

Section 5

SYGEF[®]

Standard PVDF



SYGEF® Standard – Product Specification

Material	Polyvinylidene Fluoride (PVDF)
Color	opaque
Density	~1.78 g/cm ³ (ISO 1183 / ASTM D 792)
Surface tension	30–35 mJ/m ²
Linear expansion coefficient	0.12–0.18 mm/mK (DIN 53752)
E-modulus	≥1700 N/mm ² (EN ISO 527 / ASTM D 790)
Thermal conductivity	0.19 W/mK (DIN 52612)
Surface resistivity	5 × 10 ¹⁴ Ωcm (IEC 60093)
Dimension	d 20 (½")–d 315 (12") in accordance to ISO 10931
Pressure rating	Pipes/fittings: 20–110 mm PN 16 (232 PSI); 160–315 mm PN 10 (150 PSI) Valves: separate specification
Temperature rating	from –20 °C to 140 °C (–4 °F to 284 °F)
Production	Fittings/valves: injection molded Pipes: extruded and stress relieved (ISO 10931-2) Valves: injection molded (additional available oil free treated and paint compatible / silicon free)
Surface finish	Inner surface Ra ≤ 0.5 µm (20 µin) for injection molded and extruded components
Marking	All components are embossed with a permanent identification during the production process to ensure full traceability. Lot No Material Dimension Pressure Rating
Testing and inspection (ISO 10931)	Inclusions Visual inspection Surface finish Dimension tolerance Pressure testing
Approvals/conformance	DIBt ASME BPE FDA CFR 21 177.2510 USP 25 class VI (physiological non-toxic) FM-4910 listing) UL 723 ASTM E-84 25/50 for building plenums for sizes 20–75 mm
Welding technology	BCF® Plus, bead and crevice free fusion, size d20 (½") – d110 (4") IR Plus®, infrared fusion (DVS 2207-6), size d20 (½") – d315 (12") Butt fusion (DVS 2207-15), size d20 (½") – d315 (12") Socket fusion (DVS 2207-15), size d20 (½") – d63 (2")
Documentation*	Certificate of Conformance with FDA, USP EN 10204 2.2 EN 10204 3.1
Packing**	Multiple components single bagged in specified bag
Labeling	Brand Name Product Description Code Number Material Dimension
Main applications	Uses include delivery of pharmaceutical grade purified water (PW) and DI water, using hot water, steam chemical or ozone sanitization. Due to its excellent chemical resistance it is widely used in chemical distribution systems.
* On request ** Not for socket fusion products	



Pipe

246



IR Plus/BCF Plus Fusion Fittings

247



Socket Fusion Fittings

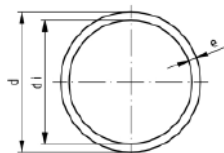
255



Manual Valves

261

Pipe

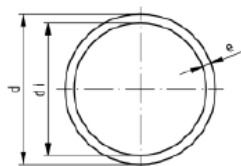


Pipe, PN 16, PVDF-Standard 25/50

Model:

- Material: PVDF
- Supplied in 5m (16.4 foot) length
- Certified for building air plenum according to UL 723 ASTM E-84 25/50, sizes 20-75mm

d (mm)	FM	Code	lbs/meter	e (mm)	di (mm)
20	BCF, IR	175 484 203	0.463	1.9	16.2
25	BCF, IR	175 484 204	0.593	1.9	21.2
32	BCF, IR	175 484 205	0.959	2.4	27.2
40	BCF, IR	175 484 206	1.241	2.4	35.2
50	BCF, IR	175 484 207	1.874	3.0	44.0
63	BCF, IR	175 484 208	2.403	3.0	57.0
75	BCF, IR	175 484 209	3.417	3.6	67.8



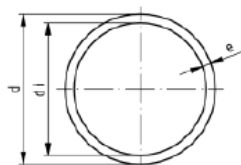
Pipe, PN 16, PVDF-Standard

Model:

- Material: PVDF
- Supplied in 5m (16.4 foot) length
- Material: PVDF-HP

* on request

d (mm)	FM	Code	lbs/meter	e (mm)	di (mm)
90	BCF, IR	175 480 210	4.916	4.3	81.4
110	BCF, IR	175 480 211	7.341	5.3	99.4



Pipe, PN 10, PVDF-Standard

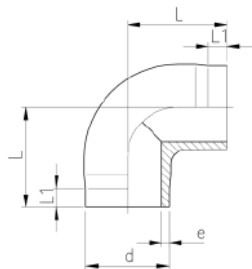
Model:

- Material: PVDF
- Supplied in 5m (16.4 foot) length

d (mm)	PN (bar)	FM	Code	lbs/meter	e (mm)	di (mm)
160	10	IR	175 480 668	10.009	4.9	150.2
200	10	IR	175 480 669	15.851	6.2	187.6
225	10	IR	175 480 670	19.731	6.9	211.2
250	10	IR	175 480 671	24.471	7.7	234.6
315	10	IR	175 480 674	38.801	9.7	295.6

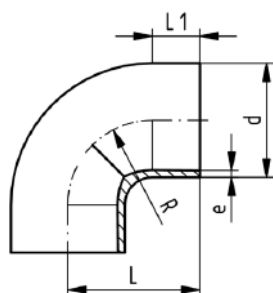
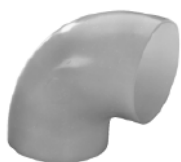
IR Plus/BCF Plus Fusion Fittings

90° Elbow, PN 16, PVDF-Standard



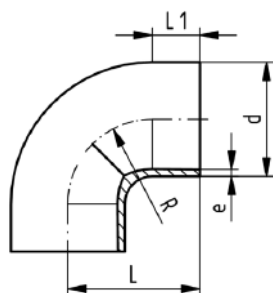
d (mm)	FM	SDR	Code	weight (kg)	e (mm)	L (mm)	L1 (mm)
20	BCF, IR	21	735 108 606	0.017	1.9	38	25
25	BCF, IR	21	735 108 607	0.026	1.9	42	26
32	BCF, IR	21	735 108 608	0.043	2.4	46	26
40	BCF, IR	21	735 108 609	0.062	2.4	51	28
50	BCF, IR	21	735 108 610	0.107	3.0	58	28
63	BCF, IR	21	735 108 611	0.188	3.0	66	28

90° Elbow, PN 16, PVDF-Standard



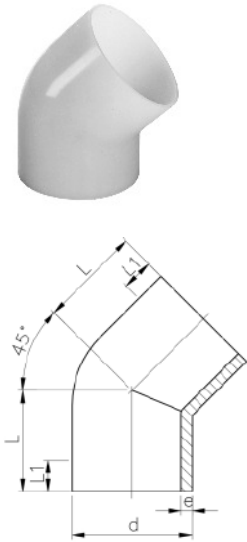
d (mm)	FM	SDR	Code	weight (kg)	e (mm)	L (mm)	L1 (mm)	R (mm)
20	BCF, IR	21	735 018 706	0.016	1.9	38	23	15
25	BCF, IR	21	735 018 707	0.022	1.9	42	23	19
32	BCF, IR	21	735 018 708	0.038	2.4	46	22	24
40	BCF, IR	21	735 018 709	0.055	2.4	51	21	30
50	BCF, IR	21	735 018 710	0.095	3.0	58	21	37
63	BCF, IR	21	735 018 711	0.138	3.0	66	21	45
75	BCF, IR	21	735 018 712	0.243	3.6	75	23	62
90	BCF, IR	21	735 018 713	0.423	4.3	90	23	77
110	BCF, IR	21	735 018 714	0.705	5.3	110	23	98

90° Elbow Sweep Radius, PN 10, PVDF-Standard



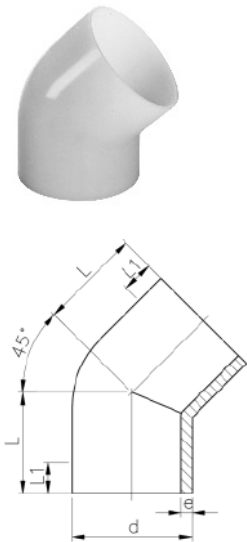
d (mm)	FM	Code	weight (kg)	e (mm)	L (mm)	L1 (mm)	R (mm)
160	IR	735 018 517	1.540	4.9	160	33	141
200	IR	735 018 519	2.018	6.2	200	33	181
225	IR	735 018 520	3.952	6.9	220	33	200
250	IR	735 018 521	4.304	7.7	254	48	232
315	IR	735 018 523	9.032	9.7	321	48	297

45° Elbow, PN 16, PVDF-Standard



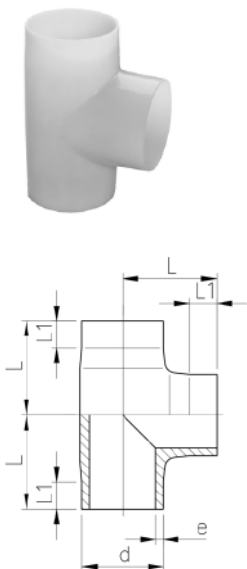
d (mm)	FM	SDR	Code	weight (kg)	e (mm)	L (mm)	L1 (mm)	R (mm)
20	BCF, IR	21	735 158 606	0.014	1.9	32	25	
25	BCF, IR	21	735 158 607	0.019	1.9	34	26	
32	BCF, IR	21	735 158 608	0.033	2.4	36	26	
40	BCF, IR	21	735 158 609	0.042	2.4	39	28	
50	BCF, IR	21	735 158 610	0.084	3.0	42	30	
63	BCF, IR	21	735 158 611	0.121	3.0	47	31	
75	BCF, IR	21	735 158 612	0.160	3.6	49	32	
90	BCF, IR	21	735 158 613	0.271	4.3	57	37	
110	BCF, IR	21	735 158 614	0.499	5.3	70	46	

45° Elbow, PN 10, PVDF-Standard



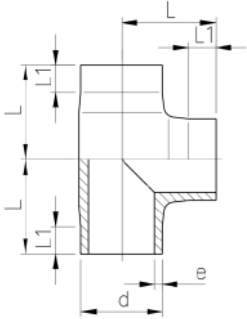
d (mm)	FM	Code	weight (kg)	e (mm)	L (mm)	L1 (mm)
160	IR	735 158 517	0.986	4.9	100	62
200	IR	735 158 519	1.928	6.2	124	77
225	IR	735 158 520	2.732	6.9	140	88
250	IR	735 158 521	2.402	7.7	120	47
315	IR	735 158 523	4.923	9.7	147	47

Tee, PN 16, PVDF-Standard



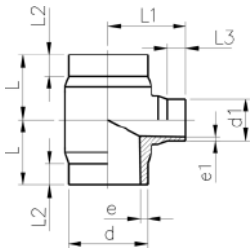
d (mm)	SDR	FM	Code	weight (kg)	e (mm)	L (mm)	L1 (mm)
20	21	BCF, IR	735 208 606	0.025	1.9	38	25
25	21	BCF, IR	735 208 607	0.033	1.9	42	27
32	21	BCF, IR	735 208 608	0.058	2.4	46	27
40	21	BCF, IR	735 208 609	0.083	2.4	51	28
50	21	BCF, IR	735 208 610	0.146	3.0	58	28
63	21	BCF, IR	735 208 611	0.254	3.0	66	28
75	21	BCF, IR	735 208 612	0.346	3.6	75	32
90	21	BCF, IR	735 208 613	0.600	4.3	90	39
110	21	BCF, IR	735 208 614	1.067	5.3	110	48

Tee, PN 10, PVDF-Standard



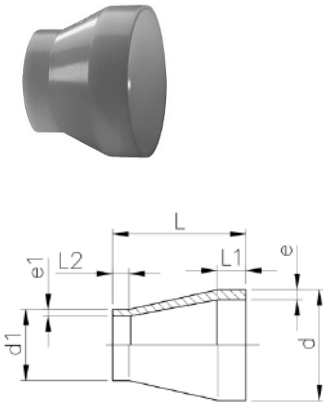
d (mm)	FM	Code	weight (kg)	e (mm)	L (mm)	L1 (mm)
160	IR	735 208 517	2.293	4.9	160	71
200	IR	735 208 519	4.297	6.2	200	80
225	IR	735 208 520	6.900	6.9	220	86
250	IR	735 208 521	6.939	7.7	223	70
315	IR	735 208 523	13.882	9.7	274	74

Reducer Tee, PN 10, PVDF-Standard



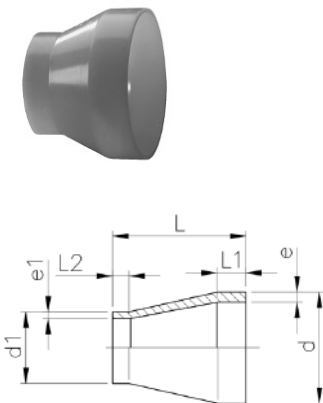
d - d1 (mm)	SDR	FM	Code	weight (kg)	e (mm)	e1 (mm)	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)
160 - 90	33-21	IR	735 208 562	2.300	4.9	4.3	155	130	60	25
160 - 110	33-21	IR	735 208 561	2.300	4.9	5.3	155	130	60	25
225 - 90	33-21	IR	735 208 570	4.400	6.9	4.3	155	160	60	25
225 - 110	33-21	IR	735 208 569	4.286	6.9	5.3	155	160	60	25
225 - 160	33-33	IR	735 208 568	4.239	6.9	4.9	155	170	60	35

Reducer, PN 16, PVDF-Standard

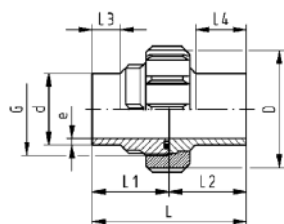


d - d1 (mm)	SDR	FM	Code	e (mm)	e1 (mm)	L (mm)	L1 (mm)	L2 (mm)
25 - 20	21	BCF, IR	735 908 637	1.9	1.9	50	22	22
32 - 20	21	BCF, IR	735 908 642	2.4	1.9	50	22	22
32 - 25	21	BCF, IR	735 908 641	2.4	1.9	50	22	22
40 - 20	21	BCF, IR	735 908 648	2.4	1.9	58	22	24
40 - 25	21	BCF, IR	735 908 647	2.4	1.9	55	22	24
40 - 32	21	BCF, IR	735 908 646	2.4	2.4	55	22	24
50 - 25	21	BCF, IR	735 908 654	3.0	1.9	60	22	25
50 - 32	21	BCF, IR	735 908 653	3.0	2.4	60	22	25
50 - 40	21	BCF, IR	735 908 652	3.0	2.4	60	22	25
63 - 32	21	BCF, IR	735 908 660	3.0	2.4	65	22	25
63 - 40	21	BCF, IR	735 908 659	3.0	2.4	65	22	25
63 - 50	21	BCF, IR	735 908 658	3.0	3.0	65	22	25
75 - 40	21	BCF, IR	735 908 666	3.6	2.4	68	24	25
75 - 50	21	BCF, IR	735 908 665	3.6	3.0	65	24	25
75 - 63	21	BCF, IR	735 908 664	3.6	3.0	65	24	25
90 - 63	21	BCF, IR	735 908 671	4.3	3.0	75	25	30
90 - 75	21	BCF, IR	735 908 670	4.3	3.6	75	25	35
110 - 63	21	BCF, IR	735 908 678	5.3	3.0	90	30	30
110 - 75	21	BCF, IR	735 908 677	5.3	3.6	90	30	35
110 - 90	21	BCF, IR	735 908 676	5.3	4.3	90	30	35

