PVC-C Threaded socket Rp
- G16 PVC-C Threaded socket Rp reinforced
- G17 PVC-C Threaded socket NPT

### Multi-functional module

- I01 No multi-functional module
- I02 Empty module
- I03 Module with 2 end switches Ag, Ni
- I04 Module with 2 end switches Au
- I05 Module with 2 inductive switches Namur
- I06 Module with 2 inductive switches PNP
- I07 Module with 2 inductive switches NPN

### Lever

- K01 Standard lever red
- K02 Standard lever black
- K11 Multi-functional lever red

### Mounting plate

- L01 without mounting plate
- L02 with mounting plate

A01

B05

C

D

E

F

G

G

I

K

L

left

right

You will find a large selection of different versions in our range of products. New system elements also provide you with new opportunities for use. In order for us to supply exactly the ball valve you need for your application, we have created a selection menu for you. (Der maximal zulässige Betriebsdruck des Kugelhahns ist PN 10).

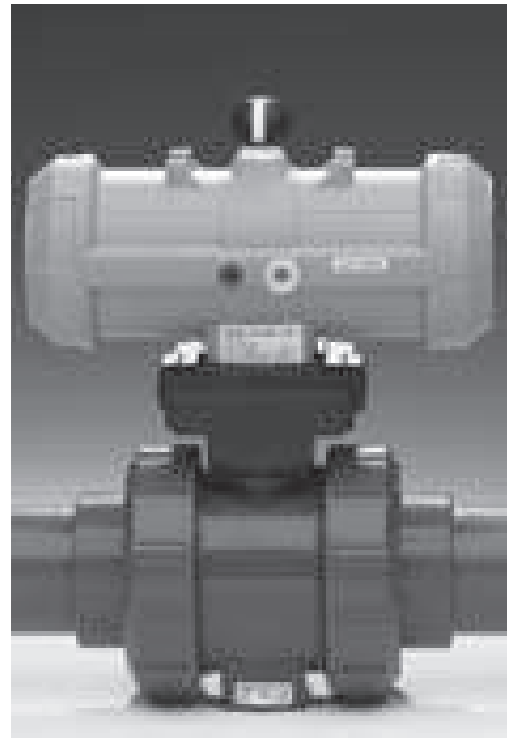
**We supply what you put together.**

# Copiable GF ball valve type 546 with pneumatic actuator

## It's so easy to configurate the type 546:

With the configurator, you have a choice of new pneumatic actuators PA11 and PA21 in 2 optimized sizes including a large range of accessories.

**We supply what you put together.**



### Pneumatic actuators PA11/PA21

- P01 Fail safe to close PA11/PA21
- P02 Fail safe to open PA11/21
- P03 Double acting PA11/21
- P30 Fail safe to close PA30/90
- P31 Fail safe to open PA30/90
- P32 Double acting PA30/90

### Manual override

- Q01 without manual override
- Q02 with manual override

### Stroke limiter

- R01 without stroke limiter
- R02 with stroke limiter

<b>P</b>	<b>Q</b>	<b>R</b>	
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# Ball Valves Pneumatic

## PROGEF Standard

### Ball valve type 231 FC (Fail safe to close)

#### With manual override

#### With fusion sockets metric



DN10/15 - 50

#### Model:

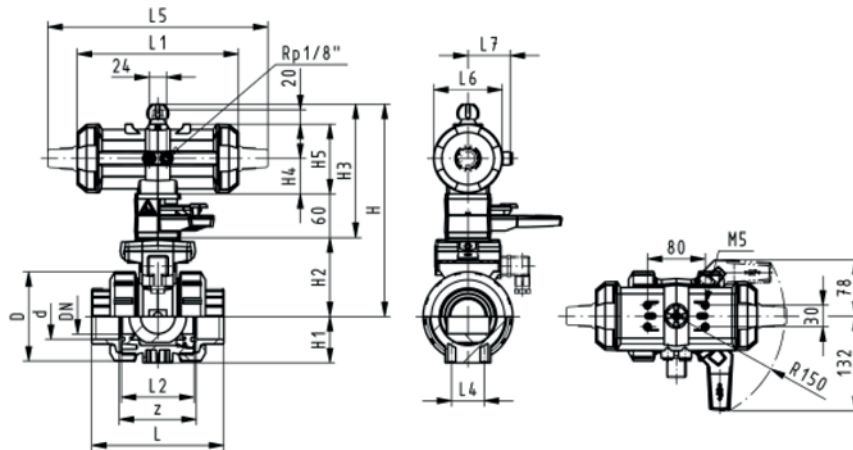
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

#### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 002	199 231 012	1.500
20	15	10	185	199 231 003	199 231 013	1.500
25	20	10	350	199 231 004	199 231 014	1.600
32	25	10	700	199 231 005	199 231 015	1.700
40	32	10	1000	199 231 006	199 231 016	2.800
50	40	10	1600	199 231 007	199 231 017	3.100
63	50	10	3100	199 231 008	199 231 018	2.985

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	77	93	194	56	25	261	76	48	67
20	50	230	27	62	168	40	77	95	194	56	25	261	76	48	66
25	58	239	30	71	168	40	77	108	194	65	25	261	76	48	77
32	68	239	36	71	168	40	77	118	194	71	25	261	76	48	83
40	84	271	44	84	187	51	99	137	224	85	45	305	95	59	99
50	97	271	51	84	187	51	99	147	224	89	45	305	95	59	105
63	124	293	64	106	187	51	99	168	224	101	45	305	95	59	117





DN10/15 - 50

## PROGEF Standard Ball valve type 231 FC (Fail safe to close) With manual override With socket fusion spigots metric

### Model:

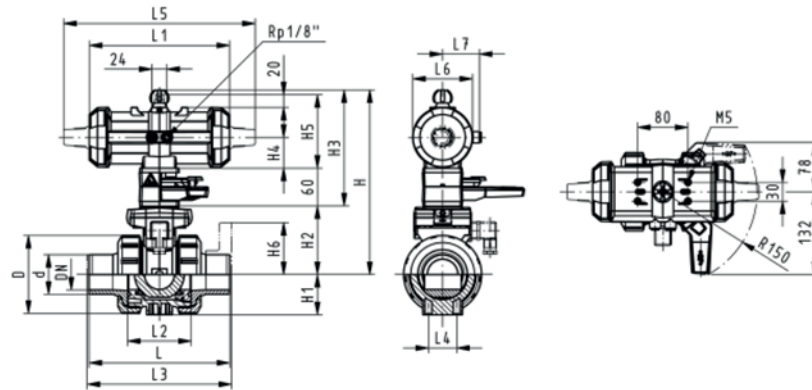
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°< 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 022	199 231 032	1.500
20	15	10	185	199 231 023	199 231 033	1.500
25	20	10	350	199 231 024	199 231 034	1.600
32	25	10	700	199 231 025	199 231 035	1.700
40	32	10	1000	199 231 026	199 231 036	2.800
50	40	10	1600	199 231 027	199 231 037	3.100
63	50	10	3100	199 231 028	199 231 038	3.051

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	159	27	62	168	40	77	110	194	56		25	261	76	48
20	50	159	27	62	168	40	77	120	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	139	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	150	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	170	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	190	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	220	224	101	230	45	305	95	59







DN10/15 - 50

# PROGEF Standard

## Ball valve type 231 FC (Fail safe to close)

### With manual override

### With butt fusion spigots IR-Plus SDR11 metric

**Model:**

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

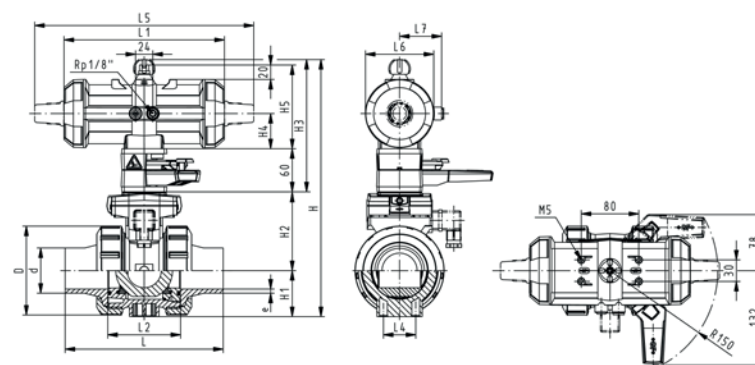
**Option:**

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>199 231 623</b>	<b>199 231 633</b>	1.500
25	20	10	350	<b>199 231 624</b>	<b>199 231 634</b>	1.600
32	25	10	700	<b>199 231 625</b>	<b>199 231 635</b>	1.387
40	32	10	1000	<b>199 231 626</b>	<b>199 231 636</b>	2.800
50	40	10	1600	<b>199 231 627</b>	<b>199 231 637</b>	3.100
63	50	10	3100	<b>199 231 628</b>	<b>199 231 638</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	168	40	77	130	194	56		25	261	76	48
25	50	159	27	62	168	40	77	143	194	56	130	25	261	76	48
32	58	168	30	71	168	40	77	150	194	65	150	25	261	76	48
40	68	168	36	71	168	40	77	171	194	71	160	25	261	76	48
50	84	202	44	84	187	51	99	191	224	85	180	45	305	95	59
63	97	202	51	84	187	51	99	220	224	89	200	45	305	95	59

d [mm]	e [mm]
20	1.9
25	2.3
32	3.0
40	3.7
50	4.6
63	5.8





DN10/15 - 50

## PROGEF Standard Ball valve type 231 FC (Fail safe to close) With manual override With fixed flanges PP-H serrated metric

### Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°< 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

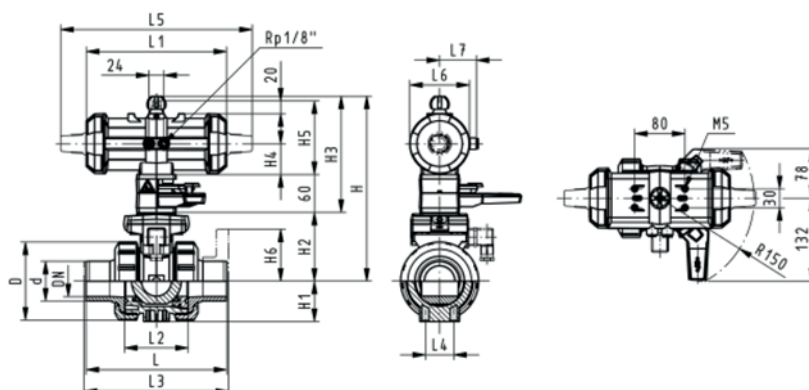
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 231 243</b>	<b>199 231 253</b>	1.700
25	20	¾	10	350	<b>199 231 244</b>	<b>199 231 254</b>	1.900
32	25	1	10	700	<b>199 231 245</b>	<b>199 231 255</b>	2.100
40	32	1 ¼	10	1000	<b>199 231 246</b>	<b>199 231 256</b>	3.400
50	40	1 ½	10	1600	<b>199 231 247</b>	<b>199 231 257</b>	3.900
63	50	2	10	3100	<b>199 231 248</b>	<b>199 231 258</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	230	27	62	168	40	77	48	120	194	56	130	25	261	76
25	58	239	30	71	168	40	77	53	139	194	65	150	25	261	76
32	68	239	36	71	168	40	77	58	150	194	71	160	25	261	76
40	84	271	44	84	187	51	99	70	170	224	85	180	45	305	95
50	97	271	51	84	187	51	99	75	190	224	89	200	45	305	95
63	124	293	64	106	187	51	99	83	220	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59





DN10/15 - 50

## PROGEF Standard Ball valve type 231 FO (Fail safe to open) With manual override With fusion sockets metric

### Model:

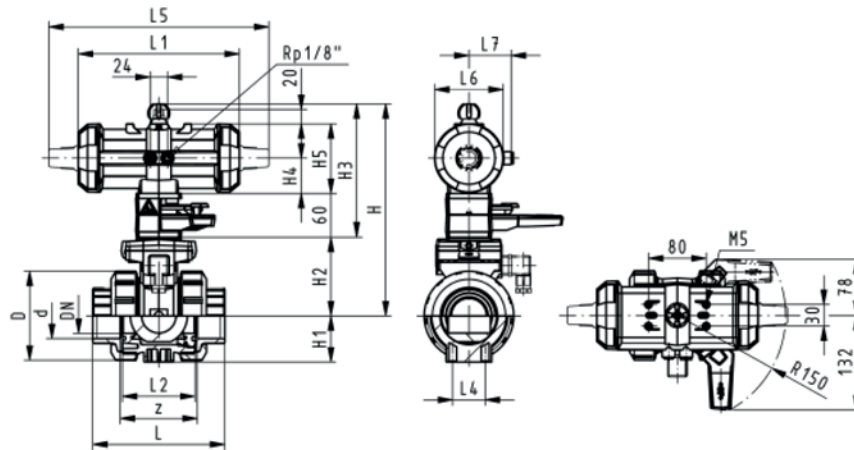
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 231 042</b>	<b>199 231 052</b>	1.500
20	15	10	185	<b>199 231 043</b>	<b>199 231 053</b>	1.500
25	20	10	350	<b>199 231 044</b>	<b>199 231 054</b>	1.600
32	25	10	700	<b>199 231 045</b>	<b>199 231 055</b>	1.700
40	32	10	1000	<b>199 231 046</b>	<b>199 231 056</b>	2.800
50	40	10	1600	<b>199 231 047</b>	<b>199 231 057</b>	3.100
63	50	10	3100	<b>199 231 048</b>	<b>199 231 058</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	77	93	194	56	25	261	76	48	67
20	50	230	27	62	168	40	77	95	194	56	25	261	76	48	66
25	58	239	30	71	168	40	77	108	194	65	25	261	76	48	77
32	68	239	36	71	168	40	77	118	194	71	25	261	76	48	83
40	84	271	44	84	187	51	99	137	224	85	45	305	95	59	99
50	97	271	51	84	187	51	99	147	224	89	45	305	95	59	105
63	124	293	64	106	187	51	99	168	224	101	45	305	95	59	117





DN10/15 - 50

## PROGEF Standard Ball valve type 231 FO (Fail safe to open) With manual override With socket fusion spigots metric

### Model:

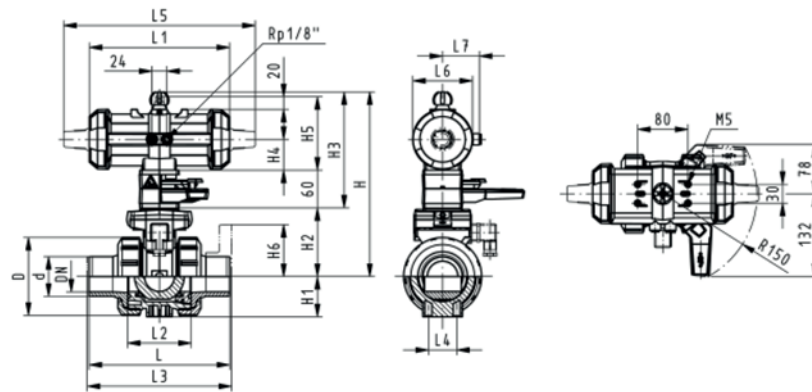
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°< 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 231 062</b>	<b>199 231 072</b>	1.500
20	15	10	185	<b>199 231 063</b>	<b>199 231 073</b>	1.500
25	20	10	350	<b>199 231 064</b>	<b>199 231 074</b>	1.600
32	25	10	700	<b>199 231 065</b>	<b>199 231 075</b>	1.700
40	32	10	1000	<b>199 231 066</b>	<b>199 231 076</b>	2.800
50	40	10	1600	<b>199 231 067</b>	<b>199 231 077</b>	3.100
63	50	10	3100	<b>199 231 068</b>	<b>199 231 078</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	159	27	62	168	40	77	110	194	56	130	25	261	76	48
20	50	159	27	62	168	40	77	120	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	139	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	150	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	170	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	190	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	220	224	101	230	45	305	95	59





DN10/15 - 50

# PROGEF Standard

## Ball valve type 231 FO (Fail safe to open)

### With manual override

### With butt fusion spigots IR-Plus SDR11 metric

#### Model:

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

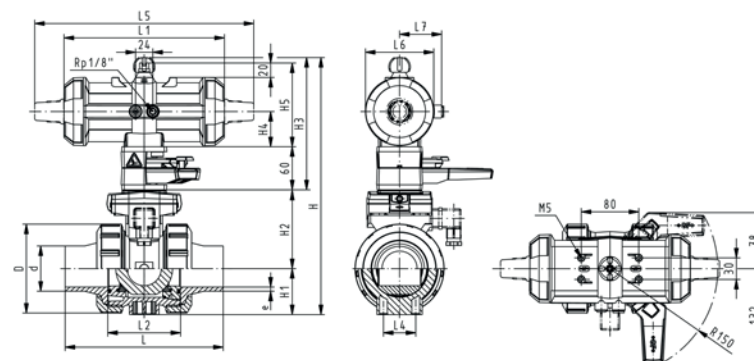
#### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>199 231 643</b>	<b>199 231 653</b>	1.500
25	20	10	350	<b>199 231 644</b>	<b>199 231 654</b>	1.600
32	25	10	700	<b>199 231 645</b>	<b>199 231 655</b>	1.700
40	32	10	1000	<b>199 231 646</b>	<b>199 231 656</b>	2.800
50	40	10	1600	<b>199 231 647</b>	<b>199 231 657</b>	3.100
63	50	10	3100	<b>199 231 648</b>	<b>199 231 658</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	168	40	77	130	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	143	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	150	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	171	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	191	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	220	224	101	230	45	305	95	59

d [mm]	e [mm]
20	1.9
25	2.3
32	3.0
40	3.7
50	4.6
63	5.8





DN10/15 - 50

## PROGEF Standard Ball valve type 231 FO (Fail safe to open) With manual override With fixed flanges PP-H serrated metric

### Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

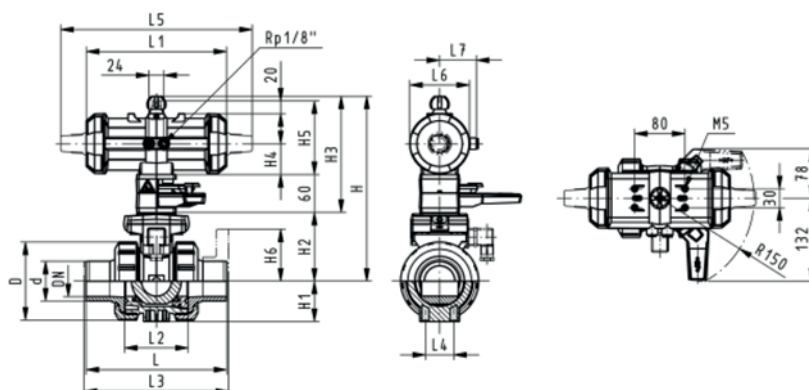
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 231 263</b>	<b>199 231 273</b>	1.700
25	20	¾	10	350	<b>199 231 264</b>	<b>199 231 274</b>	1.900
32	25	1	10	700	<b>199 231 265</b>	<b>199 231 275</b>	2.100
40	32	1 ¼	10	1000	<b>199 231 266</b>	<b>199 231 276</b>	3.400
50	40	1 ½	10	1600	<b>199 231 267</b>	<b>199 231 277</b>	3.900
63	50	2	10	3100	<b>199 231 268</b>	<b>199 231 278</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	58	230	27	62	168	40	77	48	120	194	56	130	25	261	76
25	58	239	30	71	168	40	77	53	139	194	65	150	25	261	76
32	68	239	36	71	168	40	77	58	150	194	71	160	25	261	76
40	84	271	44	84	187	51	99	70	170	224	85	180	45	305	95
50	97	271	51	84	187	51	99	75	190	224	89	200	45	305	95
63	124	293	64	106	187	51	99	83	220	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59





DN10/15 - 50

## PROGEF Standard Ball valve type 231 DA (Double acting) With manual override With fusion sockets metric

### Model:

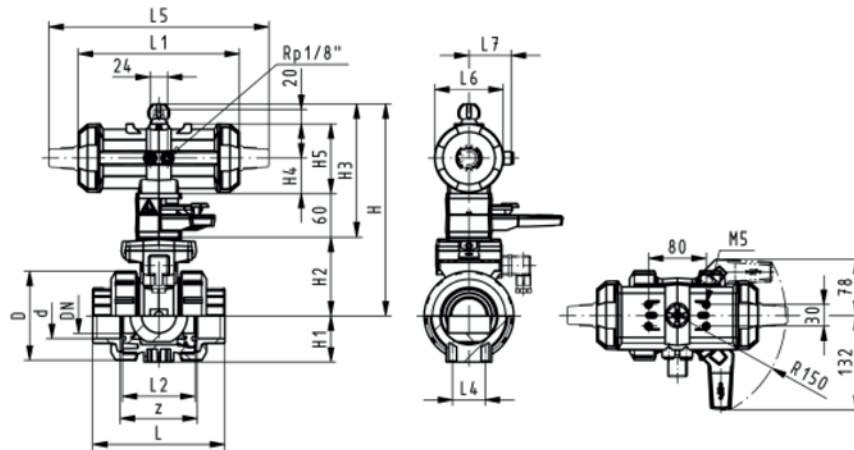
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°< 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 082	199 231 092	1.500
20	15	10	185	199 231 083	199 231 093	1.500
25	20	10	350	199 231 084	199 231 094	1.600
32	25	10	700	199 231 085	199 231 095	1.700
40	32	10	1000	199 231 086	199 231 096	2.800
50	40	10	1600	199 231 087	199 231 097	3.100
63	50	10	3100	199 231 088	199 231 098	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	159	27	62	168	40	77	93	194	56	25	261	76	48	67
20	50	159	27	62	168	40	77	95	194	56	25	261	76	48	66
25	58	168	30	71	168	40	77	108	194	65	25	261	76	48	77
32	68	168	36	71	168	40	77	118	194	71	25	261	76	48	83
40	84	202	44	84	187	51	99	137	224	85	45	305	95	59	99
50	97	202	51	84	187	51	99	147	224	89	45	305	95	59	105
63	124	225	64	106	187	51	99	168	224	101	45	305	95	59	117





DN10/15 - 50

## PROGEF Standard Ball valve type 231 DA (Double acting) With manual override With socket fusion spigots metric

### Model:

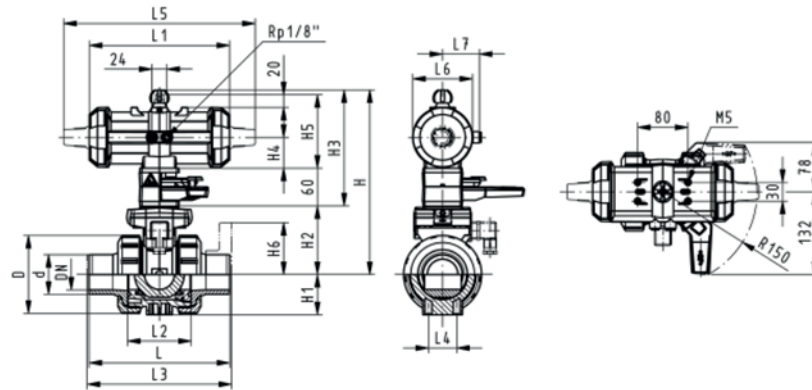
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 231 102</b>	<b>199 231 112</b>	1.500
20	15	10	185	<b>199 231 103</b>	<b>199 231 113</b>	1.500
25	20	10	350	<b>199 231 104</b>	<b>199 231 114</b>	1.600
32	25	10	700	<b>199 231 105</b>	<b>199 231 115</b>	1.700
40	32	10	1000	<b>199 231 106</b>	<b>199 231 116</b>	2.800
50	40	10	1600	<b>199 231 107</b>	<b>199 231 117</b>	3.100
63	50	10	3100	<b>199 231 108</b>	<b>199 231 118</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	159	27	62	168	40	77	110	194	56		25	261	76	48
20	50	159	27	62	168	40	77	120	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	139	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	150	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	170	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	190	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	220	224	101	230	45	305	95	59







DN10/15 - 50

## PROGEF Standard Ball valve type 231 DA (Double acting) With manual override With butt fusion spigots IR-Plus SDR11 metric

### Model:

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

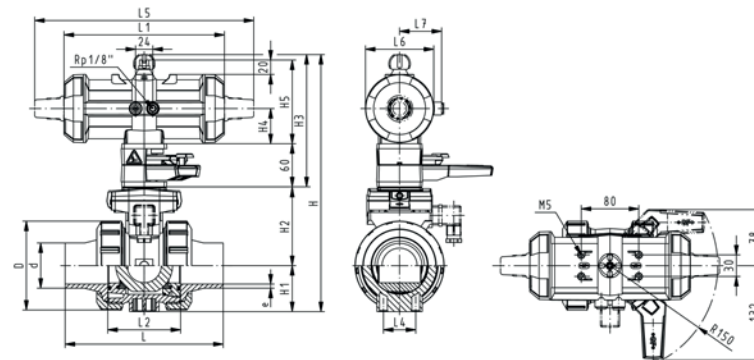
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>199 231 663</b>	<b>199 231 673</b>	1.500
25	20	10	350	<b>199 231 664</b>	<b>199 231 674</b>	1.600
32	25	10	700	<b>199 231 665</b>	<b>199 231 675</b>	1.700
40	32	10	1000	<b>199 231 666</b>	<b>199 231 676</b>	2.800
50	40	10	1600	<b>199 231 667</b>	<b>199 231 677</b>	3.100
63	50	10	3100	<b>199 231 668</b>	<b>199 231 678</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	168	40	77	130	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	143	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	150	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	171	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	191	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	220	224	101	230	45	305	95	59

d [mm]	e [mm]
20	1.9
25	2.3
32	3.0
40	3.7
50	4.6
63	5.8





DN10/15 - 50

## PROGEF Standard Ball valve type 231 DA (Double acting) With manual override With fixed flanges PP-H serrated metric

### Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°< 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

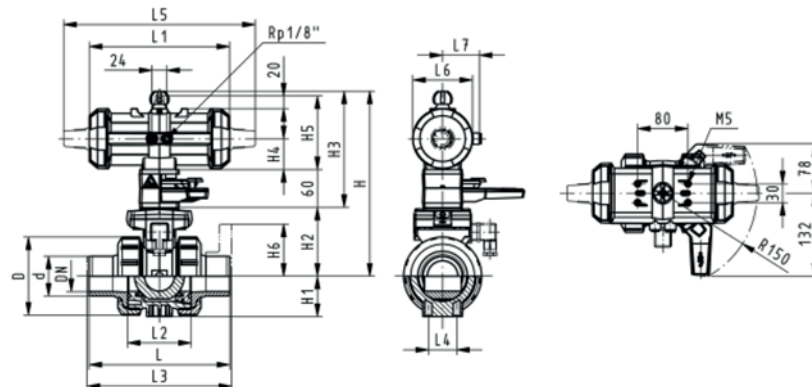
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 231 283</b>	<b>199 231 293</b>	1.700
25	20	¾	10	350	<b>199 231 284</b>	<b>199 231 294</b>	1.900
32	25	1	10	700	<b>199 231 285</b>	<b>199 231 295</b>	2.100
40	32	1 ¼	10	1000	<b>199 231 286</b>	<b>199 231 296</b>	3.400
50	40	1 ½	10	1600	<b>199 231 287</b>	<b>199 231 297</b>	3.900
63	50	2	10	3100	<b>199 231 288</b>	<b>199 231 298</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	230	27	62	168	40	77	48	120	194	56	130	25	261	76
25	58	239	30	71	168	40	77	53	139	194	65	150	25	261	76
32	68	239	36	71	168	40	77	58	150	194	71	160	25	261	76
40	84	271	44	84	187	51	99	70	170	224	85	180	45	305	95
50	97	271	51	84	187	51	99	75	190	224	89	200	45	305	95
63	124	293	64	106	187	51	99	83	220	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59





DN10/15 - 50



## PROGEF Standard Ball valve type 231 FC (Fail safe to close) Without manual override With fusion sockets metric

### Model:

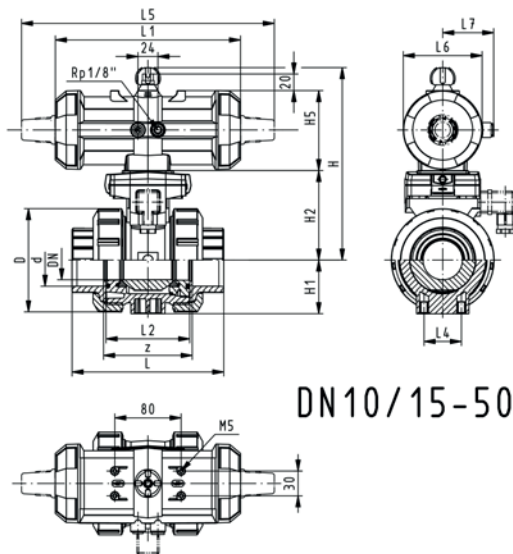
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

### Option:

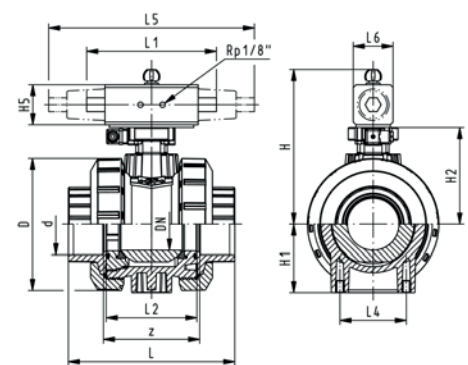
- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 122	199 231 132	1.200
20	15	10	185	199 231 123	199 231 133	0.996
25	20	10	350	199 231 124	199 231 134	1.300
32	25	10	700	199 231 125	199 231 135	1.129
40	32	10	1000	199 231 126	199 231 136	2.500
50	40	10	1600	199 231 127	199 231 137	2.800
63	50	10	3100	199 231 128	199 231 138	3.700
75	65	10	5000	199 231 129	199 231 139	5.142
90	80	10	7000	199 231 130	199 231 140	8.057
110	100	10	11000	199 231 131	199 231 141	12.600

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	159	27	62	77	93	194	56	25	261	76	48	67
20	50	159	27	62	77	95	194	56	25	261	76	48	66
25	58	168	30	71	77	108	194	65	25	261	76	48	77
32	68	168	36	71	77	118	194	71	25	261	76	48	83
40	84	202	44	84	99	137	224	85	45	305	95	59	99
50	97	202	51	84	99	147	224	89	45	305	95	59	105
63	124	225	64	106	99	168	224	101	45	305	95	59	117
75	166	262	85	156	70	233		136	70	276	65		167
90	200	281	105	168	78	254		141	70	341	72		180
110	238	292	123	175	86	301		164	120	369	80		215



DN10/15-50



DN65-100



DN10/15 - 50



# PROGEF Standard Ball valve type 231 FC (Fail safe to close) Without manual override With socket fusion spigots metric

## Model:

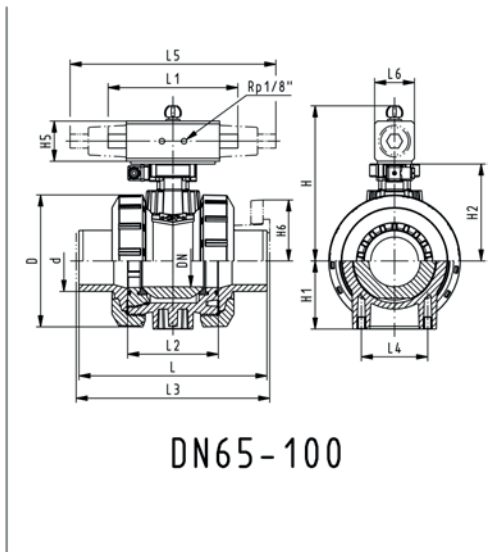
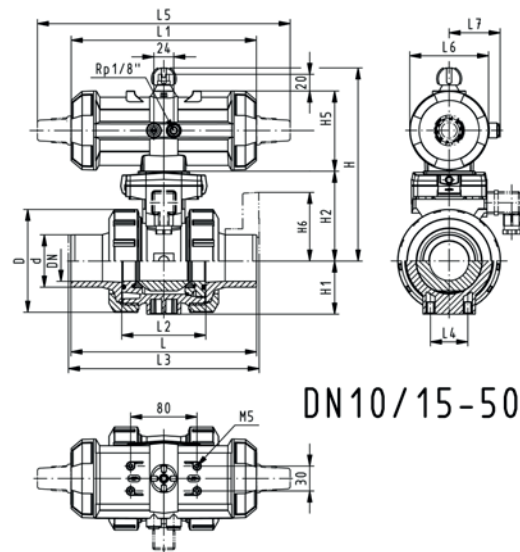
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

## Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 142	199 231 152	1.200
20	15	10	185	199 231 143	199 231 153	1.004
25	20	10	350	199 231 144	199 231 154	1.300
32	25	10	700	199 231 145	199 231 155	0.001
40	32	10	1000	199 231 146	199 231 156	2.035
50	40	10	1600	199 231 147	199 231 157	2.228
63	50	10	3100	199 231 148	199 231 158	3.700
75	65	10	5000	199 231 149	199 231 159	6.600
90	80	10	7000	199 231 150	199 231 160	8.400
110	100	10	11000	199 231 151	199 231 161	12.600

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	159	27	62	77	110	194	56	130	25	261	76	48
20	50	159	27	62	77	120	194	56	130	25	261	76	48
25	58	168	30	71	77	139	194	65	150	25	261	76	48
32	68	168	36	71	77	150	194	71	160	25	261	76	48
40	84	202	44	84	99	170	224	85	180	45	305	95	59
50	97	202	51	84	99	190	224	89	200	45	305	95	59
63	124	225	64	106	99	220	224	101	230	45	305	95	59
75	166	262	85	156	70	280		136	290	70	276	65	
90	200	281	105	168	78	296		141	310	70	341	72	
110	238	292	123	175	86	336		164	350	120	369	80	





DN10/15 - 50

**PROGEF Standard**  
**Ball valve type 231 FC (Fail safe to close)**  
**Without manual override**  
**With fixed flanges PP-H serrated metric**

**Model:**

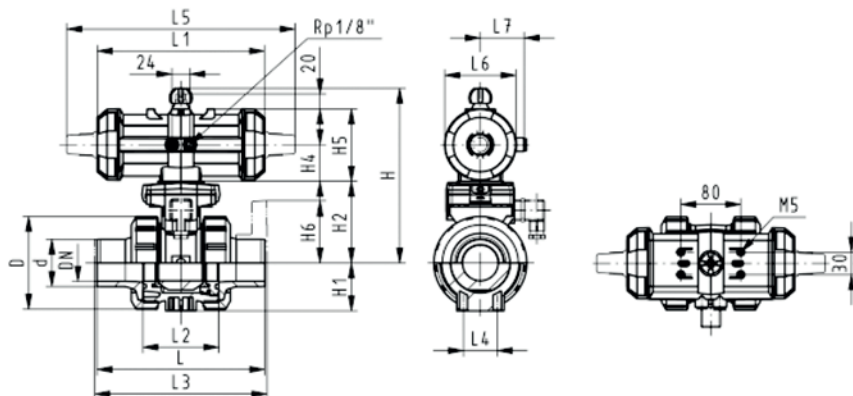
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

**Option:**

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 231 423</b>	<b>199 231 433</b>	1.400
25	20	¾	10	350	<b>199 231 424</b>	<b>199 231 434</b>	1.600
32	25	1	10	700	<b>199 231 425</b>	<b>199 231 435</b>	1.377
40	32	1 ¼	10	1000	<b>199 231 426</b>	<b>199 231 436</b>	3.100
50	40	1 ½	10	1600	<b>199 231 427</b>	<b>199 231 437</b>	3.600
63	50	2	10	3100	<b>199 231 428</b>	<b>199 231 438</b>	4.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	40	77	48	120	194	56	130	25	261	76	48
25	58	168	30	71	40	77	53	140	194	65	150	25	261	76	48
32	68	168	36	71	40	77	58	150	194	71	160	25	261	76	48
40	84	202	44	84	51	99	70	170	224	85	180	45	305	95	59
50	97	202	51	84	51	99	75	190	224	89	200	45	305	95	59
63	124	225	64	106	51	99	83	220	224	101	230	45	305	95	59





## PROGEF Standard Ball valve type 231 FC (Fail safe to close) Without manual override With backing flanges PP-st metric

### Model:

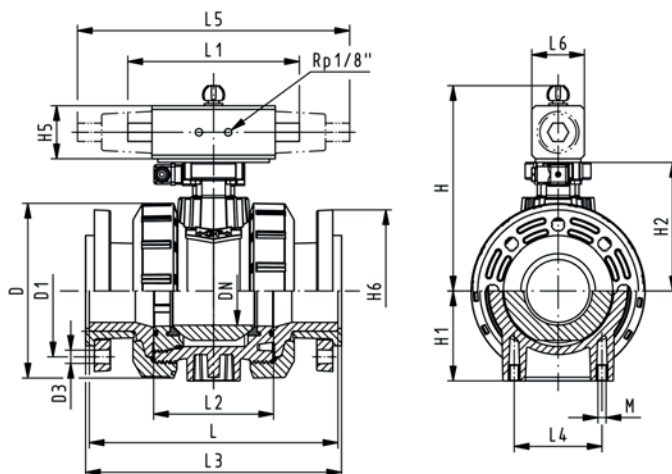
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 1/2	10	5000	<b>199 231 329</b>	<b>199 231 339</b>	5.228
90	80	3	10	7000	<b>199 231 330</b>	<b>199 231 340</b>	13.600
110	100	4	10	11000	<b>199 231 331</b>	<b>199 231 341</b>	19.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	262	85	156	70	93	280	136	290	70	276	65
90	200	281	105	168	78	100	296	141	310	70	341	72
110	238	292	123	175	86	110	336	164	350	120	369	80