Reducer, PN 10, PVDF-Standard



d - d1 (mm)	FM	PN (bar)	SDR	Code	weight (kg)	e (mm)	e1 (mm)	L (mm)	L1 (mm)	L2 (mm)
160 - 110	IR	10	33 - 21	735 908 590	0.573	4.9	5.3	120	40	40
200 - 160	IR	10	33 - 33	735 908 592	0.830	6.2	4.9	145	50	40
225 - 110	IR	10	33 - 21	735 908 595	0.940	6.9	5.3	160	55	35
225 - 160	IR	10	33 - 33	735 908 596	1.140	6.9	4.9	160	55	40
225 - 200	IR	10	33 - 33	735 908 597	1.200	6.9	6.2	160	55	50



Union (FKM black), PN 16, PVDF-Standard

Model:

- d75, d90 and d100 with buttress-shaped thread

d	SDR	Code	weight	D	e	L	L1	L2	L3	L4	G (R/Rp BS Thread)
(mm)			(kg)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(inch)
20	21	735 528 606	0.068	43	1.9	106	53	53	25	37	1
25	21	735 528 607	0.104	53	1.9	112	56	56	25	38	1 1/4
32	21	735 528 608	0.147	60	2.4	118	59	59	25	40	1 1/2
40	21	735 528 609	0.223	74	2.4	124	62	62	25	41	2
50	21	735 528 610	0.294	82	3.0	130	65	65	25	43	2 1/4
63	21	735 528 611	0.449	100	3.0	136	68	68	25	44	2 3/4
75	21	735 528 612	0.740	133	3.6	132	66	66	24	34	S107.5x3.6
90	21	735 528 613	0.773	133	4.3	130	65	65	24	48	S107.5x3.6
110	21	735 528 614	1.054	155	5.3	130	65	65	25	45	S127.5x3.6

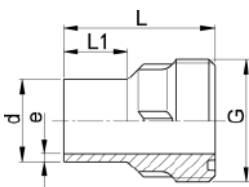


Valve end with spigot

Model:

- For unions and diaphragm valve Type 514

d	PN	PVDF	weight	z	L	z1	D	D1	d1
(mm)	(bar)	Code	(lb)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
20	16	735 608 606	0.044	24	40	26	30	28	16
25	16	735 608 607	0.068	25	44	28	39	36	20
32	16	735 608 608	0.097	27	49	30	45	42	25
40	16	735 608 609	0.152	31	57	35	57	53	32
50	16	735 608 610	0.183	35	66	40	63	59	40
63	16	735 608 611	0.278	39	77	46	79	74	50

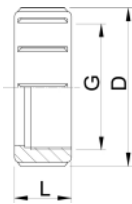


Union Bushing, PN 16, PVDF-Standard

Model:

- Suitable for SYGEF Standard Union Butt Fusion
- d75, d90 and d100 with buttress-shaped thread

d	FM	Code	weight	G (R/Rp BS Thread)	e	L	L1
(mm)			(kg)	(inch)	(mm)	(mm)	(mm)
20	BCF, IR	735 648 606	0.024	1	1.9	53	25
25	BCF, IR	735 648 607	0.038	1 1/4	1.9	56	25
32	BCF, IR	735 648 608	0.056	1 1/2	2.4	59	25
40	BCF, IR	735 648 609	0.082	2	2.4	62	25
50	BCF, IR	735 648 610	0.113	2 1/4	3.0	65	25
63	BCF, IR	735 648 611	0.168	2 3/4	3.0	68	25
75	BCF, IR	735 648 612	0.277	S 107.5 x 3.6	3.6	66	24
90	BCF, IR	735 648 613	0.275	S 107.5 x 3.6	4.3	65	24
110	BCF, IR	735 648 614	0.343	S 127.5 x 3.6	5.3	65	25



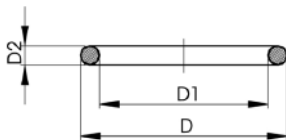
Union Nut, PN 16, PVDF-Standard

- d75, d90 and d110 with buttress shaped thread

Note:

For dimensions d75-110 please see instructions for installation

Socket Fusion d (mm)	Butt Fusion d (mm)	Code	weight (kg)	D (mm)	G (R/Rp BS Thread) (inch)	G (inch)	L (mm)
20	20	735 690 406	0.024	43	1	1	22
25	25	735 690 407	0.036	53	1 1/4	1 1/4	24
32	32	735 690 408	0.048	60	1 1/2	1 1/2	26
40	40	735 690 409	0.074	74	2	2	29
50	50	735 690 410	0.106	82	2 1/4	2 1/4	33
63	63	735 690 411	0.161	100	2 3/4	2 3/4	35
	75 - 90	735 690 422	0.289	133			40
	110	735 690 423	0.403	155			42

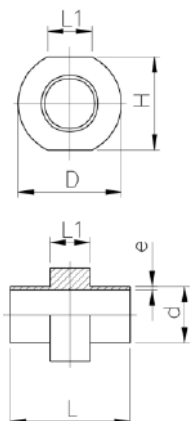


O-Ring for PROGEF, SYGEF Standard IR/BCF and Socket Fusion Unions

Model:

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

d (mm)	DN (mm)	EPDM Code	weight (kg)	FKM Code	weight (kg)	D (mm)	D1 (mm)	D2 (mm)	closest inch (inch)
20	15	748 410 006	0.002	749 410 006	0.002	27.28	20.22	3.53	1/2
25	20	748 410 007	0.002	749 410 007	0.002	35.23	28.17	3.53	3/4
32	25	748 410 008	0.003	749 410 008	0.002	39.99	32.93	3.53	1
40	32	748 410 009	0.003	749 410 009	0.007	51.33	40.65	5.34	1 1/4
50	40	748 410 010	0.004	749 410 010	0.060	57.68	46.99	5.34	1 1/2
63	50	748 410 011	0.005	749 410 011	0.003	70.37	59.69	5.34	2
75	65	748 410 014	0.007	749 410 014	0.012	92.60	81.92	5.34	2 1/2
90	80	748 410 015	0.008	749 410 015	0.015	111.68	101.00	5.34	3
110	100	748 410 016	0.016	749 410 016	0.031	134.00	120.20	6.99	4

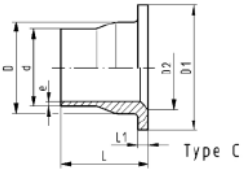
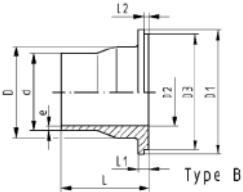
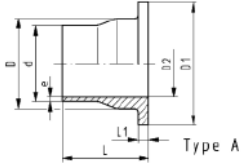


Instrument Installation Fitting, PN 16, PVDF Standard

Add "T" to end of part number and fee to list price for each factory milled thread (max. diameter is 3/4"). See published price list for fee.

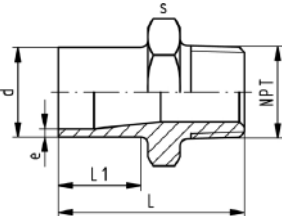
d (mm)	FM	Code	weight (kg)	e (mm)	L (mm)	D (mm)	H (mm)	L1 (mm)
20	BCF, IR	735 918 706	0.170	1.9	140	71	58	40
25	BCF, IR	735 918 707	0.200	1.9	140	75	63	40
32	BCF, IR	735 918 708	0.360	2.4	140	81	70	40
40	BCF, IR	735 918 709	0.390	2.4	140	88	78	40
50	BCF, IR	735 918 710	0.410	3.0	140	97	88	40
63	BCF, IR	155 918 711	0.430	3.0	140	109	101	40
75	BCF, IR	155 918 712	0.450	3.6	140	120	113	40
90	BCF, IR	155 918 713	0.470	4.3	140	134	128	40
110	BCF, IR	155 918 714	0.550	5.3	140	153	148	40

Flange Adaptor, PN 16/PN 10, ANSI Serrated, PVDF-Standard



d (mm)	FM	PN	Code	weight (lb)	e (mm)	D (mm)	D1 (mm)	D2 (mm)	L (mm)	L1 (mm)	Type
20	BCF, IR	16	735 798 806	0.064	1.9	26	45	15	54	6	A
25	BCF, IR	16	735 798 857	0.097	1.9	32	54	20	56	7	A
32	BCF, IR	16	735 798 858	0.139	2.4	40	63	26	58	7	A
40	BCF, IR	16	735 798 859	0.196	2.4	49	73	34	68	8	A
50	BCF, IR	16	735 798 860	0.309	3.0	60	82	43	69	8	A
63	BCF, IR	16	735 798 811	0.437	3.0	75	102	56	72	9	A
75	BCF, IR	16	735 798 812	0.686	3.6	89	122	66	80	10	A
90	BCF, IR	16	735 798 861	0.825	4.3	105	133	78	81	12	A
110	BCF, IR	16	735 798 814	1.237	5.3	125	158	100	81	13	C
160	IR	10	735 798 867	2.044	4.9	175	212	151	93	17	C
200	IR	10	735 798 869	3.962	6.2	232	268	207	102	22	C
225	IR	10	735 798 870	3.719	6.9	235	268	207	102	22	A

Male NPT Adaptor, PN 16, PVDF-Standard



Model:

- With butt fusion spigot and NPT tapered male thread
- Avoid stress when installing and large changes in temperature
- Connection to plastic thread only
- Do not apply solvent-based or other sealing compounds which could damage PVDF

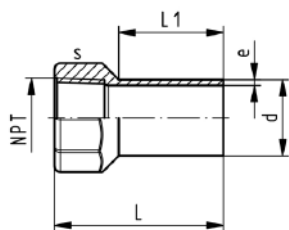
d (mm)	Thread Type	Size (inch)	FM	SDR	Code	weight (kg)	e (mm)	L (mm)	s (mm)	L1 (mm)
20	NPT	3/8	BCF, IR	21	735 914 555	0.024	1.9	50	32	26
20	NPT	1/2	BCF, IR	21	735 914 556	0.025	1.9	53	32	26
25	NPT	3/4	BCF, IR	21	735 914 557	0.035	1.9	55	36	26
32	NPT	1	BCF, IR	21	735 914 558	0.053	2.4	57	46	26
40	NPT	1 1/4	BCF, IR	21	735 914 559	0.075	2.4	60	55	26
50	NPT	1 1/2	BCF, IR	21	735 914 560	0.122	3.0	63	65	26
63	NPT	2	BCF, IR	21	735 914 561	0.176	3.0	69	75	27



Female NPT Adaptor, PN 16, PVDF-Standard

Model:

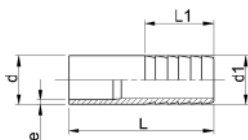
- With butt fusion spigot and NPT taper female thread
- Avoid stress when installing and large changes in temperature
- Connection to plastic thread only
- Do not apply solvent-based or other sealing compounds which could damage PVDF



d	SDR	Thread Type	Size	FM	Code	weight	e	L	s	L1
(mm)			(inch)			(kg)	(mm)	(mm)	(mm)	(mm)
20	21	NPT	3/8	BCF, IR	735 914 585	0.029	1.9	54	32	30
20	21	NPT	1/2	BCF, IR	735 914 586	0.027	1.9	54	32	30
25	21	NPT	3/4	BCF, IR	735 914 587	0.033	1.9	58	38	30
32	21	NPT	1	BCF, IR	735 914 588	0.066	2.4	63	48	30
40	21	NPT	1 1/4	BCF, IR	735 914 589	0.085	2.4	67	58	30
50	21	NPT	1 1/2	BCF, IR	735 914 590	0.108	3.0	67	65	30
* 63	21	NPT	2	BCF, IR	735 914 591	0.190	3.0	73	80	30

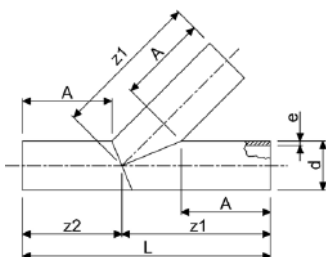
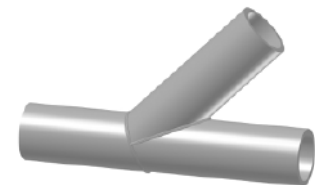


Hose Adapter, PN 16, PVDF-Standard



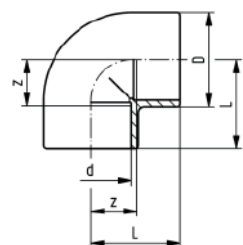
d - d1	SDR	FM	Code	weight	e	L	L1
(mm)				(kg)	(mm)	(mm)	(mm)
20 - 20	21	BCF, IR	735 968 606	0.015	1.9	64	27
25 - 25	21	BCF, IR	735 968 607	0.027	1.9	75	36
32 - 32	21	BCF, IR	735 968 608	0.042	2.4	82	36
40 - 40	21	BCF, IR	735 968 609	0.063	2.4	84	42
50 - 50	21	BCF, IR	735 968 610	0.084	3.0	90	48
63 - 60	21	BCF, IR	735 968 611	0.118	3.0	100	50

45° Wye, PVDF-Standard



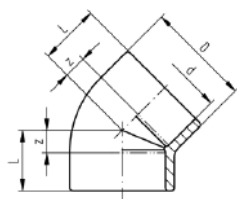
d	Code	e	A	z1	z2	L	closest inch
(mm)		(mm)	(inch)	(inch)	(inch)	(inch)	(inch)
50	155 345 050	3.0	5.91	8.28	6.31	14.59	1 1/2
63	155 345 063	3.0	5.91	8.90	6.42	15.32	2
75	155 345 075	3.6	5.91	9.47	6.52	15.99	2 1/2
90	155 345 090	4.3	7.87	12.15	8.61	20.76	3
110	155 345 110	5.3	7.87	13.10	8.77	21.87	4
160	155 345 160	4.9	7.87	15.48	9.18	24.66	6
200	155 345 200	6.2	9.84	19.35	11.47	30.82	8
225	155 345 225	6.9	9.84	20.54	11.68	32.21	9
250	155 345 250	7.7	11.81	23.70	13.86	37.56	10
315	155 345 315	9.7	13.78	28.74	16.38	45.12	12

Socket Fusion Fittings



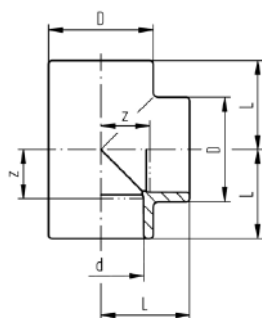
90° Elbow, PN 16, PVDF-Standard, Socket Fusion

d (mm)	SDR	Code	D (mm)	L (mm)	z (mm)
16	21	735 100 105	26	25	12
20	21	735 100 106	27	28	14
25	21	735 100 107	32	32	16
32	21	735 100 108	40	38	20
40	21	735 100 109	49	44	24
50	21	735 100 110	60	51	28
63	21	735 100 111	75	62	35



45° Elbow, PN 16, PVDF-Standard, Socket Fusion

d (mm)	SDR	Code	weight (kg)	D (mm)	L (mm)	z (mm)
16	21	735 150 105	0.017	23	20	7
20	21	735 150 106	0.020	27	21	7
25	21	735 150 107	0.031	32	24	8
32	21	735 150 108	0.051	40	28	10
40	21	735 150 109	0.082	49	33	13
50	21	735 150 110	0.119	60	36	13
63	21	735 150 111	0.212	75	43	16



Tee, PN 16, PVDF-Standard, Socket Fusion

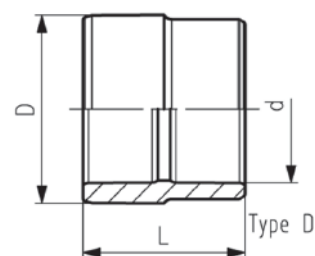
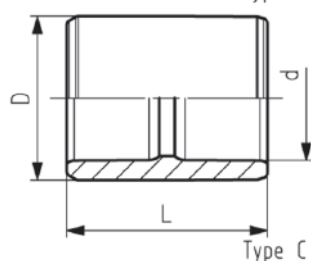
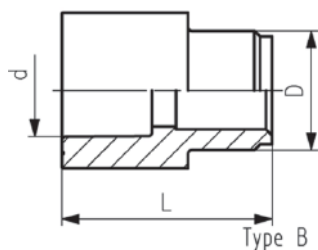
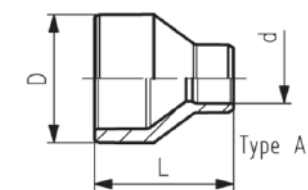
d (mm)	Code	weight (kg)	D (mm)	L (mm)	z (mm)
16	735 200 105	0.039	26	25	12
20	735 200 106	0.034	27	28	14
25	735 200 107	0.052	32	32	16
32	735 200 108	0.090	40	38	20
40	735 200 109	0.136	49	44	24
50	735 200 110	0.211	60	51	28
63	735 200 111	0.370	75	62	35



Reducer Bushing, PN 16, PVDF-Standard, Socket Fusion

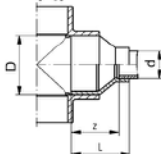
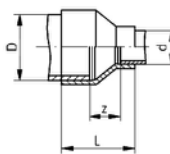
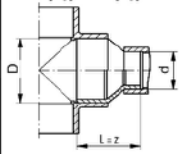
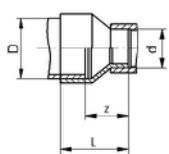
Attention:

- Z dimension (distance between fused pipe ends) depends on use of reducer. See diagrams below.

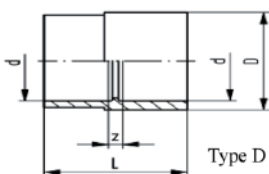
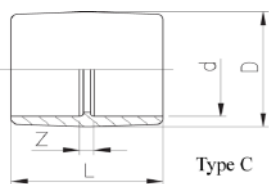


D-d (mm)	Code	weight (kg)	L (mm)	Type
20 - 16	735 910 334	0.017	35	B
25 - 20	735 910 337	0.017	37	A
32 - 20	735 910 342	0.024	43	A
32 - 25	735 910 107	0.024	39	C
40 - 20	735 910 348	0.034	48	A
40 - 25	735 910 347	0.037	48	A
40 - 32	735 910 108	0.037	43	C
50 - 20	735 910 355	0.056	54	A
50 - 25	735 910 354	0.058	54	A
50 - 32	735 910 353	0.063	54	A
50 - 40	735 910 109	0.062	48	D
63 - 20	735 910 362	0.102	64	A
63 - 25	735 910 361	0.106	64	A
63 - 32	735 910 360	0.109	64	A
63 - 40	735 910 359	0.118	64	A
63 - 50	735 910 110	0.106	54	D

overview about functionality

main function							additional functions											
reduction spigot - socket							reduction socket - socket				reduction spigot - spigot				reduction socket - spigot			
																		
Code	PN	L	spigot D	- socket d	L	Z	socket D	- socket d	L	Z	spigot D	- spigot d	L	Z	socket D	- spigot d	L	Z
735 910 334	16	35	20	- 16	35	22												
735 910 337	16	37	25	- 20	37	23												
735 910 342	16	43	32	- 20	43	29	25	- 20	43	13								
735 910 107	16	39	32	- 25	39	23												
735 910 348	16	48	40	- 20	48	34	32	- 20	48	16								
735 910 347	16	48	40	- 25	48	32	32	- 25	48	14	40	- 32	48	48				
735 910 108	16	43	40	- 32	43	25												
735 910 355	16	54	50	- 20	54	40	40	- 20	54	20								
735 910 354	16	54	50	- 25	54	38	40	- 25	54	18	50	- 32	54	54	40	- 32	54	34
735 910 353	16	54	50	- 32	54	36	40	- 32	54	16	50	- 40	54	54				
735 910 109	16	48	50	- 40	48	28												
735 910 362	16	64	63	- 20	64	50	50	- 20	64	27								
735 910 361	16	64	63	- 25	64	48	50	- 25	64	25	63	- 32	64	64	50	- 32	64	41
735 910 360	16	64	63	- 32	64	46	50	- 32	64	23	63	- 40	64	64	50	- 40	64	41
735 910 359	16	64	63	- 40	64	44	50	- 40	64	21	63	- 50	64	64				
735 910 110	16	54	63	- 50	54	31												

please note: illustration of the functions not inevitably conform to respective type!

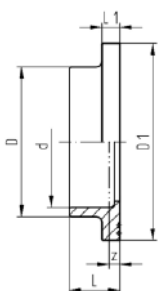


Coupling, PN 16, PVDF-Standard, Socket Fusion

Model:

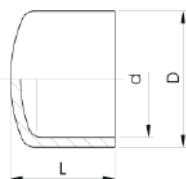
- Sizes d25 - d50 can be used as straight coupling or reducing bushing, as indicated

d (mm)	D-d (mm)	PN (bar)	Code	SP	weight (kg)	Type	D (mm)	L (mm)	z (mm)
16	-	16	735 910 105	10	0.020	C	26	33	7
20	-	16	735 910 106	2	0.016	C	27	35	7
25	32 - 25	16	735 910 107	2	0.024	C	32	39	7
32	40 - 32	16	735 910 108	2	0.037	C	40	43	7
40	50 - 40	16	735 910 109	2	0.062	D	50	48	8
50	63 - 50	16	735 910 110	2	0.106	D	63	54	8
63	-	16	735 910 111	2	0.153	C	75	62	8



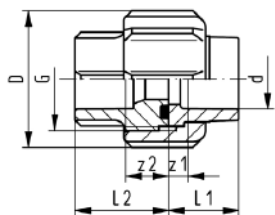
Flange Adaptor, PN 16, ANSI Serrated, PVDF-Standard, Socket Fusion

d (mm)	Code	weight (lb)	D (mm)	D1 (mm)	L (mm)	L1 (mm)	z (mm)
20	735 790 206	0.042	27	45	19	6	3
25	735 790 257	0.082	33	54	21	7	3
32	735 790 258	0.112	41	63	23	7	3
40	735 790 259	0.161	50	73	25	8	3
50	735 790 260	0.209	61	82	28	8	3
63	735 790 211	0.311	76	102	32	9	3



Cap, PN 16, PVDF-Standard, Socket Fusion

d (mm)	Code	weight (kg)	D (mm)	L (mm)
16	735 960 105	0.013	25	24
20	735 960 106	0.010	27	23
25	735 960 107	0.016	32	26
32	735 960 108	0.026	40	30
40	735 960 109	0.046	49	34
50	735 960 110	0.072	60	39
63	735 960 111	0.127	75	46

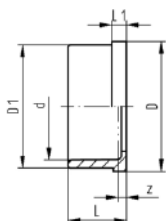


Union (FKM black), PN 16, PVDF-Standard, Socket Fusion

Model:

- With fusion socket metric
- Joining face: with O-ring groove
- Supplied with FKM O-Ring part# 749410005 - 011, respectively
- Please see installation instructions

d (mm)	Code	weight (kg)	D (mm)	G(R/Rp BS Thread) (inch)	G (inch)	L1 (mm)	L2 (mm)	z1 (mm)	z (mm)
16	735 510 105	0.025	35	¾	¾	18	24	5	11
20	735 510 106	0.057	43	1	1	19	26	5	12
25	735 510 107	0.090	53	1 ¼	1 ¼	21	28	5	12
32	735 510 108	0.118	60	1 ½	1 ½	23	30	5	12
40	735 510 109	0.195	74	2	2	25	34	5	14
50	735 510 110	0.244	82	2 ¼	2 ¼	28	39	5	16
63	735 510 111	0.403	100	2 ¾	2 ¾	32	47	5	20

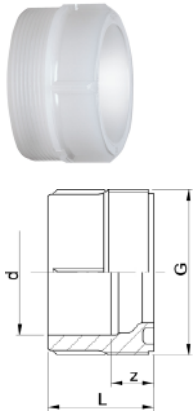


Union End, PN 16, PVDF-Standard, Socket Fusion

Model:

- Suitable for SYGEF Standard Union Socket Fusion

d (mm)	Code	D (mm)	D1 (mm)	L (mm)	L1 (mm)	z (mm)
16	735 600 105	24	22	18	4	5
20	735 600 106	30	28	19	5	5
25	735 600 107	39	36	21	5	5
32	735 600 108	45	42	23	6	5
40	735 600 109	57	53	25	6	5
50	735 600 110	63	59	28	7	5
63	735 600 111	78	74	32	7	5



Union Bushing, PN 16, PVDF-Standard, Socket Fusion

Model:

- Suitable for SYGEF Standard Union Socket Fusion

d (mm)	PN (bar)	Code	SP	weight (kg)	G (R/Rp BS Thread) (inch)	G (R/Rp BS Thread) (inch)	G (inch)	L (mm)	z (mm)
16	16	735 640 105	10	0.011	3/4	3/4	3/4	24	11
20	16	735 640 106	4	0.019	1	1	1	26	12
25	16	735 640 107	4	0.027	1 1/4	1 1/4	1 1/4	28	12
32	16	735 640 108	4	0.042	1 1/2	1 1/2	1 1/2	30	12
40	16	735 640 109	4	0.069	2	2	2	34	14
50	16	735 640 110	2	0.091	2 1/4	2 1/4	2 1/4	39	16
63	16	735 640 111	2	0.159	2 3/4	2 3/4	2 3/4	47	20



Union Nut, PN 16, PVDF-Standard

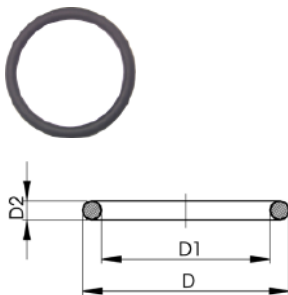
Model:

- Material: PVDF
- d75, d90 and d110 with buttress shaped thread

Note:

For dimensions d75-110 please see instructions for installation

Socket Fusion d (mm)	Butt Fusion d (mm)	Code	weight (kg)	D (mm)	G (R/Rp BS Thread) (inch)	G (inch)	L (mm)
16	16	735 690 405	0.011	35	3/4	3/4	21
20	20	735 690 406	0.024	43	1	1	22
25	25	735 690 407	0.036	53	1 1/4	1 1/4	24
32	32	735 690 408	0.048	60	1 1/2	1 1/2	26
40	40	735 690 409	0.074	74	2	2	29
50	50	735 690 410	0.106	82	2 1/4	2 1/4	33
63	63	735 690 411	0.161	100	2 3/4	2 3/4	35

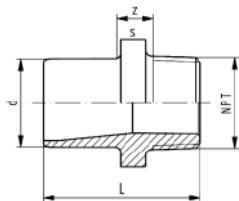


O-Ring for PROGEF, SYGEF Standard IR/BCF and Socket Fusion Unions

Model:

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

d (mm)	DN (mm)	EPDM Code	weight (kg)	FKM Code	weight (kg)	D (mm)	D1 (mm)	D2 (mm)	closest inch (inch)
16	10	748 410 005	0.002	749 410 005	0.002	20.78	15.54	2.62	3/8
20	15	748 410 006	0.002	749 410 006	0.002	27.28	20.22	3.53	1/2
25	20	748 410 007	0.002	749 410 007	0.002	35.23	28.17	3.53	3/4
32	25	748 410 008	0.003	749 410 008	0.002	39.99	32.93	3.53	1
40	32	748 410 009	0.003	749 410 009	0.007	51.33	40.65	5.34	1 1/4
50	40	748 410 010	0.004	749 410 010	0.060	57.68	46.99	5.34	1 1/2
63	50	748 410 011	0.005	749 410 011	0.003	70.37	59.69	5.34	2

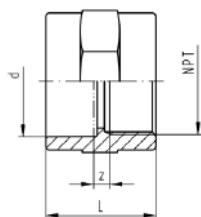


Male NPT Adapter, PN 16, PVDF-Standard, Socket Fusion

Model:

- Material: PVDF
- With socket fusion spigot and taper male thread
- Connection to plastic thread only
- Do not apply solvent-based or other sealing compounds which could damage PVDF
- Avoid stress when installing and large changes in temperature

d	Thread Type	Size	Code	weight	L	s	z
(mm)		(inch)		(kg)	(mm)	(mm)	(mm)
16	NPT	3/8	735 914 505	0.014	35	27	12
20	NPT	1/2	735 914 506	0.027	53	32	25
25	NPT	3/4	735 914 507	0.034	55	36	24
32	NPT	1	735 914 508	0.053	57	46	22
40	NPT	1 1/4	735 914 509	0.080	60	55	21
50	NPT	1 1/2	735 914 510	0.113	63	65	19
63	NPT	2	735 914 511	0.163	69	75	18

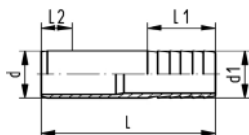


Female NPT Adapter, PN 16, PVDF-Standard, Socket Fusion

Model:

- Material: PVDF
- With socket fusion end and taper female thread
- Connection to plastic thread only
- Do not apply solvent-based or other sealing compounds which could damage PVDF
- Avoid stress when installing and large changes in temperature

d	Thread Type	Size	Code	weight	L	s	z
(mm)		(inch)		(kg)	(mm)	(mm)	(mm)
16	NPT	3/8	735 914 205	0.016	29	27	3
20	NPT	1/2	735 914 206	0.030	34	32	5
25	NPT	3/4	735 914 207	0.036	38	36	6
32	NPT	1	735 914 208	0.067	43	46	7
40	NPT	1 1/4	735 914 209	0.100	47	55	7
50	NPT	1 1/2	735 914 210	0.140	54	65	9
63	NPT	2	735 914 211	0.220	62	80	9



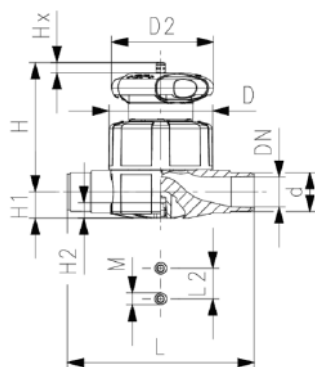
Hose Adapter, PN 16, PVDF-Standard, Socket Fusion

Model:

- Material: PVDF
- With socket fusion spigot (metric) and parallel hose connection

d - d1	Code	weight	L	L1	L2
(mm)		(kg)	(mm)	(mm)	(mm)
20 - 20	735 960 406	0.018	78	27	14
25 - 25	735 960 407	0.028	91	36	16
32 - 32	735 960 408	0.050	100	36	18
40 - 40	735 960 409	0.078	104	42	20
50 - 50	735 960 410	0.089	90	48	23
63 - 60	735 960 411	0.126	100	50	27