DN10/15 - 50



## PROGEF Standard Ball valve type 231 FC (Fail safe to close) Without manual override With butt fusion spigots IR-Plus SDR11 metric

### Model:

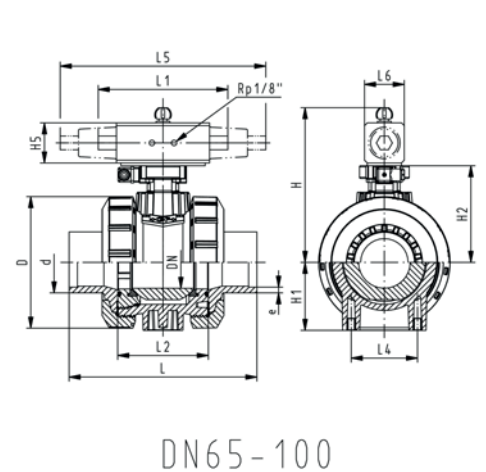
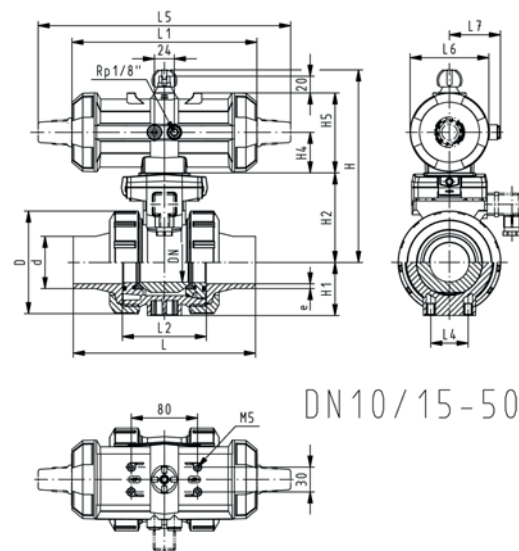
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>199 231 833</b>	<b>199 231 843</b>	1.000
25	20	10	350	<b>199 231 834</b>	<b>199 231 844</b>	1.300
32	25	10	700	<b>199 231 835</b>	<b>199 231 845</b>	1.400
40	32	10	1000	<b>199 231 836</b>	<b>199 231 846</b>	2.500
50	40	10	1600	<b>199 231 837</b>	<b>199 231 847</b>	2.800
63	50	10	3100	<b>199 231 838</b>	<b>199 231 848</b>	2.789
75	65	10	5000	<b>199 231 839</b>	<b>199 231 849</b>	6.600
90	80	10	7000	<b>199 231 840</b>	<b>199 231 850</b>	8.400
110	100	10	11000	<b>199 231 841</b>	<b>199 231 851</b>	12.600

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
20	50	159	27	62	77	130	194.0	56	130	25	261	76	1.9
25	58	168	30	71	77	143	194.0	65	150	25	261	76	2.3
32	68	168	36	71	77	150	194.0	71	160	25	261	76	3.0
40	84	202	44	84	99	171	224.0	85	180	45	305	95	3.7
50	97	202	51	84	99	191	224.0	89	200	45	305	95	4.6
63	142	225	64	106	99	220	224.0	101	230	45	305	95	5.8
75	166	262	85	156	70	266	270.0	136	290	70	276	65	8.2
90	200	281	105	168	78	264	270.0	141	310	70	341	72	9.9
110	238	292	123	175	86	301	320.0	164	350	120	369	80	12.0





DN10/15 - 50



# PROGEF Standard

## Ball valve type 231 FC (Fail safe to close)

### Without manual override

### With butt fusion spigots SDR17.6 metric

**Model:**

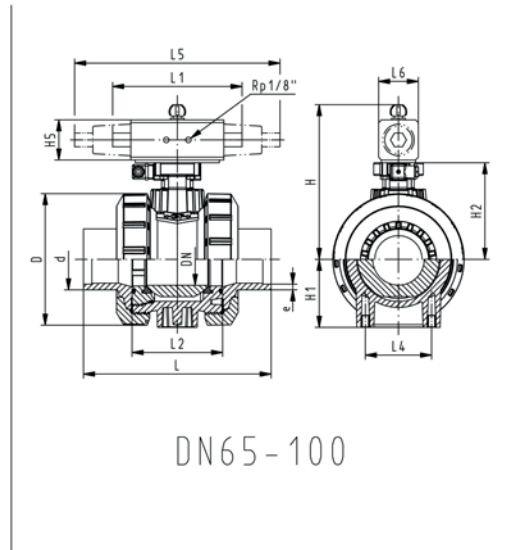
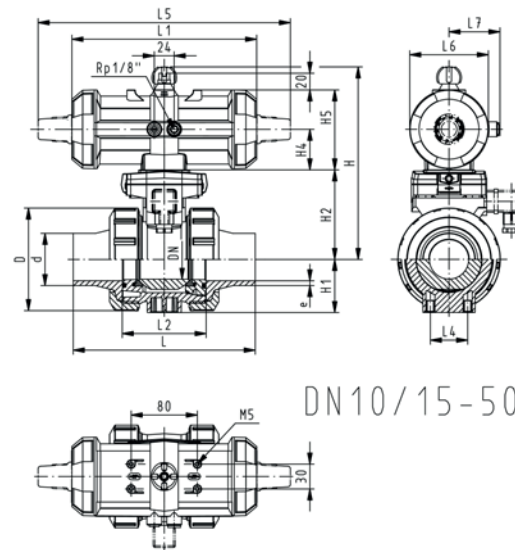
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

**Option:**

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
50	40	10	1600	<b>199 231 937</b>	<b>199 231 947</b>	6.600
63	50	10	3100	<b>199 231 938</b>	<b>199 231 948</b>	
75	65	10	5000	<b>199 231 939</b>	<b>199 231 949</b>	
90	80	10	7000	<b>199 231 940</b>	<b>199 231 950</b>	
110	100	10	11000	<b>199 231 941</b>	<b>199 231 951</b>	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
50	97	202	51	84	99	191	89	200	45	305	95	2.9
63	142	225	64	106	99	220	101	230	45	305	95	3.6
75	166	262	85	156	70	266	136	290	70	276	65	4.6
90	200	281	105	168	78	264	141	310	70	341	72	5.5
110	238	292	123	175	86	301	164	350	120	369	80	6.7







DN10/15 - 50



## PROGEF Standard Ball valve type 231 FO (Fail safe to open) Without manual override With fusion sockets metric

### Model:

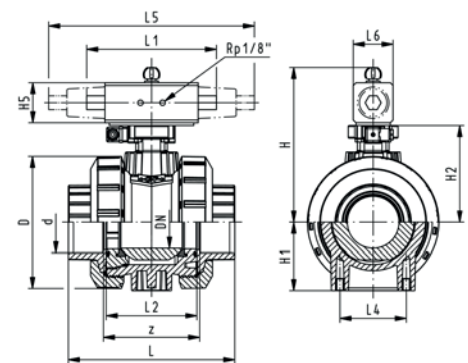
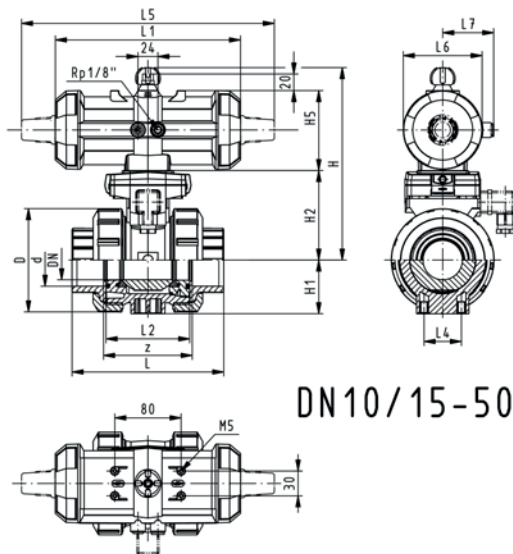
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 162	199 231 172	1.200
20	15	10	185	199 231 163	199 231 173	1.200
25	20	10	350	199 231 164	199 231 174	1.300
32	25	10	700	199 231 165	199 231 175	1.400
40	32	10	1000	199 231 166	199 231 176	2.500
50	40	10	1600	199 231 167	199 231 177	2.800
63	50	10	3100	199 231 168	199 231 178	3.700
75	65	10	5000	199 231 169	199 231 179	6.600
90	80	10	7000	199 231 170	199 231 180	8.400
110	100	10	11000	199 231 171	199 231 181	12.600

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	159	27	62	77	93	194	56	25	261	76	48	66
20	50	159	27	62	77	95	194	56	25	261	76	48	67
25	58	168	30	71	77	108	194	65	25	261	76	48	77
32	68	168	36	71	77	118	194	71	25	261	76	48	83
40	84	202	44	84	99	137	224	85	45	305	95	59	99
50	97	202	51	84	99	147	224	89	45	305	95	59	105
63	124	225	64	106	99	168	224	101	45	305	95	59	117
75	166	262	85	156	70	233		136	70	276	65		167
90	200	281	105	168	78	254		141	70	341	72		180
110	238	292	123	175	86	301		164	120	369	80		215





DN10/15 - 50



# PROGEF Standard Ball valve type 231 FO (Fail safe to open) Without manual override With socket fusion spigots metric

## Model:

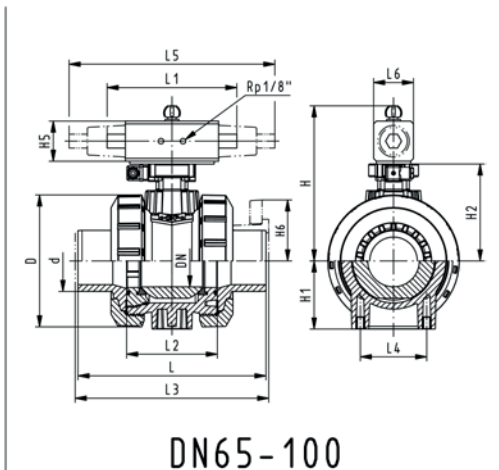
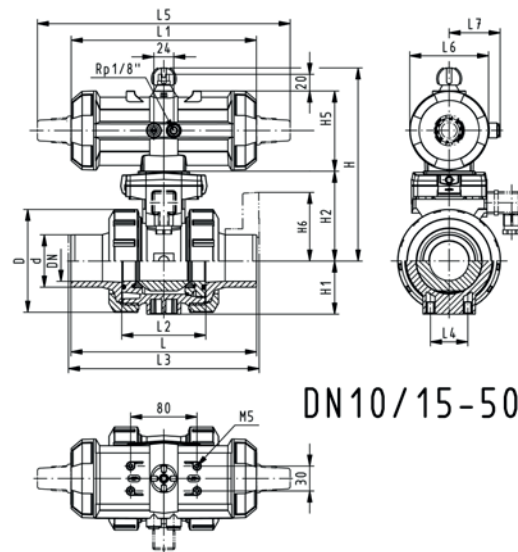
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

## Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 182	199 231 192	1.200
20	15	10	185	199 231 183	199 231 193	1.200
25	20	10	350	199 231 184	199 231 194	1.300
32	25	10	700	199 231 185	199 231 195	1.400
40	32	10	1000	199 231 186	199 231 196	2.500
50	40	10	1600	199 231 187	199 231 197	2.800
63	50	10	3100	199 231 188	199 231 198	3.700
75	65	10	5000	199 231 189	199 231 199	6.600
90	80	10	7000	199 231 190	199 231 200	8.400
110	100	10	11000	199 231 191	199 231 201	12.600

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	159	27	62	77	110	194	56	130	25	261	76	48
20	50	159	27	62	77	120	194	56	130	25	261	76	48
25	58	168	30	71	77	139	194	65	150	25	261	76	48
32	68	168	36	71	77	150	194	71	160	25	261	76	48
40	84	202	44	84	99	170	224	85	180	45	305	95	59
50	97	202	51	84	99	190	224	89	200	45	305	95	59
63	124	225	64	106	99	220	224	101	230	45	305	95	59
75	166	262	85	156	70	280		136	290	70	276	65	
90	200	281	105	168	78	296		141	310	70	341	72	
110	238	292	123	175	86	336		164	350	120	369	80	





DN10/15 - 50

## PROGEF Standard Ball valve type 231 FO (Fail safe to open) Without manual override With fixed flanges PP-H serrated metric

### Model:

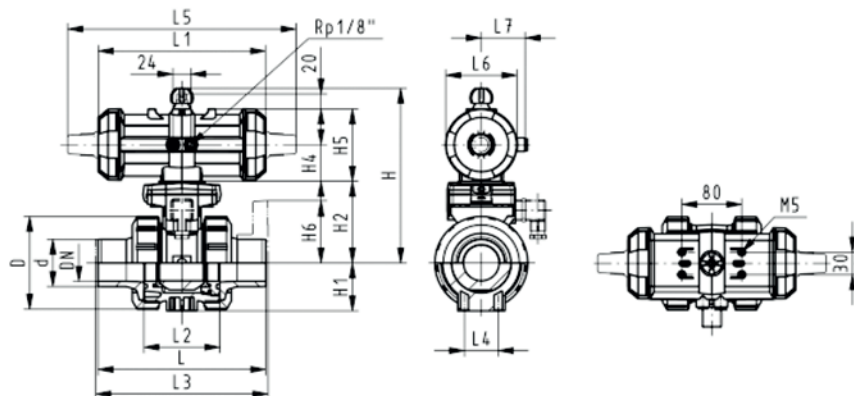
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 231 443</b>	<b>199 231 453</b>	1.400
25	20	¾	10	350	<b>199 231 444</b>	<b>199 231 454</b>	1.600
32	25	1	10	700	<b>199 231 445</b>	<b>199 231 455</b>	1.800
40	32	1 ¼	10	1000	<b>199 231 446</b>	<b>199 231 456</b>	0.001
50	40	1 ½	10	1600	<b>199 231 447</b>	<b>199 231 457</b>	3.600
63	50	2	10	3100	<b>199 231 448</b>	<b>199 231 458</b>	4.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	40	77	48	120	194	56	130	25	261	76	48
25	58	168	30	71	40	77	53	140	194	65	150	25	261	76	48
32	68	168	36	71	40	77	58	150	194	71	160	25	261	76	48
40	84	202	44	84	51	99	70	170	224	85	180	45	305	95	59
50	97	202	51	84	51	99	75	190	224	89	200	45	305	95	59
63	124	225	64	106	51	99	83	220	224	101	230	45	305	95	59





**PROGEF Standard  
Ball valve type 231 FO (Fail safe to open)  
Without manual override  
With backing flanges PP-st metric**

**Model:**

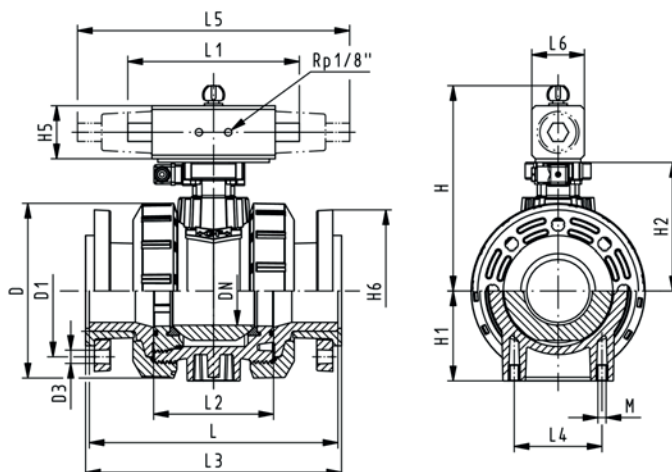
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

**Option:**

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	<b>199 231 349</b>	<b>199 231 359</b>	10.900
90	80	3	10	7000	<b>199 231 350</b>	<b>199 231 360</b>	13.600
110	100	4	10	11000	<b>199 231 351</b>	<b>199 231 361</b>	19.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	262	85	156	70	93	280	136	290	70	276	65
90	200	281	105	168	78	100	296	141	310	70	341	72
110	238	292	123	175	86	110	336	164	350	120	369	80





DN10/15 - 50



## PROGEF Standard Ball valve type 231 FO (Fail safe to open) Without manual override With butt fusion spigots IR-Plus SDR11 metric

### Model:

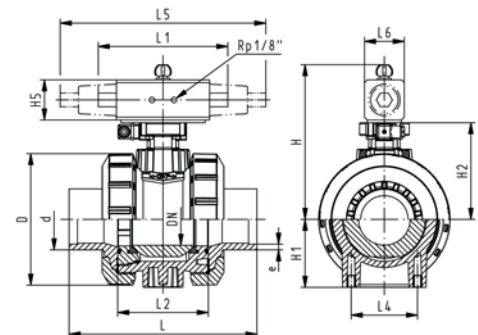
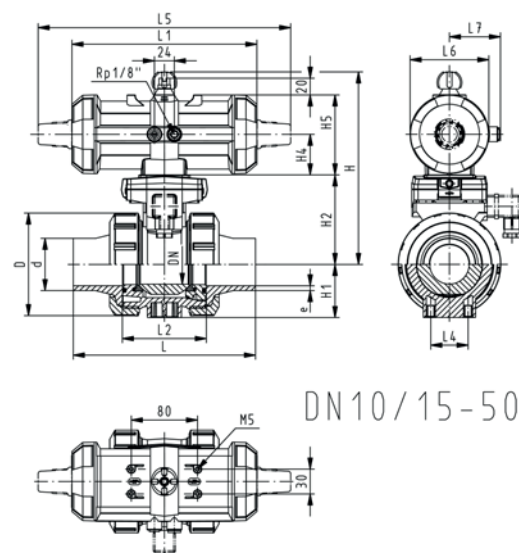
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

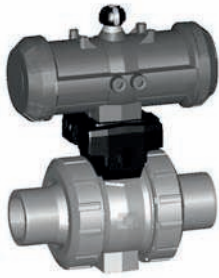
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>199 231 853</b>	<b>199 231 863</b>	1.200
25	20	10	350	<b>199 231 854</b>	<b>199 231 864</b>	1.300
32	25	10	700	<b>199 231 855</b>	<b>199 231 865</b>	1.400
40	32	10	1000	<b>199 231 856</b>	<b>199 231 866</b>	2.032
50	40	10	1600	<b>199 231 857</b>	<b>199 231 867</b>	2.800
63	50	10	3100	<b>199 231 858</b>	<b>199 231 868</b>	2.791
75	65	10	5000	<b>199 231 859</b>	<b>199 231 869</b>	6.600
90	80	10	7000	<b>199 231 860</b>	<b>199 231 870</b>	8.400
110	100	10	11000	<b>199 231 861</b>	<b>199 231 871</b>	12.600

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
20	50	159	27	62	77	120	194	56	130	25	261	76	1.9
25	58	168	30	71	77	139	194	65	150	25	261	76	2.3
32	68	168	36	71	77	150	194	71	160	25	261	76	3.0
40	84	202	44	84	99	170	224	85	180	45	305	95	3.7
50	97	202	51	84	99	190	224	89	200	45	305	95	4.6
63	124	225	64	106	99	220	224	101	230	45	305	95	5.8
75	166	262	85	156	70	266	218	136	290	70	276	65	8.2
90	200	281	105	168	78	264	259	141	310	70	341	72	9.9
110	238	292	123	175	86	301	287	164	350	120	369	80	12.0





DN10/15 - 50



# PROGEF Standard Ball valve type 231 FO (Fail safe to open) Without manual override With butt fusion spigots SDR17.6 metric

## Model:

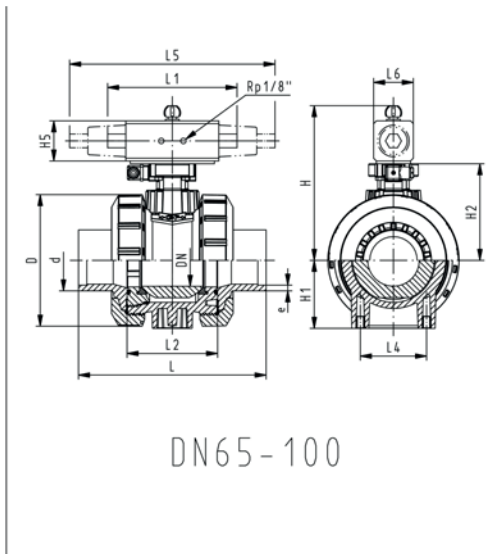
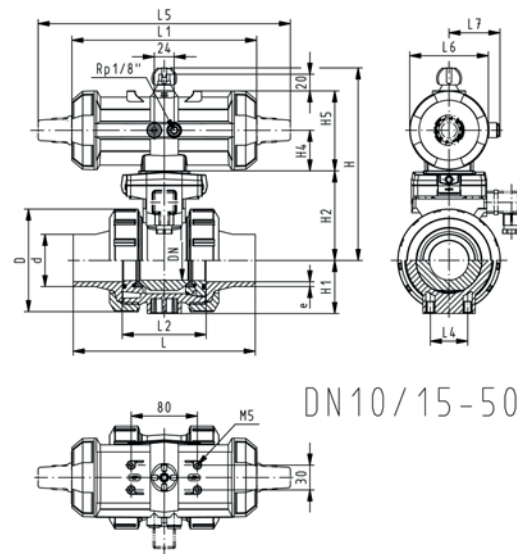
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

## Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	199 231 959	199 231 969	6.600
90	80	10	7000	199 231 960	199 231 970	8.400
110	100	10	11000	199 231 961	199 231 971	12.600

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
75	166	262	85	156	70	266	136	290	70	276	65	4.6
90	200	281	105	168	78	264	141	310	70	341	72	5.5
110	238	292	123	175	86	301	164	350	120	369	80	6.7





DN10/15 - 50



## PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With fusion sockets metric

### Model:

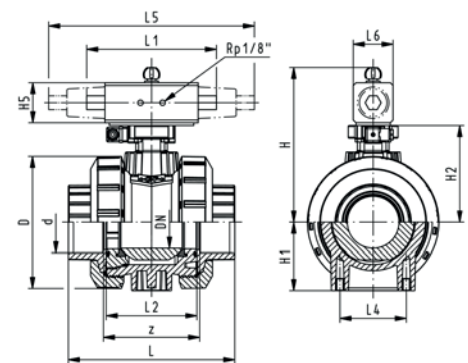
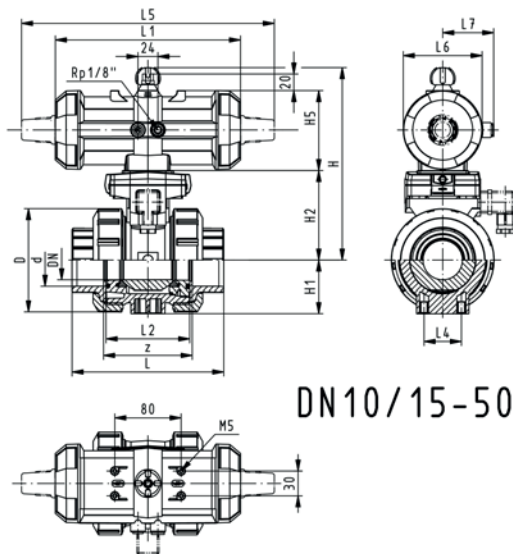
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 202	199 231 212	1.200
20	15	10	185	199 231 203	199 231 213	0.774
25	20	10	350	199 231 204	199 231 214	1.300
32	25	10	700	199 231 205	199 231 215	0.919
40	32	10	1000	199 231 206	199 231 216	2.500
50	40	10	1600	199 231 207	199 231 217	1.701
63	50	10	3100	199 231 208	199 231 218	3.700
75	65	10	5000	199 231 209	199 231 219	5.400
90	80	10	7000	199 231 210	199 231 220	7.700
110	100	10	11000	199 231 211	199 231 221	10.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	159	27	62	77	93	194	56	25	261	76	48	66
20	50	159	27	62	77	95	194	56	25	261	76	48	67
25	58	168	30	71	77	108	194	65	25	261	76	48	77
32	68	168	36	71	77	118	194	71	25	261	76	48	83
40	84	202	44	84	99	137	224	85	45	305	95	59	99
50	97	202	51	84	99	147	224	89	45	305	95	59	105
63	124	225	64	106	99	168	224	101	45	305	95	59	117
75	166	257	85	156	66	233	144	136	70	60	60	60	167
90	200	274	105	168	70	254	152	141	70	65	65	65	180
110	238	273	123	175	78	301	169	164	120	72	72	72	215





DN10/15 - 50



## PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With socket fusion spigots metric

### Model:

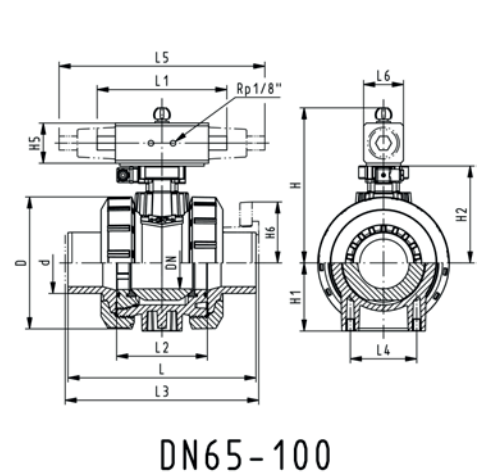
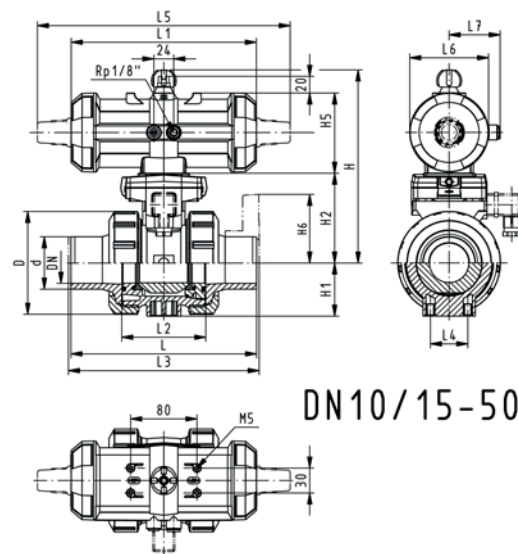
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 222	199 231 232	1.200
20	15	10	185	199 231 223	199 231 233	1.200
25	20	10	350	199 231 224	199 231 234	1.300
32	25	10	700	199 231 225	199 231 235	0.929
40	32	10	1000	199 231 226	199 231 236	2.500
50	40	10	1600	199 231 227	199 231 237	2.800
63	50	10	3100	199 231 228	199 231 238	3.700
75	65	10	5000	199 231 229	199 231 239	5.500
90	80	10	7000	199 231 230	199 231 240	7.800
110	100	10	11000	199 231 231	199 231 241	10.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	159	27	62	77	110	194	56	130	25	261	76	48
20	50	159	27	62	77	120	194	56	130	25	261	76	48
25	58	168	30	71	77	139	194	65	150	25	261	76	48
32	68	168	36	71	77	150	194	71	160	25	261	76	48
40	84	202	44	84	99	170	224	85	180	45	305	95	59
50	97	202	51	84	99	190	224	89	200	45	305	95	59
63	124	225	64	106	99	220	224	101	230	45	305	95	59
75	166	257	85	156	66	280	144	136	290	70		60	
90	200	274	105	168	70	296	152	141	310	70		65	
110	238	273	123	175	78	336	169	164	350	120		72	







DN10/15 - 50

## PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With fixed flanges PP-H serrated metric

### Model:

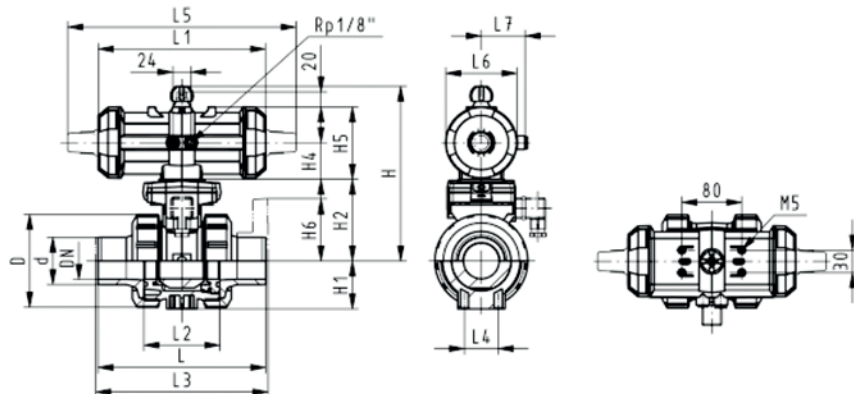
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 231 463</b>	<b>199 231 473</b>	1.400
25	20	¾	10	350	<b>199 231 464</b>	<b>199 231 474</b>	1.600
32	25	1	10	700	<b>199 231 465</b>	<b>199 231 475</b>	1.160
40	32	1 ¼	10	1000	<b>199 231 466</b>	<b>199 231 476</b>	3.100
50	40	1 ½	10	1600	<b>199 231 467</b>	<b>199 231 477</b>	3.600
63	50	2	10	3100	<b>199 231 468</b>	<b>199 231 478</b>	2.869

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	40	77	48	120	194	56	130	25	261	76	48
25	58	168	30	71	40	77	53	140	194	65	150	25	261	76	48
32	68	168	36	71	40	77	58	150	194	71	160	25	261	76	48
40	84	202	44	84	51	99	70	170	224	85	180	45	305	95	59
50	97	202	51	84	51	99	75	190	224	89	200	45	305	95	59
63	124	225	64	106	51	99	83	220	224	101	230	45	305	95	59





## PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With backing flanges PP-st metric

### Model:

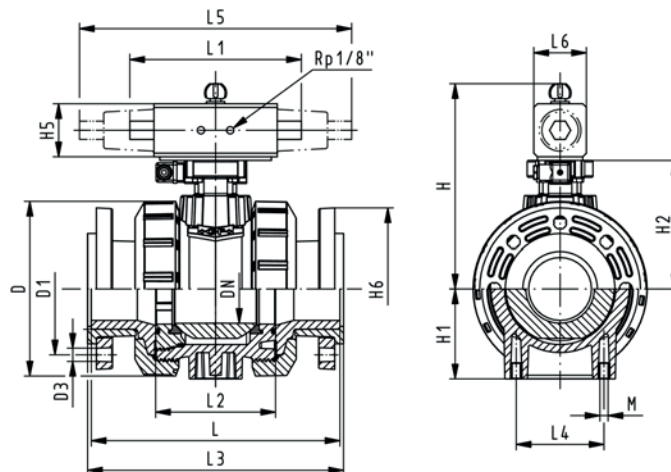
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

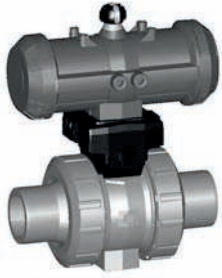
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 1/2	10	5000	199 231 369	199 231 379	9.700
90	80	3	10	7000	199 231 370	199 231 380	13.000
110	100	4	10	11000	199 231 371	199 231 381	18.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L6 [mm]
75	166	257	85	156	66	93	280	144	136	290	70	60
90	200	274	105	168	70	100	296	152	141	310	70	65
110	238	273	123	175	78	110	336	169	164	350	120	72





DN10/15 - 50



## PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With butt fusion spigots IR-Plus SDR11 metric

### Model:

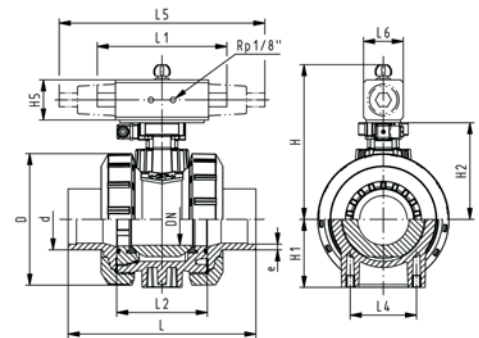
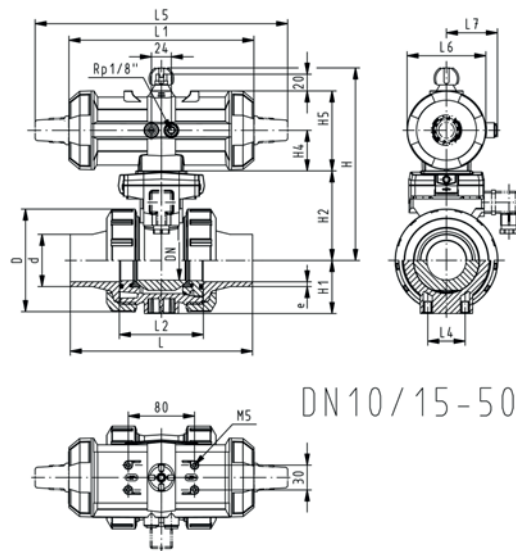
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	199 231 873	199 231 883	1.200
25	20	10	350	199 231 874	199 231 884	1.300
32	25	10	700	199 231 875	199 231 885	1.400
40	32	10	1000	199 231 876	199 231 886	2.500
50	40	10	1600	199 231 877	199 231 887	2.800
63	50	10	3100	199 231 878	199 231 888	3.700
75	65	10	5000	199 231 879	199 231 889	5.500
90	80	10	7000	199 231 880	199 231 890	7.800
110	100	10	11000	199 231 881	199 231 891	10.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L6 [mm]	e [mm]
20	50	159	27	62	77	130	194	56	130	25	76	1.9
25	58	168	30	71	77	143	194	65	150	25	76	2.3
32	68	168	36	71	77	150	194	71	160	25	76	3.0
40	84	202	44	84	99	171	224	85	180	45	95	3.7
50	97	202	51	84	99	191	224	89	200	45	95	4.6
63	124	225	64	106	99	220	224	101	230	45	95	5.8
75	166	257	85	156	66	266	144	136	290	70	60	8.2
90	200	274	105	168	70	264	152	141	310	70	65	9.9
110	238	273	123	175	78	301	169	164	350	120	72	12.0





DN10/15 - 50



## PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With butt fusion spigots SDR17.6 metric

### Model:

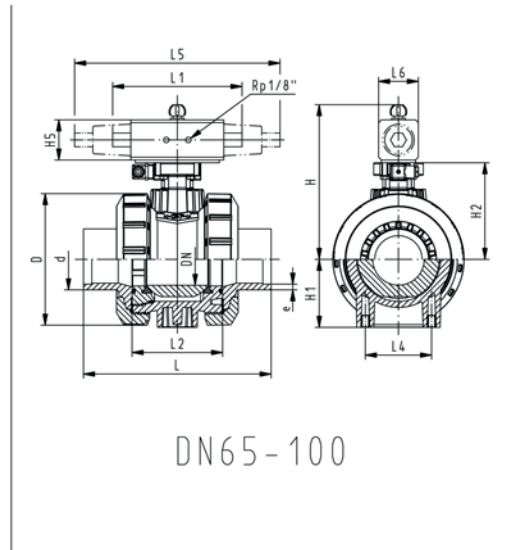
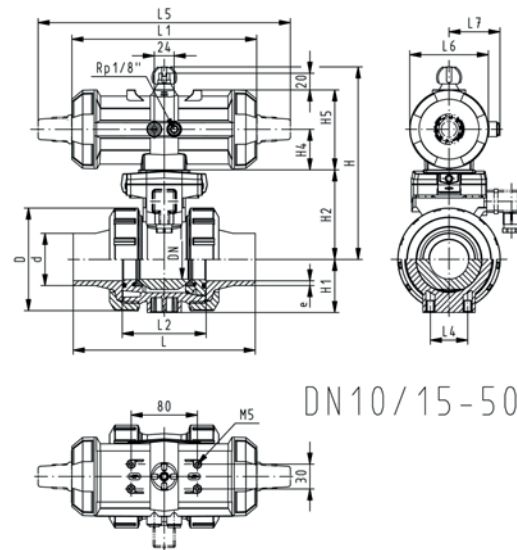
- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
50	40	10	1600	199 231 977	199 231 987	5.500
63	50	10	3100	199 231 978	199 231 988	
75	65	10	5000	199 231 979	199 231 989	
90	80	10	7000	199 231 980	199 231 990	
110	100	10	11000	199 231 981	199 231 991	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L6 [mm]	e [mm]
50	97	202	51	84	99	191	224	89	200	45	95	2.9
63	124	225	64	106	99	220	224	101	230	45	95	3.6
75	166	257	85	156	66	266	144	136	290	70	60	4.6
90	200	274	105	168	70	264	152	141	310	70	65	5.5
110	238	273	123	175	78	301	169	164	350	120	72	6.7

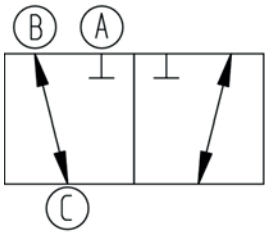
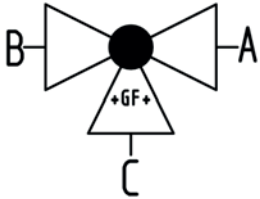




## PROGEF Standard 3-Way ball valve type 286 Horizontal/L-port Without manual override With fusion sockets metric

### Model:

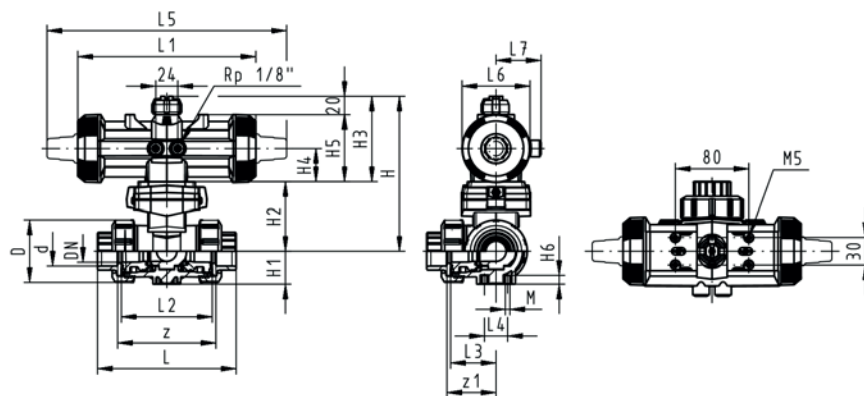
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the basic position
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless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



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 286 022	199 286 032	1.031
20	15	10	75	199 286 023	199 286 033	1.035
25	20	10	150	199 286 024	199 286 034	1.125
32	25	10	280	199 286 025	199 286 035	1.250
40	32	10	480	199 286 026	199 286 036	2.217
50	40	10	620	199 286 027	199 286 037	2.513
63	50	10	1230	199 286 028	199 286 038	3.500

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	110	194	72	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	129	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	146	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	170	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	193	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	244	224	176	88	45	305	95

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	82	41
20	48	6	82	41
25	48	6	97	49
32	48	6	110	55
40	59	8	132	66
50	59	8	151	76
63	59	8	188	94

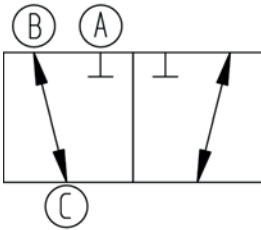
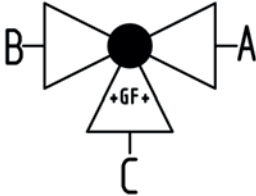




# PROGEF Standard 3-Way ball valve type 286 Horizontal/L-port Without manual override With threaded sockets reinforced Rp

## Model:

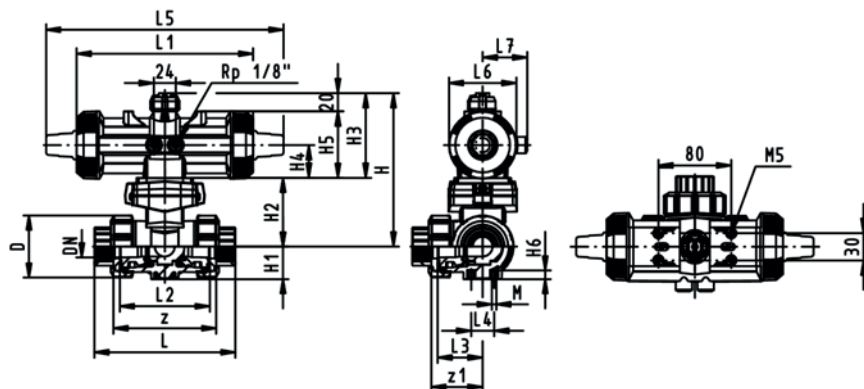
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the basic position
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 90°(<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting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



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 286 122	199 286 132	1.031
1/2	15	10	75	199 286 123	199 286 133	1.035
3/4	20	10	150	199 286 124	199 286 134	1.125
1	25	10	280	199 286 125	199 286 135	1.250
1 1/4	32	10	480	199 286 126	199 286 136	2.217
1 1/2	40	10	620	199 286 127	199 286 137	2.513
2	50	10	1230	199 286 128	199 286 138	3.420

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	112	194	72	36	25	261	76
1/2	50	159	28	62	97	40	77	8	114	194	72	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	85	43	25	261	76
1	68	168	36	71	97	40	77	8	154	194	98	49	25	261	76
1 1/4	84	203	45	84	119	51	99	9	180	224	118	59	45	305	95
1 1/2	97	203	51	84	119	51	99	9	203	224	135	68	45	305	95
2	124	225	65	106	119	51	99	9	258	224	176	88	45	305	95

Rp [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	86	43
1/2	48	6	84	42
3/4	48	6	99	50
1	48	6	112	56
1 1/4	59	8	132	66
1 1/2	59	8	153	77
2	59	8	196	98





# PROGEF Standard

## 3-Way ball valve type 286

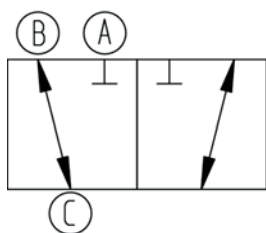
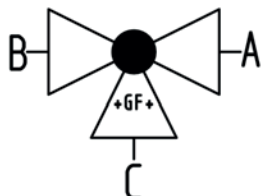
### Horizontal/L-port

### Without manual override

### With socket fusion spigots metric

#### Model:

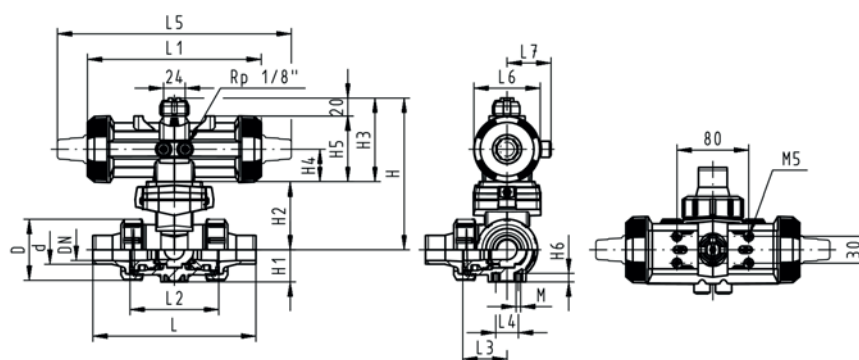
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the basic position
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless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



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	<b>199 286 002</b>	<b>199 286 012</b>	1.035
20	15	10	75	<b>199 286 003</b>	<b>199 286 013</b>	1.041
25	20	10	150	<b>199 286 004</b>	<b>199 286 014</b>	1.135
32	25	10	280	<b>199 286 005</b>	<b>199 286 015</b>	1.265
40	32	10	480	<b>199 286 006</b>	<b>199 286 016</b>	2.231
50	40	10	620	<b>199 286 007</b>	<b>199 286 017</b>	2.554
63	50	10	1230	<b>199 286 008</b>	<b>199 286 018</b>	3.502

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	126	194	72	36	25	261	76
20	50	159	28	62	97	40	77	8	136	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	159	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	178	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	204	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	237	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	296	224	176	88	45	305	95

d [mm]	L7 [mm]	M
16	48	6
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8

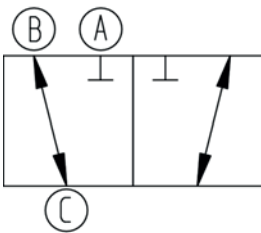
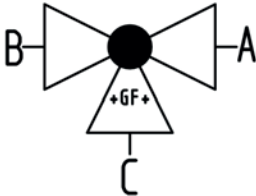




**PROGEF Standard  
3-Way ball valve type 286  
Horizontal/L-port  
Without manual override  
With butt fusion spigots  
IR-Plus SDR11 metric**

**Model:**

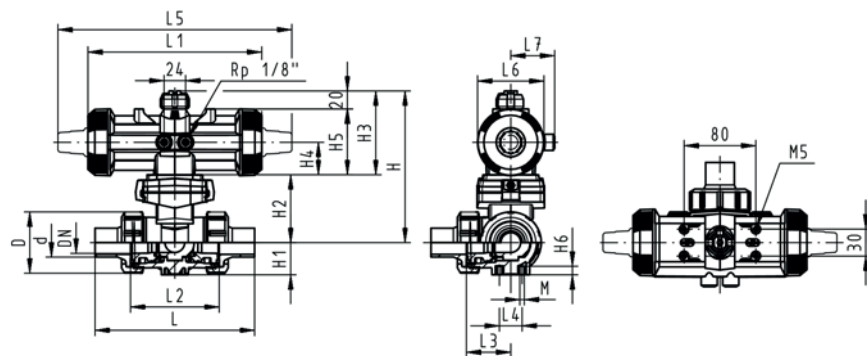
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the basic position
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 90° < 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting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



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	75	<b>199 286 083</b>	<b>199 286 093</b>	1.050
25	20	10	150	<b>199 286 084</b>	<b>199 286 094</b>	1.138
32	25	10	280	<b>199 286 085</b>	<b>199 286 095</b>	1.265
40	32	10	480	<b>199 286 086</b>	<b>199 286 096</b>	2.231
50	40	10	620	<b>199 286 087</b>	<b>199 286 097</b>	2.554
63	50	10	1230	<b>199 286 088</b>	<b>199 286 098</b>	3.568

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	159	28	62	97	40	77	8	146	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	163	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	178	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	204	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	237	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	296	224	176	88	45	305	95

d [mm]	L7 [mm]	M
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8







# PROGEF Standard

## 3-Way ball valve type 286

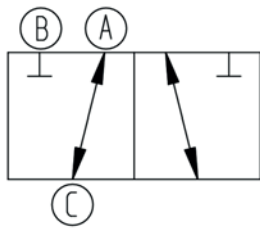
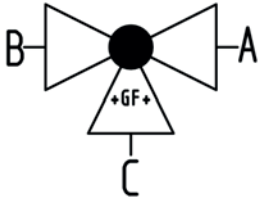
### Horizontal/L-port DA (Double acting)

### Without manual override

### With fusion sockets metric

#### Model:

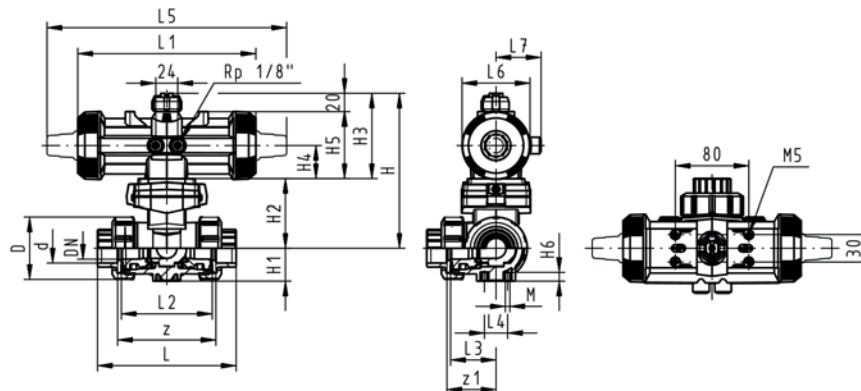
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	<b>199 286 182</b>	<b>199 286 192</b>	0.841
20	15	10	75	<b>199 286 183</b>	<b>199 286 193</b>	0.845
25	20	10	150	<b>199 286 184</b>	<b>199 286 194</b>	0.935
32	25	10	280	<b>199 286 185</b>	<b>199 286 195</b>	1.060
40	32	10	480	<b>199 286 186</b>	<b>199 286 196</b>	1.793
50	40	10	620	<b>199 286 187</b>	<b>199 286 197</b>	2.089
63	50	10	1230	<b>199 286 188</b>	<b>199 286 198</b>	2.996

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	110	194	72	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	129	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	146	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	170	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	193	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	244	224	176	88	45	305	95

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	82	41
20	48	6	82	41
25	48	6	97	49
32	48	6	110	55
40	59	8	132	66
50	59	8	151	76
63	59	8	188	94

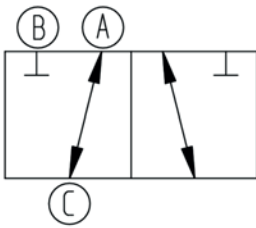
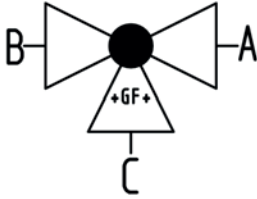




**PROGEF Standard**  
**3-Way ball valve type 286**  
**Horizontal/L-port DA (Double acting)**  
**Without manual override**  
**With threaded sockets reinforced Rp**

**Model:**

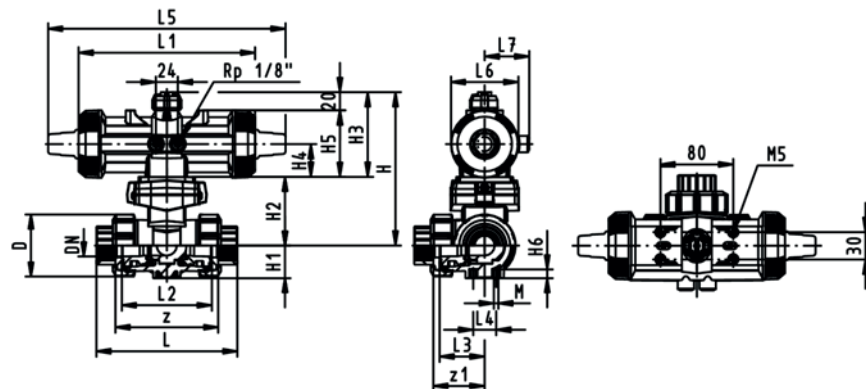
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

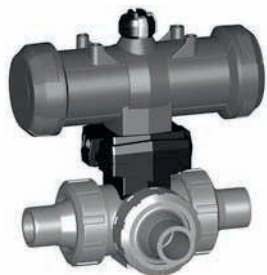


Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	<b>199 286 282</b>	<b>199 286 292</b>	0.841
1/2	15	10	75	<b>199 286 283</b>	<b>199 286 293</b>	0.845
3/4	20	10	150	<b>199 286 284</b>	<b>199 286 294</b>	0.935
1	25	10	280	<b>199 286 285</b>	<b>199 286 295</b>	1.060
1 1/4	32	10	480	<b>199 286 286</b>	<b>199 286 296</b>	1.793
1 1/2	40	10	620	<b>199 286 287</b>	<b>199 286 297</b>	2.156
2	50	10	1230	<b>199 286 288</b>	<b>199 286 298</b>	2.996

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	112	194	72	36	25	261	76
1/2	50	159	28	62	97	40	77	8	114	194	72	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	85	43	25	261	76
1	68	168	36	71	97	40	77	8	154	194	98	49	25	261	76
1 1/4	84	203	45	84	119	51	99	9	180	224	118	59	45	305	95
1 1/2	97	203	51	84	119	51	99	9	203	224	135	68	45	305	95
2	124	225	65	106	119	51	99	9	258	224	176	88	45	305	95

Rp [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	86	43
1/2	48	6	84	42
3/4	48	6	99	50
1	48	6	112	56
1 1/4	59	8	132	66
1 1/2	59	8	153	77
2	59	8	196	98

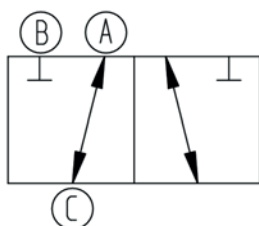
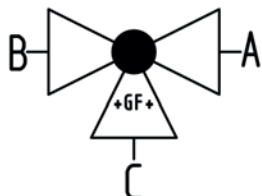




## PROGEF Standard 3-Way ball valve type 286 Horizontal/L-port DA (Double acting) Without manual override With socket fusion spigots metric

### Model:

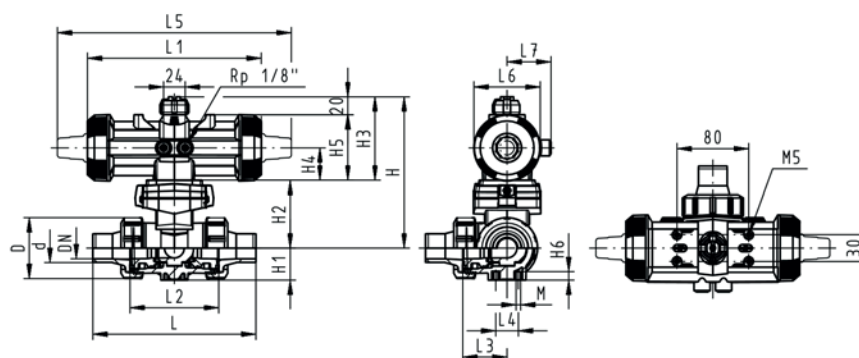
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	<b>199 286 162</b>	<b>199 286 172</b>	0.845
20	15	10	75	<b>199 286 163</b>	<b>199 286 173</b>	0.851
25	20	10	150	<b>199 286 164</b>	<b>199 286 174</b>	0.945
32	25	10	280	<b>199 286 165</b>	<b>199 286 175</b>	1.075
40	32	10	480	<b>199 286 166</b>	<b>199 286 176</b>	1.807
50	40	10	620	<b>199 286 167</b>	<b>199 286 177</b>	2.130
63	50	10	1230	<b>199 286 168</b>	<b>199 286 178</b>	3.078

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	126	194	72	36	25	261	76
20	50	159	28	62	97	40	77	8	136	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	159	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	178	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	204	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	237	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	296	224	176	88	45	305	95

d [mm]	L7 [mm]	M
16	48	6
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8

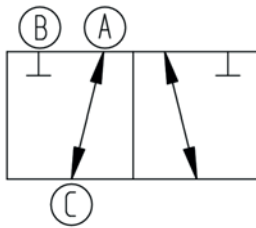
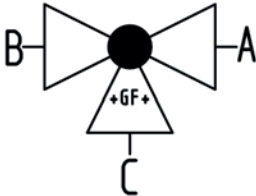




**PROGEF Standard**  
**3-Way ball valve type 286**  
**Horizontal/L-port DA (Double acting)**  
**Without manual override**  
**With butt fusion spigots**  
**IR-Plus SDR11 metric**

**Model:**

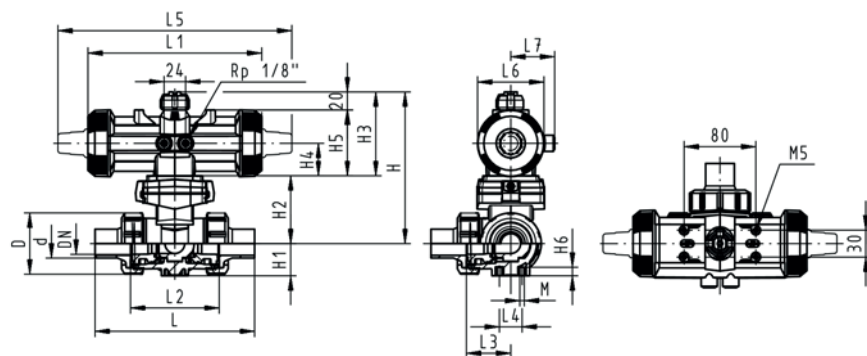
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$ ) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	75	<b>199 286 243</b>	<b>199 286 253</b>	0.851
25	20	10	150	<b>199 286 244</b>	<b>199 286 254</b>	0.945
32	25	10	280	<b>199 286 245</b>	<b>199 286 255</b>	1.075
40	32	10	480	<b>199 286 246</b>	<b>199 286 256</b>	1.807
50	40	10	620	<b>199 286 247</b>	<b>199 286 257</b>	2.130
63	50	10	1230	<b>199 286 248</b>	<b>199 286 258</b>	3.082

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	159	28	62	97	40	77	8	146	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	163	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	178	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	204	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	237	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	296	224	176	88	45	305	95

d [mm]	L7 [mm]	M
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8





# PROGEF Standard

## 3-Way ball valve type 286

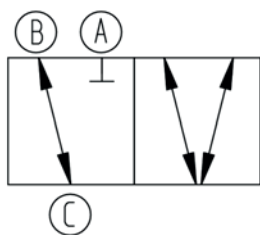
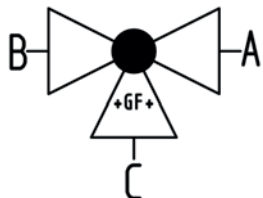
### Horizontal/T-port

### Without manual override

### With fusion sockets metric

#### Model:

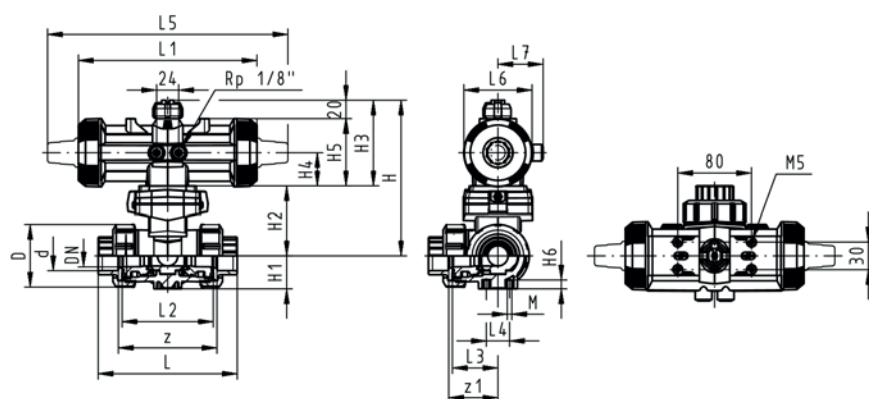
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the basic position
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting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



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>199 286 062</b>	<b>199 286 072</b>	1.031
20	15	10	200	<b>199 286 063</b>	<b>199 286 073</b>	1.035
25	20	10	470	<b>199 286 064</b>	<b>199 286 074</b>	1.124
32	25	10	793	<b>199 286 065</b>	<b>199 286 075</b>	1.266
40	32	10	1290	<b>199 286 066</b>	<b>199 286 076</b>	2.210
50	40	10	1910	<b>199 286 067</b>	<b>199 286 077</b>	2.499
63	50	10	3100	<b>199 286 068</b>	<b>199 286 078</b>	3.391

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	110	194	72	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	129	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	146	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	170	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	193	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	244	224	176	88	45	305	95

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	82	41
20	48	6	82	41
25	48	6	97	49
32	48	6	110	55
40	59	8	132	66
50	59	8	151	76
63	59	8	188	94

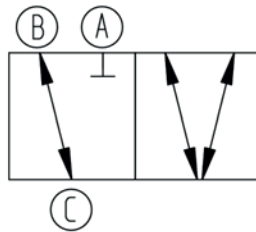
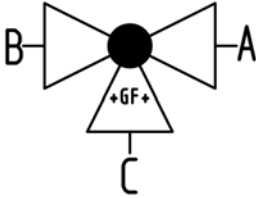




## PROGEF Standard 3-Way ball valve type 286 Horizontal/T-port Without manual override With threaded sockets reinforced Rp

### Model:

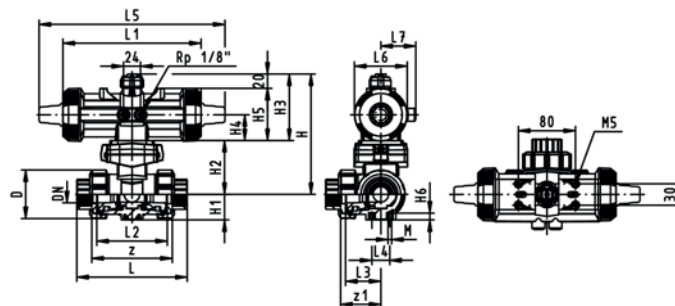
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the basic position
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time  $90^\circ <$ ) 1-3 s
- For easy installation and removal
- Integrated stainless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



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	199 286 142	199 286 152	1.031
1/2	15	10	200	199 286 143	199 286 153	1.035
3/4	20	10	470	199 286 144	199 286 154	1.124
1	25	10	793	199 286 145	199 286 155	1.245
1 1/4	32	10	1290	199 286 146	199 286 156	2.210
1 1/2	40	10	1910	199 286 147	199 286 157	2.499
2	50	10	3100	199 286 148	199 286 158	3.391

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	112	194	72	36	25	261	76
1/2	50	159	28	62	97	40	77	8	114	194	72	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	85	43	25	261	76
1	68	168	36	71	97	40	77	8	154	194	98	49	25	261	76
1 1/4	84	203	45	84	119	51	99	9	180	224	118	59	45	305	95
1 1/2	97	203	51	84	119	51	99	9	203	224	135	68	45	305	95
2	124	225	65	106	119	51	99	9	258	224	176	88	45	305	95

Rp [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	86	43
1/2	48	6	84	42
3/4	48	6	99	50
1	48	6	112	56
1 1/4	59	8	132	66
1 1/2	59	8	153	77
2	59	8	196	98

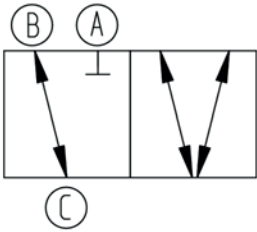
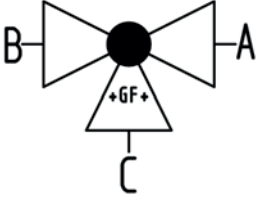




**PROGEF Standard**  
**3-Way ball valve type 286**  
**Horizontal/T-port**  
**Without manual override**  
**With socket fusion spigots metric**

**Model:**

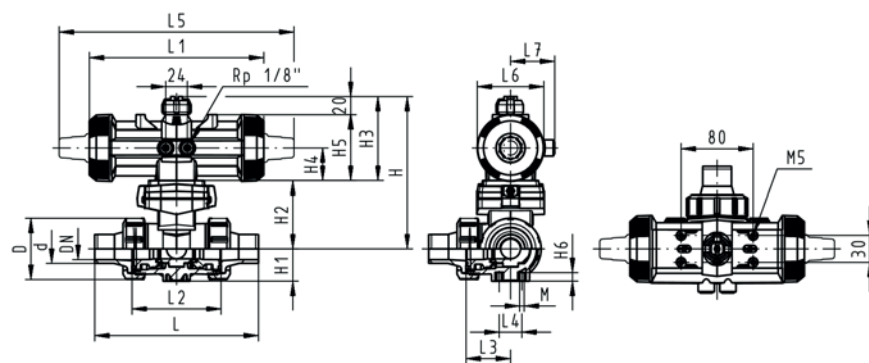
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the basic position
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting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



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>199 286 042</b>	<b>199 286 052</b>	1.035
20	15	10	200	<b>199 286 043</b>	<b>199 286 053</b>	1.041
25	20	10	470	<b>199 286 044</b>	<b>199 286 054</b>	1.134
32	25	10	793	<b>199 286 045</b>	<b>199 286 055</b>	1.261
40	32	10	1290	<b>199 286 046</b>	<b>199 286 056</b>	2.224
50	40	10	1910	<b>199 286 047</b>	<b>199 286 057</b>	2.541
63	50	10	3100	<b>199 286 048</b>	<b>199 286 058</b>	3.473

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	126	194	72	36	25	261	76
20	50	159	28	62	97	40	77	8	136	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	159	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	178	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	204	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	237	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	296	224	176	88	45	305	95

d [mm]	L7 [mm]	M
16	48	6
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8

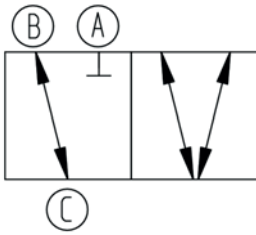
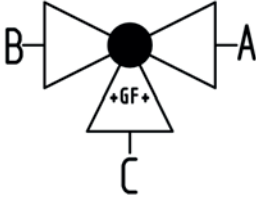




**PROGEF Standard  
3-Way ball valve type 286  
Horizontal/T-port  
Without manual override  
With butt fusion spigots  
IR-Plus SDR11 metric**

**Model:**

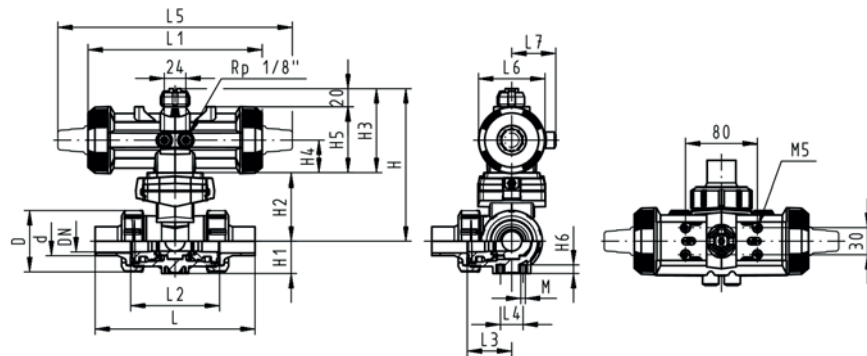
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the basic position
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90° < 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting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



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	200	<b>199 286 103</b>	<b>199 286 113</b>	1.041
25	20	10	470	<b>199 286 104</b>	<b>199 286 114</b>	1.134
32	25	10	793	<b>199 286 105</b>	<b>199 286 115</b>	1.261
40	32	10	1290	<b>199 286 106</b>	<b>199 286 116</b>	2.224
50	40	10	1910	<b>199 286 107</b>	<b>199 286 117</b>	2.541
63	50	10	3100	<b>199 286 108</b>	<b>199 286 118</b>	3.473

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	159	28	62	97	40	77	8	146	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	163	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	178	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	204	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	237	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	296	224	176	88	45	305	95

d [mm]	L7 [mm]	M
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8







# PROGEF Standard

## 3-Way ball valve type 286

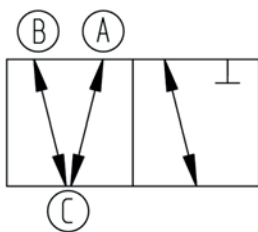
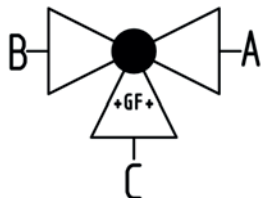
### Horizontal/T-port DA (Double acting)

### Without manual override

### With fusion sockets metric

#### Model:

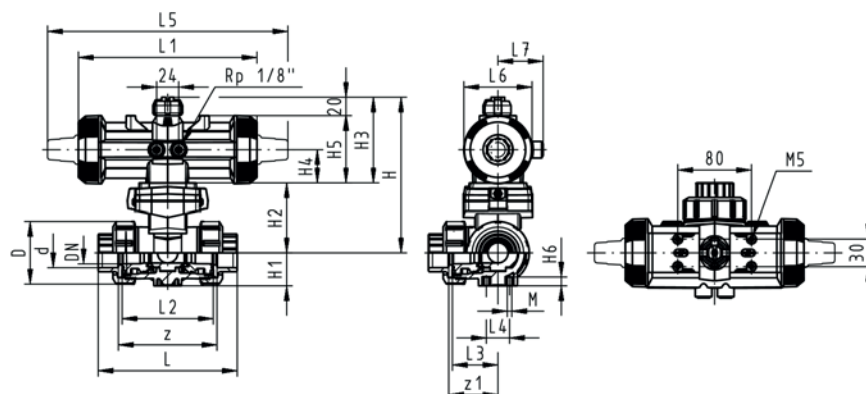
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>199 286 222</b>	<b>199 286 232</b>	0.840
20	15	10	200	<b>199 286 223</b>	<b>199 286 233</b>	0.844
25	20	10	470	<b>199 286 224</b>	<b>199 286 234</b>	0.934
32	25	10	793	<b>199 286 225</b>	<b>199 286 235</b>	1.055
40	32	10	1290	<b>199 286 226</b>	<b>199 286 236</b>	1.786
50	40	10	1910	<b>199 286 227</b>	<b>199 286 237</b>	2.075
63	50	10	3100	<b>199 286 228</b>	<b>199 286 238</b>	2.967

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	110	194	72	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	129	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	146	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	170	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	193	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	244	224	176	88	45	305	95

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	82	41
20	48	6	82	41
25	48	6	97	49
32	48	6	110	55
40	59	8	132	66
50	59	8	151	76
63	59	8	188	94

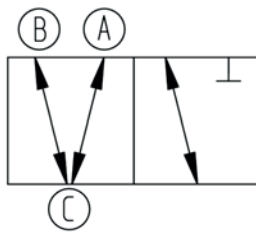
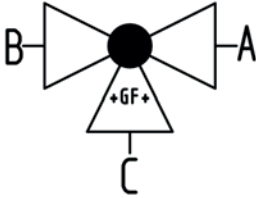




**PROGEF Standard**  
**3-Way ball valve type 286**  
**Horizontal/T-port DA (Double acting)**  
**Without manual override**  
**With threaded sockets reinforced Rp**

**Model:**

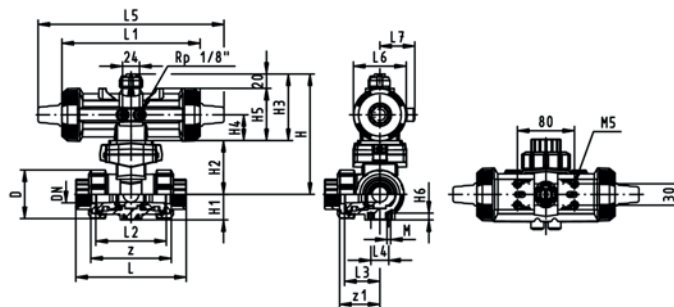
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$ ) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>199 286 302</b>	<b>199 286 312</b>	0.840
1/2	15	10	200	<b>199 286 303</b>	<b>199 286 313</b>	0.844
3/4	20	10	470	<b>199 286 304</b>	<b>199 286 314</b>	0.934
1	25	10	793	<b>199 286 305</b>	<b>199 286 315</b>	1.055
1 1/4	32	10	1290	<b>199 286 306</b>	<b>199 286 316</b>	1.786
1 1/2	40	10	1910	<b>199 286 307</b>	<b>199 286 317</b>	2.075
2	50	10	3100	<b>199 286 308</b>	<b>199 286 318</b>	2.967

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	112	194	72	36	25	261	76
1/2	50	159	28	62	97	40	77	8	114	194	72	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	85	43	25	261	76
1	68	168	36	71	97	40	77	8	154	194	98	49	25	261	76
1 1/4	84	203	45	84	119	51	99	9	180	224	118	59	45	305	95
1 1/2	97	203	51	84	119	51	99	9	203	224	135	68	45	305	95
2	124	225	65	106	119	51	99	9	258	224	176	88	45	305	95

Rp [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	86	43
1/2	48	6	84	42
3/4	48	6	99	50
1	48	6	112	56
1 1/4	59	8	132	66
1 1/2	59	8	153	77
2	59	8	196	98





# PROGEF Standard

## 3-Way ball valve type 286

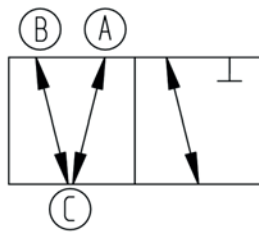
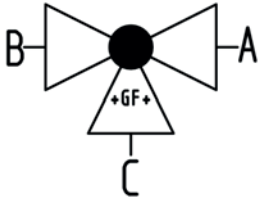
### Horizontal/T-port DA (Double acting)

### Without manual override

### With socket fusion spigots metric

#### Model:

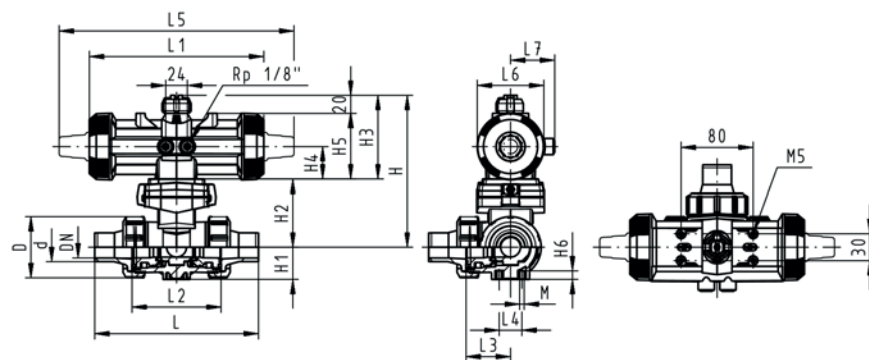
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>199 286 202</b>	<b>199 286 212</b>	0.844
20	15	10	200	<b>199 286 203</b>	<b>199 286 213</b>	0.850
25	20	10	470	<b>199 286 204</b>	<b>199 286 214</b>	0.943
32	25	10	793	<b>199 286 205</b>	<b>199 286 215</b>	1.071
40	32	10	1290	<b>199 286 206</b>	<b>199 286 216</b>	1.800
50	40	10	1910	<b>199 286 207</b>	<b>199 286 217</b>	2.117
63	50	10	3100	<b>199 286 208</b>	<b>199 286 218</b>	3.049

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	126	194	72	36	25	261	76
20	50	159	28	62	97	40	77	8	136	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	159	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	178	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	204	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	237	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	296	224	176	88	45	305	95

d [mm]	L7 [mm]	M
16	48	6
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8

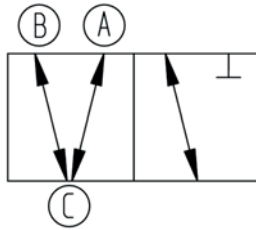
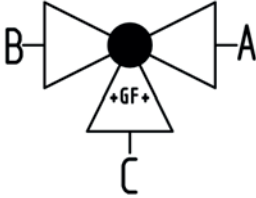




**PROGEF Standard**  
**3-Way ball valve type 286**  
**Horizontal/T-port DA (Double acting)**  
**Without manual override**  
**With butt fusion spigots**  
**IR-Plus SDR11 metric**