Manual Valves



Type 515 Diaphragm Valve SYGEF Standard PVDF Socket fusion spigot metric

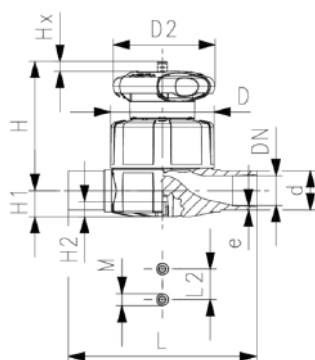
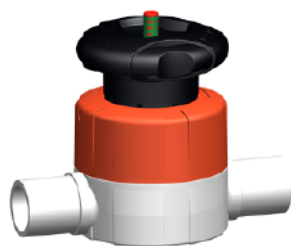
Model:

- Material: PVDF
- 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
- Self adjusting multifunctional module with integrated limit switches

d (mm)	PTFE/EPDM Code	D (mm)	D2 (mm)	L (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	M	Lift = Hx (mm)	closest inch (inch)
20	185 515 032	65	65	124	25	73	14	12	M6	7	1/2
25	185 515 033	80	65	144	25	81	18	12	M6	10	3/4
32	185 515 034	88	87	154	25	107	22	12	M6	13	1
40	185 515 035	101	87	174	45	115	26	15	M8	15	1 1/4
50	185 515 036	117	135	194	45	148	32	15	M8	19	1 1/2
63	185 515 037	144	135	223	45	166	39	15	M8	25	2



Type 515 Diaphragm Valve SYGEF Standard PVDF Butt fusion spigots metric

Model:

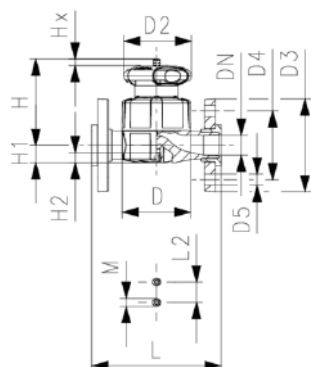
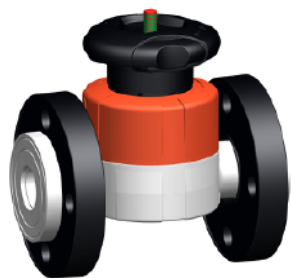
- Material: PVDF
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Overall length EN 558

Option:

- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches

d (mm)	PTFE/EPDM Code	weight (lb)
20	185 515 132	0.617
25	185 515 133	1.133
32	185 515 134	1.493
40	185 515 135	2.077
50	185 515 136	5.494
63	185 515 137	5.434

d (mm)	D (mm)	D2 (mm)	L (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	M	Lift = Hx (mm)	e (mm)	closest inch (inch)
20	65	65	124	25	73	14	12	M6	7	1.9	1/2
25	80	65	144	25	81	18	12	M6	10	1.9	3/4
32	88	87	155	25	107	22	12	M6	13	2.4	1
40	101	87	176	45	115	26	15	M8	15	2.4	1 1/4
50	117	135	193	45	148	32	15	M8	19	3.0	1 1/2
63	144	135	223	45	166	39	15	M8	25	3.0	2



Type 517 Diaphragm Valve SYGEF Standard PVDF ANSI Flanged

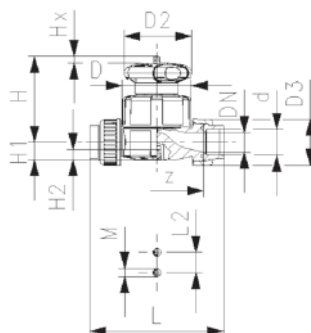
Model:

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

Option:

- Individual configuration of the valve
- Self adjusting multifunctional module with integrated limit switches

Size (inch)	PTFE/EPDM Code	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	185 517 732	65	65	95	60	16	130	25	73	14	12	M6	7
¾	185 517 733	80	65	105	70	16	150	25	81	18	12	M6	10
1	185 517 734	88	87	115	79	16	160	25	107	22	12	M6	13
1 ¼	185 517 735	101	87	140	89	16	180	45	115	26	15	M8	15
1 ½	185 517 736	117	135	150	98	16	200	45	148	32	15	M8	19
2	185 517 737	144	135	165	121	19	230	45	166	39	15	M8	25



Type 514 Diaphragm Valve SYGEF Standard PVDF Fusion sockets metric

Model:

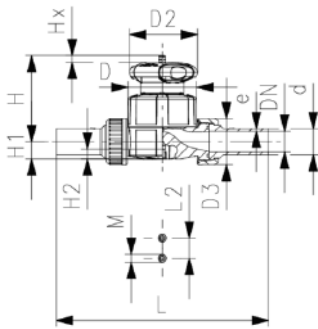
- Material: PVDF
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

Option:

- Self adjusting multifunctional module with integrated limit switches

d (mm)	PTFE/EPDM Code	weight (lb)
20	185 514 032	0.789
25	185 514 033	1.204
32	185 514 034	2.136
40	185 514 035	3.710
50	185 514 036	6.464
63	185 514 037	6.603

d (mm)	D (mm)	D2 (mm)	D3 (mm)	L (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	M	z (mm)	Lift = Hx (mm)	closest inch (inch)
20	65	65	43	128	25	73	14	12	M6	100	7	½
25	80	65	53	150	25	81	18	12	M6	118	10	¾
32	88	87	60	162	25	107	22	12	M6	126	13	1
40	101	87	74	184	45	115	26	15	M8	144	15	1 ¼
50	117	135	82	210	45	148	32	15	M8	164	19	1 ½
63	144	135	100	248	45	166	39	15	M8	194	25	2



Type 514 Diaphragm Valve SYGEF Standard PVDF Butt fusion spigots metric

Model:

- Material: PVDF
- 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
- Self adjusting multifunctional module with integrated limit switches

d	PTFE/EPDM weight
(mm)	Code (lb)
20	185 514 132 0.840
25	185 514 133 1.224
32	185 514 134 2.310
40	185 514 135 3.089
50	185 514 136 4.489
63	185 514 137 7.485

d	D	D2	D3	L	L2	H	H1	H2	M	Lift = Hx	e	closest inch
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)		(mm)	(mm)	(inch)
20	65	65	43	196	25	73	14	12	M6	7	1.9	½
25	80	65	53	221	25	81	18	12	M6	10	1.9	¾
32	88	87	60	234	25	107	22	12	M6	13	2.4	1
40	101	87	74	260	45	115	26	15	M8	15	2.4	1 ¼
50	117	135	82	284	45	148	32	15	M8	19	3.0	1 ½
63	144	135	100	321	45	166	39	15	M8	25	3.0	2



Type 317 Diaphragm Valve **SYGEF Standard PVDF** **Flanged**

Model:

- Material: PVDF
- Overall length according to EN 558
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)

Option:

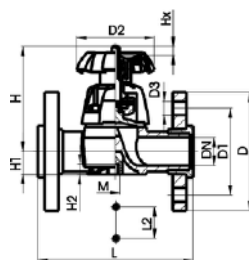
- Handwheel with built-in locking mechanism (standard version is nonlockable)

*** 3# and 6 # fixed flanges metric and Inch ANSI B16.5**

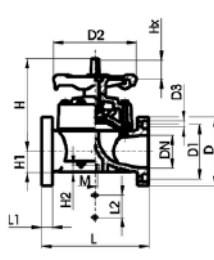
d **Size** **PTFE with** **weight**
(mm) (inch) **EPDM supp.** (lb)
diaphragm
Code

75	2 ½	175 317 538	12.606
90	3	175 317 009	23.722
110	4	175 317 340	33.964
160	6	175 317 012	69.446

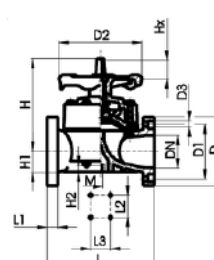
d	D	D1	D2	D3	H	H1	H2	Lift =	L	L1	L2	L3	M	AL
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Hx	(mm)	(mm)	(mm)	(mm)		
								(mm)						
75	185	140	152	18	201	46	15	30	290		70		M8	4
90	200	160	270	18	265	57	23	40	310	35	120		M12	8
110	225	191	270	19	304	69	23	50	350	35	120		M12	8
160	285	240	400	22	437	108	23	70	480	26	100	200	M12	8



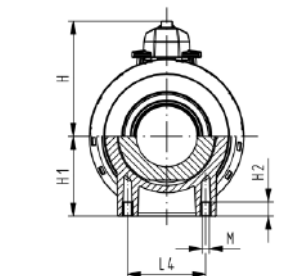
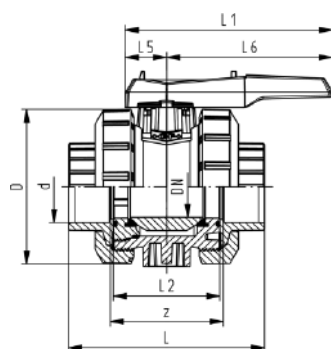
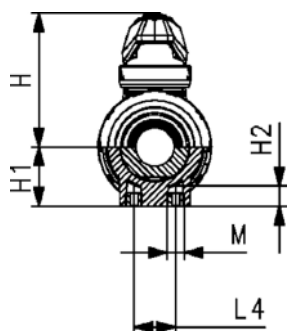
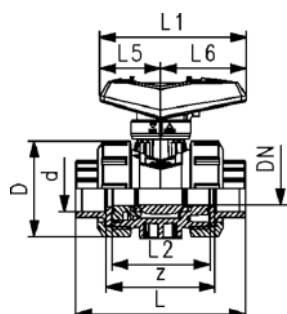
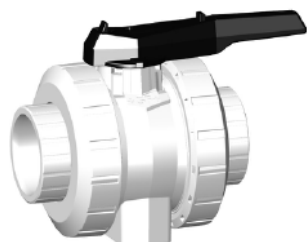
DN 15-65



DN 80-100



DN 150



SYGEF Standard Ball valve type 546 Pro With fusion sockets metric

Model:

- Material: PVDF
- Lockable lever as standard (DN10-DN50)
- For easy installation and removal
- Ball seats PTFE
- Integrated stainless steel mounting inserts
- Z-dimension, valve end and union nut **are compatible** with type 546 (1st Generation)

Option:

- Interface-module with position feedback sensor, incl. LED feedback (DN10-50)
- Manual spring return lever ("Dead man") (DN10-25)
- Pneumatic or electric actuators from GF
- Individual configuration of the valve possible
- Multifunctional module with integrated limit switches (DN65-100)

d (mm)	DN (mm)	PN (bar)	Cv-value (l/min)	FKM Code	weight (kg)
16	10	16	71	175 546 411	0.195
20	15	16	185	175 546 412	0.197
25	20	16	350	175 546 413	0.302
32	25	16	700	175 546 414	0.431
40	32	16	1000	175 546 415	0.760
50	40	16	1600	175 546 416	1.011
63	50	16	3100	175 546 417	1.856
75	65	16	5000	175 546 418	6.300
90	80	16	7000	175 546 419	9.500
110	100	16	11000	175 546 420	15.000

d (mm)	DN (mm)	D (mm)	H (mm)	H1 (mm)	H2 (mm)	L (mm)	L1 (mm)	L2 (mm)	L4 (mm)	L5 (mm)	L6 (mm)	M	z (mm)	closest inch (inch)
16	10	50	61	27	12	93	82	56	25	35	47	M6	67	$\frac{3}{8}$
20	15	50	61	27	12	95	82	56	25	35	47	M6	67	$\frac{1}{2}$
25	20	58	74	30	12	108	106	65	25	44	62	M6	76	$\frac{3}{4}$
32	25	68	80	36	12	118	106	71	25	44	62	M6	82	1
40	32	84	95	44	15	136	131	85	45	57	74	M8	96	1 $\frac{1}{4}$
50	40	97	102	51	15	147	131	89	45	57	74	M8	101	1 $\frac{1}{2}$
63	50	124	117	64	15	168	152	101	45	66	86	M8	114	2
75	65	166	150	85	15	233	270	136	70	64	206	M8	171	2 $\frac{1}{2}$
90	80	200	161	105	15	254	270	141	70	64	206	M8	184	3
110	100	238	178	123	22	299	320	164	120	64	256	M12	217	4



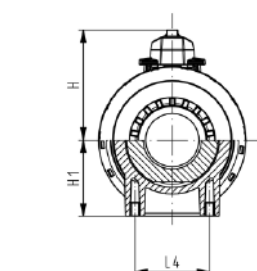
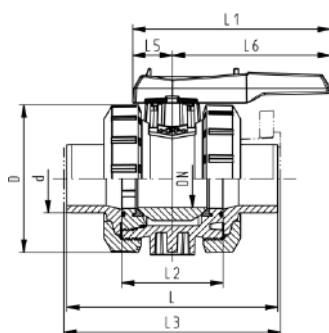
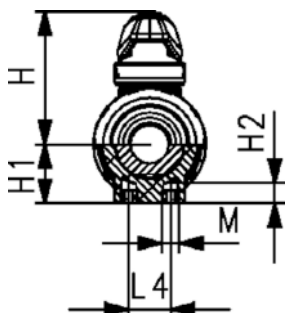
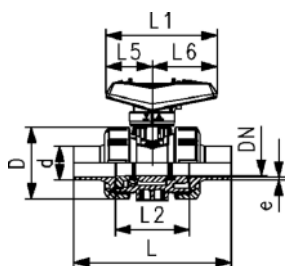
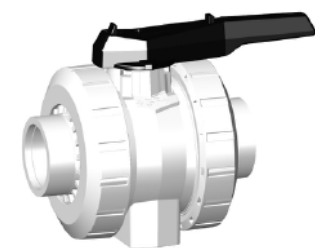
SYGEF Standard Ball valve type 546 Pro With butt fusion spigots IR-Plus metric

Model:

- Material: PVDF
- Lockable lever as standard (DN10-DN50)
- For easy installation and removal
- Ball seats PTFE
- Integrated stainless steel mounting inserts
- Z-dimension, valve end and union nut **are compatible** with type 546 (1st Generation)

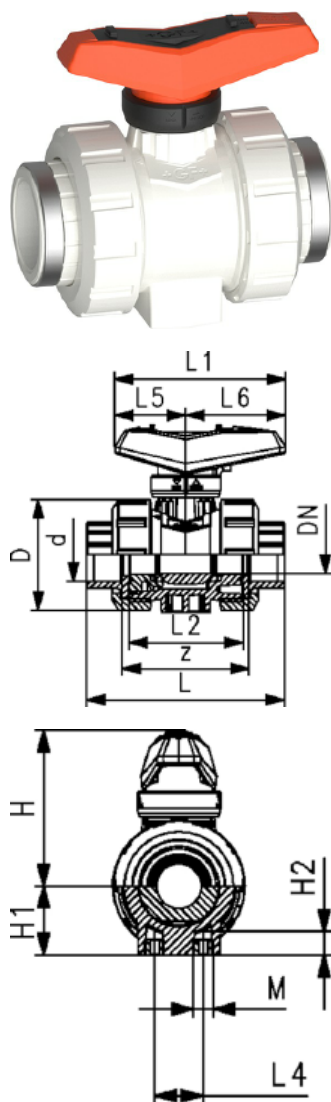
Option:

- Interface-module with position feedback sensor, incl. LED feedback (DN10-50)
- Manual spring return lever ("Dead man") (DN10-25)
- Pneumatic or electric actuators from GF
- Individual configuration of the valve possible
- Multifunctional module with integrated limit switches (DN65-100)



d (mm)	PN (bar)	Cv-value (l/min)	FKM Code	weight (kg)
20	16	185	175 546 272	0.201
25	16	350	175 546 273	0.301
32	16	700	175 546 274	0.438
40	16	1000	175 546 275	0.780
50	16	1600	175 546 276	1.110
63	16	3100	175 546 277	1.958

d (mm)	D (mm)	H (mm)	H1 (mm)	H2 (mm)	L (mm)	L1 (mm)	L2 (mm)	L4 (mm)	L5 (mm)	L6 (mm)	M	e (mm)
20	50	61	27	12	130	82	56	25	35	47	M6	1.9
25	58	78	30	12	143	105	65	25	44	62	M6	1.9
32	68	80	36	15	150	105	71	45	44	62	M6	2.4
40	84	95	44	15	171	131	85	45	57	74	M8	2.4
50	97	102	51	15	191	131	89	45	57	74	M8	3.0
63	124	117	64	15	219	152	101	70	66	86	M8	3.0



SYGEF Standard Ball valve type 546 Pro With threaded sockets NPT

Model:

- Material: PVDF
- Lockable lever as standard (DN10-DN50)
- For easy installation and removal
- Ball seats PTFE
- Integrated stainless steel mounting inserts
- Z-dimension, valve end and union nut **are compatible** with type 546 (1st Generation)

Option:

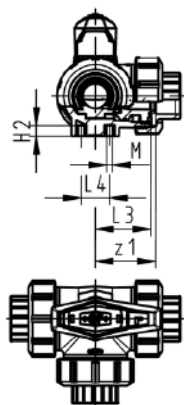
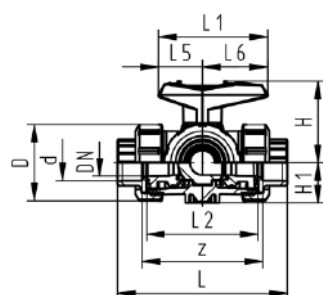
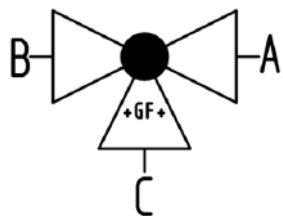
- Interface-module with position feedback sensor, incl. LED feedback (DN10-50)
- Manual spring return lever ("Dead man") (DN10-25)
- Pneumatic or electric actuators from GF
- Individual configuration of the valve possible

NPT (inch)	d (mm)	DN (mm)	PN (bar)	Cv-value (l/min)	FKM Code	weight (kg)
3/8	16	10	10	71	175 546 331	0.205
1/2	20	15	10	185	175 546 332	0.205
3/4	25	20	10	350	175 546 333	0.325
1	32	25	10	700	175 546 334	0.490
1 1/4	40	32	10	1000	175 546 335	0.820
1 1/2	50	40	10	1600	175 546 336	1.135
2	63	50	10	3100	175 546 337	2.150

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	61	27	12	96	82	56	25	35	47	M6	74
1/2	50	61	27	12	99	82	56	25	35	47	M6	70
3/4	58	74	30	12	111	106	65	25	44	62	M6	81
1	68	80	36	12	126	106	71	25	44	62	M6	89
1 1/4	84	95	44	15	146	131	85	45	57	74	M8	106
1 1/2	97	102	51	15	157	131	89	45	57	74	M8	117
2	124	117	64	15	183	152	101	45	66	86	M8	141



Type 543 3-Way Ball Valve
Horizontal/L-port, Standard PVDF
With fusion sockets metric

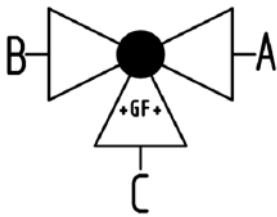
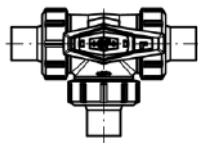
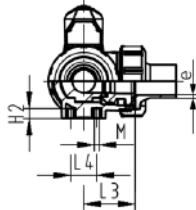
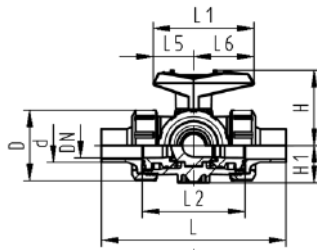


d (mm)	FKM Code	weight (lb)
16	175543011_old	0.619
20	175543012_old	0.639
25	175543013_old	1.016
32	175543014_old	1.442
40	175543015_old	2.643
50	175543016_old	3.631
63	175543017_old	7.114

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)	closest inch (inch)
16	50	110	77	72	36	25	32	45	57	28	8	6	82	41	3/8
20	50	112	77	72	36	25	32	45	57	28	8	6	82	41	1/2
25	58	129	97	85	43	25	39	58	67	32	8	6	97	49	3/4
32	68	146	97	98	49	25	39	58	73	36	8	6	110	55	1
40	84	170	128	118	59	45	54	74	90	45	9	8	132	66	1 1/4
50	97	193	128	135	68	45	54	74	97	51	9	8	151	76	1 1/2
63	124	244	152	176	88	45	66	87	116	65	9	8	188	94	2

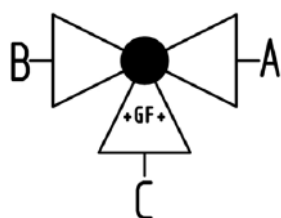
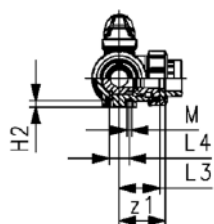
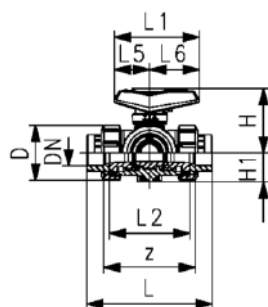
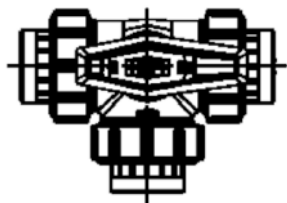


Type 543 3-Way Ball Valve
Horizontal/L-port, Standard PVDF
With butt fusion spigots IR-Plus metric



d (mm)	FKM Code	weight (lb)
20	175 543 052	0.732
25	175 543 053	1.058
32	175 543 054	1.620
40	175543055_old	2.703
50	175543056_old	4.098
63	175543057_old	7.430

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)	closest inch (inch)
20	50	146	77	72	36	25	32	45	57	28	8	6	1.9	½
25	58	163	97	85	43	25	39	58	67	32	8	6	1.9	¾
32	68	178	97	98	49	25	39	58	73	36	8	6	2.4	1
40	84	204	128	118	59	45	54	74	90	45	9	8	2.4	1 ¼
50	97	237	128	135	68	45	54	74	97	51	9	8	3.0	1 ½
63	124	296	152	176	88	45	66	87	116	65	9	8	3.0	2



SYGEF Standard 3-Way ball valve type 543 Pro

Horizontal/L-port

With threaded sockets NPT

Model:

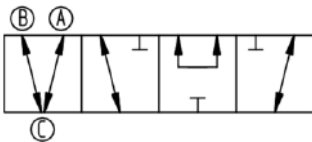
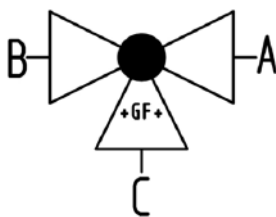
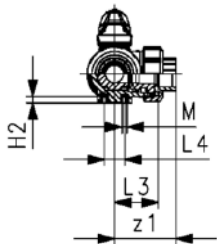
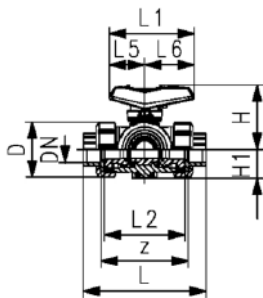
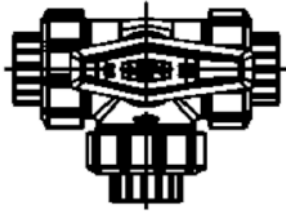
- Lockable lever as standard (DN10-DN50)
- Material: PVDF
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seats PTFE
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme
- Z-dimension, valve end and union nut are compatible with type 543 (1stGeneration)

Option:

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

d	DN	Thread	Type	Size	PN	Cv-value	FKM	weight
(mm)	(mm)			(inch)	(bar)	(l/min)	Code	(kg)
	10		NPT	3/8	10	50	175 543 071	0.312
	15		NPT	1/2	10	75	175 543 072	0.320
	20		NPT	3/4	10	150	175 543 073	0.461
	25		NPT	1	10	280	175 543 074	0.704
40	32		NPT	1 1/4	10	480	175 543 075	1.199
50	40		NPT	1 1/2	10	620	175 543 076	1.778
63	50		NPT	2	10	1230	175 543 077	3.462

D	H	H1	H2	L	L1	L2	L3	L4	L5	L6	M	z	z1
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)		(mm)	(mm)
50	61	28	8	112	82	72	36	25	35	47	6	86	43
50	61	28	8	114	82	72	36	25	35	47	6	80	40
58	74	32	8	131	106	85	43	25	44	62	6	95	48
68	80	36	8	154	106	98	49	25	44	62	6	110	55
84	95	45	9	180	131	118	59	45	57	74	8	132	66
97	102	51	9	203	131	135	68	45	57	74	8	157	79
124	117	65	9	258	152	176	88	45	66	86	8	210	105



SYGEF Standard 3-Way ball valve type 543 Pro

Horizontal/T-port

With fusion sockets metric

Model:

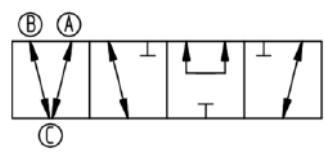
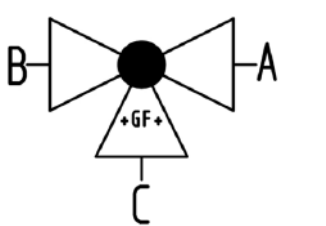
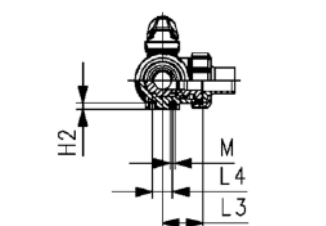
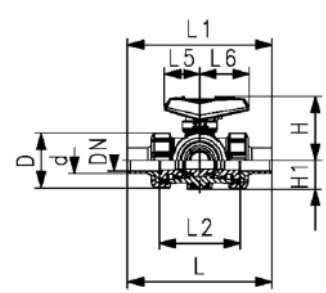
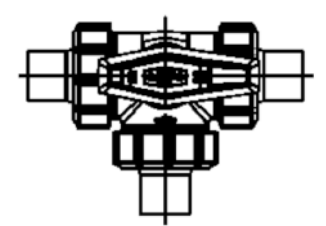
- Lockable lever as standard (DN10-DN50)
- Material: PVDF
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seats PTFE
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme
- Z-dimension, valve end and union nut are compatible with type 543 (1stGeneration)

Option:

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

d	DN	Size	PN	Cv-value	FKM	weight
(mm)	(mm)	(inch)	(bar)	(l/min)	Code	(kg)
16	10		10	140	175 543 111	0.283
20	15		10	200	175 543 112	0.288
25	20		10	470	175 543 113	0.417
32	25		10	793	175 543 114	0.644
40	32	1 ¼	10	1290	175 543 115	1.185
50	40	1 ½	10	1910	175 543 116	1.613
63	50	2	10	3100	175 543 117	3.405

d	D	H	H1	H2	L	L1	L2	L3	L4	L5	L6	M	z	z1	closest
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)		(mm)	(mm)	inch
16	50	61	28	8	110	82	72	36	25	35	47	6	82	41	¾
20	50	61	28	8	112	82	72	36	25	35	47	6	82	41	½
25	58	74	32	8	129	106	85	43	25	44	62	6	97	49	¾
32	68	80	36	8	146	106	98	49	25	44	62	6	110	55	1
40	84	95	45	9	170	131	118	59	45	57	74	8	132	66	1 ¼
50	97	102	51	9	193	131	135	68	45	57	74	8	151	76	1 ½
63	124	117	65	9	244	152	176	88	45	66	86	8	188	94	2



SYGEF Standard 3-Way ball valve type 543 Pro Horizontal/T-port With butt fusion spigots IR-Plus metric

Model:

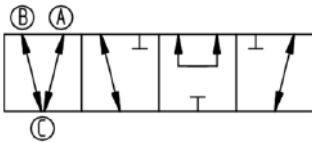
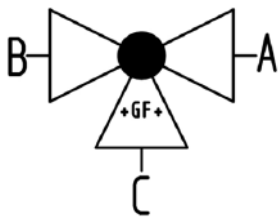
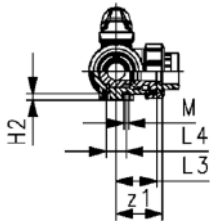
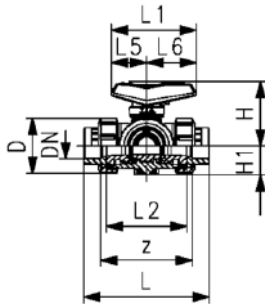
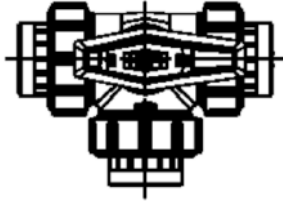
- Material: PVDF
- Lockable lever as standard (DN10-DN50)
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seats PTFE
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme
- Z-dimension, valve end and union nut are compatible with type 543 (1stGeneration)

Option:

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

d	DN	Size	PN	Cv-value	FKM	weight
(mm)	(mm)	(inch)	(bar)	(l/min)	Code	(kg)
20	15		10	200	175 543 152	0.321
25	20		10	470	175 543 153	0.478
32	25		10	793	175 543 154	0.655
40	32	1 ¼	10	1290	175 543 155	1.212
50	40	1 ½	10	1910	175 543 156	1.832
63	50	2	10	3100	175 543 157	3.566

d	D	H	H1	H2	L	L1	L2	L3	L4	L5	L6	M	e	closest
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	inch
20	50	61	28	8	146	82	72	36	25	35	47	6	1.9	½
25	58	74	32	8	163	106	85	43	25	44	62	6	1.9	¾
32	68	80	36	8	178	106	98	49	25	44	62	6	2.4	1
40	84	95	45	9	204	131	118	59	45	57	74	8	2.4	1 ¼
50	97	102	51	9	237	131	135	68	45	57	74	8	3.0	1 ½
63	124	117	65	9	296	152	176	88	45	66	86	8	3.0	2



SYGEF Standard 3-Way ball valve type 543 Pro

Horizontal/T-port

With threaded sockets NPT

Model:

- Material: PVDF
- Lockable lever as standard (DN10-DN50)
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seats PTFE
- 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
- Z-dimension, valve end and union nut are compatible with type 543 (1stGeneration)

Option:

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

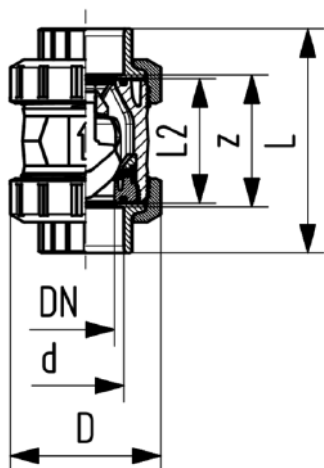
d	DN	Thread	Type	Size	PN	Cv-value	FKM	weight
(mm)	(mm)			(inch)	(bar)	(l/min)	Code	(kg)
	10		NPT	3/8	10	140	175 543 171	0.311
	15		NPT	1/2	10	200	175 543 172	0.319
	20		NPT	3/4	10	470	175 543 173	0.458
	25		NPT	1	10	793	175 543 174	0.695
	40	32	NPT	1 1/4	10	1290	175 543 175	1.185
	50	40	NPT	1 1/2	10	1910	175 543 176	1.751
	63	50	NPT	2	10	3100	175 543 177	3.405