**Model:**

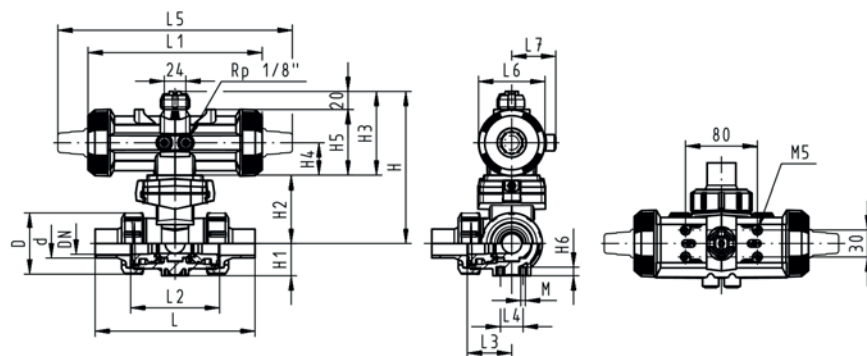
- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$ ) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	200	<b>199 286 263</b>	<b>199 286 273</b>	0.850
25	20	10	470	<b>199 286 264</b>	<b>199 286 274</b>	0.943
32	25	10	793	<b>199 286 265</b>	<b>199 286 275</b>	1.071
40	32	10	1290	<b>199 286 266</b>	<b>199 286 276</b>	1.800
50	40	10	1910	<b>199 286 267</b>	<b>199 286 277</b>	2.117
63	50	10	3100	<b>199 286 268</b>	<b>199 286 278</b>	3.049

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	159	28	62	97	40	77	8	146	194	72	36	25	261	76
25	58	168	32	71	97	40	77	8	163	194	85	43	25	261	76
32	68	168	36	71	97	40	77	8	178	194	98	49	25	261	76
40	84	203	45	84	119	51	99	9	204	224	118	59	45	305	95
50	97	203	51	84	119	51	99	9	237	224	135	68	45	305	95
63	124	225	65	106	119	51	99	9	296	224	176	88	45	305	95

d [mm]	L7 [mm]	M
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8



# Diaphragm valves pneumatic

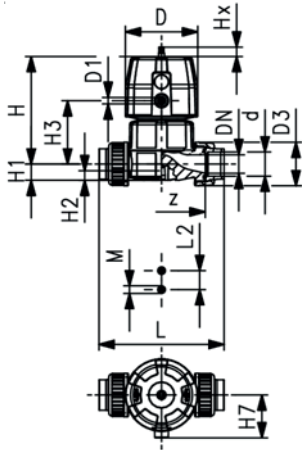
## New generation

### PROGEF Standard

#### Diaphragm valve DIASTAR Six

#### FC (Fail safe to close)

#### Unions with fusion sockets metric



**Model:**

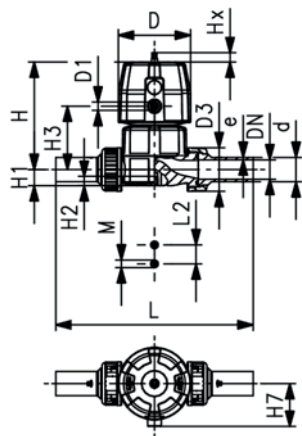
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

**Option:**

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	6	125	<b>167 614 012</b>	0.529
25	20	6	271	<b>167 614 013</b>	0.974
32	25	6	481	<b>167 614 014</b>	1.180
40	32	6	759	<b>167 614 015</b>	1.949
50	40	6	960	<b>167 614 016</b>	2.450
63	50	6	1181	<b>167 614 017</b>	3.153

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
20	68	1/8	128	25	101	14	12	60	43	M6	100	7
25	96	1/8	150	25	132	18	12	73	57	M6	118	10
32	96	1/8	162	25	143	22	12	84	57	M6	126	13
40	120	1/8	184	45	173	26	15	99	69	M8	144	14
50	120	1/8	210	45	193	32	15	119	69	M8	164	16
63	120	1/8	248	45	205	39	15	132	69	M8	194	16



### PROGEF Standard

#### Diaphragm valve DIASTAR Six

#### FC (Fail safe to close)

#### Unions with butt fusion spigots SDR11 metric

**Model:**

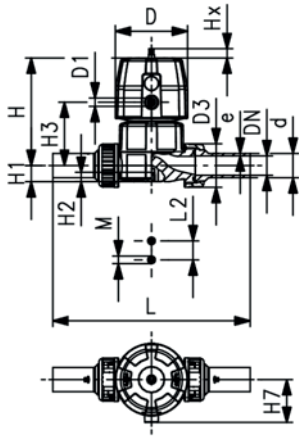
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

**Option:**

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	6	125	<b>167 614 112</b>	0.537
25	20	6	271	<b>167 614 113</b>	0.871
32	25	6	481	<b>167 614 114</b>	1.589
40	32	6	759	<b>167 614 115</b>	1.805
50	40	6	960	<b>167 614 116</b>	2.279
63	50	6	1181	<b>167 614 117</b>	3.421

table continued next page



d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	68	1/8	196	25	101	14	12	60	43	M6	7	1.9
25	96	1/8	221	25	132	18	12	73	57	M6	10	2.3
32	96	1/8	234	25	143	22	12	84	57	M6	13	2.9
40	120	1/8	260	45	173	26	15	99	69	M8	14	3.7
50	120	1/8	284	45	193	32	15	119	69	M8	16	4.6
63	120	1/8	321	45	205	39	15	132	69	M8	16	5.8



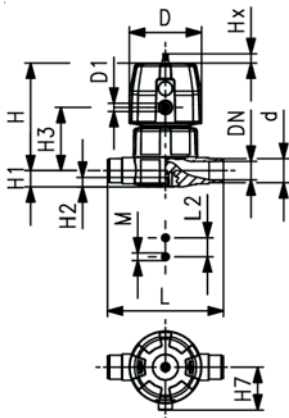
## PROGEF Standard Diaphragm valve DIASTAR Six FC (Fail safe to close) With socket fusion spigots metric

### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	6	125	<b>167 615 012</b>	0.466
25	20	6	271	<b>167 615 013</b>	0.903
32	25	6	481	<b>167 615 014</b>	1.054
40	32	6	759	<b>167 615 015</b>	1.747
50	40	6	960	<b>167 615 016</b>	2.207
63	50	6	1181	<b>167 615 017</b>	2.981

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	68	1/8	124	25	101	14	12	60	43	M6	7	1.9
25	96	1/8	144	25	132	18	12	73	57	M6	10	2.3
32	96	1/8	154	25	143	22	12	84	57	M6	13	2.9
40	120	1/8	174	45	173	26	15	99	69	M8	14	3.7
50	120	1/8	194	45	193	32	15	119	69	M8	16	4.6
63	120	1/8	224	45	205	39	15	132	69	M8	16	5.8



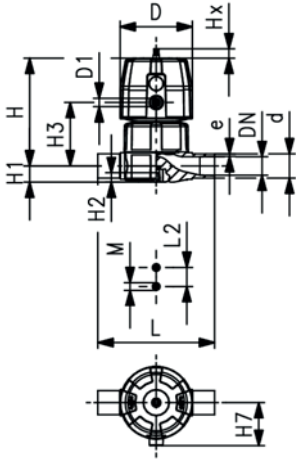
## PROGEF Standard Diaphragm valve DIASTAR Six FC (Fail safe to close) With butt fusion spigots SDR11 metric

### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals

### Option:

- Individual configuration of the valve (see diagram)



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	6	125	<b>167 615 112</b>	0.465
25	20	6	271	<b>167 615 113</b>	0.899
32	25	6	481	<b>167 615 114</b>	1.062
40	32	6	759	<b>167 615 115</b>	1.743
50	40	6	960	<b>167 615 116</b>	2.202
63	50	6	1181	<b>167 615 117</b>	2.978

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	68	1/8	124	25	101	14	12	60	43	M6	7	1.9
25	96	1/8	144	25	132	18	12	73	57	M6	10	2.3
32	96	1/8	154	25	143	22	12	84	57	M6	13	2.9
40	120	1/8	174	45	173	26	15	99	69	M8	14	3.7
50	120	1/8	194	45	193	32	15	119	69	M8	16	4.6
63	120	1/8	224	45	205	39	15	132	69	M8	16	5.8



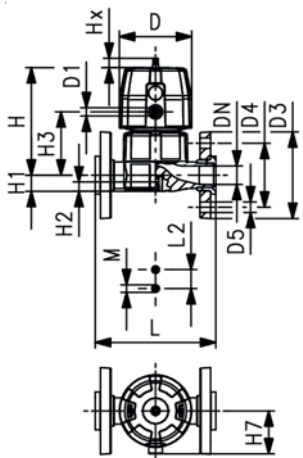
## PROGEF Standard Diaphragm valve DIASTAR Six FC (Fail safe to close) With backing flanges PP-V metric/BS

### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces/serrated
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

### Option:

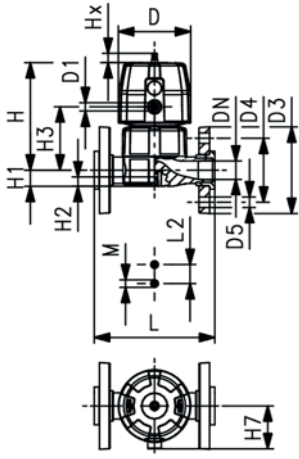
- Individual configuration of the valve (see diagram)



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	6	125	<b>167 617 112</b>	0.648
25	20	6	271	<b>167 617 113</b>	1.148
32	25	6	481	<b>167 617 114</b>	1.410
40	32	6	759	<b>167 617 115</b>	2.279
50	40	6	960	<b>167 617 116</b>	2.751
63	50	6	1181	<b>167 617 117</b>	3.921

d [mm]	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	Lift = Hx [mm]
20	68	1/8	95	65	14	130	25	101	14	12	60	43	M6	7
25	96	1/8	105	75	14	150	25	132	18	12	73	57	M6	10
32	96	1/8	115	85	14	160	25	143	22	12	84	69	M6	13

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d [mm]	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	Lift = Hx [mm]
40	120	1/8	140	100	18	180	45	173	26	15	99	69	M8	14
50	120	1/8	150	110	18	200	45	193	32	15	119	69	M8	16
63	120	1/8	165	125	18	230	45	205	39	15	132	69	M8	16



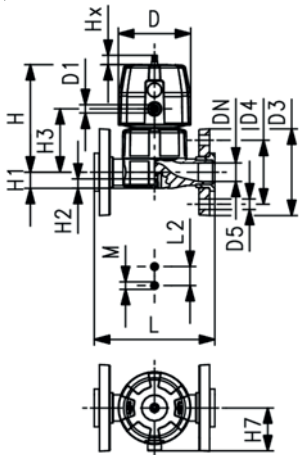
## PROGEF Standard Diaphragm valve DIASTAR Six FC (Fail safe to close) With backing flanges PP-V Inch ANSI

### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces/serrated
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

### Option:

- Individual configuration of the valve (see diagram)



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	kg
1/2	15	6	125	<b>167 617 712</b>	0.648
3/4	20	6	271	<b>167 617 713</b>	1.148
1	25	6	481	<b>167 617 714</b>	1.410
1 1/4	32	6	759	<b>167 617 715</b>	2.279
1 1/2	40	6	960	<b>167 617 716</b>	2.751
2	50	6	1181	<b>167 617 717</b>	3.921

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	Lift = Hx [mm]
1/2	68	1/8	95	60	16	130	25	101	14	12	60	43	M6	7
3/4	96	1/8	105	70	16	150	25	132	18	12	73	57	M6	10
1	96	1/8	115	79	16	160	25	143	22	12	84	69	M6	13
1 1/4	120	1/8	140	89	16	180	45	173	26	15	99	69	M8	14
1 1/2	120	1/8	150	98	16	200	45	193	32	15	119	69	M8	16
2	120	1/8	165	121	19	230	45	205	39	15	132	69	M8	16





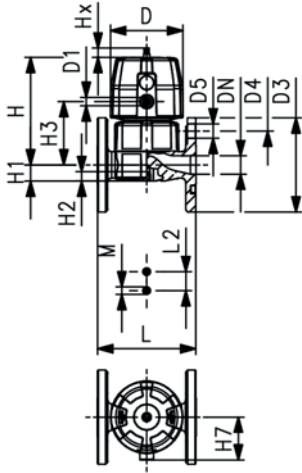
## PROGEF Standard Diaphragm valve DIASTAR Six FC (Fail safe to close) With fixed flanges PP-H JIS

### Model:

- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces/serrated
- Connecting dimension: JIS B2238/39 10K

### Option:

- Individual configuration of the valve (see diagram)



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
½	15	6	125	<b>167 617 912</b>	0.593
¾	20	6	271	<b>167 617 913</b>	1.023
1	25	6	481	<b>167 617 914</b>	1.263
1 ¼	32	6	759	<b>167 617 915</b>	2.082
1 ½	40	6	960	<b>167 617 916</b>	2.570
2	50	6	1181	<b>167 617 917</b>	3.432

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	Lift = Hx [mm]
½	68	¾	95	70	15	110	25	101	14	12	60	43	M6	7
¾	96	¾	100	75	15	120	25	132	18	12	73	57	M6	10
1	96	¾	125	90	19	130	25	143	22	12	84	69	M6	13
1 ¼	120	¾	135	100	19	180	45	173	26	15	99	69	M8	14
1 ½	120	¾	140	105	19	180	45	193	32	15	119	69	M8	16
2	120	¾	155	120	19	210	45	205	39	15	132	69	M8	16



## PROGEF Standard Diaphragm valve DIASTAR Ten FC (Fail safe to close) Unions with fusion sockets metric

### Model:

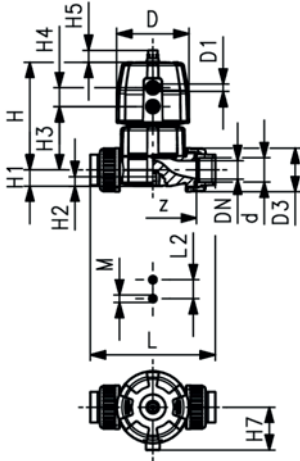
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 624 012</b>	<b>167 624 032</b>	0.526
25	20	10/10*	271	<b>167 624 013</b>	<b>167 624 033</b>	1.071
32	25	10/10*	481	<b>167 624 014</b>	<b>167 624 034</b>	1.286
40	32	10/10*	759	<b>167 624 015</b>	<b>167 624 035</b>	2.152
50	40	10/10*	1263	<b>167 624 016</b>	<b>167 624 036</b>	3.623
63	50	10/6*	1728	<b>167 624 017</b>	<b>167 624 037</b>	5.032

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
20	68	1/8	128	25	101	14	12	60	24	16	43	M6	100	7
25	96	1/8	150	25	132	18	12	73	25	16	57	M6	118	10
32	96	1/8	162	25	143	22	12	84	25	16	57	M6	126	13
40	120	1/8	184	45	173	26	15	99	26	26	69	M8	144	15
50	150	1/4	210	45	214	32	15	119	36	26	88	M8	164	19
63	150	1/4	248	45	226	39	15	132	36	26	88	M8	194	23



## PROGEF Standard Diaphragm valve DIASTAR Ten FC (Fail safe to close) Unions with butt fusion spigots SDR11 metric

### Model:

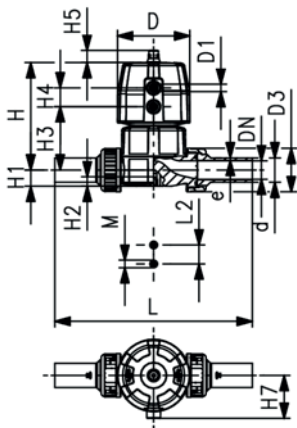
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

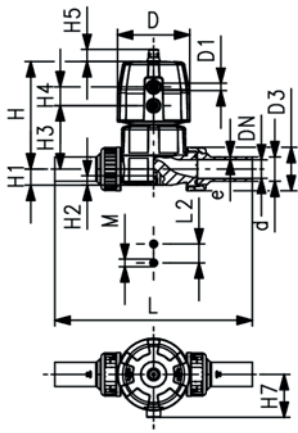
\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 624 112</b>	<b>167 624 132</b>	0.533
25	20	10/10*	271	<b>167 624 113</b>	<b>167 624 133</b>	0.971
32	25	10/10*	481	<b>167 624 114</b>	<b>167 624 134</b>	1.698
40	32	10/10*	759	<b>167 624 115</b>	<b>167 624 135</b>	2.682
50	40	10/10*	1263	<b>167 624 116</b>	<b>167 624 136</b>	4.378
63	50	10/6*	1728	<b>167 624 117</b>	<b>167 624 137</b>	4.076

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d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	68	1/8	196	25	101	14	12	60	24	16	43	M6	7	1.9
25	96	1/8	221	25	132	18	12	73	25	16	57	M6	10	2.3
32	96	1/8	234	25	143	22	12	84	25	16	57	M6	13	2.9
40	120	1/8	260	45	173	26	15	99	26	26	69	M8	15	3.7
50	150	1/4	284	45	214	32	15	119	36	26	88	M8	19	4.6
63	150	1/4	321	45	226	39	15	132	36	26	88	M8	23	5.8



## PROGEF Standard Diaphragm valve DIASTAR Ten FC (Fail safe to close) With socket fusion spigots metric

### Model:

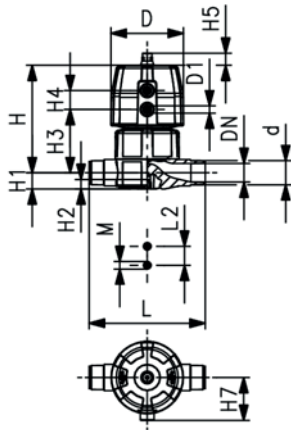
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value (Δp=1 bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 625 012</b>	<b>167 625 032</b>	0.502
25	20	10/10*	271	<b>167 625 013</b>	<b>167 625 033</b>	0.990
32	25	10/10*	481	<b>167 625 014</b>	<b>167 625 034</b>	1.156
40	32	10/10*	759	<b>167 625 015</b>	<b>167 625 035</b>	1.917
50	40	10/10*	1263	<b>167 625 016</b>	<b>167 625 036</b>	3.375
63	50	10/6*	1728	<b>167 625 017</b>	<b>167 625 037</b>	4.054

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	68	1/8	124	25	101	14	12	60	24	16	43	M6	7	1.9
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10	2.3
32	96	1/8	154	25	143	22	12	84	25	16	57	M6	13	2.9
40	120	1/8	174	45	173	26	15	99	26	26	69	M8	15	3.7
50	150	1/4	194	45	214	32	15	119	36	26	88	M8	19	4.6
63	150	1/4	224	45	226	39	15	132	36	26	88	M8	23	5.8



## PROGEF Standard Diaphragm valve DIASTAR Ten FC (Fail safe to close) With butt fusion spigots SDR11 metric

### Model:

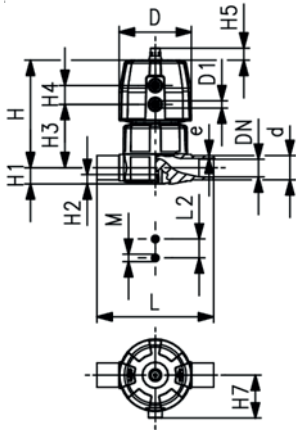
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 625 112</b>	<b>167 625 132</b>	0.501
25	20	10/10*	271	<b>167 625 113</b>	<b>167 625 133</b>	0.986
32	25	10/10*	481	<b>167 625 114</b>	<b>167 625 134</b>	1.154
40	32	10/10*	759	<b>167 625 115</b>	<b>167 625 135</b>	1.913
50	40	10/10*	1263	<b>167 625 116</b>	<b>167 625 136</b>	3.370
63	50	10/6*	1728	<b>167 625 117</b>	<b>167 625 137</b>	3.927

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]
20	68	1/8	124	25	101	14	12	60	24	16	43	M6	7
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10
32	96	1/8	154	25	143	22	12	84	25	16	57	M6	13
40	120	1/8	174	45	173	26	15	99	26	26	69	M8	15
50	150	1/4	194	45	214	32	15	119	36	26	88	M8	19
63	150	1/4	224	45	226	39	15	132	36	26	88	M8	23



## PROGEF Standard Diaphragm valve DIASTAR Ten FC (Fail safe to close) With backing flanges PP-V metric/BS

### Model:

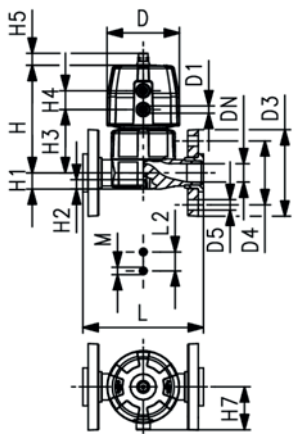
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces/serrated
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

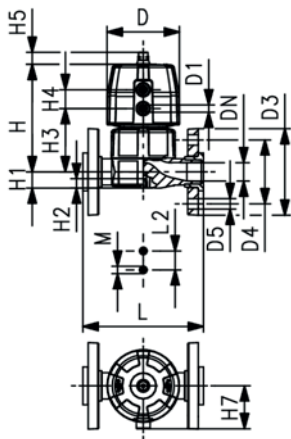
\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 627 112</b>	<b>167 627 132</b>	0.684
25	20	10/10*	271	<b>167 627 113</b>	<b>167 627 133</b>	1.234
32	25	10/10*	481	<b>167 627 114</b>	<b>167 627 134</b>	1.526
40	32	10/10*	759	<b>167 627 115</b>	<b>167 627 135</b>	2.562
50	40	10/10*	1263	<b>167 627 116</b>	<b>167 627 136</b>	3.919
63	50	10/6*	1728	<b>167 627 117</b>	<b>167 627 137</b>	4.952

table continued next page



d	D	D1_G	D3	D4	D5	L	L2	H	H1	H2	H3	H4	H5	H7	M
[mm]	[mm]	[inch]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
20	68	1/8	95	65	14	130	25	101	14	12	60	24	16	43	M6
25	96	1/8	105	75	14	150	25	132	18	12	73	25	16	57	M6
32	96	1/8	115	85	14	160	25	143	22	12	84	25	16	69	M6
40	120	1/8	140	100	18	180	45	173	26	15	99	26	26	69	M8
50	150	1/4	150	110	18	200	45	193	32	15	119	36	26	88	M8
63	150	1/4	165	125	18	230	45	205	39	15	132	36	26	88	M8

d	Lift = Hx
[mm]	[mm]
20	7
25	10
32	13
40	15
50	19
63	23



## PROGEF Standard Diaphragm valve DIASTAR Ten FC (Fail safe to close) With backing flanges PP-V Inch ANSI

### Model:

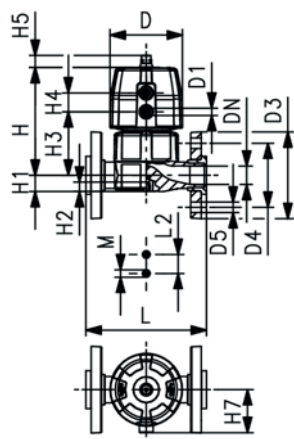
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces/serrated
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



Inch	DN	PN*	kv-value	EPDM	PTFE/EPDM	kg
	[mm]	[bar]	( $\Delta p=1$ bar)	Code	Code	
			[l/min]			
1/2	15	10/10*	125	167 627 712	167 627 732	0.684
3/4	20	10/10*	271	167 627 713	167 627 733	1.234
1	25	10/10*	481	167 627 714	167 627 734	1.502
1 1/4	32	10/10*	759	167 627 715	167 627 735	2.449
1 1/2	40	10/10*	1263	167 627 716	167 627 736	3.919
2	50	10/6*	1728	167 627 717	167 627 737	4.870

Inch	D	D1_G	D3	D4	D5	L	L2	H	H1	H2	H3	H4	H5	H7	M
	[mm]	[inch]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
1/2	68	1/8	95	60	16	130	25	101	14	12	60	24	16	43	M6
3/4	96	1/8	105	70	16	150	25	132	18	12	73	25	16	57	M6
1	96	1/8	115	79	16	160	25	143	22	12	84	25	16	69	M6
1 1/4	120	1/8	140	89	16	180	45	173	26	15	99	26	26	69	M8
1 1/2	150	1/4	150	98	16	200	45	193	32	15	119	36	26	88	M8
2	150	1/4	165	121	19	230	45	205	39	15	132	36	26	88	M8

Inch	Lift = Hx
	[mm]
1/2	7
3/4	10
1	13
1 1/4	15
1 1/2	19
2	23



## PROGEF Standard Diaphragm valve type DIASTAR Series 025 FC (Fail safe to close) With fixed flanges PP metric

### Model:

- Material: PP-H
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

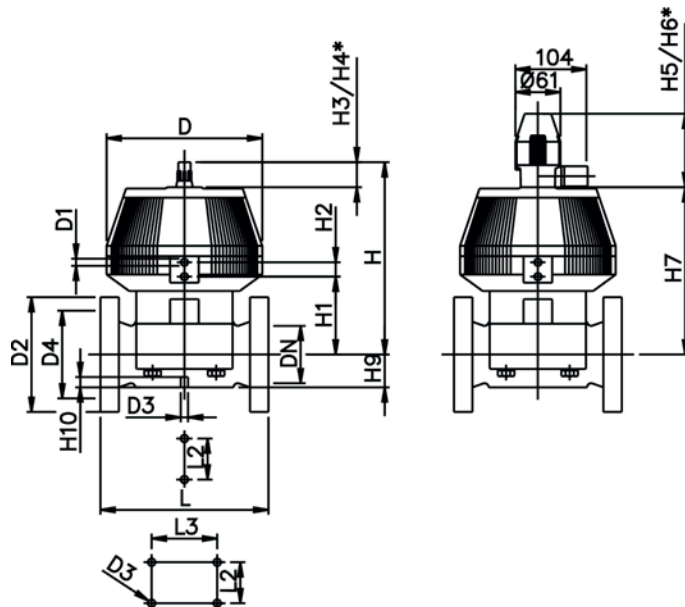
\* With backing flanges PP-V

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
* 75	65	2 ½	10	992	<b>199 025 267</b>	<b>199 025 297</b>	14.715
** 90	80	3	10	1700	<b>199 025 268</b>	<b>199 025 298</b>	16.162
110	100	4	6	2700	<b>199 025 269</b>	<b>199 025 299</b>	24.700
** 160	150	6	6	6033	<b>199 025 270</b>	-	35.000

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
* 75	280	¼	185	8	145	290	70		344	148	24	46	100	129
** 90	280	¼	200	12	160	310	120		348	150	24	46	100	129
110	335	¼	225	12	180	350	120		395	176	24	46	100	129
** 160	335	¼	285	12	240	480	100	200	455	237	24	46	100	129

d [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 75	195	298	46	15
** 90	195	302	57	15
110	195	349	69	20
** 160	195	409	108	20





## PROGEF Standard Diaphragm valve DIASTAR Ten FC (Fail safe to close) With fixed flanges PP-H JIS

### Model:

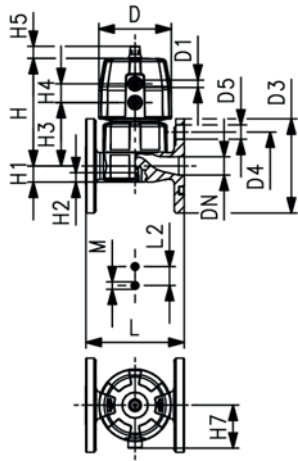
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Connecting dimension: JIS B2238/39 10K
- Flat sealing faces/serrated

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



Inch	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10/10*	125	<b>167 627 912</b>	<b>167 627 932</b>	0.628
3/4	20	10/10*	271	<b>167 627 913</b>	<b>167 627 933</b>	1.108
1	25	10/10*	481	<b>167 627 914</b>	<b>167 627 934</b>	1.354
1 1/4	32	10/10*	759	<b>167 627 915</b>	<b>167 627 935</b>	2.251
1 1/2	40	10/10*	1263	<b>167 627 916</b>	<b>167 627 936</b>	3.737
2	50	10/6*	1728	<b>167 627 917</b>	<b>167 627 937</b>	4.380

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
1/2	68	1/8	95	70	15	110	25	101	14	12	60	24	16	43	M6
3/4	96	1/8	100	75	15	120	25	132	18	12	73	25	16	57	M6
1	96	1/8	125	90	19	130	25	143	22	12	84	25	16	69	M6
1 1/4	120	1/8	135	100	19	180	45	173	26	15	99	26	26	69	M8
1 1/2	150	1/4	140	105	19	180	45	193	32	15	119	36	26	88	M8
2	150	1/4	155	120	19	210	45	205	39	15	132	36	26	88	M8

Inch	Lift = Hx [mm]
1/2	7
3/4	10
1	13
1 1/4	15
1 1/2	19
2	23



## PROGEF Standard Diaphragm valve DIASTAR Ten FO (Fail safe to open) Unions with fusion sockets metric

### Model:

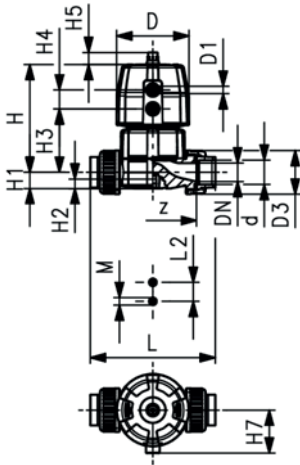
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 644 012</b>	<b>167 644 032</b>	0.515
25	20	10/10*	271	<b>167 644 013</b>	<b>167 644 033</b>	0.919
32	25	10/10*	481	<b>167 644 014</b>	<b>167 644 034</b>	1.079
40	32	10/10*	759	<b>167 644 015</b>	<b>167 644 035</b>	1.726
50	40	10/10*	1263	<b>167 644 016</b>	<b>167 644 036</b>	3.533
63	50	10/10*	1728	<b>167 644 017</b>	<b>167 644 037</b>	4.266

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
20	68	1/8	128	25	101	14	12	60	24	16	43	M6	100	7
25	96	1/8	152	25	132	18	12	73	25	16	57	M6	118	10
32	96	1/8	166	25	143	22	12	84	25	16	57	M6	126	13
40	120	1/8	192	45	173	26	15	99	26	26	69	M8	144	15
50	150	1/4	222	45	214	32	15	119	36	26	88	M8	164	19
63	150	1/4	266	45	226	39	15	132	36	26	88	M8	194	23



## PROGEF Standard Diaphragm valve DIASTAR Ten FO (Fail safe to open) Unions with butt fusion spigots SDR11 metric

### Model:

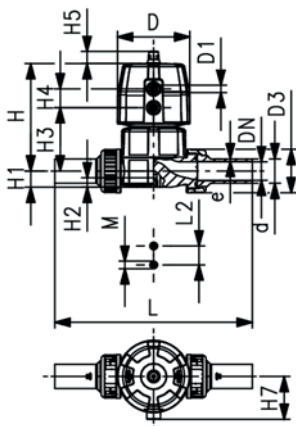
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

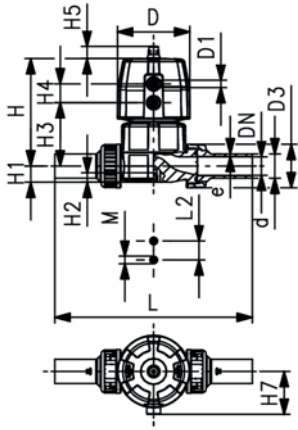
Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 644 112</b>	<b>167 644 132</b>	0.510
25	20	10/10*	271	<b>167 644 113</b>	<b>167 644 133</b>	0.931
32	25	10/10*	481	<b>167 644 114</b>	<b>167 644 134</b>	1.482
40	32	10/10*	759	<b>167 644 115</b>	<b>167 644 135</b>	1.647
50	40	10/10*	1263	<b>167 644 116</b>	<b>167 644 136</b>	3.541
63	50	10/10*	1728	<b>167 644 117</b>	<b>167 644 137</b>	3.426

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d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	68	1/8	196	25	101	14	12	60	24	16	43	M6	7	1.9
25	96	1/8	221	25	132	18	12	73	25	16	57	M6	10	2.3
32	96	1/8	234	25	143	22	12	84	25	16	57	M6	13	2.9
40	120	1/8	260	45	173	26	15	99	26	26	69	M8	15	3.7
50	150	1/4	284	45	214	32	15	119	36	26	69	M8	19	4.6
63	150	1/4	321	45	226	39	15	132	36	26	69	M8	23	5.8



## PROGEF Standard Diaphragm valve DIASTAR Ten FO (Fail safe to open) With socket fusion spigots metric

### Model:

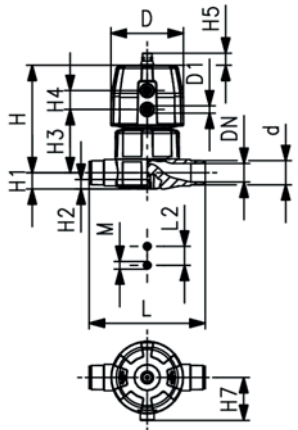
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 645 012</b>	<b>167 645 032</b>	0.452
25	20	10/10*	271	<b>167 645 013</b>	<b>167 645 033</b>	0.816
32	25	10/10*	481	<b>167 645 014</b>	<b>167 645 034</b>	0.976
40	32	10/10*	759	<b>167 645 015</b>	<b>167 645 035</b>	1.557
50	40	10/10*	1263	<b>167 645 016</b>	<b>167 645 036</b>	3.285
63	50	10/10*	1728	<b>167 645 017</b>	<b>167 645 037</b>	3.840

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	68	1/8	124	25	101	14	12	60	24	16	43	M6	7	1.9
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10	2.3
32	96	1/8	154	25	143	22	12	84	25	16	57	M6	13	2.9
40	120	1/8	174	45	173	26	15	99	26	26	69	M8	15	3.7
50	150	1/4	194	45	214	32	15	119	36	26	88	M8	19	4.6
63	150	1/4	224	45	226	39	15	132	36	26	88	M8	23	5.8



## PROGEF Standard Diaphragm valve DIASTAR Ten FO (Fail safe to open) With butt fusion spigots SDR11 metric

### Model:

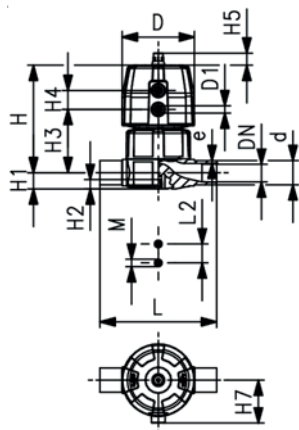
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 645 112</b>	<b>167 645 132</b>	0.451
25	20	10/10*	271	<b>167 645 113</b>	<b>167 645 133</b>	0.812
32	25	10/10*	481	<b>167 645 114</b>	<b>167 645 134</b>	0.974
40	32	10/10*	759	<b>167 645 115</b>	<b>167 645 135</b>	1.553
50	40	10/10*	1263	<b>167 645 116</b>	<b>167 645 136</b>	3.280
63	50	10/10*	1728	<b>167 645 117</b>	<b>167 645 137</b>	3.837

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	68	1/8	124	25	101	14	12	60	24	16	43	M6	7	1.9
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10	2.3
32	96	1/8	154	25	143	22	12	84	25	16	57	M6	13	2.9
40	120	1/8	174	45	173	26	15	99	26	26	69	M8	15	3.7
50	150	1/4	194	45	214	32	15	119	36	26	88	M8	19	4.6
63	150	1/4	224	45	226	39	15	132	36	26	88	M8	23	5.8



# PROGEF Standard Diaphragm valve DIASTAR Ten FO (Fail safe to open) With backing flanges PP-V metric/BS

## Model:

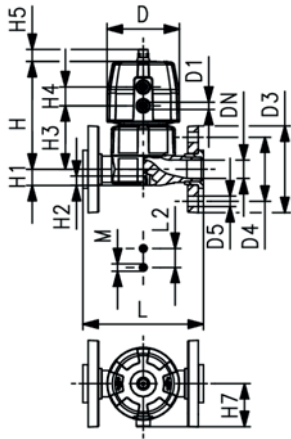
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces/serrated
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

## Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 647 112</b>	<b>167 647 132</b>	0.634
25	20	10/10*	271	<b>167 647 113</b>	<b>167 647 133</b>	1.060
32	25	10/10*	481	<b>167 647 114</b>	<b>167 647 134</b>	1.322
40	32	10/10*	759	<b>167 647 115</b>	<b>167 647 135</b>	2.089
50	40	10/10*	1263	<b>167 647 116</b>	<b>167 647 136</b>	3.829
63	50	10/10*	1728	<b>167 647 117</b>	<b>167 647 137</b>	4.780

d [mm]	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
20	68	1/8	95	65	14	130	25	101	14	12	60	24	16	57	M6
25	96	1/8	105	75	14	150	25	132	18	12	73	25	16	57	M6
32	96	1/8	115	85	14	160	25	143	22	12	84	25	16	69	M6
40	120	1/8	140	100	18	180	45	173	26	15	99	26	26	88	M8
50	150	1/4	150	110	18	200	45	214	32	15	119	36	26	103	M8
63	150	1/4	165	125	18	230	45	226	39	15	132	36	26	103	M8

d [mm]	Lift = Hx [mm]
20	7
25	10
32	13
40	15
50	19
63	23



## PROGEF Standard Diaphragm valve DIASTAR Ten FO (Fail safe to open) With backing flanges PP-V Inch ANSI

### Model:

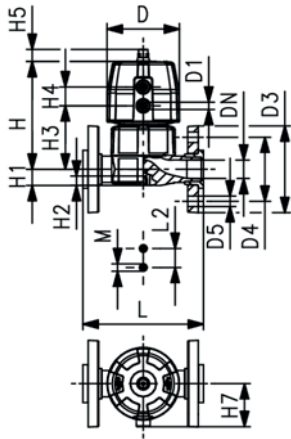
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces/serrated
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