D	H	H1	H2	L	L1	L2	L3	L4	L5	L6	M	z	z1
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)		(mm)	(mm)
50	61	28	8	112	82	72	36	25	35	47	6	86	43
50	61	28	8	114	82	72	36	25	35	47	6	80	40
58	74	32	8	131	106	85	43	25	44	62	6	95	48
68	80	36	8	154	106	98	49	25	44	62	6	110	55
84	95	45	9	180	131	118	59	45	57	74	6	132	66
97	102	51	9	203	131	135	68	45	57	74	6	157	79
124	117	65	9	258	152	176	88	45	66	86	6	210	105



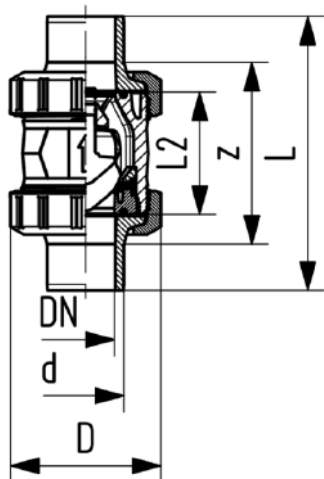
Check valve type 561 SYGEF Standard
With fusion sockets metric

d (mm)	FKM Code	weight (lb)	D (mm)	L (mm)	L2 (mm)	z (mm)	closest inch (inch)
16	175 561 011	0.353	50	93	56	67	$\frac{3}{8}$
20	175 561 012	0.353	50	95	56	66	$\frac{1}{2}$
25	175 561 013	0.750	58	109	65	77	$\frac{3}{4}$
32	175 561 014	0.794	68	119	71	83	1
40	175 561 015	1.477	84	135	85	99	1 $\frac{1}{4}$
50	175 561 016	2.183	97	147	89	105	1 $\frac{1}{2}$
63	175 561 017	3.902	124	168	101	117	2
75	175 561 018	8.003	166	233	136	167	2 $\frac{1}{2}$
90	175 561 019	12.787	200	254	141	180	3
110	175 561 020	20.834	238	301	164	215	4



Check valve type 561 SYGEF Standard
With butt fusion spigots IR-Plus metric

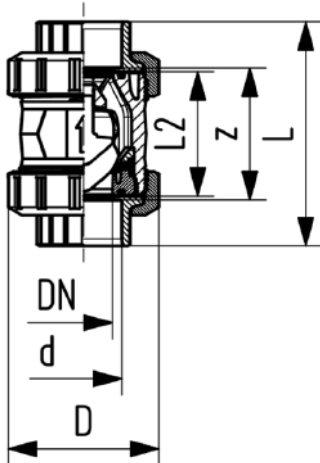
d (mm)	FKM Code	weight (lb)	D (mm)	L (mm)	L2 (mm)	e (mm)	closest inch (inch)
20	175 561 092	0.353	50	130	56	1.9	$\frac{1}{2}$
25	175 561 093	0.772	58	143	65	1.9	$\frac{3}{4}$
32	175 561 094	0.838	68	150	71	2.4	1
40	175 561 095	1.455	84	171	85	2.4	1 $\frac{1}{4}$
50	175 561 096	2.205	97	191	89	3.0	1 $\frac{1}{2}$
63	175 561 097	3.946	124	220	101	3.0	2
75	175 561 098	8.113	166	270	136	3.6	2 $\frac{1}{2}$
90	175 561 099	12.699	200	265	141	4.3	3
110	175 561 100	20.437	238	305	164	5.3	4





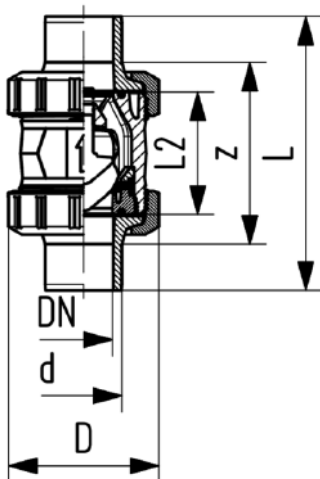
Check valve type 561
SYGEF Standard silicone free
With fusion sockets metric

d (mm)	FKM Code	D (mm)	L (mm)	L2 (mm)	z (mm)	closest inch (inch)
16	175 561 211	50	93	56	67	$\frac{3}{8}$
20	175 561 212	50	95	56	66	$\frac{1}{2}$
25	175 561 213	58	109	65	77	$\frac{3}{4}$
32	175 561 214	68	119	71	83	1
40	175 561 215	84	135	85	99	1 $\frac{1}{4}$
50	175 561 216	97	147	89	105	1 $\frac{1}{2}$
63	175 561 217	124	168	101	117	2
75	175 561 218	166	235	136	167	2 $\frac{1}{2}$
90	175 561 219	200	255	141	180	3
110	175 561 220	238	305	164	215	4



Check valve type 561
SYGEF Standard silicone free
With butt fusion spigots IR-Plus metric

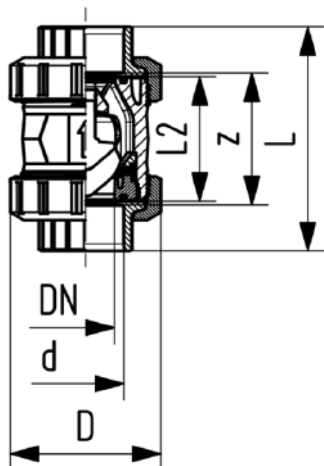
d (mm)	FKM Code	D (mm)	L (mm)	L2 (mm)	e (mm)	closest inch (inch)
20	175 561 272	50	130	56	1.9	$\frac{1}{2}$
25	175 561 273	58	143	65	1.9	$\frac{3}{4}$
32	175 561 274	68	150	71	2.4	1
40	175 561 275	84	171	85	2.4	1 $\frac{1}{4}$
50	175 561 276	97	191	89	3.0	1 $\frac{1}{2}$
63	175 561 277	124	220	101	3.0	2
75	175 561 278	166	290	136	3.6	2 $\frac{1}{2}$
90	175 561 279	200	310	141	4.3	3
110	175 561 280	238	350	164	5.3	4





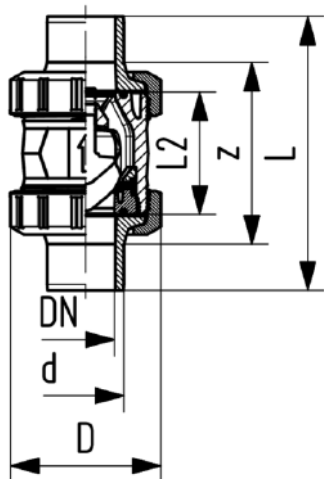
Check valve type 562 SYGEF Standard
With fusion sockets metric

d (mm)	FKM Code	weight (lb)	D (mm)	L (mm)	L2 (mm)	z (mm)	closest inch (inch)
16	175 562 011	0.353	50	93	56	67	$\frac{3}{8}$
20	175 562 012	0.353	50	95	56	66	$\frac{1}{2}$
25	175 562 013	0.750	58	109	65	77	$\frac{3}{4}$
32	175 562 014	0.794	68	119	71	83	1
40	175 562 015	1.477	84	135	85	99	1 $\frac{1}{4}$
50	175 562 016	2.183	97	147	89	105	1 $\frac{1}{2}$
63	175 562 017	3.902	124	168	101	117	2
75	175 562 018	8.003	166	235	136	167	2 $\frac{1}{2}$
90	175 562 019	12.787	200	255	141	180	3
110	175 562 020	20.834	238	305	164	215	4



Check valve type 562 SYGEF Standard
With butt fusion spigots IR-Plus metric

d (mm)	FKM Code	weight (lb)	D (mm)	L (mm)	L2 (mm)	e (mm)	closest inch (inch)
20	175 562 092	0.353	50	130	56	1.9	$\frac{1}{2}$
25	175 562 093	0.772	58	143	65	1.9	$\frac{3}{4}$
32	175 562 094	0.838	68	150	71	2.4	1
40	175 562 095	1.455	84	171	85	2.4	1 $\frac{1}{4}$
50	175 562 096	2.205	97	191	89	3.0	1 $\frac{1}{2}$
63	175 562 097	3.946	124	220	101	3.0	2
75	175 562 098	8.113	166	270	136	3.6	2 $\frac{1}{2}$
90	175 562 099	12.699	200	265	141	4.3	3
110	175 562 100	20.437	238	305	164	5.3	4



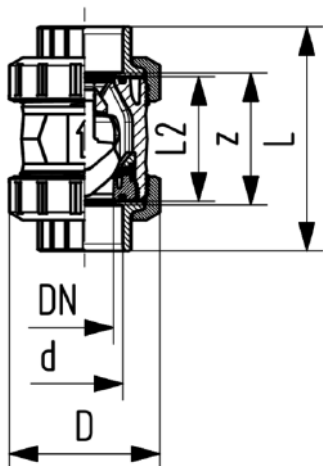


Check valve type 562 SYGEF Standard
silicone free
With fusion sockets metric

Model:

- Material: PVDF / silicone free cleaned
- For horizontal or vertical installation
- Sealing at a minimum water column of 1m
- 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
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360

Note: CK-54 is defined in both the high purity and low purity specs. GF is not a vendor for low purity CK-54.



d (mm)	FKM Code	weight (kg)	D (mm)	L (mm)	L2 (mm)	z (mm)	closest inch (inch)
16	175 562 211	0.160	50	93	56	67	¾
20	175 562 212	0.160	50	95	56	66	½
25	175 562 213	0.340	58	109	65	77	¾
32	175 562 214	0.360	68	119	71	83	1
40	175 562 215	0.670	84	135	85	99	1 ¼
50	175 562 216	0.990	97	147	89	105	1 ½
63	175 562 217	1.770	124	168	101	117	2
75	175 562 218	3.630	166	235	136	167	2 ½
90	175 562 219	5.800	200	255	141	180	3
110	175 562 220	9.450	238	305	164	215	4

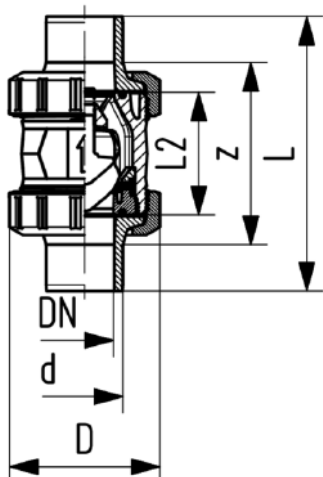


Check valve type 562 SYGEF Standard
silicone free
With butt fusion spigots IR-Plus metric

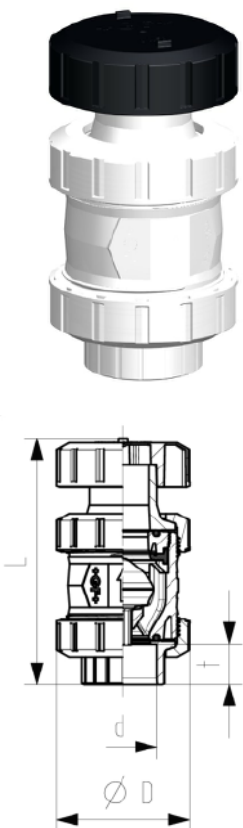
Model:

- Material: PVDF / silicone free cleaned
- For horizontal or vertical installation
- Sealing at a minimum water column of 1m
- 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
- Compact installation length, same as ball valve type 546
- Z-length, end connectors and union nuts **not** compatible with type 360

Note: CK-54 is defined in both the high purity and low purity specs. GF is not a vendor for low purity CK-54.

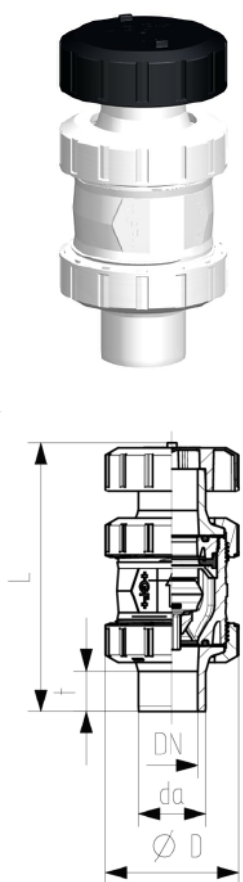


d (mm)	FKM Code	weight (kg)	D (mm)	L (mm)	L2 (mm)	e (mm)	closest inch (inch)
20	175 562 272	0.160	50	130	56	1.9	½
25	175 562 273	0.350	58	143	65	1.9	¾
32	175 562 274	0.380	68	150	71	2.4	1
40	175 562 275	0.660	84	171	85	2.4	1 ¼
50	175 562 276	1.000	97	191	89	3.0	1 ½
63	175 562 277	1.790	124	220	101	3.0	2
75	175 562 278	3.680	166	290	136	3.6	2 ½
90	175 562 279	5.760	200	310	141	4.3	3
110	175 562 280	9.270	238	350	164	5.3	4



Type 591 SYGEF Standard
Ventilating and bleed valve
With fusion sockets metric

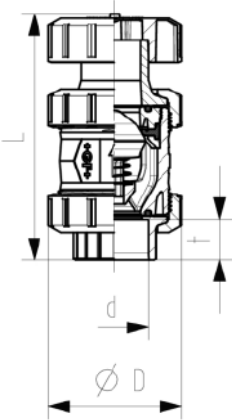
d (mm)	FKM Code	weight (kg)	D (mm)	L (mm)	t (mm)	closest inch (inch)
16	175 591 011	0.177	50	126	14	¾
20	175 591 012	0.177	50	127	15	½
25	175 591 013	0.363	58	142	16	¾
32	175 591 014	0.394	68	153	18	1
40	175 591 015	0.722	84	171	19	1 ¼
50	175 591 016	1.059	97	190	21	1 ½
63	175 591 017	1.876	124	219	26	2
75	175 591 018	3.630	166	256	33	2 ½
90	175 591 019	5.800	200	275	37	3
110	175 591 020	9.450	238	318	43	4



Type 591 SYGEF Standard
Ventilating and bleed valve
With socket fusion spigots metric

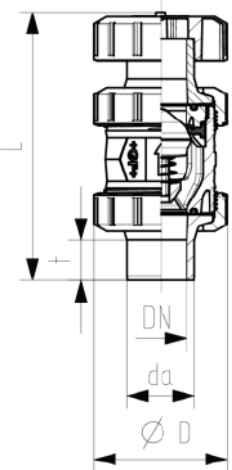
d (mm)	FKM Code	weight (lb)	D (mm)	L (mm)	t (mm)	closest inch (inch)
16	175 591 031	0.390	50	135	13	¾
20	175 591 032	0.412	50	140	14	½
25	175 591 033	0.866	58	157	16	¾
32	175 591 034	0.957	68	168	18	1
40	175 591 035	1.592	84	189	20	1 ¼
50	175 591 036	2.423	97	211	23	1 ½
63	175 591 037	4.268	124	245	27	2