Inch	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10/10*	125	<b>167 647 712</b>	<b>167 647 732</b>	0.634
3/4	20	10/10*	271	<b>167 647 713</b>	<b>167 647 733</b>	1.060
1	25	10/10*	481	<b>167 647 714</b>	<b>167 647 734</b>	1.322
1 1/4	32	10/10*	759	<b>167 647 715</b>	<b>167 647 735</b>	2.089
1 1/2	40	10/10*	1263	<b>167 647 716</b>	<b>167 647 736</b>	3.829
2	50	10/10*	1728	<b>167 647 717</b>	<b>167 647 737</b>	4.780

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
1/2	68	1/8	95	60	16	130	25	101	14	12	60	24	16	57	M6
3/4	96	1/8	105	70	16	150	25	132	18	12	73	25	16	57	M6
1	96	1/8	115	79	16	160	25	143	22	12	84	25	16	69	M6
1 1/4	120	1/8	140	89	16	180	45	173	26	15	99	26	26	88	M8
1 1/2	150	1/4	150	98	16	200	45	214	32	15	119	36	26	103	M8
2	150	1/4	165	121	19	230	45	226	39	15	132	36	26	103	M8

Inch	Lift = Hx [mm]
1/2	7
3/4	10
1	13
1 1/4	15
1 1/2	19
2	23



## PROGEF Standard Diaphragm valve DIASTAR Ten FO (Fail safe to open) With fixed flanges PP-H JIS

### Model:

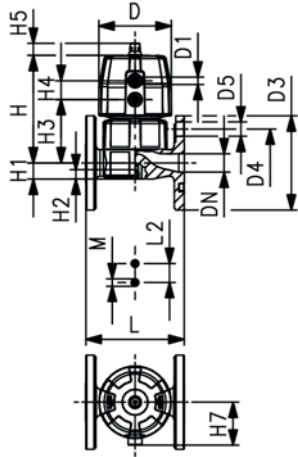
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces/serrated
- Connecting dimension: JIS B2238/39 10K

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



Inch	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10/10*	125	167 647 912	167 647 932	0.578
3/4	20	10/10*	271	167 647 913	167 647 933	0.934
1	25	10/10*	481	167 647 914	167 647 934	1.174
1 1/4	32	10/10*	759	167 647 915	167 647 935	1.891
1 1/2	40	10/10*	1263	167 647 916	167 647 936	3.647
2	50	10/10*	1728	167 647 917	167 647 937	4.290

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
1/2	68	1/8	95	70	15	110	25	101	14	12	60	24	16	57	M6
3/4	96	1/8	100	75	15	120	25	132	18	12	73	25	16	57	M6
1	96	1/8	125	90	19	130	25	143	22	12	84	25	16	69	M6
1 1/4	120	1/8	135	100	19	180	45	173	26	15	99	26	26	88	M8
1 1/2	150	1/4	140	105	19	180	45	214	32	15	119	36	26	103	M8
2	150	1/4	155	120	19	210	45	226	39	15	132	36	26	103	M8

Inch	Lift = Hx [mm]
1/2	7
3/4	10
1	13
1 1/4	15
1 1/2	19
2	23



# PROGEF Standard Diaphragm valve type DIASTAR Series 025 FO (Fail safe to open) With fixed flanges PP metric

## Model:

- Material: PP-H
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

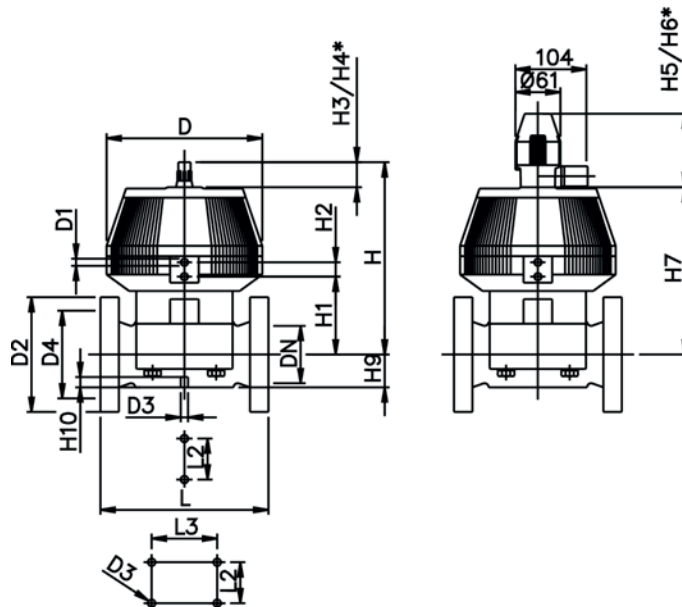
\* With backing flanges PP-V

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
* 75	65	2 ½	10	992	<b>199 025 277</b>	<b>199 025 307</b>	13.600
** 90	80	3	10	1700	<b>199 025 278</b>	<b>199 025 308</b>	17.400
110	100	4	6	2700	<b>199 025 279</b>	<b>199 025 309</b>	24.700
** 160	150	6	6	6033	<b>199 025 280</b>	<b>199 025 310</b>	35.000

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
* 75	280	¼	185	8	145	290	70		344	148	24	46	100	129
** 90	280	¼	200	12	160	310	120		348	150	24	46	100	129
110	335	¼	225	12	180	350	120		395	176	24	46	100	129
** 160	335	¼	285	12	240	480	100	200	455	237	24	46	100	129

d [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 75	195	298	46	15
** 90	195	302	57	15
110	195	349	69	20
** 160	195	409	108	20





## PROGEF Standard Diaphragm valve DIASTAR Ten DA (Double acting) Unions with fusion sockets metric

### Model:

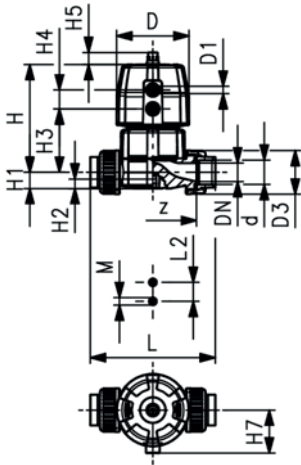
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 654 012</b>	<b>167 654 032</b>	0.499
25	20	10/10*	271	<b>167 654 013</b>	<b>167 654 033</b>	0.883
32	25	10/10*	481	<b>167 654 014</b>	<b>167 654 034</b>	1.077
40	32	10/10*	759	<b>167 654 015</b>	<b>167 654 035</b>	1.666
50	40	10/10*	1263	<b>167 654 016</b>	<b>167 654 036</b>	2.783
63	50	10/10*	1728	<b>167 654 017</b>	<b>167 654 037</b>	3.516

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
20	68	1/8	128	25	101	14	12	60	24	16	43	M6	100	7
25	96	1/8	152	25	132	18	12	73	25	16	57	M6	118	10
32	96	1/8	166	25	143	22	12	84	25	16	57	M6	126	13
40	120	1/8	192	45	173	26	15	99	26	26	69	M8	144	15
50	150	1/4	222	45	214	32	15	119	36	26	88	M8	164	19
63	150	1/4	266	45	226	39	15	132	36	26	88	M8	194	23



## PROGEF Standard Diaphragm valve DIASTAR Ten DA (Double acting) Unions with butt fusion spigots SDR11 metric

### Model:

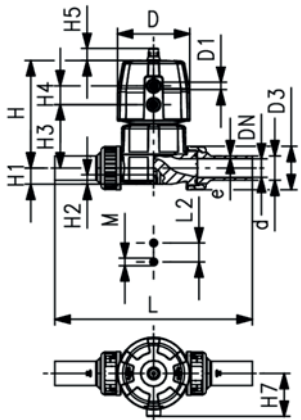
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

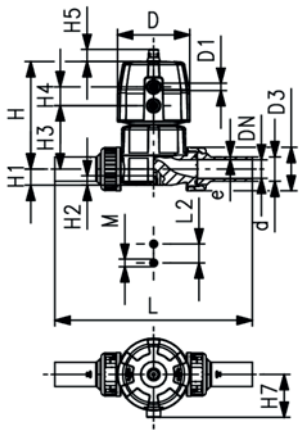
\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 654 112</b>	<b>167 654 132</b>	0.507
25	20	10/10*	271	<b>167 654 113</b>	<b>167 654 133</b>	0.895
32	25	10/10*	481	<b>167 654 114</b>	<b>167 654 134</b>	1.097
40	32	10/10*	759	<b>167 654 115</b>	<b>167 654 135</b>	1.698
50	40	10/10*	1263	<b>167 654 116</b>	<b>167 654 136</b>	2.791
63	50	10/10*	1728	<b>167 654 117</b>	<b>167 654 137</b>	3.530

table continued next page



d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	68	1/8	196	25	101	14	12	60	24	16	43	M6	7	1.9
25	96	1/8	221	25	132	18	12	73	25	16	57	M6	10	2.3
32	96	1/8	234	25	143	22	12	84	25	16	57	M6	13	2.9
40	120	1/8	260	45	173	26	15	99	26	26	69	M8	15	3.7
50	150	1/4	284	45	214	32	15	119	36	26	69	M8	19	4.6
63	150	1/4	321	45	226	39	15	132	36	26	69	M8	23	5.8



## PROGEF Standard Diaphragm valve DIASTAR Ten DA (Double acting) With socket fusion spigots metric

### Model:

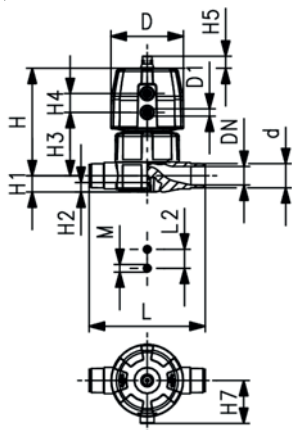
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 655 012</b>	<b>167 655 032</b>	0.436
25	20	10/10*	271	<b>167 655 013</b>	<b>167 655 033</b>	0.780
32	25	10/10*	481	<b>167 655 014</b>	<b>167 655 034</b>	0.946
40	32	10/10*	759	<b>167 655 015</b>	<b>167 655 035</b>	1.497
50	40	10/10*	1263	<b>167 655 016</b>	<b>167 655 036</b>	2.535
63	50	10/10*	1728	<b>167 655 017</b>	<b>167 655 037</b>	3.090

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]
20	68	1/8	124	25	101	14	12	60	24	16	43	M6	7
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10
32	96	1/8	154	25	143	22	12	84	25	16	57	M6	13
40	120	1/8	174	45	173	26	15	99	26	26	69	M8	15
50	150	1/4	194	45	214	32	15	119	36	26	88	M8	19
63	150	1/4	224	45	226	39	15	132	36	26	88	M8	23





## PROGEF Standard Diaphragm valve DIASTAR Ten DA (Double acting) With butt fusion spigots SDR11 metric

### Model:

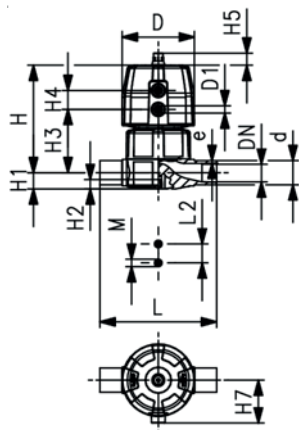
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 655 112</b>	<b>167 655 132</b>	0.435
25	20	10/10*	271	<b>167 655 113</b>	<b>167 655 133</b>	0.776
32	25	10/10*	481	<b>167 655 114</b>	<b>167 655 134</b>	0.944
40	32	10/10*	759	<b>167 655 115</b>	<b>167 655 135</b>	1.493
50	40	10/10*	1263	<b>167 655 116</b>	<b>167 655 136</b>	2.530
63	50	10/10*	1728	<b>167 655 117</b>	<b>167 655 137</b>	3.087

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	68	1/8	124	25	101	14	12	60	24	16	43	M6	7	1.9
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10	2.3
32	96	1/8	154	25	143	22	12	84	25	16	57	M6	13	2.9
40	120	1/8	174	45	173	26	15	99	26	26	69	M8	15	3.7
50	150	1/4	194	45	214	32	15	119	36	26	88	M8	19	4.6
63	150	1/4	224	45	226	39	15	132	36	26	88	M8	23	5.8



## PROGEF Standard Diaphragm valve DIASTAR Ten DA (Double acting) With backing flanges PP-V metric/BS

### Model:

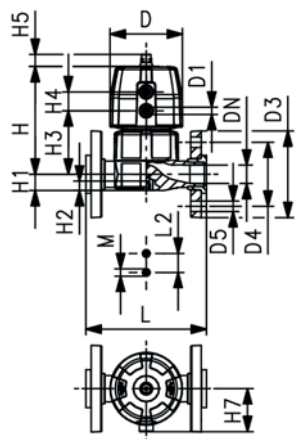
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces/serrated
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 657 112</b>	<b>167 657 132</b>	0.618
25	20	10/10*	271	<b>167 657 113</b>	<b>167 657 133</b>	1.024
32	25	10/10*	481	<b>167 657 114</b>	<b>167 657 134</b>	1.292
40	32	10/10*	759	<b>167 657 115</b>	<b>167 657 135</b>	2.029
50	40	10/10*	1263	<b>167 657 116</b>	<b>167 657 136</b>	3.079
63	50	10/10*	1728	<b>167 657 117</b>	<b>167 657 137</b>	4.030

d [mm]	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
20	68	1/8	95	65	14	130	25	101	14	12	60	24	16	57	M6
25	96	1/8	105	75	14	150	25	132	18	12	73	25	16	57	M6
32	96	1/8	115	85	14	160	25	143	22	12	84	25	16	69	M6
40	120	1/8	140	100	18	180	45	173	26	15	99	26	26	88	M8
50	150	1/4	150	110	18	200	45	214	32	15	119	36	26	103	M8
63	150	1/4	165	125	18	230	45	226	39	15	132	36	26	103	M8

d [mm]	Lift = Hx [mm]
20	7
25	10
32	13
40	15
50	19
63	23



## PROGEF Standard Diaphragm valve DIASTAR Ten DA (Double acting) With backing flanges PP-V Inch ANSI

### Model:

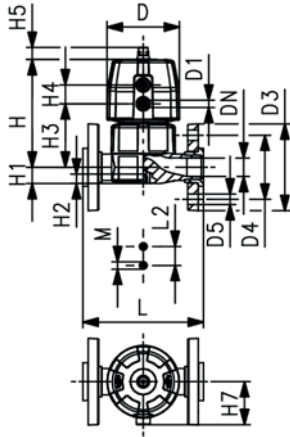
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces/serrated
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



Inch	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10/10*	125	<b>167 657 712</b>	<b>167 657 732</b>	0.618
3/4	20	10/10*	271	<b>167 657 713</b>	<b>167 657 733</b>	1.024
1	25	10/10*	481	<b>167 657 714</b>	<b>167 657 734</b>	1.292
1 1/4	32	10/10*	759	<b>167 657 715</b>	<b>167 657 735</b>	2.029
1 1/2	40	10/10*	1263	<b>167 657 716</b>	<b>167 657 736</b>	3.079
2	50	10/10*	1728	<b>167 657 717</b>	<b>167 657 737</b>	4.030

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
1/2	68	1/8	95	60	16	130	25	101	14	12	60	24	16	57	M6
3/4	96	1/8	105	70	16	150	25	132	18	12	73	25	16	57	M6
1	96	1/8	115	79	16	160	25	143	22	12	84	25	16	69	M6
1 1/4	120	1/8	140	89	16	180	45	173	26	15	99	26	26	88	M8
1 1/2	150	1/4	150	98	16	200	45	214	32	15	119	36	26	103	M8
2	150	1/4	165	121	19	230	45	226	39	15	132	36	26	103	M8

Inch	Lift = Hx [mm]
1/2	7
3/4	10
1	13
1 1/4	15
1 1/2	19
2	23



## PROGEF Standard Diaphragm valve DIASTAR Ten DA (Double acting) With fixed flanges PP-H JIS

### Model:

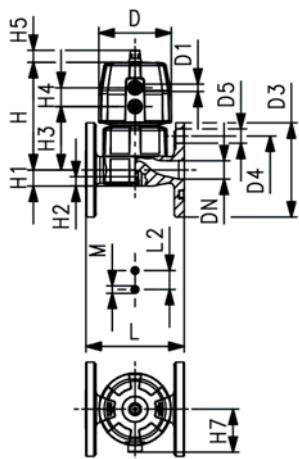
- Material: PP-H
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces/serrated
- Connecting dimension: JIS B2238/39 10K

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **one side**



Inch	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10/10*	125	<b>167 657 912</b>	<b>167 657 932</b>	0.562
3/4	20	10/10*	271	<b>167 657 913</b>	<b>167 657 933</b>	0.898
1	25	10/10*	481	<b>167 657 914</b>	<b>167 657 934</b>	1.144
1 1/4	32	10/10*	759	<b>167 657 915</b>	<b>167 657 935</b>	1.831
1 1/2	40	10/10*	1263	<b>167 657 916</b>	<b>167 657 936</b>	2.897
2	50	10/10*	1728	<b>167 657 917</b>	<b>167 657 937</b>	3.540

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
1/2	68	1/8	95	70	15	110	25	101	14	12	60	24	16	57	M6
3/4	96	1/8	100	75	15	120	25	132	18	12	73	25	16	57	M6
1	96	1/8	125	90	19	130	25	143	22	12	84	25	16	69	M6
1 1/4	120	1/8	135	100	19	180	45	173	26	15	99	26	26	88	M8
1 1/2	150	1/4	140	105	19	180	45	214	32	15	119	36	26	103	M8
2	150	1/4	155	120	19	210	45	226	39	15	132	36	26	103	M8

Inch	Lift = Hx [mm]
1/2	7
3/4	10
1	13
1 1/4	15
1 1/2	19
2	23



# PROGEF Standard Diaphragm valve type DIASTAR Series 025 DA (Double acting) With fixed flanges PP metric

## Model:

- Material: PP-H
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

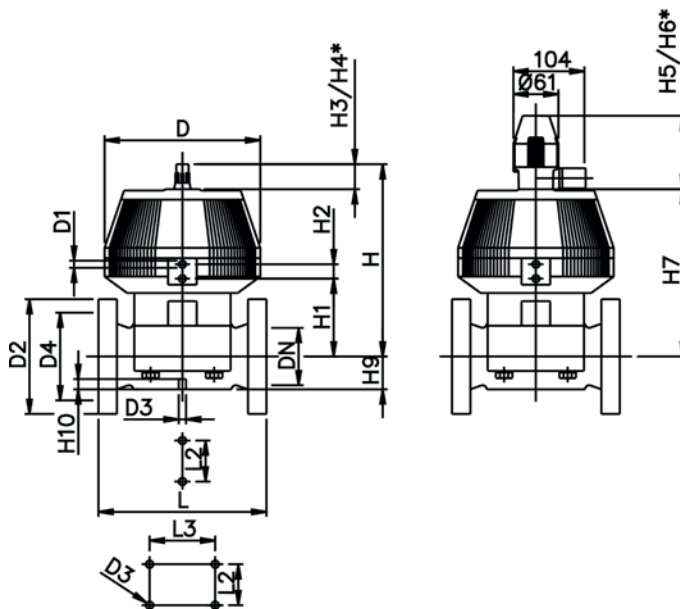
\* With backing flanges PP-V

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
* 75	65	2 ½	10	992	<b>199 025 287</b>	<b>199 025 317</b>	13.600
** 90	80	3	10	1700	<b>199 025 288</b>	<b>199 025 318</b>	17.400
110	100	4	6	2700	<b>199 025 289</b>	<b>199 025 319</b>	24.700
** 160	150	6	6	6033	<b>199 025 290</b>	<b>199 025 320</b>	35.000

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
* 75	280	¼	185	8	145	290	70		344	148	24	46	100	129
** 90	280	¼	200	12	160	310	120		348	150	24	46	100	129
110	335	¼	225	12	180	350	120		395	176	24	46	100	129
** 160	335	¼	285	12	240	480	100	200	455	237	24	46	100	129

d [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 75	195	298	46	15
** 90	195	302	57	15
110	195	349	69	20
** 160	195	409	108	20





## PROGEF Standard Diaphragm valve DIASTAR TenPlus FC (Fail safe to close) Unions with fusion sockets metric

### Model:

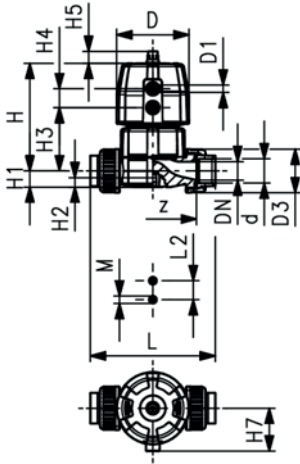
- Material: PP-H
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Double flow rate compared to predecessor
- Short overall length
- For easy installation and removal

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **both sides**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE/EPDM Code	PTFE/FPM Code
20	15	10/10*	125	167 684 012	167 684 062	167 684 032	167 684 052
25	20	10/10*	271	167 684 013	167 684 063	167 684 033	167 684 053
32	25	10/10*	481	167 684 014	167 684 064	167 684 034	167 684 054
40	32	10/10*	759	167 684 015	167 684 065	167 684 035	167 684 055
50	40	10/10*	1263	167 684 016	167 684 066	167 684 036	167 684 056
63	50	10/10*	1728	167 684 017	167 684 067	167 684 037	167 684 057

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
20	96	1/8	128	25	127	14	12	68	25	16	57	M6	100	7
25	96	1/8	152	25	132	18	12	73	25	16	57	M6	118	10
32	120	1/8	166	25	167	22	12	93	26	26	69	M6	126	13
40	150	1/4	192	45	196	26	15	101	36	26	88	M8	144	15
50	180	1/4	222	45	239	32	15	124	37	26	103	M8	164	19
63	180	1/4	266	45	251	39	15	137	37	26	103	M8	194	23



## PROGEF Standard Diaphragm valve DIASTAR TenPlus FC (Fail safe to close) Unions with fusion sockets PE80 metric

### Model:

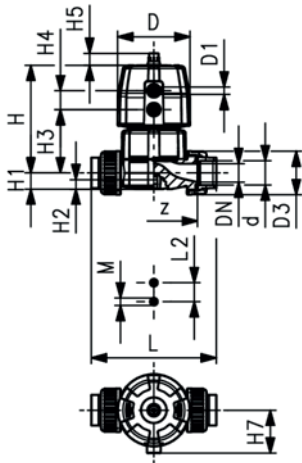
- Material: PP-H
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Double flow rate compared to predecessor
- Short overall length
- Double flow rate compared to predecessor
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **both sides**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	156	<b>167 684 212</b>	<b>167 684 232</b>	0.965
25	20	10/10*	276	<b>167 684 213</b>	<b>167 684 233</b>	1.096
32	25	10/10*	561	<b>167 684 214</b>	<b>167 684 234</b>	1.883
40	32	10/10*	684	<b>167 684 215</b>	<b>167 684 235</b>	3.158
50	40	10/10*	950	<b>167 684 216</b>	<b>167 684 236</b>	4.985
63	50	10/10*	1425	<b>167 684 217</b>	<b>167 684 237</b>	5.683

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
20	96	1/8	128	25	127	14	12	68	25	16	57	M6	100	7
25	96	1/8	150	25	132	18	12	73	25	16	57	M6	118	10
32	120	1/8	162	25	167	22	12	93	26	26	69	M6	126	13
40	150	1/4	184	45	196	26	15	101	36	26	88	M8	144	15
50	180	1/4	210	45	239	32	15	124	37	26	103	M8	164	19
63	180	1/4	248	45	251	39	15	137	37	26	103	M8	194	23



## PROGEF Standard Diaphragm valve DIASTAR TenPlus FC (Fail safe to close) Unions with butt fusion spigots SDR11 metric

### Model:

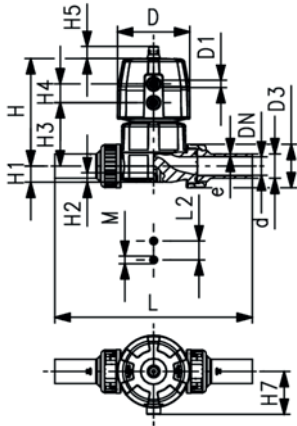
- Material: PP-H
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Double flow rate compared to predecessor
- Short overall length
- For easy installation and removal

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **both sides**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE/EPDM Code	PTFE/FPM Code
20	15	10/10*	125	<b>167 684 112</b>	<b>167 684 162</b>	<b>167 684 132</b>	<b>167 684 152</b>
25	20	10/10*	271	<b>167 684 113</b>	<b>167 684 163</b>	<b>167 684 133</b>	<b>167 684 153</b>
32	25	10/10*	481	<b>167 684 114</b>	<b>167 684 164</b>	<b>167 684 134</b>	<b>167 684 154</b>
40	32	10/10*	759	<b>167 684 115</b>	<b>167 684 165</b>	<b>167 684 135</b>	<b>167 684 155</b>
50	40	10/10*	1263	<b>167 684 116</b>	<b>167 684 166</b>	<b>167 684 136</b>	<b>167 684 156</b>
63	50	10/10*	1728	<b>167 684 117</b>	<b>167 684 167</b>	<b>167 684 137</b>	<b>167 684 157</b>

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	96	1/8	196	25	127	14	12	68	25	16	57	M6	7	1.9
25	96	1/8	221	25	132	18	12	73	25	16	57	M6	10	2.3
32	120	1/8	234	25	167	22	12	93	26	26	69	M6	13	2.9
40	150	1/4	260	45	196	26	15	101	36	26	88	M8	15	3.7
50	180	1/4	284	45	239	32	15	124	37	26	103	M8	19	4.6
63	180	1/4	321	45	251	39	15	137	37	26	103	M8	23	5.8



## PROGEF Standard Diaphragm valve DIASTAR TenPlus FC (Fail safe to close) Unions with butt fusion spigots PE100 SDR11 metric

### Model:

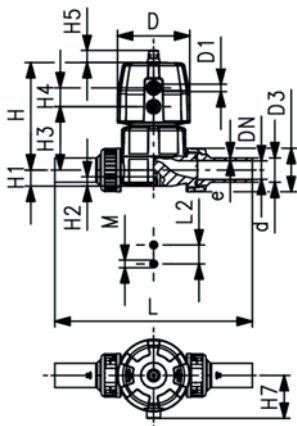
- Material: PP-H
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Double flow rate compared to predecessor
- Short overall length
- Double flow rate compared to predecessor
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

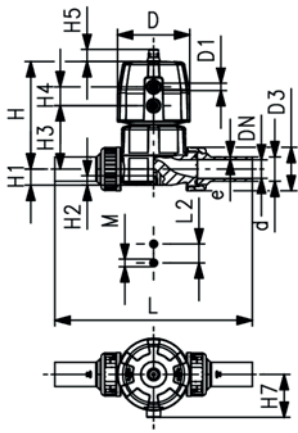
Working Pressure: **both sides**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	156	<b>167 684 312</b>	<b>167 684 332</b>	0.975
25	20	10/10*	276	<b>167 684 313</b>	<b>167 684 333</b>	1.108
32	25	10/10*	561	<b>167 684 314</b>	<b>167 684 334</b>	1.907

table continued next page





d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
40	32	10/10*	684	<b>167 684 315</b>	<b>167 684 335</b>	3.196
50	40	10/10*	950	<b>167 684 316</b>	<b>167 684 336</b>	5.055
63	50	10/10*	1425	<b>167 684 317</b>	<b>167 684 337</b>	5.793

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	96	1/8	196	25	127	14	12	68	25	16	57	M6	7	1.9
25	96	1/8	221	25	132	18	12	73	25	16	57	M6	10	2.3
32	120	1/8	234	25	167	22	12	93	26	26	69	M6	13	3.0
40	150	1/4	260	45	196	26	15	101	36	26	88	M8	15	3.7
50	180	1/4	284	45	239	32	15	124	37	26	103	M8	19	4.6
63	180	1/4	321	45	251	39	15	137	37	26	103	M8	23	5.8



## PROGEF Standard Diaphragm valve DIASTAR TenPlus FC (Fail safe to close) With socket fusion spigots metric

### Model:

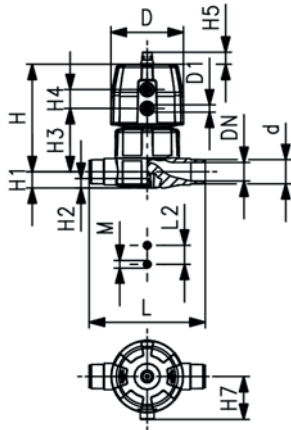
- Material: PP-H
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Double flow rate compared to predecessor
- Short overall length
- Double flow rate compared to predecessor
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **both sides**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 685 012</b>	<b>167 685 032</b>	0.902
25	20	10/10*	271	<b>167 685 013</b>	<b>167 685 033</b>	0.990
32	25	10/10*	481	<b>167 685 014</b>	<b>167 685 034</b>	1.750
40	32	10/10*	759	<b>167 685 015</b>	<b>167 685 035</b>	2.987
50	40	10/10*	1263	<b>167 685 016</b>	<b>167 685 036</b>	4.650
63	50	10/10*	1728	<b>167 685 017</b>	<b>167 685 037</b>	5.337

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	96	1/8	124	25	127	14	12	68	25	16	57	M6	7	1.9
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10	2.3
32	120	1/8	154	25	167	22	12	93	26	26	69	M6	13	2.9
40	150	1/4	174	45	196	26	15	101	36	26	88	M8	15	3.7
50	180	1/4	194	45	239	32	15	124	37	26	103	M8	19	4.6
63	180	1/4	224	45	251	39	15	137	37	26	103	M8	23	5.8



## PROGEF Standard Diaphragm valve DIASTAR TenPlus FC (Fail safe to close) With butt fusion spigots SDR11 metric

### Model:

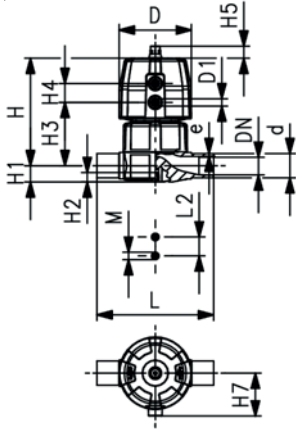
- Material: PP-H
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Double flow rate compared to predecessor
- Short overall length
- Double flow rate compared to predecessor

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **both sides**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	<b>167 685 112</b>	<b>167 685 132</b>	0.901
25	20	10/10*	271	<b>167 685 113</b>	<b>167 685 133</b>	0.986
32	25	10/10*	481	<b>167 685 114</b>	<b>167 685 134</b>	1.748
40	32	10/10*	759	<b>167 685 115</b>	<b>167 685 135</b>	2.983
50	40	10/10*	1263	<b>167 685 116</b>	<b>167 685 136</b>	4.778
63	50	10/10*	1728	<b>167 685 117</b>	<b>167 685 137</b>	5.334

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	e [mm]
20	96	1/8	124	25	127	14	12	68	25	16	57	M6	7	1.9
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10	2.3
32	120	1/8	154	25	167	22	12	93	26	26	69	M6	13	2.9
40	150	1/4	174	45	196	26	15	101	36	26	88	M8	15	3.7
50	180	1/4	194	45	239	32	15	124	37	26	103	M8	19	4.6
63	180	1/4	224	45	251	39	15	137	37	26	103	M8	23	5.8



# PROGEF Standard Diaphragm valve DIASTAR TenPlus FC (Fail safe to close) With backing flanges PP-V metric/BS

## Model:

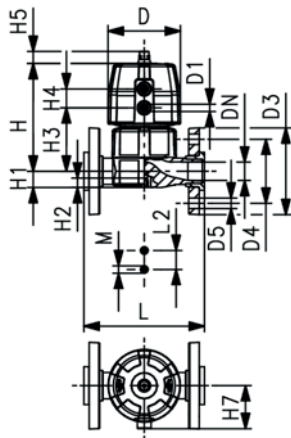
- Material: PP-H
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Double flow rate compared to predecessor
- Short overall length
- Double flow rate compared to predecessor
- Flat sealing faces/serrated
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

## Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **both sides**



d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE/EPDM Code
20	15	10/10*	125	<b>167 687 112</b>	<b>167 687 162</b>	<b>167 687 132</b>
25	20	10/10*	271	<b>167 687 113</b>	<b>167 687 163</b>	<b>167 687 133</b>
32	25	10/10*	481	<b>167 687 114</b>	<b>167 687 164</b>	<b>167 687 134</b>
40	32	10/10*	759	<b>167 687 115</b>	<b>167 687 165</b>	<b>167 687 135</b>
50	40	10/10*	1263	<b>167 687 116</b>	<b>167 687 166</b>	<b>167 687 136</b>
63	50	10/10*	1728	<b>167 687 117</b>	<b>167 687 167</b>	<b>167 687 137</b>

d [mm]	DN [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/FPM Code	kg
20	15	10/10*	125	<b>167 687 152</b>	1.103
25	20	10/10*	271	<b>167 687 153</b>	1.276
32	25	10/10*	481	<b>167 687 154</b>	2.096
40	32	10/10*	759	<b>167 687 155</b>	3.350
50	40	10/10*	1263	<b>167 687 156</b>	5.327
63	50	10/10*	1728	<b>167 687 157</b>	6.678

d [mm]	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
20	96	1/8	95	65	14	130	25	127	14	12	68	25	16	57	M6
25	96	1/8	105	75	14	150	25	132	18	12	73	25	16	57	M6
32	120	1/8	115	85	14	160	25	167	22	12	93	26	26	69	M6
40	150	1/4	140	100	18	180	45	196	26	15	101	36	26	88	M8
50	180	1/4	150	110	18	200	45	239	32	15	124	37	26	103	M8
63	180	1/4	165	125	18	230	45	251	39	15	137	37	26	103	M8

d [mm]	Lift = Hx [mm]
20	7
25	10
32	13
40	15
50	19
63	23



## PROGEF Standard Diaphragm valve DIASTAR TenPlus FC (Fail safe to close) With butt fusion spigots SDR11 metric

### Model:

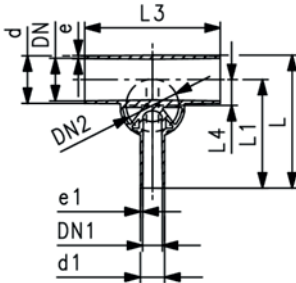
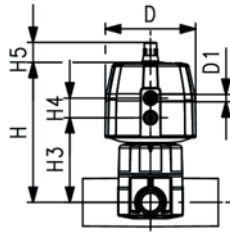
- Material: PP-H
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Double flow rate compared to predecessor
- Short overall length
- Smallest possible dead space

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE

Working Pressure: **both sides**



d [mm]	d1 [mm]	Valve Size d [mm]	DN [mm]	DN1 [mm]	DN2 [mm]	PN* [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code
20	20	20	15	15	15	10/10*	57	167 689 101	167 689 301
25	20	25	20	15	20	10/10*	89	167 689 103	167 689 303
25	25	25	20	20	20	10/10*	118	167 689 104	167 689 304
32	20	25	25	15	20	10/10*	80	167 689 107	167 689 307
32	25	25	25	20	20	10/10*	105	167 689 108	167 689 308
32	32	32	25	25	25	10/10*	231	167 689 109	167 689 309
40	20	32	32	15	25	10/10*	85	167 689 112	167 689 312
50	20	25	40	15	20	10/10*	86	167 689 118	167 689 318
50	25	32	40	20	25	10/10*	160	167 689 119	167 689 319
50	32	32	40	25	25	10/10*	206	167 689 120	167 689 320
63	20	25	50	15	20	10/10*	84	167 689 125	167 689 325
63	25	32	50	20	25	10/10*	150	167 689 126	167 689 326
63	32	32	50	25	25	10/10*	184	167 689 127	167 689 327

d [mm]	D [mm]	D1 [inch]	L [mm]	L1 [mm]	L3 [mm]	L4 [mm]	H [mm]	H3 [mm]	H4 [mm]	H5 [mm]	Lift = Hx [mm]	e [mm]	e1 [mm]
20	96	1/8	117	96	162	12	130	71	25	16	7	1.9	1.9
25	96	1/8	133	108	162	16	131	72	25	16	10	2.3	1.9
25	96	1/8	133	108	162	16	131	72	25	16	10	2.3	2.3
32	96	1/8	142	120	162	19	135	76	25	16	10	2.9	1.9
32	96	1/8	142	120	162	19	135	76	25	16	10	2.9	2.3
32	120	1/8	145	120	160	19	167	93	26	26	13	2.9	2.9
40	120	1/8	149	128	180	23	175	101	26	26	13	3.7	1.9
50	96	1/8	160	134	180	27	148	90	25	16	10	4.6	1.9
50	120	1/8	160	134	180	28	180	106	26	26	13	4.6	2.3
50	120	1/8	160	134	180	28	180	106	26	26	13	4.6	2.9
63	96	1/8	177	144	180	33	155	96	25	26	10	5.8	1.9
63	120	1/8	177	144	180	35	187	113	26	16	13	5.8	2.3
63	120	1/8	177	144	180	35	187	113	26	26	13	5.8	2.9