Ventilating valve type 595
SYGEF Standard
With fusion sockets metric



d (mm)	FKM Code	weight (lb)	D (mm)	L (mm)	t (mm)	closest inch (inch)
16	175 595 011	0.390	50	126	14	$\frac{3}{8}$
20	175 595 012	0.390	50	127	15	$\frac{1}{2}$
25	175 595 013	0.800	58	142	16	$\frac{3}{4}$
32	175 595 014	0.869	68	153	18	1
40	175 595 015	1.592	84	171	19	1 $\frac{1}{4}$
50	175 595 016	2.335	97	190	21	1 $\frac{1}{2}$
63	175 595 017	4.136	124	219	26	2
75	175 595 018	8.003	166	256	33	2 $\frac{1}{2}$
90	175 595 019	12.787	200	275	37	3
110	175 595 020	20.834	238	318	43	4

Ventilating valve type 595
SYGEF Standard
With socket fusion spigots metric



d (mm)	FKM Code	weight (lb)	D (mm)	L (mm)	t (mm)	closest inch (inch)
16	175 595 031	0.390	50	135	13	$\frac{3}{8}$
20	175 595 032	0.412	50	140	14	$\frac{1}{2}$
25	175 595 033	0.866	58	157	16	$\frac{3}{4}$
32	175 595 034	0.957	68	168	18	1
40	175 595 035	1.592	84	189	20	1 $\frac{1}{4}$
50	175 595 036	2.423	97	211	23	1 $\frac{1}{2}$
63	175 595 037	4.268	124	245	27	2



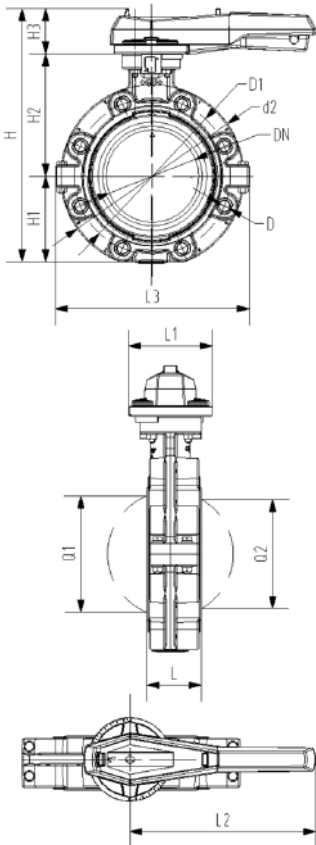
SYGEF Standard
Lugstyle butterfly valve 578 ANSI
Hand lever with ratchet settings

Model:

- Housing material: PP-GF30 with 316SS lug inserts
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension: ANSI/ASME B 16.5 Class 150
- We recommend for the dimensions DN250 and DN300 only 6 bar maximum system pressure for the hand lever version

Option:

- Optional accessory: Integrated position feedback with limit switches (sold separately)



d	Size	DN	PN	Cv-value	FKM	SP	weight
(mm)	(inch)	(mm)	(bar)	(l/min)	Code		(kg)
63	2	50	10	740	175 578 102	1	1.800
75	2 ½	65	10	1500	175 578 103	1	1.895
90	3	80	10	2400	175 578 104	1	2.251
110	4	100	10	3800	175 578 105	1	3.146
140	5	125	10	8600	175 578 106	1	4.660
160	6	150	10	11400	175 578 107	1	6.430
225	8	200	10	19900	175 578 108	1	8.625
280	10	300	10	34000	175 578 109	1	19.528
315	12	250	10	50000	175 578 110	1	26.106

d	Size	d2	D	D1	H	H1	H2	H3	L	L1	L2	L3	Q1	Q2
(mm)	(inch)	(mm)		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
63	2	160	UNC 5/8	120.6	265	77	134	54	45	106	205	165	40	
75	2 ½	180	UNC 5/8	139.7	277	83	140	54	46	106	205	182	54	35
90	3	195	UNC 5/8	152.4	289	89	146	54	49	106	205	210	67	50
110	4	226	UNC 5/8	190.5	328	106	167	55	56	106	255	240	88	74
140	5	258	UNC 3/4	215.9	357	121	181	55	64	106	255	272	113	97
160	6	284	UNC 3/4	241.3	377	133	189	55	72	106	255	300	139	123
225	8	341	UNC 3/4	298.4	436	159	210	67	73	140	408	360	178	169
280	10	412	UNC 7/8	362.0	536	205	264	67	114	140	408	440	210	207
315	12	482	UNC 7/8	431.8	586	234	285	67	115	140	408	510	256	253



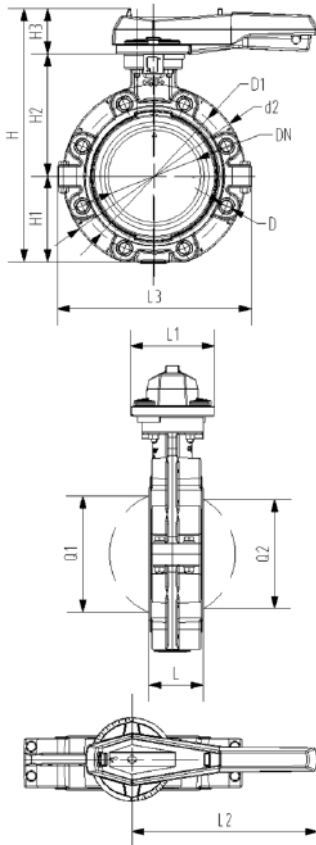
**SYGEF Standard Lug-Style, end installation butterfly valve type 578
with hand lever
Flange standard ANSI/ASME**

Model:

- Housing material: PP-GF30 with 316SS lug inserts
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension: ANSI/ASME B 16.5 Class 150
- We recommend for the dimensions DN250 and DN300 only 6 bar maximum system pressure for the hand lever version

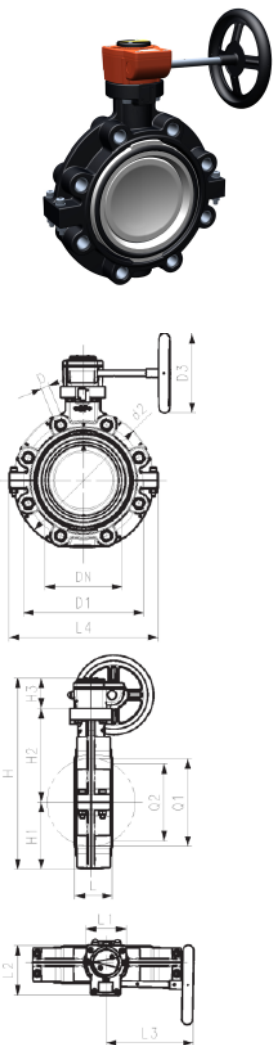
Option:

- Optional accessory: Integrated position feedback with limit switches (sold separately)



d	Size	PN	Cv-value	PTFE	weight
(mm)	(inch)	(bar)	(l/min)	Code	(kg)
63	2	10	740	175 578 302	1.800
75	2 ½	10	1500	175 578 303	1.895
90	3	10	2400	175 578 304	2.251
110	4	10	3800	175 578 305	3.146
140	5	10	8600	175 578 306	4.660
160	6	10	11400	175 578 307	6.430
225	8	10	19900	175 578 308	8.625
280	10	10	34000	175 578 309	19.528
315	12	10	50000	175 578 310	26.106

d2	D	D1	H	H1	H2	H3	L	L1	L2	L3	Q1	Q2
(mm)		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
160	UNC 5/8	120.6	265	77	134	54	45	106	205	165	40	
180	UNC 5/8	139.7	277	83	140	54	46	106	205	182	54	35
195	UNC 5/8	152.4	289	89	146	54	49	106	205	210	67	50
226	UNC 5/8	190.5	328	106	167	55	56	106	255	240	88	74
258	UNC 3/4	215.9	357	121	181	55	64	106	255	272	113	97
284	UNC 3/4	241.3	377	133	189	55	72	106	255	300	139	123
341	UNC 3/4	298.4	436	159	210	67	73	140	408	360	178	169
412	UNC 7/8	362.0	536	205	264	67	114	140	408	440	210	207
482	UNC 7/8	431.8	586	234	285	67	115	140	408	510	256	253



SYGEF Standard Lug-style, end installation butterfly valve type 578
With gear box
Flange standard ANSI/ASME

Model:

- Housing material: PP-GF30 with 316SS lug inserts
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension: ANSI/ASME B 16.5 Class 150

d	Size	DN	PN	Cv-value	FKM	weight
(mm)	(inch)	(mm)	(bar)	(l/min)	Code	(kg)
63	2	50	10	740	175 578 122	3.562
75	2 ½	65	10	1500	175 578 123	3.721
90	3	80	10	2400	175 578 124	3.929
110	4	100	10	3800	175 578 125	4.834
140	5	125	10	8600	175 578 126	6.348
160	6	150	10	11400	175 578 127	8.109
225	8	200	10	19900	175 578 128	9.353
280	10	250	10	34000	175 578 129	21.210
315	12	300	10	50000	175 578 130	27.746

d	Size	d2	D	D1	D3	H	H1	H2	H3	L	L1	L2	L3	L4
(mm)	(inch)	(mm)		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
63	2	160	UNC 5/8	120.6	160	273	77	134	62	45	78	112	179	165
75	2 ½	180	UNC 5/8	139.7	150	285	83	140	62	46	78	112	179	182
90	3	195	UNC 5/8	152.4	150	297	89	146	62	49	78	112	179	210
110	4	226	UNC 5/8	190.5	150	335	106	167	62	56	78	112	179	240
140	5	258	UNC 3/4	215.9	150	364	121	181	62	64	78	112	179	272
160	6	284	UNC 3/4	241.3	160	384	133	189	62	72	78	112	179	300
225	8	341	UNC 3/4	298.4	160	431	159	210	62	73	78	112	179	360
280	10	412	UNC 7/8	362.0	200	555	205	264	69	113	97	130	198	440
315	12	482	UNC 7/8	431.8	200	605	234	285	69	113	97	130	198	510

d	Size	Q1	Q2
(mm)	(inch)	(mm)	(mm)
63	2	40	
75	2 ½	54	35
90	3	67	50
110	4	88	74
140	5	113	97
160	6	139	123
225	8	178	169
280	10	210	207
315	12	256	253

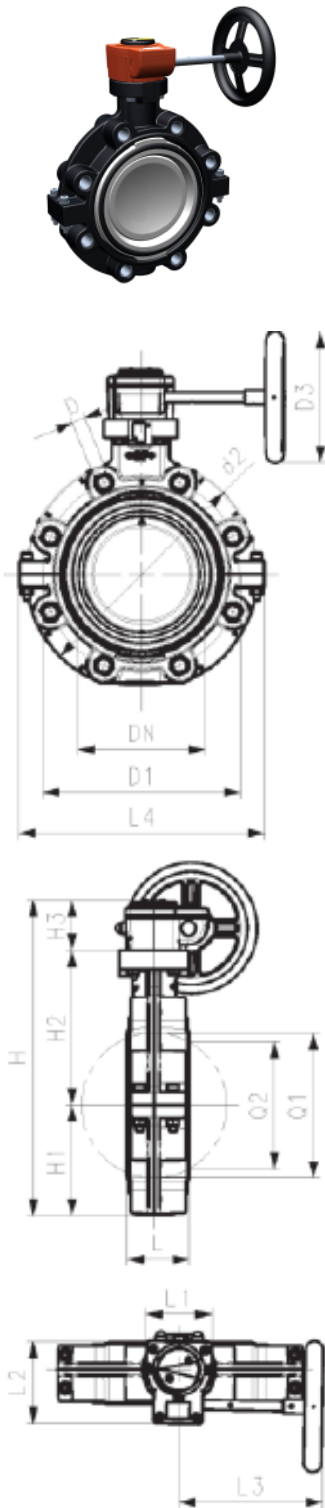
SYGEF Standard Lug-style, end installation butterfly valve type 578
With gear box
Flange standard ANSI/ASME

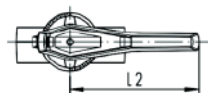
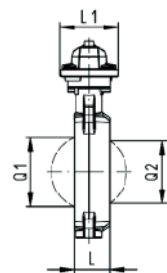
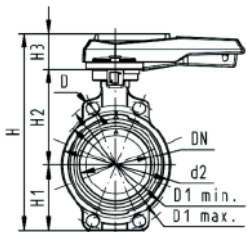
Model:

- Housing material: PP-GF30 with 316SS lug inserts
- Overall length according to EN 558, ISO 5752 (DN50 - 200 line 25, DN250 - 300 line 10)
- Connecting dimension: ANSI/ASME B 16.5 Class 150

d	Size	DN	PN	Cv-value	PTFE	weight
(mm)	(inch)	(mm)	(bar)	(l/min)	Code	(kg)
63	2	50	10	740	175 578 322	3.562
75	2 ½	65	10	1500	175 578 323	3.721
90	3	80	10	2400	175 578 324	3.929
110	4	100	10	3800	175 578 325	4.834
140	5	125	10	8600	175 578 326	6.348
160	6	150	10	11400	175 578 327	8.109
225	8	200	10	19900	175 578 328	9.353
280	10	250	10	34000	175 578 329	21.210
315	12	300	10	50000	175 578 330	27.746

d2	D	D1	D3	H	H1	H2	H3	L	L1	L2	L3	L4	Q1	Q2
(mm)		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
160	UNC 5/8	120.6	160	273	77	134	62	45	78	112	179	165	40	
180	UNC 5/8	139.7	160	285	83	140	62	46	78	112	179	182	54	35
195	UNC 5/8	152.4	160	297	89	146	62	49	78	112	179	210	67	50
226	UNC 5/8	190.5	160	335	106	167	62	56	78	112	179	240	88	74
258	UNC 3/4	215.9	160	364	121	181	62	64	78	112	179	272	113	97
284	UNC 3/4	241.3	160	384	133	189	62	72	78	112	179	300	139	123
341	UNC 3/4	298.4	160	431	159	210	62	73	78	112	179	360	178	169
412	UNC 7/8	362.0	200	555	205	264	62	113	97	130	198	440	210	207
482	UNC 7/8	431.8	200	605	234	285	62	113	97	130	198	510	256	253

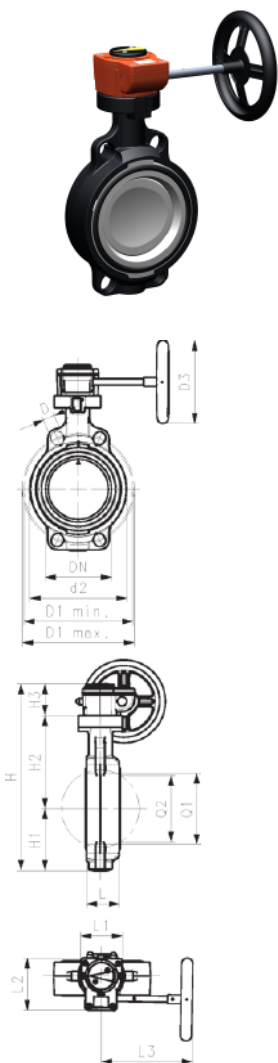




Type 567 Butterfly Valve SYGEF® Standard PVDF **Hand lever with ratchet settings**

d (mm)	Size (inch)	FKM Code	PTFE/FKM Code	weight (kg)
63	2	175 567 002	175 567 202	1.080
75	2 ½	175 567 003	175 567 203	1.192
90	3	175 567 004	175 567 204	1.992
110	4	175 567 005	175 567 205	2.072
140	5	175 567 006	175 567 206	2.667
160	6	175 567 007	175 567 207	3.887
225	8	175 567 008	175 567 208	7.242
280	10	175 567 009	175 567 209	14.623
315	12	175 567 010	175 567 210	19.513