# Butterfly Valves Electric

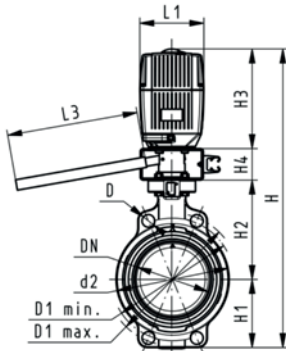
## Butterfly valve type 140 PP-H 100-230V With manual override



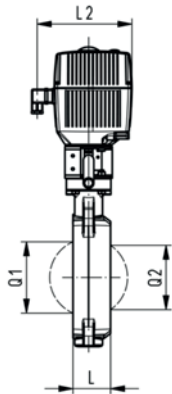
### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- Material: PP-H
- Overall length according to EN 558, ISO 5752

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	199 140 322	199 140 342	199 140 842	6.002
75	65	2 ½	10	2200	199 140 323	199 140 343	199 140 843	5.694
90	80	3	10	3000	199 140 324	199 140 344	199 140 844	5.822
110	100	4	10	6500	199 140 325	199 140 345	199 140 845	6.327
140	125	5	10	11500	199 140 326	199 140 346	199 140 846	7.174
160	150	6	10	16600	199 140 327	199 140 347	199 140 847	9.604
225	200	8	10	39600	199 140 328	199 140 348	199 140 848	13.271



d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	EA-31	19	120.0	125.0	104	460	77	134	188	60	45	122	180
75	EA-31	19	139.7	145.0	115	473	83	140	188	60	46	122	180
90	EA-31	19	150.0	160.0	131	488	89	146	188	60	49	122	180
110	EA-31	19	175.0	190.5	161	520	104	167	188	60	56	122	180
140	EA-31	23	210.0	215.9	187	547	117	181	188	60	64	122	180
160	EA-31	24	241.3	241.3	215	568	130	189	188	60	72	122	180
225	EA-42	23	290.0	295.0	267	635	158	210	208	60	73	122	180



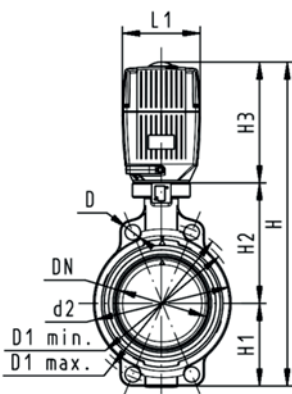
d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	250	40	
75	250	54	35
90	250	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169



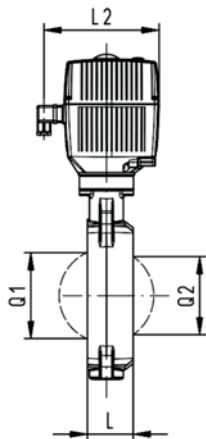
## Butterfly valve type 140 PP-H 100-230V Without manual override

### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- Material: PP-H, DN350-DN600 material PP-R
- Up to DN 300: Overall length according to EN558 (DN 50-200: line 25, DN250, 300 line 16), ISO 5752
- For DN350-DN600 electric actuator from Valpes is equipped, various options available



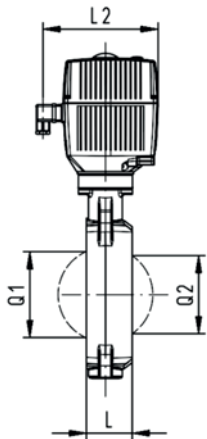
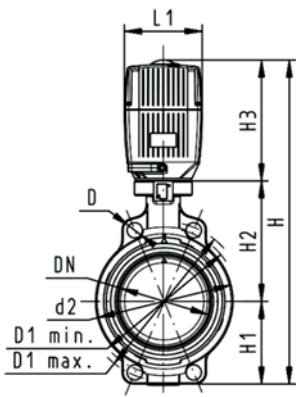
d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	199 140 362	199 140 382	199 140 802	5.264
75	65	2 ½	10	2200	199 140 363	199 140 383	199 140 803	4.423
90	80	3	10	3000	199 140 364	199 140 384	199 140 804	4.548
110	100	4	10	6500	199 140 365	199 140 385	199 140 805	5.034
140	125	5	10	11500	199 140 366	199 140 386	199 140 806	5.271
160	150	6	10	16600	199 140 367	199 140 387	199 140 807	6.256
225	200	8	10	39600	199 140 368	199 140 388	199 140 808	9.656
280	250	10	6	55200	199 140 369	199 140 389	199 140 809	13.747
315	300	12	4	80000	199 140 370	199 140 390	199 140 810	16.722
* 355	350	14	6	900000	199 140 371	199 140 391		46.180
* 400	400	16	6	115000	199 140 372	199 140 392		63.800
* 450	450	18	5	155000	199 140 373	199 140 393		78.800
* 500	500	20	4	204000	199 140 374	199 140 394		96.200
* 630	600	24	4	265000	199 140 375	199 140 395		153.000



d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	EA-31	19	120.0	125.0	104	400	77	134	188	45	122	180
75	EA-31	19	139.7	145.0	115	413	83	140	188	46	122	180
90	EA-31	19	150.0	160.0	131	428	89	146	188	49	122	180
110	EA-31	19	175.0	190.5	161	460	104	167	188	56	122	180
140	EA-31	23	210.0	215.9	187	487	117	181	188	64	122	180
160	EA-31	24	241.3	241.3	215	508	130	189	188	72	122	180
225	EA-42	23	290.0	295.0	267	575	158	210	208	73	122	180
280	EA-42	25	353.0	362.0	329	677	205	264	208	113	122	180
315	EA-42	25	400.0	432.0	379	721	228	285	208	113	122	180
* 355	VS-300	29	445.0	477.0	535	936	268	410	258	129	209	275
* 400	VT-600	29	510.0	540.0	595	1084	300	435	349	169	228	468
* 450	VT-600	32	565.0	578.0	635	1189	320	520	349	179	228	468
* 500	VT-600	32	620.0	635.0	700	1249	350	550	349	190	228	468
* 630	VT-1000	35	725.0	750.0	813	1379	420	610	349	209	228	468

d [mm]	Q1 [mm]	Q2 [mm]
63	40	
75	54	35
90	67	50
110	88	74
140	113	97
160	139	123
225	178	169
280	210	207
315	256	253
* 355	325	305
* 400	353	350

table continued next page

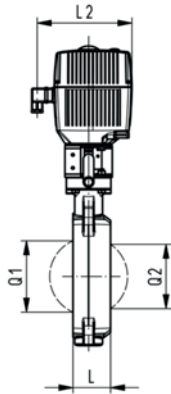
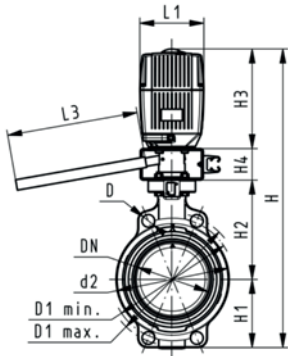


d [mm]	Q1 [mm]	Q2 [mm]
* 450	393	390
* 500	444	440
* 630	530	527

# Butterfly valve type 140 PP-H 24V With manual override

## Model:

- Material: PP-H
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	<b>199 140 402</b>	<b>199 140 422</b>	<b>199 140 862</b>	5.603
75	65	2 ½	10	2200	<b>199 140 403</b>	<b>199 140 423</b>	<b>199 140 863</b>	5.694
90	80	3	10	3000	<b>199 140 404</b>	<b>199 140 424</b>	<b>199 140 864</b>	5.822
110	100	4	10	6500	<b>199 140 405</b>	<b>199 140 425</b>	<b>199 140 865</b>	6.327
140	125	5	10	11500	<b>199 140 406</b>	<b>199 140 426</b>	<b>199 140 866</b>	6.771
160	150	6	10	16600	<b>199 140 407</b>	<b>199 140 427</b>	<b>199 140 867</b>	7.556
225	200	8	10	39600	<b>199 140 408</b>	<b>199 140 428</b>	<b>199 140 868</b>	13.271

d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	EA-31	19	120.0	125.0	104	460	77	134	188	60	45	122	180
75	EA-31	19	139.7	145.0	115	473	83	140	188	60	46	122	180
90	EA-31	19	150.0	160.0	131	488	89	146	188	60	49	122	180
110	EA-31	19	175.0	190.5	161	520	104	167	188	60	56	122	180
140	EA-31	23	210.0	215.9	187	547	117	181	188	60	64	122	180
160	EA-31	24	241.3	241.3	215	568	130	189	188	60	72	122	180
225	EA-42	23	290.0	295.0	267	635	158	210	208	60	73	122	180

d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	250	40	
75	250	54	35
90	250	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169

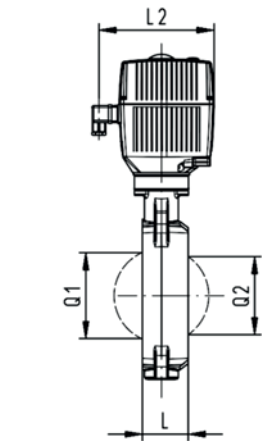
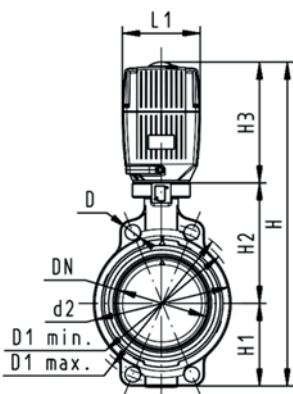




## Butterfly valve type 140 PP-H 24V Without manual override

### Model:

- Material: PP-H
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- 12" PVC, 12"-24" PP, available on request



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	199 140 442	199 140 462	199 140 822	4.314
75	65	2 ½	10	2200	199 140 443	199 140 463	199 140 823	4.194
90	80	3	10	3000	199 140 444	199 140 464	199 140 824	4.529
110	100	4	10	6500	199 140 445	199 140 465	199 140 825	5.017
140	125	5	10	11500	199 140 446	199 140 466	199 140 826	5.271
160	150	6	10	16600	199 140 447	199 140 467	199 140 827	6.056
225	200	8	10	39600	199 140 448	199 140 468	199 140 828	11.771
280	250	10	6	55200	199 140 449	199 140 469	199 140 829	13.747
315	300	12	4	80000	199 140 450	199 140 470	199 140 830	16.722

d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	Q1 [mm]
63	EA-31	19	120.0	125.0	104	400	77	134	188	45	122	180	40
75	EA-31	19	139.7	145.0	115	413	83	140	188	46	122	180	54
90	EA-31	19	150.0	160.0	131	428	89	146	188	49	122	180	67
110	EA-31	19	175.0	190.5	161	460	104	167	188	56	122	180	88
140	EA-31	23	210.0	215.9	187	487	117	181	188	64	122	180	113
160	EA-31	24	241.3	241.3	215	508	130	189	188	72	122	180	139
225	EA-42	23	290.0	295.0	267	575	158	210	208	73	122	180	178
280	EA-42	25	353.0	362.0	329	677	205	264	208	113	122	180	210
315	EA-42	25	400.0	432.0	379	721	228	285	208	113	122	180	256

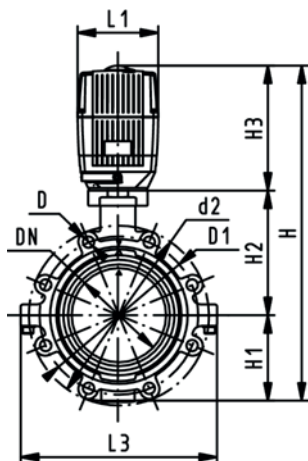
d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169
280	207
315	253

# PROGEF Standard Lugstyle butterfly valve type 141 100-230V Without manual override



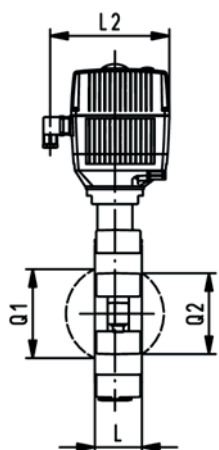
## Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	<b>199 141 362</b>	<b>199 141 382</b>	<b>199 141 802</b>	6.193
75	65	2 ½	10	2200	<b>199 141 363</b>	<b>199 141 383</b>	<b>199 141 803</b>	6.535
90	80	3	10	3000	<b>199 141 364</b>	<b>199 141 384</b>	<b>199 141 804</b>	7.540
110	100	4	10	6500	<b>199 141 365</b>	<b>199 141 385</b>	<b>199 141 805</b>	8.925
140	125	5	10	11500	<b>199 141 366</b>	<b>199 141 386</b>	<b>199 141 806</b>	10.755
160	150	6	10	16600	<b>199 141 367</b>	<b>199 141 387</b>	<b>199 141 807</b>	12.539
225	200	8	10	39600	<b>199 141 368</b>	<b>199 141 388</b>	<b>199 141 808</b>	21.747

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]
63	EA-31	M16	125	150	399	77	134	188	45	122	180	150	40
75	EA-31	M16	145	170	411	83	140	188	46	122	180	160	54
90	EA-31	M16	160	184	423	89	146	188	49	122	180	205	67
110	EA-31	M16	180	216	459	104	167	188	56	122	180	244	88
140	EA-31	M16	210	246	486	117	181	188	64	122	180	272	113
160	EA-31	M20	240	273	507	130	189	188	72	122	180	297	139
225	EA-42	M20	295	334	576	158	210	208	73	122	180	360	178



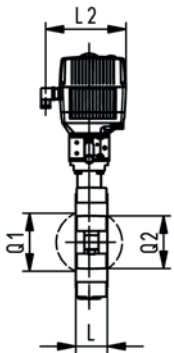
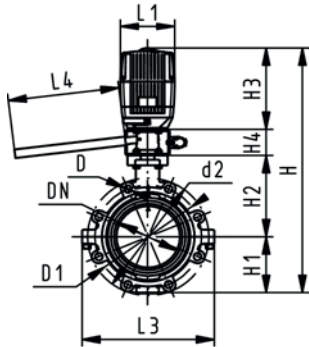
d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169



## PROGEF Standard Lugstyle butterfly valve type 141 100-230V With manual override

### Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	199 141 322	199 141 342	199 141 842	7.693
75	65	2 ½	10	2200	199 141 323	199 141 343	199 141 843	8.035
90	80	3	10	3000	199 141 324	199 141 344	199 141 844	9.040
110	100	4	10	6500	199 141 325	199 141 345	199 141 845	10.425
140	125	5	10	11500	199 141 326	199 141 346	199 141 846	12.255
160	150	6	10	16600	199 141 327	199 141 347	199 141 847	14.039
225	200	8	10	39600	199 141 328	199 141 348	199 141 848	23.247

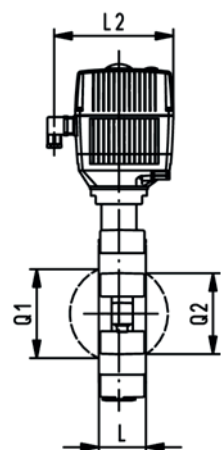
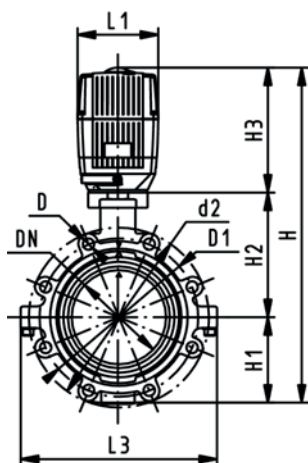
d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
63	EA-31	M16	125	150	459	77	134	188	60	45	122	180	150
75	EA-31	M16	145	170	471	83	140	188	60	46	122	180	160
90	EA-31	M16	160	184	483	89	146	188	60	49	122	180	205
110	EA-31	M16	180	216	519	104	167	188	60	56	122	180	244
140	EA-31	M16	210	246	546	117	181	188	60	64	122	180	272
160	EA-31	M20	240	273	567	130	189	188	60	72	122	180	297
225	EA-42	M20	295	334	636	158	210	208	60	73	122	180	360

d [mm]	L4 [mm]	Q1 [mm]	Q2 [mm]
63	200	40	
75	200	54	35
90	200	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169

# PROGEF Standard Lugstyle butterfly valve type 141 24V Without manual override

## Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	199 141 442	199 141 462	199 141 822	6.193
75	65	2 ½	10	2200	199 141 443	199 141 463	199 141 823	6.535
90	80	3	10	3000	199 141 444	199 141 464	199 141 824	7.540
110	100	4	10	6500	199 141 445	199 141 465	199 141 825	8.925
140	125	5	10	11500	199 141 446	199 141 466	199 141 826	10.755
160	150	6	10	16600	199 141 447	199 141 467	199 141 827	12.539
225	200	8	10	39600	199 141 448	199 141 468	199 141 828	21.747

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]
63	EA-31	M16	125	150	399	77	134	188	45	122	180	150	40
75	EA-31	M16	145	170	411	83	140	188	46	122	180	160	54
90	EA-31	M16	160	184	423	89	146	188	49	122	180	205	67
110	EA-31	M16	180	216	459	104	167	188	56	122	180	244	88
140	EA-31	M16	210	246	486	117	181	188	64	122	180	272	113
160	EA-31	M20	240	273	507	130	189	188	72	122	180	297	139
225	EA-42	M20	295	334	576	158	210	208	73	122	180	360	178

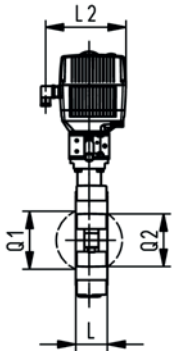
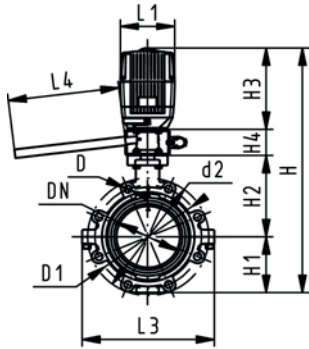
d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169



# PROGEF Standard Lugstyle butterfly valve type 141 24V With manual override

## Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	<b>199 141 402</b>	<b>199 141 422</b>	<b>199 141 862</b>	7.693
75	65	2 ½	10	2200	<b>199 141 403</b>	<b>199 141 423</b>	<b>199 141 863</b>	8.035
90	80	3	10	3000	<b>199 141 404</b>	<b>199 141 424</b>	<b>199 141 864</b>	9.040
110	100	4	10	6500	<b>199 141 405</b>	<b>199 141 425</b>	<b>199 141 865</b>	10.425
140	125	5	10	11500	<b>199 141 406</b>	<b>199 141 426</b>	<b>199 141 866</b>	12.255
160	150	6	10	16600	<b>199 141 407</b>	<b>199 141 427</b>	<b>199 141 867</b>	14.039
225	200	8	10	39600	<b>199 141 408</b>	<b>199 141 428</b>	<b>199 141 868</b>	23.247

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
63	EA-31	M16	125	150	459	77	134	188	60	45	122	180	150
75	EA-31	M16	145	170	471	83	140	188	60	46	122	180	160
90	EA-31	M16	160	184	483	89	146	188	60	49	122	180	205
110	EA-31	M16	180	216	519	104	167	188	60	56	122	180	244
140	EA-31	M16	210	246	546	117	181	188	60	64	122	180	272
160	EA-31	M20	240	273	567	130	189	188	60	72	122	180	297
225	EA-42	M20	295	334	636	158	210	208	60	73	122	180	360

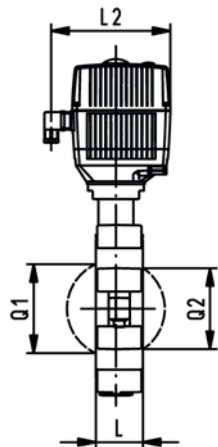
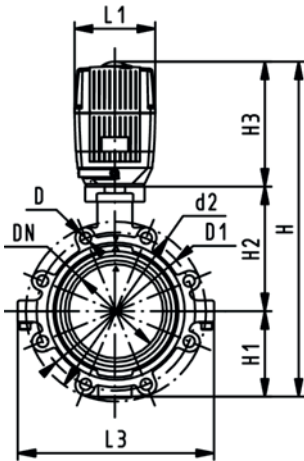
d [mm]	L4 [mm]	Q1 [mm]	Q2 [mm]
63	200	40	
75	200	54	35
90	200	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169



# PROGEF Standard Lugstyle butterfly valve type 142 100-230V Without manual override

## Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
2	50	63	10	1470	<b>199 142 362</b>	<b>199 142 382</b>	<b>199 142 802</b>	6.193
2 ½	65	75	10	2200	<b>199 142 363</b>	<b>199 142 383</b>	<b>199 142 803</b>	6.535
3	80	90	10	3000	<b>199 142 364</b>	<b>199 142 384</b>	<b>199 142 804</b>	6.911
4	100	110	10	6500	<b>199 142 365</b>	<b>199 142 385</b>	<b>199 142 805</b>	8.925
5	125	140	10	11500	<b>199 142 366</b>	<b>199 142 386</b>	<b>199 142 806</b>	10.755
6	150	160	10	16600	<b>199 142 367</b>	<b>199 142 387</b>	<b>199 142 807</b>	12.539
8	200	225	10	39600	<b>199 142 368</b>	<b>199 142 388</b>	<b>199 142 808</b>	21.747

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	399	77	134	188	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	411	83	140	188	46	122	180	160
3	EA-31	UNC 5/8	153	177	423	89	146	188	49	122	180	175
4	EA-31	UNC 5/8	191	216	459	104	167	188	56	122	180	244
5	EA-31	UNC 3/4	216	246	486	117	181	188	64	122	180	272
6	EA-31	UNC 3/4	242	273	507	130	189	188	72	122	180	297
8	EA-42	UNC 3/4	299	334	576	158	210	208	73	122	180	360

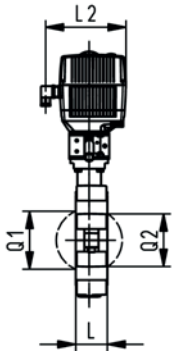
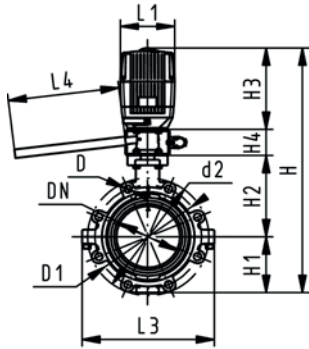
Inch	Q1 [mm]	Q2 [mm]
2	40	
2 ½	54	35
3	67	50
4	88	74
5	113	97
6	139	123
8	178	169



# PROGEF Standard Lugstyle butterfly valve type 142 100-230V With manual override

## Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg	
2	50	63	10	1470	<b>199 142 322</b>	<b>199 142 342</b>	<b>199 142 842</b>	6.193	
2 ½	65	75	10	2200	<b>199 142 323</b>	<b>199 142 343</b>	<b>199 142 843</b>	6.535	
3	80	90	10	3000	<b>199 142 324</b>	<b>199 142 344</b>	<b>199 142 844</b>	6.911	
4	100	110	10	6500	<b>199 142 325</b>	<b>199 142 345</b>	<b>199 142 845</b>	8.925	
5	125	140	10	11500	<b>199 142 326</b>	<b>199 142 346</b>	<b>199 142 846</b>	10.755	
6	150	160	10	16600	<b>199 142 327</b>	<b>199 142 347</b>	<b>199 142 847</b>	12.539	
8	200	225	10	39600	<b>199 142 328</b>	<b>199 142 348</b>	<b>199 142 848</b>	21.747	

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	459	77	134	188	60	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	471	83	140	188	60	46	122	180	160
3	EA-31	UNC 5/8	153	177	483	89	146	188	60	49	122	180	175
4	EA-31	UNC 5/8	191	216	519	104	167	188	60	56	122	180	244
5	EA-31	UNC 3/4	216	246	546	117	181	188	60	64	122	180	272
6	EA-31	UNC 3/4	242	273	567	130	189	188	60	72	122	180	297
8	EA-42	UNC 3/4	299	334	636	158	210	208	60	73	122	180	360

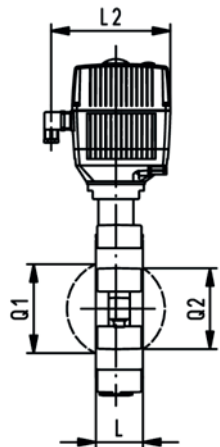
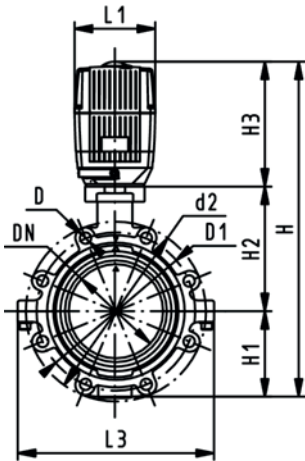
Inch	L4 [mm]	Q1 [mm]	Q2 [mm]
2	200	40	
2 ½	200	54	35
3	200	67	50
4	250	88	74
5	250	113	97
6	250	139	123
8	250	178	169



# PROGEF Standard Lugstyle butterfly valve type 142 24V Without manual override

## Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
2	50	63	10	1470	<b>199 142 442</b>	<b>199 142 462</b>	<b>199 142 822</b>	6.193
2 ½	65	75	10	2200	<b>199 142 443</b>	<b>199 142 463</b>	<b>199 142 823</b>	6.535
3	80	90	10	3000	<b>199 142 444</b>	<b>199 142 464</b>	<b>199 142 824</b>	6.911
4	100	110	10	6500	<b>199 142 445</b>	<b>199 142 465</b>	<b>199 142 825</b>	8.925
5	125	140	10	11500	<b>199 142 446</b>	<b>199 142 466</b>	<b>199 142 826</b>	10.755
6	150	160	10	16600	<b>199 142 447</b>	<b>199 142 467</b>	<b>199 142 827</b>	12.539
8	200	225	10	39600	<b>199 142 448</b>	<b>199 142 468</b>	<b>199 142 828</b>	21.747

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	399	77	134	188	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	411	83	140	188	46	122	180	160
3	EA-31	UNC 5/8	153	177	423	89	146	188	49	122	180	175
4	EA-31	UNC 5/8	191	216	459	104	167	188	56	122	180	244
5	EA-31	UNC 3/4	216	246	486	117	181	188	64	122	180	272
6	EA-31	UNC 3/4	242	273	507	130	189	188	72	122	180	297
8	EA-42	UNC 3/4	299	334	576	158	210	208	73	122	180	360

Inch	Q1 [mm]	Q2 [mm]
2	40	
2 ½	54	35
3	67	50
4	88	74
5	113	97
6	139	123
8	178	169

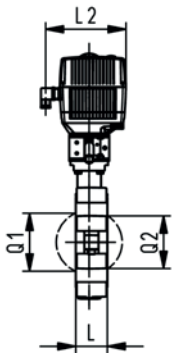
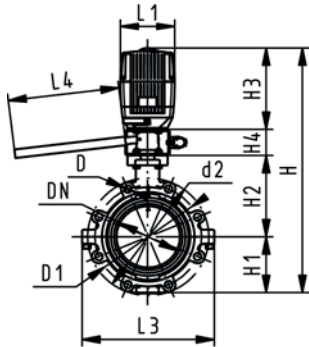




## PROGEF Standard Lugstyle butterfly valve type 142 24V With manual override

### Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



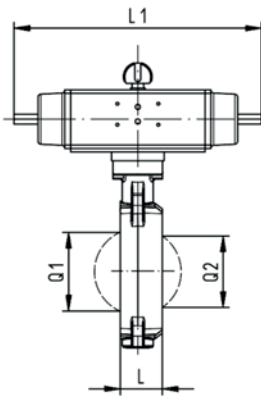
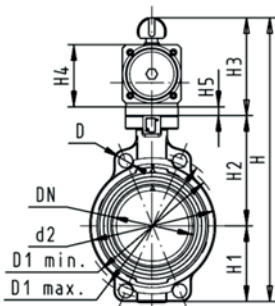
Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg	
2	50	63	10	1470	<b>199 142 402</b>	<b>199 142 422</b>	<b>199 142 862</b>	6.193	
2 ½	65	75	10	2200	<b>199 142 403</b>	<b>199 142 423</b>	<b>199 142 863</b>	6.535	
3	80	90	10	3000	<b>199 142 404</b>	<b>199 142 424</b>	<b>199 142 864</b>	6.911	
4	100	110	10	6500	<b>199 142 405</b>	<b>199 142 425</b>	<b>199 142 865</b>	8.925	
5	125	140	10	11500	<b>199 142 406</b>	<b>199 142 426</b>	<b>199 142 866</b>	10.755	
6	150	160	10	16600	<b>199 142 407</b>	<b>199 142 427</b>	<b>199 142 867</b>	12.539	
8	200	225	10	39600	<b>199 142 408</b>	<b>199 142 428</b>	<b>199 142 868</b>	21.747	

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	459	77	134	188	60	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	471	83	140	188	60	46	122	180	160
3	EA-31	UNC 5/8	153	177	483	89	146	188	60	49	122	180	175
4	EA-31	UNC 5/8	191	216	519	104	167	188	60	56	122	180	244
5	EA-31	UNC 3/4	216	246	546	117	181	188	60	64	122	180	272
6	EA-31	UNC 3/4	242	273	567	130	189	188	60	72	122	180	297
8	EA-42	UNC 3/4	299	334	636	158	210	208	60	73	122	180	360

Inch	L4 [mm]	Q1 [mm]	Q2 [mm]
2	200	40	
2 ½	200	54	35
3	200	67	50
4	250	88	74
5	250	113	97
6	250	139	123
8	250	178	169

# Butterfly Valves Pneumatic

## Butterfly valve type 240 PP-H FC (Fail safe to close) Without manual override



### Model:

- Material: PP-H, DN350-DN600 material PP-R
- For DN350-DN600 pneumatic actuator supplied by Revac
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Up to DN 300: Overall length according to EN558 (DN 50-200: line 25, DN250, 300 line 16), ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	199 240 282	199 240 302	199 240 702	2.909
75	65	2 ½	10	2200	199 240 283	199 240 303	199 240 703	2.999
90	80	3	10	3000	199 240 284	199 240 304	199 240 704	3.787
110	100	4	10	6500	199 240 285	199 240 305	199 240 705	4.996
140	125	5	10	11500	199 240 286	199 240 306	199 240 706	6.790
160	150	6	10	16600	199 240 287	199 240 307	199 240 707	9.533
225	200	8	10	39600	199 240 288	199 240 308	199 240 708	13.430
280	250	10	8	55200	199 240 289	199 240 309	199 240 709	26.888
315	300	12	8	80000	199 240 290	199 240 310	199 240 710	33.459

d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]
63	PA-30 FC	19	120.0	125.0	104	327	77	134	117	70	15	45	276
75	PA-30 FC	19	139.7	145.0	115	340	83	140	117	70	15	46	276
90	PA-35 FC	19	150.0	160.0	131	361	89	146	126	78	15	49	326
110	PA-40 FC	19	175.0	190.5	161	400	104	167	129	86	15	56	370
140	PA-45 FC	23	210.0	215.9	187	436	117	181	139	96	15	64	411
160	PA-50 FC	24	241.3	241.3	215	468	130	189	149	106	15	72	423
225	PA-55 FC	23	290.0	295.0	267	529	158	210	161	118	15	73	452
280	PA-65 FC	25	353.0	362.0	329	808	205	264	191	148	15	113	648
315	PA-70 FC	25	400.0	432.0	379	866	228	285	196	157	15	113	663

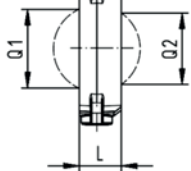
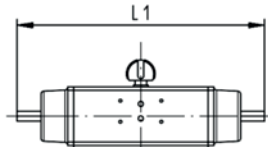
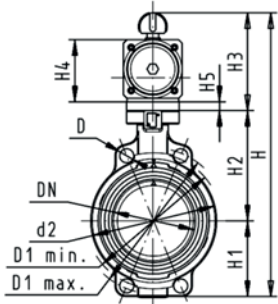
d [mm]	Q1 [mm]	Q2 [mm]
63	40	
75	54	35
90	67	50
110	88	74
140	113	97
160	139	123
225	178	169
280	210	207
315	256	253



# Butterfly valve type 240 PP-H FO (Fail safe to open) Without manual override

## Model:

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



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	199 240 322	199 240 342	199 240 722	3.143
75	65	2 ½	10	2200	199 240 323	199 240 343	199 240 723	3.234
90	80	3	10	3000	199 240 324	199 240 344	199 240 724	3.362
110	100	4	10	6500	199 240 325	199 240 345	199 240 725	4.988
140	125	5	10	11500	199 240 326	199 240 346	199 240 726	6.511
160	150	6	10	16600	199 240 327	199 240 347	199 240 727	9.617
225	200	8	10	39600	199 240 328	199 240 348	199 240 728	13.271
280	250	10	8	55200	199 240 329	199 240 349	199 240 729	30.484
315	300	12	8	80000	199 240 330	199 240 350	199 240 730	33.459

d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]
63	PA-30 FO	19	120.0	125.0	104	327	77	134	117	70	15	45	276
75	PA-30 FO	19	139.7	145.0	115	340	83	140	117	70	15	46	276
90	PA-35 FO	19	150.0	160.0	131	361	89	146	126	78	15	49	326
110	PA-40 FO	19	175.0	190.5	161	400	104	167	129	86		56	370
140	PA-45 FO	23	210.0	215.9	187	436	117	181	139	96		64	411
160	PA-50 FO	24	241.3	241.3	215	468	130	189	149	106		72	423
225	PA-55 FO	23	290.0	295.0	267	529	158	210	161	118		73	452
280	PA-70 FO	25	353.0	362.0	329	808	205	264	191	148		113	648
315	PA-70 FO	25	400.0	432.0	379	866	228	285	196	157		113	663

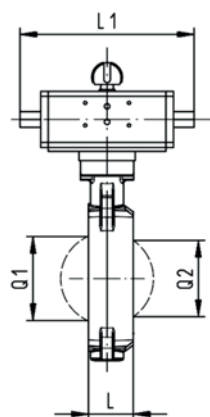
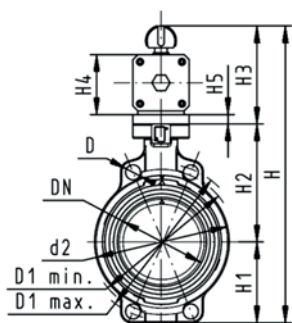
d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	65	40	
75	65	54	35
90	72	67	50
110	80	88	74
140	90	113	97
160	100	139	123
225	112	178	169
280	137	210	207
315	145	256	253



## Butterfly valve type 240 PP-H DA (Double acting) Without manual override

### Model:

- For DN350-DN600 pneumatic actuator supplied by Revac
- Material: PP-H, DN350-DN600 material PP-R
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Up to DN 300: Overall length according to EN558 (DN 50-200: line 25, DN250, 300 line 16), ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	199 240 362	199 240 382	199 240 742	2.227
75	65	2 ½	10	2200	199 240 363	199 240 383	199 240 743	2.084
90	80	3	10	3000	199 240 364	199 240 384	199 240 744	2.728
110	100	4	10	6500	199 240 365	199 240 385	199 240 745	3.542
140	125	5	10	11500	199 240 366	199 240 386	199 240 746	3.967
160	150	6	10	16600	199 240 367	199 240 387	199 240 747	6.096
225	200	8	10	39600	199 240 368	199 240 388	199 240 748	7.271
280	250	10	8	55200	199 240 369	199 240 389	199 240 749	18.188
315	300	12	8	80000	199 240 370	199 240 390	199 240 750	24.263
* 355	350	14	6	90000	199 240 371	199 240 391		40.600
* 400	400	16	6	115000	199 240 372	199 240 392		62.100
* 450	450	18	5	155000	199 240 373	199 240 393		77.100
* 500	500	20	4	204000	199 240 374	199 240 394		92.100
* 630	600	24	4	265000	199 240 375	199 240 395		127.100

d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]
63	PA-35 DA	19	120.0	125.0	104	317	77	134	107	60	15	45	177
75	PA-35 DA	19	139.7	145.0	115	330	83	140	107	60	15	46	177
90	PA-40 DA	19	150.0	160.0	131	348	89	146	113	66	15	49	190
110	PA-45 DA	19	175.0	190.5	161	372	104	167	102	71		56	235
140	PA-45 DA	23	210.0	215.9	187	408	117	181	111	78		64	235
160	PA-55 DA	24	241.3	241.3	215	448	130	189	129	86		72	279
225	PA-55 DA	23	290.0	295.0	267	507	158	210	139	96		73	279
280	PA-65 DA	25	353.0	362.0	329	748	205	264	161	118		113	350
315	PA-70 DA	25	400.0	432.0	379	816	228	285	173	130		113	381
* 355	AP 5	29	445.0	477.0	535	863	268	410	185	155	27	129	360
* 400	AP 5.5	29	510.0	540.0	595	941	300	435	206	176	27	169	380
* 450	AP 5.5	32	565.0	578.0	635	1046	320	520	206	176	36	179	380
* 500	AP 6	32	620.0	635.0	700	1130	350	550	230	200	36	190	462
* 630	AP8	35	725.0	750.0	813	1330	420	610	300	250	36	209	530

d [mm]	Q1 [mm]	Q2 [mm]
63	40	
75	54	35
90	67	50
110	88	74
140	113	97
160	139	123
225	178	169
280	210	207
315	256	253
* 355	325	305
* 400	353	350
* 450	393	390
* 500	444	440
* 630	530	527