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	125	104	264	77	134	54	45	106	205	40	
75	19	140	145	115	277	83	140	54	46	106	205	54	35
90	19	150	160	131	289	89	146	54	49	106	205	67	50
110	19	175	191	161	325	104	167	55	56	106	255	88	74
140	23	210	216	187	352	117	181	55	64	106	255	113	97
160	24	241	241	215	373	130	189	55	72	106	255	139	123
225	23	290	295	267	435	158	210	67	73	140	408	178	169
280	25	353	362	329	554	205	264	85	113	149	408	210	207
315	25	400	432	379	598	228	285	85	113	149	408	256	253



Type 567 Butterfly Valve SYGEF® Standard PVDF
Reduction gear with handwheel

d (mm)	Size (inch)	FKM Code	PTFE/FKM Code	weight (lb)
63	2	175 567 022	175 567 222	6.874
75	2 ½	175 567 023	175 567 223	7.121
90	3	175 567 024	175 567 224	7.791
110	4	175 567 025	175 567 225	8.955
140	5	175 567 026	175 567 226	10.267
160	6	175 567 027	175 567 227	12.957
225	8	175 567 028	175 567 228	17.218
280	10	175 567 029	175 567 229	33.973
315	12	175 567 030	175 567 230	79.366

d (mm)	D (mm)	D1 min. (mm)	D1 max. (mm)	d2 (mm)	D3 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	Q1 (mm)
63	19	120	125	104	160	273	77	134	62	45	78	112	179	40
75	19	140	145	115	160	285	83	140	62	46	78	112	179	54
90	19	150	160	131	160	297	89	146	62	49	78	112	179	67
110	19	175	191	160	160	333	104	167	62	56	78	112	179	88
140	23	210	216	187	160	360	117	181	62	64	78	112	179	113
160	24	241	241	215	160	381	130	189	62	72	78	112	179	139
225	23	290	295	267	160	430	158	210	62	73	78	112	179	178
280	25	353	362	329	200	555	205	264	69	113	97	130	198	210
315	25	400	432	379	200	605	228	285	69	113	97	130	198	256

d (mm)	Q2 (mm)
63	
75	35
90	50
110	74
140	97
160	123
225	169
280	207
315	253



Type 568 Butterfly Valve SYGEF® Standard PVDF Reduction gear with handwheel

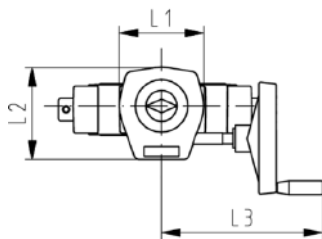
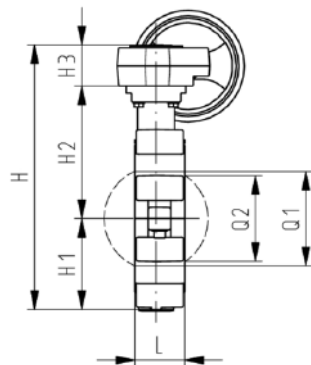
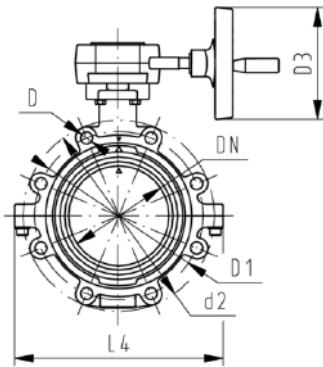
Model:

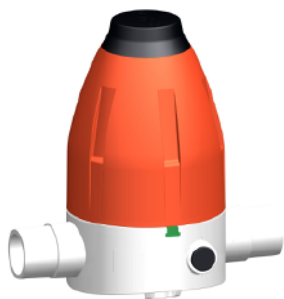
- Material: PVDF
- Outer body in GGG-40.3 epoxy-coated
- Overall length according to EN 558, ISO 5752
- Connecting dimension: ANSI/ASME B 16.5 Class 150

Model with PTFE seal in DN50 - DN80 on request

d	Size	PTFE/FKM	weight
(mm)	(inch)	Code	(lb)
225	8	175 568 328	39.626

d2	D	D1	D3	H	H1	H2	H3	L	L1	L2	L3	L4	Q1	Q2
(mm)		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
334	UNC 3/4	298	150	436	158	210	50	73	110	120	155	360	178	169





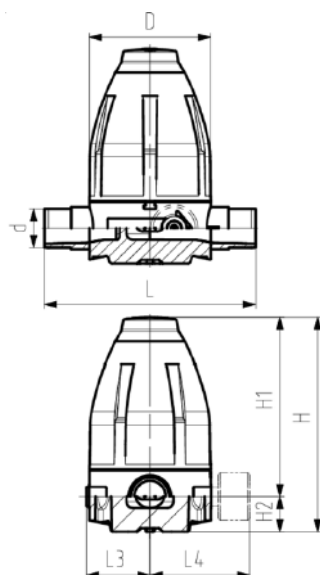
Type 582 Pressure Reducing Valve SYGEF Standard PVDF Butt fusion spigots metric Without manometer

Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

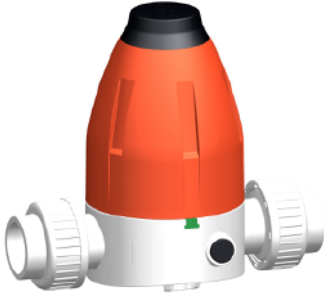
0.3-3.0 bar (4-44 psi) on request

Manometer on request



d (mm)	DN (mm)	PN (bar)	O-rings FKM Code	weight (kg)
20	15	10	185 582 012	0.700
25	20	10	185 582 013	1.550
32	25	10	185 582 014	1.560
40	32	10	185 582 015	4.370
50	40	10	185 582 016	4.400
63	50	10	185 582 017	4.520

d (mm)	D (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	L (mm)	L3 (mm)	M	closest inch (inch)
20	79	132	111	21	14	150	42	M6	½
25	100	177	148	29	14	190	53	M6	¾
32	100	177	148	29	14	190	53	M6	1
40	147	251	207	44	21	240	76	M8	1 ¼
50	147	251	207	44	21	240	76	M8	1 ½
63	147	251	207	44	21	260	76	M8	2



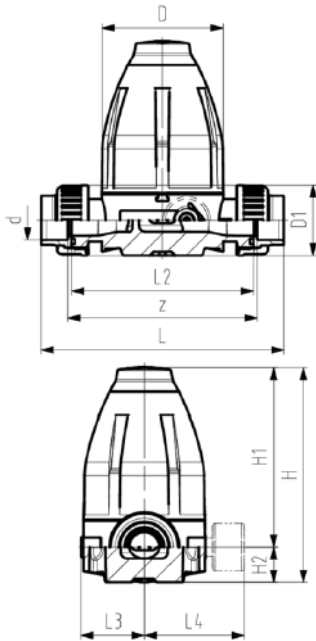
Type 582 Pressure Reducing Valve SYEGEF Standard PVDF Unions with fusion sockets metric Without manometer

Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

0.3-3.0 bar (4-44 psi) on request

Manometer on request



d (mm)	DN (mm)	PN (bar)	O-rings FKM Code	weight (kg)
20	15	10	185 582 112	0.780
25	20	10	185 582 113	1.650
32	25	10	185 582 114	1.700
40	32	10	185 582 115	4.530
50	40	10	185 582 116	4.750
63	50	10	185 582 117	5.050

d (mm)	D (mm)	D1 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	L (mm)	L2 (mm)	L3 (mm)	M	z (mm)	closest inch (inch)
20	79	43	132	111	21	12	158	120	42	M6	130	½
25	100	53	177	148	29	14	192	150	53	M6	160	¾
32	100	60	177	148	29	14	196	150	53	M6	160	1
40	147	74	251	207	44	21	255	205	76	M8	215	1 ¼
50	147	82	251	207	44	21	261	205	76	M8	215	1 ½
63	147	100	251	207	44	21	269	205	76	M8	215	2

Type 582 Pressure Reducing Valve SYGEF Standard PVDF Unions with butt fusion spigots metric Without manometer

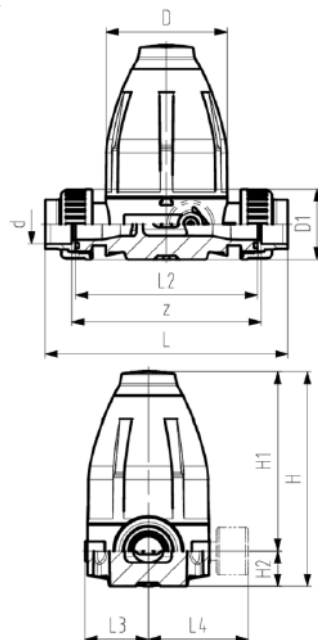


Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

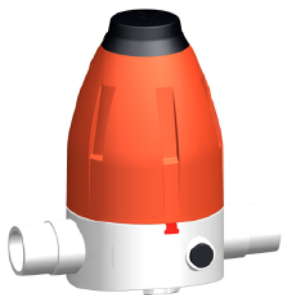
0.3-3.0 bar (4-44 psi) on request

Manometer on request



d (mm)	DN (mm)	PN (bar)	O-rings FKM Code	weight (kg)
20	15	10	185 582 512	0.830
25	20	10	185 582 513	1.710
32	25	10	185 582 514	1.760
40	32	10	185 582 515	4.750
50	40	10	185 582 516	4.840
63	50	10	185 582 517	5.140

d (mm)	D (mm)	D1 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	L (mm)	L2 (mm)	L3 (mm)	M	closest inch (inch)
20	79	43	132	111	21	12	226	120	42	M6	½
25	100	53	177	148	29	14	262	150	53	M6	¾
32	100	60	177	148	29	14	268	150	53	M6	1
40	147	74	251	207	44	21	329	205	76	M8	1 ¼
50	147	82	251	207	44	21	335	205	76	M8	1 ½
63	147	100	251	207	44	21	341	205	76	M8	2



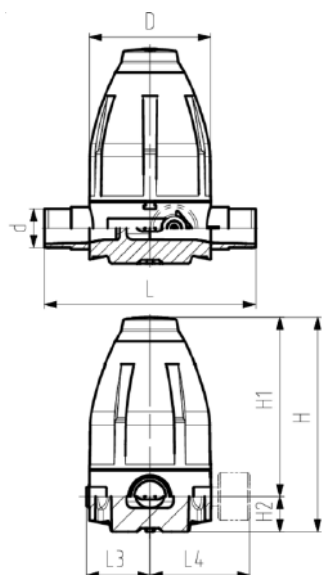
Type 586 Pressure Retaining Valve SYGEF Standard PVDF Butt fusion spigots metric Without manometer

Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

0.3-3.0 bar (4-44 psi) on request

Manometer on request



d (mm)	DN (mm)	PN (bar)	O-rings FKM Code	weight (kg)
20	15	10	185 586 012	0.700
25	20	10	185 586 013	1.570
32	25	10	185 586 014	1.580
40	32	10	185 586 015	4.410
50	40	10	185 586 016	4.430
63	50	10	185 586 017	4.550

d (mm)	D (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	L (mm)	L3 (mm)	M	closest inch (inch)
20	79	132	111	21	14	150	42	M6	½
25	100	177	148	29	14	190	53	M6	¾
32	100	177	148	29	14	190	53	M6	1
40	147	251	207	44	21	240	76	M8	1 ¼
50	147	251	207	44	21	240	76	M8	1 ½
63	147	251	207	44	21	260	76	M8	2



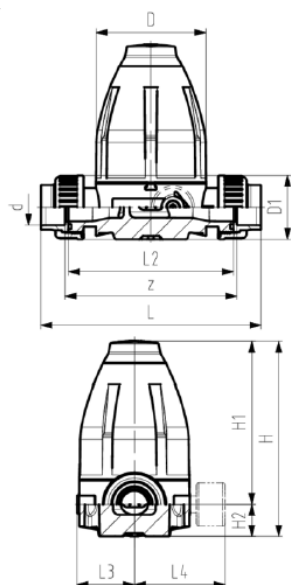
Type 586 Pressure Retaining Valve SYGEF Standard PVDF Unions with fusion sockets metric **Without manometer**

Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

0.3-3.0 bar (4-44 psi) on request

Manometer on request



d (mm)	DN (mm)	PN (bar)	O-rings FKM Code	weight (kg)
20	15	10	185 586 112	0.780
25	20	10	185 586 113	1.670
32	25	10	185 586 114	1.720
40	32	10	185 586 115	4.700
50	40	10	185 586 116	4.790
63	50	10	185 586 117	5.090

d (mm)	D (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	L (mm)	L2 (mm)	L3 (mm)	M	z (mm)	closest inch (inch)
20	79	132	111	21	12	158	120	42	M6	130	½
25	100	177	148	29	14	192	150	53	M6	160	¾
32	100	177	148	29	14	196	150	53	M6	160	1
40	147	251	207	44	21	255	205	76	M8	215	1 ¼
50	147	251	207	44	21	261	205	76	M8	215	1 ½
63	147	251	207	44	21	269	205	76	M8	215	2

Type 586 Pressure Retaining Valve SYGEF Standard PVDF Unions with butt fusion spigots metric Without manometer

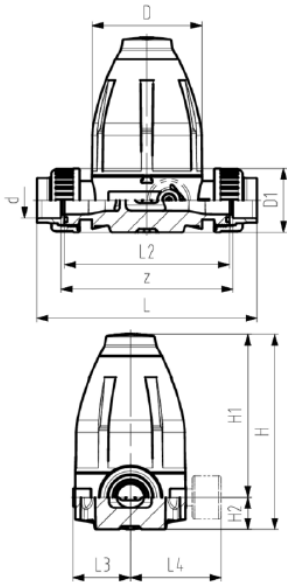


Model:

- Diaphragm PTFE/EPDM
- Integrated stainless steel mounting inserts
- 0.5-9.0 bar (7-130 psi)

0.3-3.0 bar (4-44 psi) on request

Manometer on request



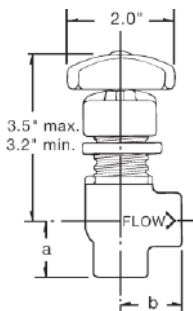
d (mm)	DN (mm)	PN (bar)	O-rings FKM Code	weight (kg)
20	15	10	185 586 512	0.820
25	20	10	185 586 513	1.710
32	25	10	185 586 514	1.760
40	32	10	185 586 515	4.740
50	40	10	185 586 516	4.830
63	50	10	185 586 517	5.130

d (mm)	D (mm)	D1 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	L (mm)	L2 (mm)	L3 (mm)	M	z (mm)	closest inch (inch)
20	79	43	132	111	21	12	226	120	42	M6	130	½
25	100	53	177	148	29	14	262	150	53	M6	160	¾
32	100	60	177	148	29	14	268	150	53	M6	160	1
40	147	74	251	207	44	21	329	205	76	M8	215	1 ¼
50	147	82	251	207	44	21	335	205	76	M8	215	1 ½
63	147	100	251	207	44	21	341	205	76	M8	215	2

**Needle Valve - Type 522
Angle Body, Female NPT**



Size	PN (bar)	Code	SP	weight (lb)	a (mm)	b (mm)
¼	10	155 522 579	1	0.309	25	28
½	10	155 522 581	1	0.309	28	31



Needle Valve - Type 522
Globe Body, Female NPT



Size	PN (bar)	Code	SP	weight (lb)	c (mm)
¼	10	155 522 554	1	0.309	58
½	10	155 522 556	1	0.309	65