# PROGEF Standard

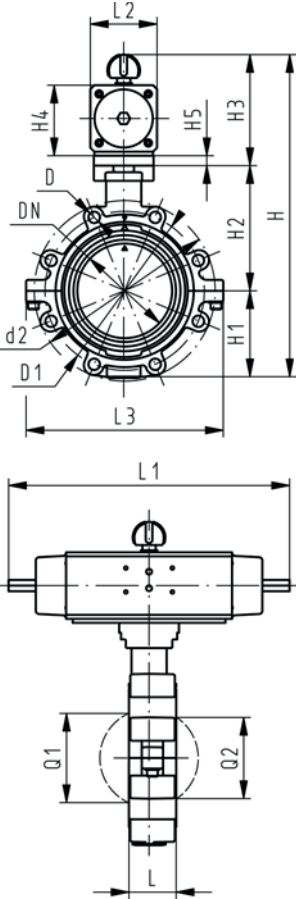
## Lugstyle butterfly valve type 241

### FC (Fail safe to close)

### Without manual override

#### Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	199 241 282	199 241 302	199 241 702	5.233
75	65	2 1/2	10	2200	199 241 283	199 241 303	199 241 703	5.575
90	80	3	10	3000	199 241 284	199 241 304	199 241 704	6.580
110	100	4	10	6500	199 241 285	199 241 305	199 241 705	9.487
140	125	5	10	11500	199 241 286	199 241 306	199 241 706	11.995
160	150	6	10	16600	199 241 287	199 241 307	199 241 707	16.100
225	200	8	10	39600	199 241 288	199 241 308	199 241 708	23.247

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	PA-30 FC	M16	125	150	328	77	134	117	70	15	45	276	65
75	PA-30 FC	M16	145	170	340	83	140	117	70	15	46	276	65
90	PA-35 FC	M16	160	184	361	89	146	126	78	15	49	326	72
110	PA-40 FC	M16	180	216	400	104	167	129	86		56	370	80
140	PA-45 FC	M16	210	246	437	117	181	139	96		64	411	90
160	PA-50 FC	M20	240	273	468	130	189	149	106		72	423	100
225	PA-55 FC	M20	295	334	529	158	210	161	118		73	452	112

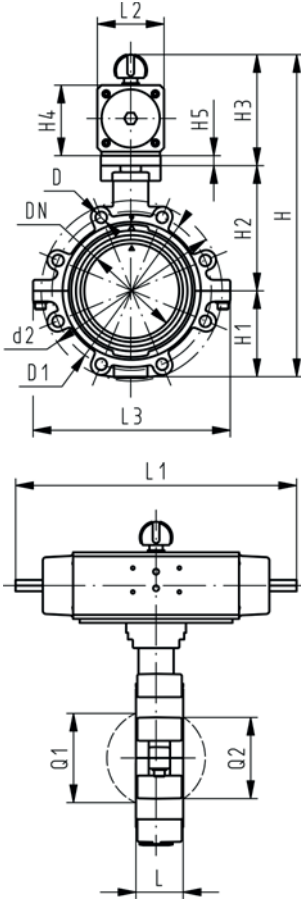
d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	150	40	
75	160	54	35
90	205	67	50
110	244	88	74
140	272	113	97
160	297	139	123
225	360	178	169



# PROGEF Standard Lugstyle butterfly valve type 241 FO (Fail safe to open) Without manual override

## Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	<b>199 241 322</b>	<b>199 241 342</b>	<b>199 241 722</b>	5.123
75	65	2 ½	10	2200	<b>199 241 323</b>	<b>199 241 343</b>	<b>199 241 723</b>	6.396
90	80	3	10	3000	<b>199 241 324</b>	<b>199 241 344</b>	<b>199 241 724</b>	6.580
110	100	4	10	6500	<b>199 241 325</b>	<b>199 241 345</b>	<b>199 241 725</b>	9.163
140	125	5	10	11500	<b>199 241 326</b>	<b>199 241 346</b>	<b>199 241 726</b>	12.951
160	150	6	10	16600	<b>199 241 327</b>	<b>199 241 347</b>	<b>199 241 727</b>	16.100
225	200	8	10	39600	<b>199 241 328</b>	<b>199 241 348</b>	<b>199 241 728</b>	23.247

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	PA-30 FO	M16	125	150	328	77	134	117	70	15	45	276	65
75	PA-30 FO	M16	145	170	340	83	140	117	70	15	46	276	65
90	PA-35 FO	M16	160	184	361	89	146	126	78	15	49	326	72
110	PA-40 FO	M16	180	216	400	104	167	129	86		56	370	80
140	PA-45 FO	M16	210	246	437	117	181	139	96		64	411	90
160	PA-50 FO	M20	240	273	468	130	189	149	106		72	423	100
225	PA-55 FO	M20	295	334	529	158	210	161	118		73	452	112

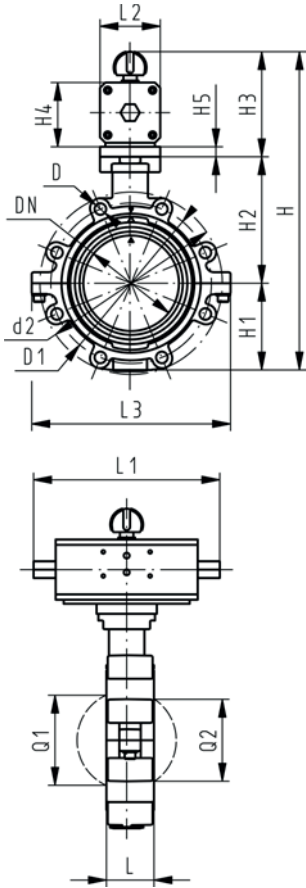
d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	150	40	
75	160	54	35
90	205	67	50
110	244	88	74
140	272	113	97
160	297	139	123
225	360	178	169



# PROGEF Standard Lugstyle butterfly valve type 241 DA (Double acting) Without manual override

## Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
63	50	2	10	1470	<b>199 241 362</b>	<b>199 241 382</b>	<b>199 241 742</b>	4.083
75	65	2 1/2	10	2200	<b>199 241 363</b>	<b>199 241 383</b>	<b>199 241 743</b>	4.425
90	80	3	10	3000	<b>199 241 364</b>	<b>199 241 384</b>	<b>199 241 744</b>	5.911
110	100	4	10	6500	<b>199 241 365</b>	<b>199 241 385</b>	<b>199 241 745</b>	7.415
140	125	5	10	11500	<b>199 241 366</b>	<b>199 241 386</b>	<b>199 241 746</b>	9.245
160	150	6	10	16600	<b>199 241 367</b>	<b>199 241 387</b>	<b>199 241 747</b>	12.579
225	200	8	10	39600	<b>199 241 368</b>	<b>199 241 388</b>	<b>199 241 748</b>	17.247

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	PA-35 DA	M16	125	150	318	77	134	107	60	15	45	177	55
75	PA-35 DA	M16	145	170	330	83	140	107	60	15	46	177	55
90	PA-40 DA	M16	160	184	348	89	146	113	66	15	49	190	60
110	PA-45 DA	M16	180	216	373	104	167	102	71		56	235	65
140	PA-45 DA	M16	210	246	409	117	181	111	78		64	235	72
160	PA-55 DA	M20	240	273	448	130	189	129	86		72	279	80
225	PA-55 DA	M20	295	334	507	158	210	139	96		73	279	90

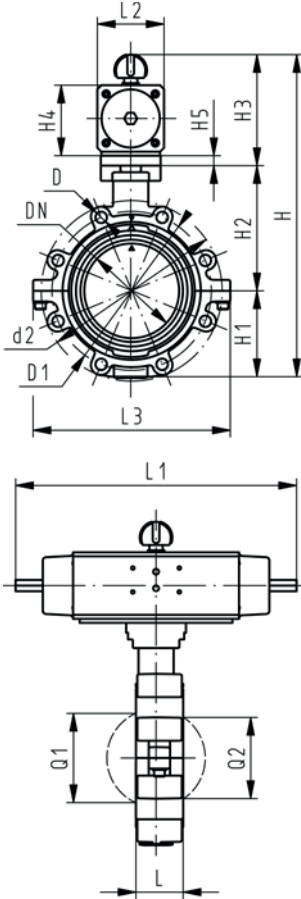
d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	150	40	
75	160	54	35
90	205	67	50
110	244	88	74
140	272	113	97
160	297	139	123
225	360	178	169



# PROGEF Standard Lugstyle butterfly valve type 242 FC (Fail safe to close) Without manual override

## Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Control range 90°<



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
2	50	63	10	1470	<b>199 242 282</b>	<b>199 242 302</b>	<b>199 242 702</b>	5.233
2 ½	65	75	10	2200	<b>199 242 283</b>	<b>199 242 303</b>	<b>199 242 703</b>	5.575
3	80	90	10	3000	<b>199 242 284</b>	<b>199 242 304</b>	<b>199 242 704</b>	5.951
4	100	110	10	6500	<b>199 242 285</b>	<b>199 242 305</b>	<b>199 242 705</b>	9.163
5	125	140	10	11500	<b>199 242 286</b>	<b>199 242 306</b>	<b>199 242 706</b>	11.995
6	150	160	10	16600	<b>199 242 287</b>	<b>199 242 307</b>	<b>199 242 707</b>	16.100
8	200	225	10	39600	<b>199 242 288</b>	<b>199 242 308</b>	<b>199 242 708</b>	23.247

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-30 FC	UNC 5/8	121	150	328	77	134	117	70	15	45	276	65
2 ½	PA-30 FC	UNC 5/8	140	170	340	83	140	117	70	15	46	276	65
3	PA-35 FC	UNC 5/8	153	177	361	89	146	126	78	15	49	326	72
4	PA-40 FC	UNC 5/8	191	216	400	104	167	129	86		56	370	80
5	PA-45 FC	UNC 3/4	216	246	437	117	181	139	96		64	411	90
6	PA-50 FC	UNC 3/4	242	273	468	130	189	149	106		72	423	100
8	PA-55 FC	UNC 3/4	299	334	529	158	210	161	118		73	452	112

Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 ½	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169

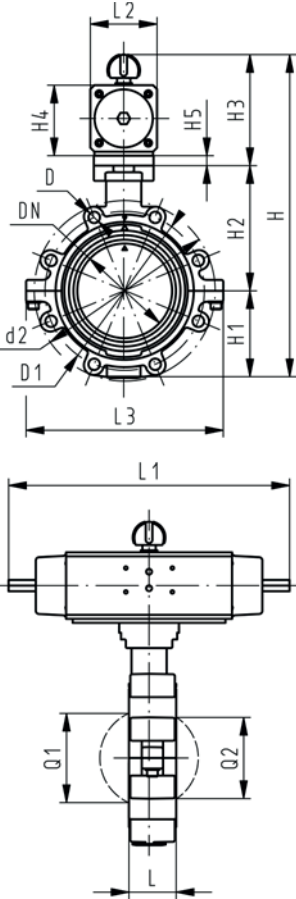




# PROGEF Standard Lugstyle butterfly valve type 242 FO (Fail safe to open) Without manual override

## Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Control range 90°<



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
2	50	63	10	1470	199 242 322	199 242 342	199 242 722	5.233
2 1/2	65	75	10	2200	199 242 323	199 242 343	199 242 723	5.575
3	80	90	10	3000	199 242 324	199 242 344	199 242 724	5.951
4	100	110	10	6500	199 242 325	199 242 345	199 242 725	9.163
5	125	140	10	11500	199 242 326	199 242 346	199 242 726	11.995
6	150	160	10	16600	199 242 327	199 242 347	199 242 727	16.100
8	200	225	10	39600	199 242 328	199 242 348	199 242 728	23.247

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-30 FO	UNC 5/8	121	150	328	77	134	117	70	15	45	276	65
2 1/2	PA-30 FO	UNC 5/8	140	170	340	83	140	117	70	15	46	276	65
3	PA-35 FO	UNC 5/8	153	177	361	89	146	126	78	15	49	326	72
4	PA-40 FO	UNC 5/8	191	216	400	104	167	129	86		56	370	80
5	PA-45 FO	UNC 3/4	216	246	437	117	181	139	96		64	411	90
6	PA-50 FO	UNC 3/4	242	273	468	130	189	149	106		72	423	100
8	PA-55 FO	UNC 3/4	299	334	529	158	210	161	118		73	452	112

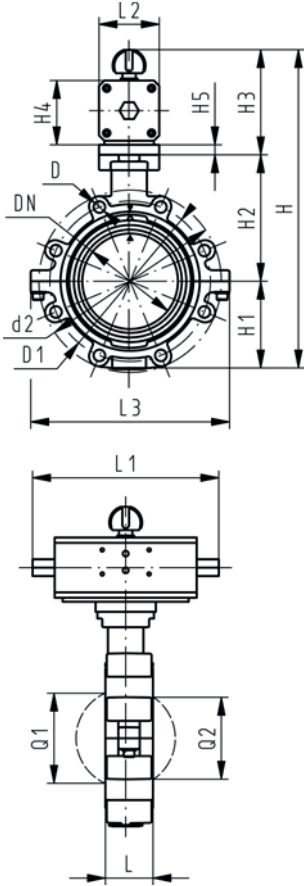
Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 1/2	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169



# PROGEF Standard Lugstyle butterfly valve type 242 DA (Double acting) Without manual override

## Model:

- Material: PP-H
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Control range 90°<



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	PTFE Code	kg
2	50	63	10	1470	<b>199 242 362</b>	<b>199 242 382</b>	<b>199 242 742</b>	4.083
2 ½	65	75	10	2200	<b>199 242 363</b>	<b>199 242 383</b>	<b>199 242 743</b>	4.425
3	80	90	10	3000	<b>199 242 364</b>	<b>199 242 384</b>	<b>199 242 744</b>	5.282
4	100	110	10	6500	<b>199 242 365</b>	<b>199 242 385</b>	<b>199 242 745</b>	7.415
5	125	140	10	11500	<b>199 242 366</b>	<b>199 242 386</b>	<b>199 242 746</b>	9.245
6	150	160	10	16600	<b>199 242 367</b>	<b>199 242 387</b>	<b>199 242 747</b>	12.579
8	200	225	10	39600	<b>199 242 368</b>	<b>199 242 388</b>	<b>199 242 748</b>	17.247

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-35 DA	UNC 5/8	121	150	318	77	134	107	60	15	45	177	55
2 ½	PA-35 DA	UNC 5/8	140	170	330	83	140	107	60	15	46	177	55
3	PA-40 DA	UNC 5/8	153	177	348	89	146	113	66	15	49	190	60
4	PA-45 DA	UNC 5/8	191	216	373	104	167	102	71		56	235	65
5	PA-45 DA	UNC 3/4	216	246	409	117	181	111	78		64	235	72
6	PA-55 DA	UNC 3/4	242	273	448	130	189	129	86		72	279	80
8	PA-55 DA	UNC 3/4	299	334	507	158	210	139	96		73	279	90

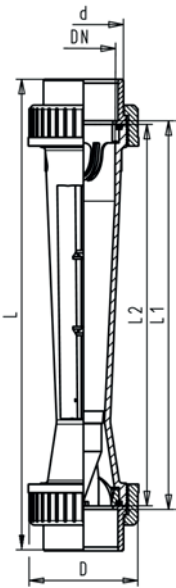
Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 ½	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169

# Variable area flow meters

## Variable area flow meter type 335

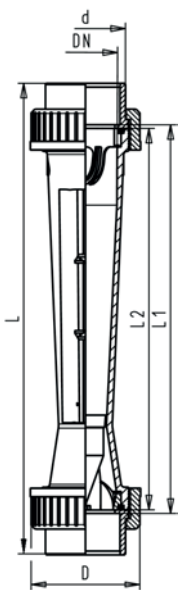
Float in PVDF without magnet

With solvent cement sockets PVC-U metric



Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O- rings in EPDM Code	Taper tube in Polyamid O-rings in EPDM Code	Taper tube in Polysulfone O- rings in EPDM Code	kg
50 - 500	32	25	198 335 000	198 335 020	198 335 040	0.464
100 - 1000	32	25	198 335 001	198 335 021	198 335 041	0.528
150 - 1500	40	32	198 335 002	198 335 022	198 335 042	0.698
250 - 2500	40	32	198 335 003	198 335 023	198 335 043	0.561
200 - 2000	50	40	198 335 004	198 335 024	198 335 044	1.057
300 - 3000	50	40	198 335 005	198 335 025	198 335 045	1.038
600 - 6000	50	40	198 335 006	198 335 026	198 335 046	0.991
600 - 6000	63	50	198 335 007	198 335 027	198 335 047	1.455
1000 - 10000	63	50	198 335 008	198 335 028	198 335 048	1.252
1500 - 15000	63	50	198 335 009	198 335 029	198 335 049	1.429
2000 - 20000	75	65	198 335 010	198 335 030	198 335 050	2.639
3000 - 30000	75	65	198 335 011	198 335 031	198 335 051	2.572
8000 - 60000	75	65	198 335 012	198 335 032	198 335 052	2.432

Scale range [l/h]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]
50 - 500	58	385	341	335	1 ½
100 - 1000	58	385	341	335	1 ½
150 - 1500	72	393	341	335	2
250 - 2500	72	393	341	335	2
200 - 2000	83	403	341	335	2 ¼
300 - 3000	83	403	341	335	2 ¼
600 - 6000	83	403	341	335	2 ¼
600 - 6000	101	417	341	335	2 ¾
1000 - 10000	101	417	341	335	2 ¾
1500 - 15000	101	417	341	335	2 ¾
2000 - 20000	135	429	341	335	3 ½
3000 - 30000	135	429	341	335	3 ½
8000 - 60000	135	429	341	335	3 ½



## Variable area flow meter type 335 Float in PVDF with magnet With solvent cement sockets PVC-U metric

### Model:

- Suitable limit switches see accessories for variable area flow meters

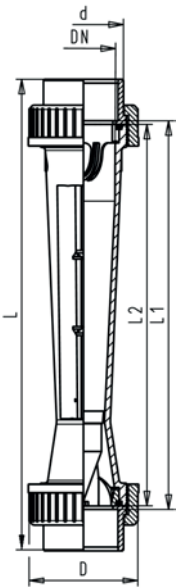
Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O- Rings in EPDM Code	Taper tube in Polyamid O-rings in EPDM Code	Taper tube in Polysulfone O- rings in EPDM Code	kg
50 - 500	32	25	<b>198 335 100</b>	<b>198 335 120</b>	<b>198 335 140</b>	0.440
100 - 1000	32	25	<b>198 335 101</b>	<b>198 335 121</b>	<b>198 335 141</b>	0.452
150 - 1500	40	32	<b>198 335 102</b>	<b>198 335 122</b>	<b>198 335 142</b>	0.604
250 - 2500	40	32	<b>198 335 103</b>	<b>198 335 123</b>	<b>198 335 143</b>	0.585
200 - 2000	50	40	<b>198 335 104</b>	<b>198 335 124</b>	<b>198 335 144</b>	0.900
300 - 3000	50	40	<b>198 335 105</b>	<b>198 335 125</b>	<b>198 335 145</b>	1.035
600 - 6000	50	40	<b>198 335 106</b>	<b>198 335 126</b>	<b>198 335 146</b>	0.881
600 - 6000	63	50	<b>198 335 107</b>	<b>198 335 127</b>	<b>198 335 147</b>	1.225
1000 - 10000	63	50	<b>198 335 108</b>	<b>198 335 128</b>	<b>198 335 148</b>	1.248
1500 - 15000	63	50	<b>198 335 109</b>	<b>198 335 129</b>	<b>198 335 149</b>	1.409
2000 - 20000	75	65	<b>198 335 110</b>	<b>198 335 130</b>	<b>198 335 150</b>	2.441
3000 - 30000	75	65	<b>198 335 111</b>	<b>198 335 131</b>	<b>198 335 151</b>	2.377
8000 - 60000	75	65	<b>198 335 112</b>	<b>198 335 132</b>	<b>198 335 152</b>	2.150

Scale range [l/h]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]
50 - 500	58	385	341	335	1 ½
100 - 1000	58	385	341	335	1 ½
150 - 1500	72	393	341	335	2
250 - 2500	72	393	341	335	2
200 - 2000	83	403	341	335	2 ¼
300 - 3000	83	403	341	335	2 ¼
600 - 6000	83	403	341	335	2 ¼
600 - 6000	101	417	341	335	2 ¾
1000 - 10000	101	417	341	335	2 ¾
1500 - 15000	101	417	341	335	2 ¾
2000 - 20000	135	429	341	335	3 ½
3000 - 30000	135	429	341	335	3 ½
8000 - 60000	135	429	341	335	3 ½

## Variable area flow meter type 350

### Float in PVDF without magnet

### With solvent cement sockets PVC-U metric



Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O- rings in EPDM Code	Taper tube in Polyamid O-rings in EPDM Code	Taper tube in Polysulfone O- rings in EPDM Code	kg
50 - 500	32	25	<b>198 350 000</b>	<b>198 350 020</b>	<b>198 350 040</b>	0.487
100 - 1000	32	25	<b>198 350 001</b>	<b>198 350 021</b>	<b>198 350 041</b>	0.474
150 - 1500	40	32	<b>198 350 002</b>	<b>198 350 022</b>	<b>198 350 042</b>	0.614
250 - 2500	40	32	<b>198 350 003</b>	<b>198 350 023</b>	<b>198 350 043</b>	0.688
200 - 2000	50	40	<b>198 350 004</b>	<b>198 350 024</b>	<b>198 350 044</b>	0.962
300 - 3000	50	40	<b>198 350 005</b>	<b>198 350 025</b>	<b>198 350 045</b>	0.989
600 - 6000	50	40	<b>198 350 006</b>	<b>198 350 026</b>	<b>198 350 046</b>	0.953
600 - 6000	63	50	<b>198 350 007</b>	<b>198 350 027</b>	<b>198 350 047</b>	1.335
1000 - 10000	63	50	<b>198 350 008</b>	<b>198 350 028</b>	<b>198 350 048</b>	1.343
1500 - 15000	63	50	<b>198 350 009</b>	<b>198 350 029</b>	<b>198 350 049</b>	1.315
2000 - 20000	75	65	<b>198 350 010</b>	<b>198 350 030</b>	<b>198 350 050</b>	2.486
3000 - 30000	75	65	<b>198 350 011</b>	<b>198 350 031</b>	<b>198 350 051</b>	2.770
8000 - 60000	75	65	<b>198 350 012</b>	<b>198 350 032</b>	<b>198 350 052</b>	2.244

Scale range [l/h]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]
50 - 500	58	400	356	350	1 ½
100 - 1000	58	400	356	350	1 ½
150 - 1500	72	408	356	350	2
250 - 2500	72	408	356	350	2
200 - 2000	83	418	356	350	2 ¼
300 - 3000	83	418	356	350	2 ¼
600 - 6000	83	418	356	350	2 ¼
600 - 6000	101	432	356	350	2 ¾
1000 - 10000	101	432	356	350	2 ¾
1500 - 15000	101	432	356	350	2 ¾
2000 - 20000	135	444	356	350	3 ½
3000 - 30000	135	444	356	350	3 ½
8000 - 60000	135	444	356	350	3 ½

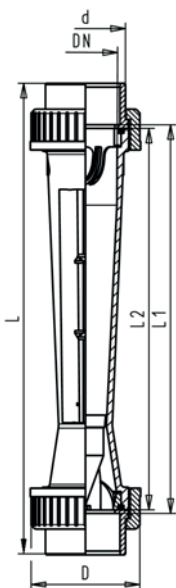


## Variable area flow meter type 350 Float in PVDF with magnet With solvent cement sockets PVC-U metric

### Model:

- Suitable limit switches see accessories for variable area flow meters

Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O- Rings in EPDM Code	Taper tube in Polyamid O-rings in EPDM Code	Taper tube in Polysulfone O- rings in EPDM Code	kg
50 - 500	32	25	<b>198 350 100</b>	<b>198 350 120</b>	<b>198 350 140</b>	0.440
100 - 1000	32	25	<b>198 350 101</b>	<b>198 350 121</b>	<b>198 350 141</b>	0.440
150 - 1500	40	32	<b>198 350 102</b>	<b>198 350 122</b>	<b>198 350 142</b>	0.615
250 - 2500	40	32	<b>198 350 103</b>	<b>198 350 123</b>	<b>198 350 143</b>	0.620
200 - 2000	50	40	<b>198 350 104</b>	<b>198 350 124</b>	<b>198 350 144</b>	0.900
300 - 3000	50	40	<b>198 350 105</b>	<b>198 350 125</b>	<b>198 350 145</b>	0.900
600 - 6000	50	40	<b>198 350 106</b>	<b>198 350 126</b>	<b>198 350 146</b>	0.900
600 - 6000	63	50	<b>198 350 107</b>	<b>198 350 127</b>	<b>198 350 147</b>	1.320
1000 - 10000	63	50	<b>198 350 108</b>	<b>198 350 128</b>	<b>198 350 148</b>	1.320
1500 - 15000	63	50	<b>198 350 109</b>	<b>198 350 129</b>	<b>198 350 149</b>	1.320
2000 - 20000	75	65	<b>198 350 110</b>	<b>198 350 130</b>	<b>198 350 150</b>	2.150
3000 - 30000	75	65	<b>198 350 111</b>	<b>198 350 131</b>	<b>198 350 151</b>	2.150
8000 - 60000	75	65	<b>198 350 112</b>	<b>198 350 132</b>	<b>198 350 152</b>	2.150



Scale range [l/h]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]
50 - 500	58	400	356	350	1 ½
100 - 1000	58	400	356	350	1 ½
150 - 1500	72	408	356	350	2
250 - 2500	72	408	356	350	2
200 - 2000	83	418	356	350	2 ¼
300 - 3000	83	418	356	350	2 ¼
600 - 6000	83	418	356	350	2 ¼
600 - 6000	101	432	356	350	2 ¾
1000 - 10000	101	432	356	350	2 ¾
1500 - 15000	101	432	356	350	2 ¾
2000 - 20000	135	444	356	350	3 ½
3000 - 30000	135	444	356	350	3 ½
8000 - 60000	135	444	356	350	3 ½

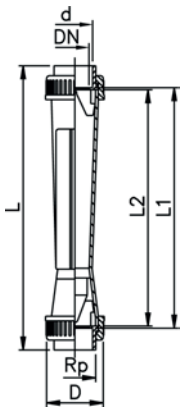


## Short version Float in PVDF without magnet With solvent cement sockets PVC-U metric

### Model:

- Union nuts and valve ends in other materials on request

Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in Polysulfone O- rings in EPDM Code	Taper tube in PVC-U transp. O- rings in EPDM Code	kg
SK 50	16	10	2.5 - 25	<b>198 801 880</b>	<b>198 803 310</b>	0.081
SK 51	16	10	5 - 50	<b>198 801 881</b>	<b>198 803 311</b>	0.079
SK 52	16	10	10 - 100	<b>198 801 882</b>	<b>198 803 312</b>	0.079
SK 60	20	15	8 - 80	<b>198 801 883</b>	<b>198 803 313</b>	0.127
SK 61	20	15	15 - 150	<b>198 801 884</b>	<b>198 803 314</b>	0.130
SK 62	20	15	20 - 200	<b>198 801 885</b>	<b>198 803 315</b>	0.125
SK 70	32	25	15 - 150	<b>198 801 886</b>	<b>198 803 316</b>	0.256
SK 71	32	25	30 - 300	<b>198 801 887</b>	<b>198 803 317</b>	0.254
SK 72	32	25	50 - 500	<b>198 801 888</b>	<b>198 803 318</b>	0.244
SK 73	32	25	100 - 1000	<b>198 801 889</b>	<b>198 803 319</b>	0.242



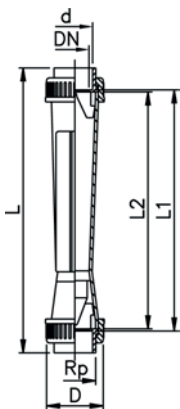
Type	D [mm]	L [mm]	L1 [mm]	L2 [mm]	Rp [inch]
SK 50	35	199	171	165	3/8
SK 51	35	199	171	165	3/8
SK 52	35	199	171	165	3/8
SK 60	43	223	191	185	1/2
SK 61	43	223	191	185	1/2
SK 62	43	223	191	185	1/2
SK 70	60	250	206	200	1
SK 71	60	250	206	200	1
SK 72	60	250	206	200	1
SK 73	60	250	206	200	1

## Short version Float in PVDF with magnet With solvent cement sockets PVC-U metric

### Model:

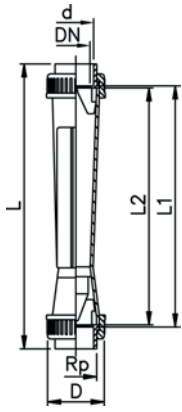
- Union nuts and valve ends in other materials on request
- Suitable limit switches see accessories for variable area flow meters

Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in Polysulfone O- rings in EPDM Code	Taper tube in PVC-U transp. O- rings in EPDM Code	kg
SK 500	16	10	2.5 - 25	<b>198 801 890</b>	<b>198 803 320</b>	0.081
SK 510	16	10	5 - 50	<b>198 801 891</b>	<b>198 803 321</b>	0.080
SK 520	16	10	10 - 100	<b>198 801 892</b>	<b>198 803 322</b>	0.079
SK 600	20	15	8 - 80	<b>198 801 893</b>	<b>198 803 323</b>	0.129
SK 610	20	15	15 - 150	<b>198 801 894</b>	<b>198 803 324</b>	0.128
SK 620	20	15	20 - 200	<b>198 801 895</b>	<b>198 803 325</b>	0.125
SK 700	32	25	15 - 150	<b>198 801 896</b>	<b>198 803 326</b>	0.301
SK 710	32	25	30 - 300	<b>198 801 897</b>	<b>198 803 327</b>	0.255
SK 720	32	25	50 - 500	<b>198 801 898</b>	<b>198 803 328</b>	0.248
SK 730	32	25	100 - 1000	<b>198 801 899</b>	<b>198 803 329</b>	0.242



Type	D [mm]	L [mm]	L1 [mm]	L2 [mm]	Rp [inch]
SK 500	35	199	171	165	3/8
SK 510	35	199	171	165	3/8
SK 520	35	199	171	165	3/8
SK 600	43	223	191	185	1/2
SK 610	43	223	191	185	1/2
SK 620	43	223	191	185	1/2
SK 700	60	250	206	200	1

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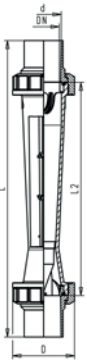


Type	D [mm]	L [mm]	L1 [mm]	L2 [mm]	Rp [inch]
SK 710	60	250	206	200	1
SK 720	60	250	206	200	1
SK 730	60	250	206	200	1



### Special version PVDF-HP Float in PTFE without magnet With fusion spigots BCF/IR

Type	d [mm]	DN [mm]	Scale range [l/h]	Scale range [gal/min]	Taper tube in Polysulfone O- rings in FPM Code	kg
SK 70	32	25	68 - 204	0.3-0.9	<b>198 807 209</b>	0.383
SK 71	32	25	90 - 295	0.4-1.3	<b>198 807 210</b>	0.387
SK 73	32	25	136 - 795	0.6-3.5	<b>198 807 202</b>	0.401
SK 20	50	40	568 - 2273	2.5-10.0	<b>198 807 203</b>	1.030
SK 21	50	40	909 - 4091	4.0-18.0	<b>198 807 204</b>	0.978
SK 30	63	50	1000 - 8142	4.4-36.0	<b>198 807 205</b>	1.500
SK 31	63	50	1000 - 9091	4.4-40.0	<b>198 807 206</b>	1.500
SK 40	75	65	1848 - 11364	8.0-50.0	<b>198 807 207</b>	2.500
SK 41	75	65	2273 - 16364	10.0-72.0	<b>198 807 208</b>	2.500

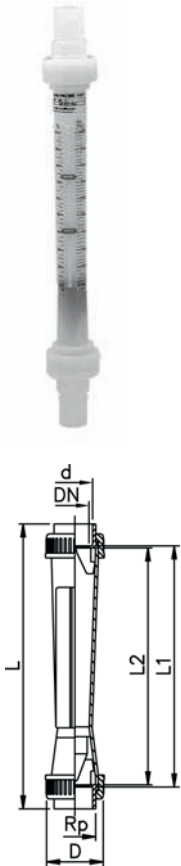


Type	D [mm]	L [mm]	L1 [mm]	L2 [mm]	Rp [inch]
SK 70	60	318		200	1
SK 71	60	318		200	1
SK 73	60	318		200	1
SK 20	83	466		335	1 ½
SK 21	83	466		335	1 ½
SK 30	103	472		335	2
SK 31	103	472		335	2
SK 40	122	495		335	2 ½
SK 41	122	495		335	2 ½



## Special version PVDF Float in PVDF (red) without magnet

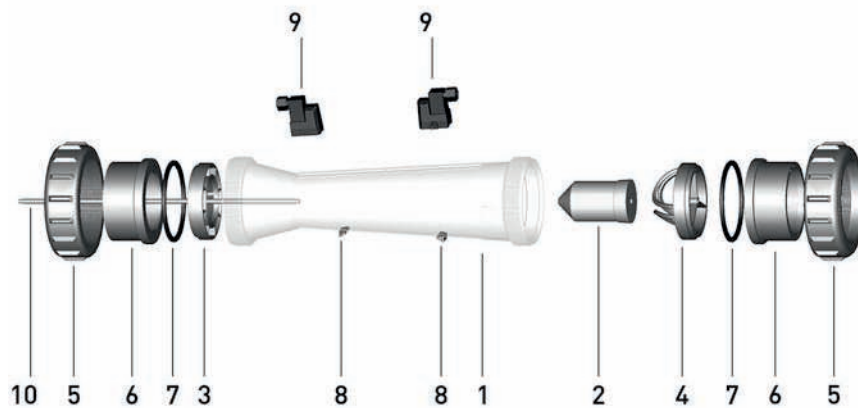
Dimension L and L1 only valid for socket connection  
Dimension L2 describes taper tube length



Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in PVDF O-rings in FPM fusion sock- et Code	Taper tube in PVDF O-rings in FPM IR fusion spigot Code	kg
SK 10	32	25	50 - 500	<b>198 806 466</b>	<b>198 803 905</b>	0.520
SK 11	32	25	100 - 1000	<b>198 806 467</b>	<b>198 803 906</b>	0.520
SK 20	50	40	200 - 2000	<b>198 806 468</b>	<b>198 803 907</b>	1.220
SK 21	50	40	300 - 3000	<b>198 806 469</b>	<b>198 803 908</b>	1.220
SK 30	63	50	600 - 6000	<b>198 806 470</b>	<b>198 803 909</b>	1.785
SK 31	63	50	1200 - 12000	<b>198 806 471</b>	<b>198 803 910</b>	1.680
SK 40	75	65	2000 - 20000	-	<b>198 803 911</b>	2.900
SK 41	75	65	3000 - 30000	-	<b>198 803 912</b>	2.900

Type	D [mm]	L [mm]	L (IR-SS) [mm]	L1 [mm]	L2 [mm]	Rp [inch]
SK 10	60	385	443	341	335	1
SK 11	60	385	443	341	335	1
SK 20	83	403	459	341	335	1 ½
SK 21	83	403	459	341	335	1 ½
SK 30	103	417	461	339	335	2
SK 31	103	417	461	339	335	2
SK 40	122	429	453	341	335	2 ½
SK 41	122	429	453	341	335	2 ½

## Valve ends and Nuts



## Union nut (5)

Union nut not useable for the special version with taper tube in PVDF



d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	ABS Code	PP-H Code
32	1	25	<b>721 890 008</b>	<b>723 690 008</b>	<b>729 890 408</b>	<b>727 890 408</b>
40	1 ¼	32	<b>721 890 009</b>	<b>723 690 009</b>	<b>729 890 409</b>	<b>727 890 409</b>
50	1 ½	40	<b>721 890 010</b>	<b>723 690 010</b>	<b>729 890 410</b>	<b>727 890 410</b>
63	2	50	<b>721 890 011</b>	<b>723 690 011</b>	<b>729 890 411</b>	<b>727 890 411</b>
75	2 ½	65	<b>198 806 429</b>	-	-	<b>198 806 421</b>

d [mm]	Inch	DN [mm]	PVDF Code	kg
32	1	25	<b>735 690 408</b>	0.035
40	1 ¼	32	<b>735 690 409</b>	0.065
50	1 ½	40	<b>735 690 410</b>	0.093
63	2	50	<b>735 690 411</b>	0.144
75	2 ½	65	<b>198 806 422</b>	0.337

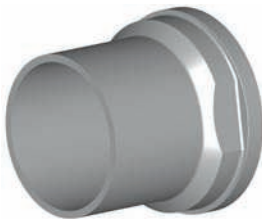


## Union end / Socket (6)

For DN65 PVDF only spigot

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	ABS Code	PP-H Code	PVDF Code
32	1	25	721 500 108	723 800 108	729 800 108	727 500 108	735 600 108
40	1 ¼	32	721 500 109	723 800 109	729 800 109	727 500 109	735 600 109
50	1 ½	40	721 500 110	723 800 110	729 800 110	727 500 110	735 600 110
63	2	50	721 500 111	723 800 111	729 800 111	727 500 111	735 600 111
75	2 ½	65	721 600 112	700 253 867	700 246 112	700 253 866	-

d [mm]	Inch	DN [mm]	PE80 Code	kg
32	1	25	734 600 108	0.015
40	1 ¼	32	734 600 109	0.026
50	1 ½	40	734 600 110	0.025
63	2	50	734 600 111	0.044
75	2 ½	65	700 246 419	0.163



## Union end / Spigot (6)

d [mm]	Inch	DN [mm]	PP-H Code	PVDF Code	PE100 Code	kg
32	1	25	727 508 508	735 608 608	753 608 608	0.027
40	1 ¼	32	727 508 509	735 608 609	753 608 609	0.042
50	1 ½	40	727 508 510	735 608 610	753 608 610	0.060
63	2	50	727 508 511	735 608 611	753 608 611	0.102
75	2 ½	65	700 256 401	175 483 013	700 246 420	0.300

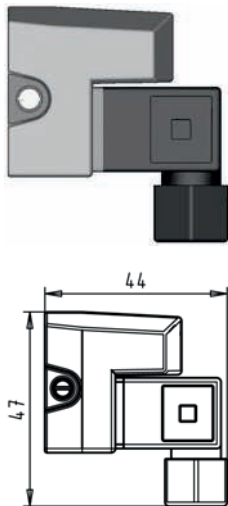
## Accessories

### 4-20 mA sensor

For type 335 and type 350



Type	d [mm]	DN [mm]	Corresponds to water scale [l/h]	Code	kg
GK 15	32	25	50-500	198 335 962	0.150
GK 15	32	25	100-1000	198 335 963	0.150
GK 15	40	32	150-1500	198 335 964	0.150
GK 15	40	32	250-2500	198 335 965	0.150
GK 15	50	40	200-2000	198 335 966	0.150
GK 15	50	40	300-3000	198 335 967	0.150
GK 15	50	40	600-6000	198 335 968	0.150
GK 15	63	50	600-6000	198 335 969	0.150
GK 15	63	50	1000-10000	198 335 991	0.150
GK 15	63	50	1500-15000	198 335 992	0.150
GK 15	75	65	2000-20000	198 335 993	0.150
GK 15	75	65	3000-30000	198 335 994	0.150
GK 15	75	65	8000-60000	198 335 995	0.150



## Accessories

### Limit contacts GK10/GK11

#### For type 335/350 and short version

Type	Code	kg
GK10 (min.)	<b>198 335 960</b>	0.035
GK11 (max.)	<b>198 335 961</b>	0.034

### Special scale for type 335/350

#### l/h

d [mm]	DN [mm]	Scale range [l/h]	Code	kg
32	25	50-500	<b>198 335 861</b>	0.050
32	25	100-1000	<b>198 335 862</b>	0.050
40	32	150-1500	<b>198 335 863</b>	0.050
40	32	250-2500	<b>198 335 864</b>	0.050
50	40	200-2000	<b>198 335 865</b>	0.050
50	40	300-3000	<b>198 335 866</b>	0.050
50	40	600-6000	<b>198 335 867</b>	0.050
63	50	600-6000	<b>198 335 868</b>	0.050
63	50	1000-10000	<b>198 335 869</b>	0.050
63	50	1500-15000	<b>198 335 870</b>	0.050
75	65	2000-20000	<b>198 335 871</b>	0.050
75	65	3000-30000	<b>198 335 872</b>	0.050
75	65	8000-60000	<b>198 335 873</b>	0.050

### Special scale for type 335/350

#### % for H<sub>2</sub>O

d [mm]	DN [mm]	Scale range	Corresponds to water scale [l/h]	Code	kg
32	25	10-100 %	50-500	<b>198 335 084</b>	0.050
32	25	10-100 %	100-1000	<b>198 335 083</b>	0.003
40	32	10-100 %	150-1500	<b>198 335 069</b>	0.050
40	32	10-100 %	250-2500	<b>198 335 068</b>	0.050
50	40	10-100 %	200-2000	<b>198 335 054</b>	0.050
50	40	10-100 %	300-3000	<b>198 335 053</b>	0.001
50	40	10-100 %	600-6000	<b>198 335 039</b>	0.050
63	50	10-100 %	600-6000	<b>198 335 038</b>	0.002
63	50	10-100 %	1000-10000	<b>198 335 037</b>	0.001
63	50	10-100 %	1500-15000	<b>198 335 036</b>	0.050
75	65	10-100 %	2000-20000	<b>198 335 035</b>	0.050
75	65	10-100 %	3000-30000	<b>198 335 034</b>	0.050
75	65	13.3-100 %	8000-60000	<b>198 335 033</b>	0.050

### Special scale for type 335/350

#### m<sup>3</sup>/h

d [mm]	DN [mm]	Scale range [m <sup>3</sup> /h]	Corresponds to wa- ter scale [l/h]	Code	kg
32	25	0.05 - 0.5	50 - 500	<b>198 335 655</b>	0.050
32	25	0.1 - 1	100 - 1000	<b>198 335 656</b>	0.050
40	32	0.15 - 1.5	150 - 1500	<b>198 335 657</b>	0.050

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<b>d</b> [mm]	<b>DN</b> [mm]	<b>Scale range</b> [m <sup>3</sup> /h]	<b>Corresponds to wa- ter scale</b> [l/h]	<b>Code</b>	<b>kg</b>
40	32	0.25 - 2.5	250 - 2500	<b>198 335 658</b>	0.050
50	40	0.2 - 2.0	200 - 2000	<b>198 335 659</b>	0.050
50	40	0.3 - 3	300 - 3000	<b>198 335 660</b>	0.050
50	40	0.6 - 6	600 - 6000	<b>198 335 661</b>	0.050
63	50	0.6 - 6	600 - 6000	<b>198 335 662</b>	0.050
63	50	1 - 10	1000 - 10000	<b>198 335 663</b>	0.050
63	50	1.5 - 15	1500 - 15000	<b>198 335 664</b>	0.050
75	65	2 - 20	2000 - 20000	<b>198 335 665</b>	0.050
75	65	3 - 30	3000 - 30000	<b>198 335 666</b>	0.008
75	65	8 - 60	8000 - 60000	<b>198 335 667</b>	0.050

### Special scale for type 335/350 Imp. GPM

<b>d</b> [mm]	<b>DN</b> [mm]	<b>Scale range</b> [gal/min]	<b>Corresponds to water scale</b> [l/h]	<b>Code</b>	<b>kg</b>
32	25	0,183 - 1,83	50-500	<b>198 335 670</b>	0.050
32	25	0,366 - 3,66	100-1000	<b>198 335 671</b>	0.050
40	32	0,55 - 5,5	150-1500	<b>198 335 672</b>	0.050
40	32	0,916 - 9,16	250-2500	<b>198 335 673</b>	0.050
50	40	0,733 - 7,33	200-2000	<b>198 335 674</b>	0.050
50	40	1,09 - 10,9	300-3000	<b>198 335 675</b>	0.050
50	40	2,19 - 21,9	600-6000	<b>198 335 676</b>	0.050
63	50	2,2 - 22	600-6000	<b>198 335 677</b>	0.050
63	50	3,66 - 36,6	1000-10000	<b>198 335 678</b>	0.050
63	50	5,49 - 54,9	1500-15000	<b>198 335 679</b>	0.050
75	65	7,32 - 73,2	2000-20000	<b>198 335 680</b>	0.050
75	65	10,98 - 109,8	3000-30000	<b>198 335 681</b>	0.050
75	65	29,28 - 219,6	8000-60000	<b>198 335 682</b>	0.050

### Special scale for type 335/350 US GPM

<b>d</b> [mm]	<b>DN</b> [mm]	<b>Scale range</b> [gal/min]	<b>Corresponds to wa- ter scale</b> [l/h]	<b>Code</b>	<b>kg</b>
32	25	0.22 - 2.2	50 - 500	<b>198 335 685</b>	0.050
32	25	0.44 - 4.4	100 - 1000	<b>198 335 686</b>	0.050
40	32	0.66 - 6.6	150 - 1500	<b>198 335 687</b>	0.001
40	32	1.1 - 11	250 - 2500	<b>198 335 688</b>	0.050
50	40	0.88 - 8.8	200 - 2000	<b>198 335 689</b>	0.001
50	40	1.32 - 13.2	300 - 3000	<b>198 335 690</b>	0.050
50	40	2.64 - 26.4	600 - 6000	<b>198 335 691</b>	0.002
63	50	2.64 - 26.4	600 - 6000	<b>198 335 692</b>	0.050
63	50	4.40 - 44.02	1000 - 10000	<b>198 335 693</b>	0.002
63	50	6.60 - 66.04	1500 - 15000	<b>198 335 694</b>	0.050
75	65	8.80 - 88	2000 - 20000	<b>198 335 695</b>	0.001
75	65	13.20 - 132	3000 - 30000	<b>198 335 696</b>	0.001
75	65	35.2 - 264	8000 - 60000	<b>198 335 697</b>	0.050

### Special scale for type 335/350 Air/0bar/Nm<sup>3</sup>/h

<b>d</b> [mm]	<b>DN</b> [mm]	<b>Scale range</b> [m <sup>3</sup> /h]	<b>Corresponds to wa- ter scale</b> [l/h]	<b>Code</b>	<b>kg</b>
32	25	1.5 - 14	50 - 500	<b>198 350 655</b>	0.001
32	25	2.5 - 29	100 - 1000	<b>198 350 656</b>	0.050
40	32	4 - 45	150 - 1500	<b>198 350 657</b>	0.050
40	32	7 - 79	250 - 2500	<b>198 350 658</b>	0.050
50	40	6 - 58	200 - 2000	<b>198 350 659</b>	0.050
50	40	9 - 108	300 - 3000	<b>198 350 660</b>	0.001

table continued next page

d [mm]	DN [mm]	Scale range [m³/h]	Corresponds to wa- ter scale [l/h]	Code	kg
50	40	17 - 174	600 - 6000	<b>198 350 661</b>	0.050
63	50	17 - 175	600 - 6000	<b>198 350 662</b>	0.050
63	50	29 - 301	1000 - 10000	<b>198 350 663</b>	0.050
63	50	53 - 405	1500 - 15000	<b>198 350 664</b>	0.050
75	65	55 - 545	2000 - 20000	<b>198 350 665</b>	0.050
75	65	80 - 758	3000 - 30000	<b>198 350 666</b>	0.050
75	65	-	8000 - 60000	<b>198 350 667</b>	0.050

### Special scale for type 335/350 HCl 30-33% l/h

d [mm]	DN [mm]	Scale range [l/h]	Corresponds to water scale [l/h]	Code	kg
32	25	20 - 405	50-500	<b>198 350 670</b>	0.050
32	25	55 - 866	100-1000	<b>198 350 671</b>	0.001
40	32	90 - 1340	150-1500	<b>198 350 672</b>	0.050
40	32	165 - 2310	250-2500	<b>198 350 673</b>	0.050
50	40	115 - 1660	200-2000	<b>198 350 674</b>	0.050
50	40	190 - 3050	300-3000	<b>198 350 675</b>	0.050
50	40	420 - 4900	600-6000	<b>198 350 676</b>	0.001
63	50	430 - 5090	600-6000	<b>198 350 677</b>	0.050
63	50	750 - 9460	1000-10000	<b>198 350 678</b>	0.050
63	50	1415 - 11570	1500-15000	<b>198 350 679</b>	0.050
75	65	1500 - 17300	2000-20000	<b>198 350 680</b>	0.050
75	65	2175 - 24120	3000-30000	<b>198 350 681</b>	0.050
75	65	-	8000-60000	<b>198 350 682</b>	0.050

### Special scale for type 335/350 NaOH 30% l/h

d [mm]	DN [mm]	Scale range [l/h]	Corresponds to water scale [l/h]	Code	kg
32	25	4 - 226	50-500	<b>198 350 685</b>	0.050
32	25	15 - 600	100-1000	<b>198 350 686</b>	0.050
40	32	30 - 970	150-1500	<b>198 350 687</b>	0.050
40	32	70 - 1800	250-2500	<b>198 350 688</b>	0.050
50	40	35 - 1240	200-2000	<b>198 350 689</b>	0.002
50	40	75 - 2370	300-3000	<b>198 350 690</b>	0.050
50	40	230 - 4000	600-6000	<b>198 350 691</b>	0.050
63	50	240 - 4700	600-6000	<b>198 350 692</b>	0.050
63	50	475 - 7340	1000-10000	<b>198 350 693</b>	0.050
63	50	1030 - 10330	1500-15000	<b>198 350 694</b>	0.050
75	65	915 - 11720	2000-20000	<b>198 350 695</b>	0.050
75	65	1195 - 16040	3000-30000	<b>198 350 696</b>	0.050
75	65	-	8000-60000	<b>198 350 697</b>	0.050

### Special scale for type 335/350 NaOH 50% l/h

d [mm]	DN [mm]	Scale range [l/h]	Corresponds to water scale [l/h]	Code	kg
32	25	1 - 55	50-500	<b>198 350 755</b>	0.050
32	25	3 - 192	100-1000	<b>198 350 756</b>	0.050
40	32	6 - 365	150-1500	<b>198 350 757</b>	0.050
40	32	15 - 770	250-2500	<b>198 350 758</b>	0.050
50	40	8 - 520	200-2000	<b>198 350 759</b>	0.050
50	40	15 - 1170	300-3000	<b>198 350 760</b>	0.050
50	40	50 - 2270	600-6000	<b>198 350 761</b>	0.002
63	50	55 - 2300	600-6000	<b>198 350 762</b>	0.050
63	50	140 - 4340	1000-10000	<b>198 350 763</b>	0.050
63	50	420 - 5820	1500-15000	<b>198 350 764</b>	0.050

table continued next page

<b>d</b> [mm]	<b>DN</b> [mm]	<b>Scale range</b> [l/h]	<b>Corresponds to water scale</b> [l/h]	<b>Code</b>	<b>kg</b>
75	65	245 - 7590	2000-20000	<b>198 350 765</b>	0.050
75	65	400 - 11120	3000-30000	<b>198 350 766</b>	0.050
75	65	-	8000-60000	<b>198 350 767</b>	0.050

### Special scale for short version Water l/h

<b>Type</b>	<b>Scale range</b> [l/h]	<b>Code</b>	<b>kg</b>
SK 50 / 500	2.5 - 25.0	<b>198 801 386</b>	0.001
SK 51 / 510	5.0 - 50.0	<b>198 801 387</b>	0.001
SK 52 / 520	10.0 - 100.0	<b>198 801 388</b>	0.001
SK 60 / 600	8.0 - 80.0	<b>198 801 389</b>	0.001
SK 61 / 610	15.0 - 150.0	<b>198 801 390</b>	0.001
SK 62 / 620	20.0 - 200.0	<b>198 801 391</b>	0.001
SK 70 / 700	15.0 - 150.0	<b>198 801 392</b>	0.001
SK 71 / 710	30.0 - 300.0	<b>198 801 393</b>	0.001
SK 72 / 720	50.0 - 500.0	<b>198 801 394</b>	0.001
SK 73 / 730	100.0 - 1000.0	<b>198 801 395</b>	0.001

### Special scale for short version US GPM

<b>Type</b>	<b>Scale range</b> [gal/min]	<b>Code</b>	<b>kg</b>
SK 50 / 500	0,01 - 0,11	<b>198 801 961</b>	0.001
SK 51 / 510	0,02 - 0,22	<b>198 801 962</b>	0.001
SK 52 / 520	0,04 - 0,44	<b>198 801 963</b>	0.001
SK 60 / 600	0,03 - 0,35	<b>198 801 964</b>	0.001
SK 61 / 610	0,06 - 0,66	<b>198 801 965</b>	0.001
SK 62 / 620	0,08 - 0,88	<b>198 801 966</b>	0.001
SK 70 / 700	0,06 - 0,66	<b>198 801 967</b>	0.001
SK 71 / 710	0,13 - 1,32	<b>198 801 968</b>	0.001
SK 72 / 720	0,22 - 2,20	<b>198 801 969</b>	0.001
SK 73 / 730	0,44 - 4,40	<b>198 801 970</b>	0.001

### Special scale for short version Air/0bar/Nm<sup>3</sup>/h

<b>Type</b>	<b>Scale range</b> [m <sup>3</sup> /h]	<b>Code</b>	<b>kg</b>
SK 50 / 500	0,5 - 0,95	<b>198 801 308</b>	0.001
SK 51 / 510	0,5 - 1,9	<b>198 801 309</b>	0.001
SK 52 / 520	0,8 - 3,0	<b>198 801 310</b>	0.001
SK 60 / 600	0,6 - 2,8	<b>198 801 311</b>	0.001
SK 61 / 610	1,4 - 5,6	<b>198 801 312</b>	0.001
SK 62 / 620	1,5 - 7,0	<b>198 801 313</b>	0.001
SK 70 / 700	1,0 - 6,5	<b>198 801 314</b>	0.001
SK 71 / 710	1,5 - 11,0	<b>198 801 315</b>	0.001
SK 72 / 720	3,0 - 18,0	<b>198 801 316</b>	0.001
SK 73 / 730	6,0 - 30,0	<b>198 801 317</b>	0.001

### Special scale for short version HCl 30 - 33% l/h

<b>Type</b>	<b>Scale range</b> [l/h]	<b>Code</b>	<b>kg</b>
SK 50 / 500	2,5 - 20	<b>198 806 511</b>	0.001
SK 51 / 510	5 - 40	<b>198 806 512</b>	0.001
SK 52 / 520	10 - 85	<b>198 806 513</b>	0.001
SK 60 / 600	8 - 70	<b>198 806 514</b>	0.001
SK 61 / 610	15 - 125	<b>198 806 515</b>	0.001

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Type	Scale range [l/h]	Code	kg
SK 62 / 620	20 - 170	<b>198 806 516</b>	0.001
SK 70 / 700	5 - 125	<b>198 806 517</b>	0.001
SK 71 / 710	30 - 260	<b>198 806 518</b>	0.001
SK 72 / 720	50 - 425	<b>198 806 519</b>	0.001
SK 73 / 730	100 - 850	<b>198 806 520</b>	0.001

### Special scale for short version NaOH 30% l/h

Type	Scale range [l/h]	Code	kg
SK 50 / 500	0.2 - 5	<b>198 806 521</b>	0.001
SK 51 / 510	1 - 14	<b>198 806 522</b>	0.001
SK 52 / 520	3 - 35	<b>198 806 523</b>	0.001
SK 60 / 600	2 - 23	<b>198 806 524</b>	0.002
SK 61 / 610	3 - 55	<b>198 806 525</b>	0.001
SK 62 / 620	5 - 80	<b>198 806 526</b>	0.001
SK 70 / 700	3 - 55	<b>198 806 527</b>	0.001
SK 71 / 710	6 - 130	<b>198 806 528</b>	0.001
SK 72 / 720	10 - 250	<b>198 806 529</b>	0.002
SK 73 / 730	40 - 590	<b>198 806 530</b>	0.001

### Special scale for short version NaOH 50% l/h

Type	Scale range [l/h]	Code	kg
SK 60 / 600	0,2 - 3,5	<b>198 806 531</b>	0.001
SK 61 / 610	0,5 - 10	<b>198 806 532</b>	0.001
SK 62 / 620	0,5 - 16	<b>198 806 533</b>	0.001
SK 70 / 700	0,5 - 11	<b>198 806 534</b>	0.001
SK 71 / 710	1 - 33	<b>198 806 535</b>	0.001
SK 72 / 720	2 - 80	<b>198 806 536</b>	0.001
SK 73 / 730	10 - 220	<b>198 806 537</b>	0.001

### Spare part for variable area flow meter SK10-SK41/SK100-SK410 Standard version float PTFE Without magnet

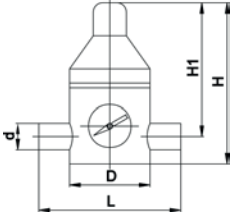
Type	d [mm]	DN [mm]	Code	kg
SK 20	50	40	<b>198 807 167</b>	0.096
SK 21	50	40	<b>198 807 171</b>	0.270
SK 30	63	50	<b>198 807 168</b>	0.170
SK 31	63	50	<b>198 807 172</b>	0.450
SK 40	75	65	<b>198 807 169</b>	0.179
SK 41	75	65	<b>198 807 170</b>	0.171

# Process control valves

## PROGEF Standard Pressure reducing valve type V182/82 With fusion spigots metric

Model:

- Material: PP-H



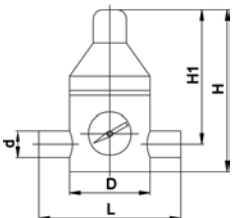
Type	d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	FPM Code	PTFE Code	kg
V182	16	10	0.5 - 10	199 041 621	199 041 631		0.540
V182	20	15	0.5 - 10	199 041 622	199 041 632		0.540
V182	25	20	0.5 - 10	199 041 623	199 041 633		1.020
V182	32	25	0.5 - 10	199 041 624	199 041 634		1.300
V182	40	32	0.5 - 10	199 041 625	199 041 635		2.240
V182	50	40	0.5 - 10	199 041 626	199 041 636		2.240
V182	63	50	0.5 - 10	199 041 377	199 041 378		5.700
V82	75	65	0.5 - 6	199 041 039	-	199 041 049	7.900
V82	90	80	0.5 - 6	199 041 040	-	199 041 050	12.900
V82	110	100	0.5 - 4	199 041 041	-	199 041 051	23.300

Type	D [mm]	L [mm]	H [mm]	H1 [mm]
V182	70	134	130	100
V182	70	134	130	100
V182	100	174	180	134
V182	100	174	180	134
V182	130	224	230	175
V182	130	224	230	175
V182	150	260	285	210
V82	200	300	350	250
V82	250	360	425	305
V82	300	420	495	345

## PROGEF Standard Pressure reducing valve type V182/82 With butt fusion spigots IR metric

Model:

- Material: PP-H

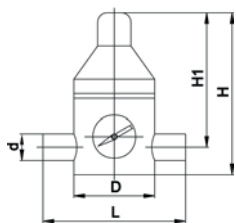


Type	d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	FPM Code	PTFE Code	kg
V182	16	10	0.5 - 10	199 041 641	199 041 651		
V182	20	15	0.5 - 10	199 041 642	199 041 652		0.550
V182	25	20	0.5 - 10	199 041 643	199 041 653		1.030
V182	32	25	0.5 - 10	199 041 644	199 041 654		1.030
V182	40	32	0.5 - 10	199 041 645	199 041 655		2.240
V182	50	40	0.5 - 10	199 041 646	199 041 656		2.240
V182	63	50	0.5 - 10	199 041 351	199 041 358		3.960
V82	75	65	0.5 - 6	199 041 417		199 041 427	7.910
V82	90	80	0.5 - 6	199 041 418		199 041 428	12.910
V82	110	100	0.5 - 4	199 041 419		199 041 429	23.300

Type	D [mm]	L [mm]	H [mm]	H1 [mm]
V182	70		130	100
V182	70	150	130	100
V182	100	190	180	134
V182	100	190	180	134
V182	130	240	230	175
V182	130	240	230	175
V182	150	260	285	210

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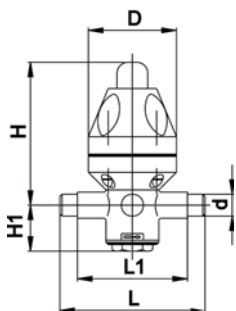
Type	D [mm]	L [mm]	H [mm]	H1 [mm]
V82				
V82				
V82				



## PROGEF Standard Pressure reducing valve type V782 With fusion spigots metric

Model:

- Material: PP-H



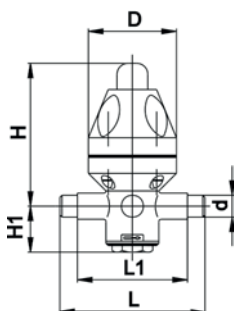
d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]
16	10	0.5 - 10	199 041 072	199 041 078	0.450	83	134	102	138	48
20	15	0.5 - 10	199 041 073	199 041 079	0.460	83	134	102	138	48
25	20	0.5 - 10	199 041 074	199 041 080	1.240	113	154	110	205	65
32	25	0.5 - 10	199 041 075	199 041 081	1.250	113	154	110	205	65
40	32	0.5 - 10	199 041 076	199 041 082	3.910	165	224	162	248	95
50	40	0.5 - 10	199 041 077	199 041 083	3.930	165	224	162	248	95



## PROGEF Standard Pressure reducing valve type V782 With butt fusion spigots IR metric

Model:

- Material: PP-H



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]
20	15	0.5 - 10	199 041 299	199 041 404	0.460	83	172	102	138	48
25	20	0.5 - 10	199 041 300	199 041 405	1.240	113	190	110	205	65
32	25	0.5 - 10	199 041 301	199 041 406	1.250	113	190	110	205	65
40	32	0.5 - 10	199 041 302	199 041 407	3.910	165	262	162	248	95
50	40	0.5 - 10	199 041 303	199 041 408	4.760	165	262	162	248	95

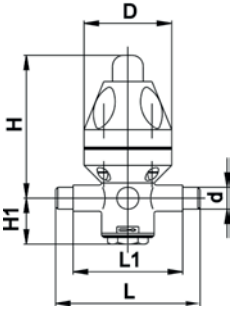


## PROGEF Standard Pressure retaining valve type V786 With fusion spigots metric

Model:

- Material: PP-H

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]
16	10	0.5 - 10	199 041 102	199 041 108	0.450	83	134	102	138	38
20	15	0.5 - 10	199 041 103	199 041 109	0.450	83	134	102	138	38
25	20	0.5 - 10	199 041 104	199 041 110	1.280	112	154	110	205	55
32	25	0.5 - 10	199 041 105	199 041 111	1.280	112	154	110	205	55
40	32	0.5 - 4	199 041 106	199 041 112	3.480	165	224	162	248	85
50	40	0.5 - 4	199 041 107	199 041 113	4.692	165	224	162	248	85

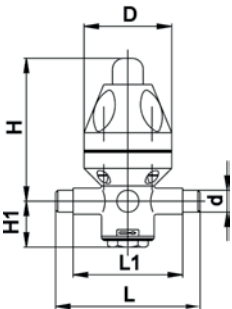


## PROGEF Standard Pressure retaining valve type V786 With butt fusion spigots IR metric

Model:

- Material: PP-H

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]
20	15	0.5 - 10	199 041 431	199 041 437	0.450	83	172	102	138	38
25	20	0.5 - 10	199 041 432	199 041 438	1.280	112	190	110	205	55
32	25	0.5 - 10	199 041 433	199 041 439	1.280	112	190	110	205	55
40	32	0.5 - 4	199 041 434	199 041 440	3.480	165	262	162	248	85
50	40	0.5 - 4	199 041 435	199 041 441	3.480	165	262	162	248	85



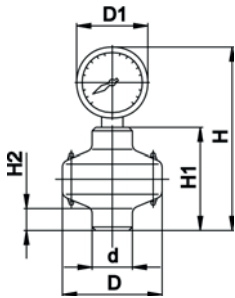


## PROGEF Standard Gauge guard type Z700 With manometer

Model:

- Material: PP-H

d [mm]	Pressure range [bar]	Pressure range [psi]	PTFE Code	kg	G_R	D [mm]	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]
25	0.0 - 10	0.0 - 145.03	<b>199 041 002</b>	0.250	¼	72	63	129	71	15
25	0.0 - 6	0.0 - 87.02	<b>199 041 294</b>	0.250	¼	72	63	129	71	15
32	0.0 - 10	0.0 - 145.03	<b>199 041 003</b>	0.542	½	100	100	210	90	22
32	0.0 - 6	0.0 - 87.02	<b>199 041 295</b>	0.540	½	100	100	210	90	22

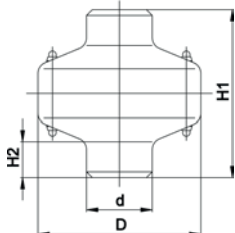


## PROGEF Standard Gauge guard type Z701 Without manometer

Model:

- Material: PP-H

d [mm]	PTFE Code	kg	G_R	D [mm]	H1 [mm]	H2 [mm]
25	<b>199 041 008</b>	0.108	¼	72	71	15
32	<b>199 041 009</b>	0.183	½	100	90	22



## PROGEF Standard Water jet suction pump type P20

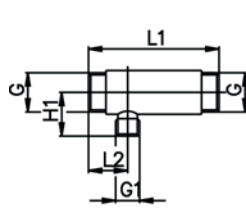
Model:

- Material: PP-H
- DN 10-20: BSP parallel female thread
- DN 25-50: Fusion socket metric
- DN 65-80: Fusion spigot metric

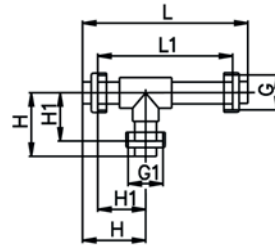
d [mm]	DN [mm]	PN	EPDM Code	kg	G [inch]	G1 [inch]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]
16	10	10	<b>199 041 129</b>	0.100	R 3/4	R 3/4		110	40		35
20	15	10	<b>199 041 130</b>	0.170	R 1	R 3/4		125	40		35
25	20	10	<b>199 041 131</b>	0.270	R 1 1/4	R 3/4		145	45		45
32	25	10	<b>199 041 132</b>	0.400	R 1 1/2	R 1 1/2	245	195		96	71
40	32	10	<b>199 041 133</b>	0.604	R 2	R 2	297	239		116	87
50	40	10	<b>199 041 134</b>	1.090	R 2 1/4	R 2 1/4	369	301		139	105

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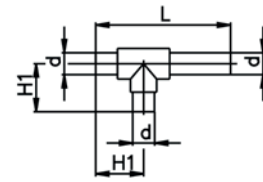
d [mm]	DN [mm]	PN	EPDM Code	kg	G [inch]	G1 [inch]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]
63	50	10	<b>199 041 135</b>	1.930	R 2 3/4	R 2 3/4	433	351		169	128
75	65	10	<b>199 041 136</b>	1.603	R 1	-	388				115
90	80	10	<b>199 041 137</b>	2.570	R 2 3/4	-	465				149



DN 10 – 20



DN 25 – 50

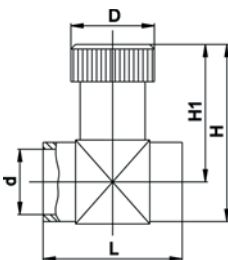


DN 65 – 80

## PROGEF Standard Throttle valve type V251 With fusion sockets metric

Model:

- Material: PP-H

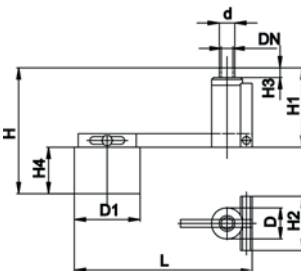


d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
16	10	10	<b>199 041 217</b>	<b>199 041 224</b>	0.032	29	47	57	45
20	15	10	<b>199 041 218</b>	<b>199 041 225</b>	0.051	35	55	66	51
25	20	10	<b>199 041 219</b>	<b>199 041 226</b>	0.080	40	66	80	63
32	25	10	<b>199 041 220</b>	<b>199 041 227</b>	0.135	47	80	96	75
40	32	10	<b>199 041 221</b>	<b>199 041 228</b>	0.243	56	100	111	86
50	40	10	<b>199 041 222</b>	<b>199 041 229</b>	0.419	70	120	133	101
63	50	10	<b>199 041 223</b>	<b>199 041 230</b>	0.600	88	146	158	118

## PROGEF Standard Float valve type V140 With fusion spigots metric

Model:

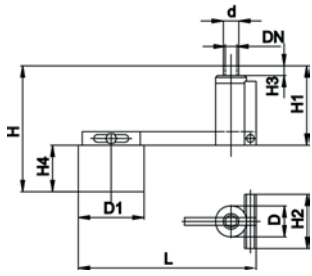
- Material: PP-H
- Lever 1:10



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
16	10	6	<b>199 041 165</b>	<b>199 041 174</b>	0.460
20	15	6	<b>199 041 166</b>	<b>199 041 175</b>	0.500
25	20	6	<b>199 041 167</b>	<b>199 041 176</b>	1.382
32	25	6	<b>199 041 168</b>	<b>199 041 177</b>	2.140
40	32	6	<b>199 041 169</b>	<b>199 041 178</b>	3.250
50	40	6	<b>199 041 170</b>	<b>199 041 179</b>	4.400
63	50	6	<b>199 041 171</b>	<b>199 041 180</b>	5.800
75	65	6	<b>199 041 172</b>	<b>199 041 181</b>	7.400
90	80	6	<b>199 041 173</b>	<b>199 041 182</b>	8.200

d [mm]	D [mm]	D1 [mm]	L [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
16	45	125	380	270	120	80	14	130
20	45	125	380	270	120	80	16	130
25	65	200	530	340	160	110	19	170
32	65	200	530	345	165	110	22	170
40	90	225	720	440	210	130	26	210
50	90	225	720	445	215	130	31	210

table continued next page



d [mm]	D [mm]	D1 [mm]	L [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	
63	130	315	975	595	255	160	38	290	
75	130	315	975	600	260	160	44	290	
90	150	355	1140	640	290	180	51	340	

# Solenoid valves

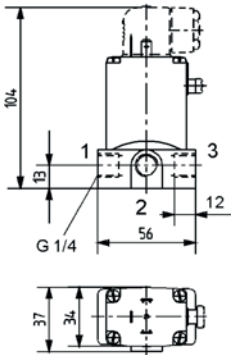
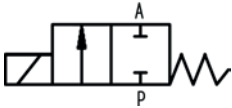
## PROGEF Standard

### Solenoid valve type 166

#### Function A straight-through valve 2/2 ways

#### Nominal voltage 24V DC

#### With G 1/4 line connection



#### Model:

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	D1_G [inch]	Function	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3	1/4	A	0.0 - 8.0	4	199 166 000	199 166 005	0.298
4	1/4	A	0.0 - 4.0	5	199 166 001	199 166 006	1.100
5	1/4	A	0.0 - 3.0	6	199 166 002	199 166 007	0.292

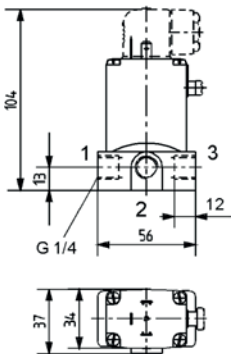
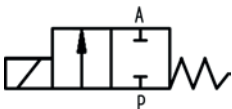
## PROGEF Standard

### Solenoid valve type 166

#### Function A straight-through valve 2/2 ways

#### Nominal voltage 230V 50Hz $\pm 10\%$

#### With G 1/4 line connection



#### Model:

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

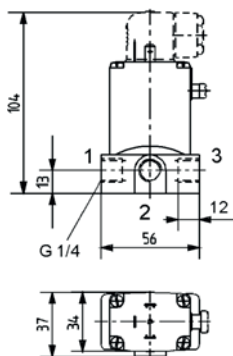
DN [mm]	D1_G [inch]	Function	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3	1/4	A	0.0 - 10.0	4	199 166 010	199 166 015	1.100
4	1/4	A	0.0 - 5.0	5	199 166 011	199 166 016	1.100
5	1/4	A	0.0 - 4.5	6	199 166 012	199 166 017	1.100



**PROGEF Standard**  
**Solenoid valve type 166**  
**Function E mixing valve 3/2 ways**  
**Nominal voltage 24V DC**  
**With G 1/4 line connection**

**Model:**

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65



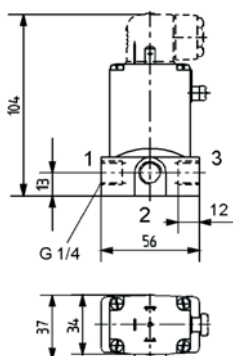
DN [mm]	D1_G [inch]	Function	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3	1/4	E	0.0 - 4.0	4	199 166 150	199 166 155	1.100
4	1/4	E	0.0 - 2.0	5	199 166 151	199 166 156	1.100



**PROGEF Standard**  
**Solenoid valve type 166**  
**Function E mixing valve 3/2 ways**  
**Nominal voltage 230V 50Hz  $\pm 10\%$**   
**With G 1/4 line connection**

**Model:**

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65



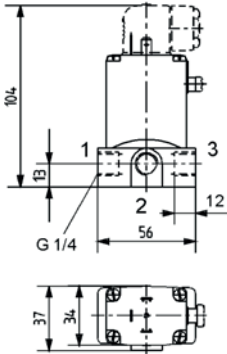
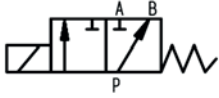
DN [mm]	D1_G [inch]	Function	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3	1/4	E	0.0 - 6.0	4	199 166 160	199 166 165	1.100
4	1/4	E	0.0 - 3.0	5	199 166 161	199 166 166	1.100



**PROGEF Standard  
Solenoid valve type 166  
Function F distribution valve 3/2 ways  
Nominal voltage 24V DC  
With G 1/4 line connection**

**Model:**

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65



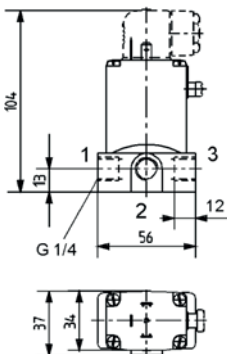
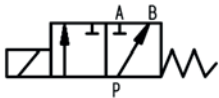
DN [mm]	D1_G [inch]	Function	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
4	1/4	F	0.0 - 4.0	5	199 166 201	199 166 206	1.100



**PROGEF Standard  
Solenoid valve type 166  
Function F distribution valve 3/2 ways  
Nominal voltage 230V 50Hz  $\pm 10\%$   
With G 1/4 line connection**

**Model:**

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65



DN [mm]	D1_G [inch]	Function	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
4	1/4	F	0.0 - 5.0	5	199 166 211	199 166 216	1.100