

Product Range  
International  
2009

SYGEF® PVDF

Pipe, Fittings,  
Valves and Accessories



**+GF+**

**GEORG FISCHER**  
PIPING SYSTEMS

# List of Abbreviations

AL	Number of bolt holes	PN	Nominal pressure at 20°C, water
ANSI	American National Standard Institute	PP	Polypropylene, heat stabilised
d	Pipe outside diameter	PTFE	Polytetrafluorethylene, e.g. Teflon®
DIN	Deutsche Industrie-Normen	PVDF	Polyvinylidene fluoride
DN	Nominal bore	R	Taper male thread, pressure tight in the thread to ISO 7
e	Wall thickness	Rp	Parallel female thread, pressure tight in the thread to ISO 7
EPDM	Ethylene Propylene Rubber	®	Registered trade-mark
FPM	Fluorine Rubber, e.g. Viton®	s	A/F
g	Weight in grams	SC	Size of hexagon bolts
G	Pipe thread, not pressure tight in the thread to ISO 288	SDR	Standard Dimension Ratio
HP	High Purity	SP	Standard pack. The figure given indicates the quantity of fittings contained in a standard pack
HTR	High Temperature Resistant	St	Steel
ISO	International Standardization Organisation	™	Trade-mark
NBR	Nitrile Rubber	Tr	Trapezoid thread
NPT	Taper male thread pressure tight in the thread to ANSI B 1.20.1		
PBTP	Polybutylene terephthalate		

## General Information

### Dimensions

All dimensions are given in mm and are intended as nominal or average sizes. Subject to alteration resulting from modifications in design.

### Ordering example

Pipe	d32	PVDF HP	175 481 669
Elbow 45°	d140	PVDF Standard	735 158 516

### Orders

Always quote the Georg Fischer code number when placing orders.

**SYGEF® is a registered trade-mark for Georg Fischer plastic piping systems as well as the system-oriented fusion machines.**

**Detailed technical information is given in our handbook «Planning Fundamentals» and also available under [www.piping.georgfischer.com](http://www.piping.georgfischer.com)**

# Content – Fluoropolymers Product Range 2009

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Rtf-Prime.ru

## GF Piping Systems quality is no coincidence!

GF Piping systems has not only taken a pioneering role in the past for the range of PVC fittings and equipment, but also in the sector of fusible plastics. GF Piping Systems developed the socket fusion jointing process 30 years ago, and

in later years also the BCF<sup>®</sup> and IR-Plus<sup>®</sup> fusion methods. More than 9 million IR & BCF fusion joints in the past 15 years world-wide has proven GF Piping Systems performance in jointing technology.

### GF Piping Systems jointing technology for fluoropolymers

Jointing Method	SYGEF-Plus	SYGEF-Standard	SYGEF-Exhaust	SYGEF-PFA	FUSEAL 25/50
Heated Element Socket Fusion	-	X	-	-	-
Heated Element Butt Fusion	X <sup>1</sup>	X	-	-	X <sup>2</sup>
Infrared (IR-Plus <sup>®</sup> ) Fusion	X	X	-	X <sup>2</sup>	-
Bead-and-Crevice-Free (BCF <sup>®</sup> ) Fusion	X	X	-	-	-
Electrofusion with Integral Heating	-	-	-	-	X
Hot Air / Hot Gas Manual Fusion	X	X	X	X	X
Mechanical Jointing	X	X	X	X	X

X = Standard range  
X<sup>2</sup> = On request only

X<sup>1</sup> = Technically possible, but not recommended  
- = Not available

Hot Air / Hot Gas Manual Fusion is the standard jointing method for SYGEF-Exhaust, however it can be implemented on other systems as a repair method &/or for the processing of semifinished materials.

### Component selection basis

SYGEF-Plus and SYGEF-Standard are system products, pipes and fittings are matched to each other, when selecting SYGEF PVDF fusion components to produce a system; the only consideration needs to be the fusion dimension; PN16 or PN10.

Mechanical joints such as flanges & threaded components are available in various industry standards:

- Flange connections to EN ISO 1092 or ANSI B16.5 #150 (JIS available on request)
- Threaded connections to ISO 7/1 & 228/1 (BSP) or NPT (JIS Rc available on request)
- Sanitary clamp connections to all standards worldwide
- Union connections to GF specification

### Design Factors and derived operating pressures

In various standards for PVDF we find design factors (formerly called safety factors) stated, these are for water.

They are lower than the design factors recommended by GF Piping Systems for industrial applications. In order to protect human beings and the environment, those safety factors cannot be applied for industrial applications. We therefore recommend to use safety factors for SYGEF<sup>®</sup> piping systems as published in the following graph, for the calculation of piping system pressures for industrial applications.

For chemical applications, special considerations must be taken in determining appropriate safety factors, please consult GF for further information.

## Size comparison – SS Tube to PVDF Pipe

### DN, d, inch, nominal bore, o.d. – which is which?

Plastic piping in Inch sizes is typically sized on the nominal bore (DN) which is designated in inches. The outside diameter is fixed but is not mentioned.

Metric piping systems are sized on their outside diameter, with occasional mention of the DN size, when referring to valves or flanges.

Existing comparisons of metric sized pipes to Inch sizes pipes are well known, and generally the variation between Inch and Metric sizes (OD & ID) for the same DN is only a few millimetres.

e.g. The closest size to 1" Sch80 is d32 Metric, with both pipes being "DN25"

However, the sizing for SS tubes is often based on the outside diameter, and this does lead to some confusion. The table below demonstrates which PVDF size pipe is the closest match to SS Tubes in Inch & DIN, and to IPS / BS Inch pipe.

SS Tube Inch	SS Tube ISO/DIN	PVDF Pipe	IPS / BS Pipe
3/4"	DN20	d20	1/2"
1"	DN25	d25	3/4"
1 1/2" <sup>A</sup>	DN32	d32	1"
1 1/2"	DN40	d40	1 1/4"
2"	DN50	d50	1 1/2"
2 1/2"	DN65	d63	2"
3"	DN80	d75	2 1/2"
4" <sup>B</sup>	DN100 <sup>B</sup>	d90	3"
		d110	4"
5"	DN125	d125 <sup>C</sup> / d140 <sup>C</sup>	5"
6"	DN150	d160	6"
8"	-	d200	-
-	DN200	d200 or d225	8"

A = There is no 1 1/4" SS Tube Size in Inch dimensions; 3A, ASME-BPE or BS

B = 4" & DN100 SS Tube could transitioned to either d110 or d90 PVDF

C = 5" & DN125 Tube is closest to d125 PVDF, 5" IPS/BS is closest to d140 PVDF

8" SS tube is equivalent to d200 PVDF – DN200 SS Tube could be transitioned to either d200 or d225 PVDF

Further examples of this size comparison can be seen in the SYGEF-Plus Sanitary Clamp adaptors for transition to SS Tubes. As a "rule of thumb", the DN value of SS tube should be matched to the d value of PVDF pipe, but there are some exceptions depending upon which standard of SS Tube is employed.

→ In short, DN value is often not a clear indication of the required dimension.

## SYGEF® PVDF General Information



- Standard and High-Purity Pipes
- Socket Fusion System
- Butt Fusion (IR/BCF) System
- High-Purity Butt Fusion (IR/BCF) System

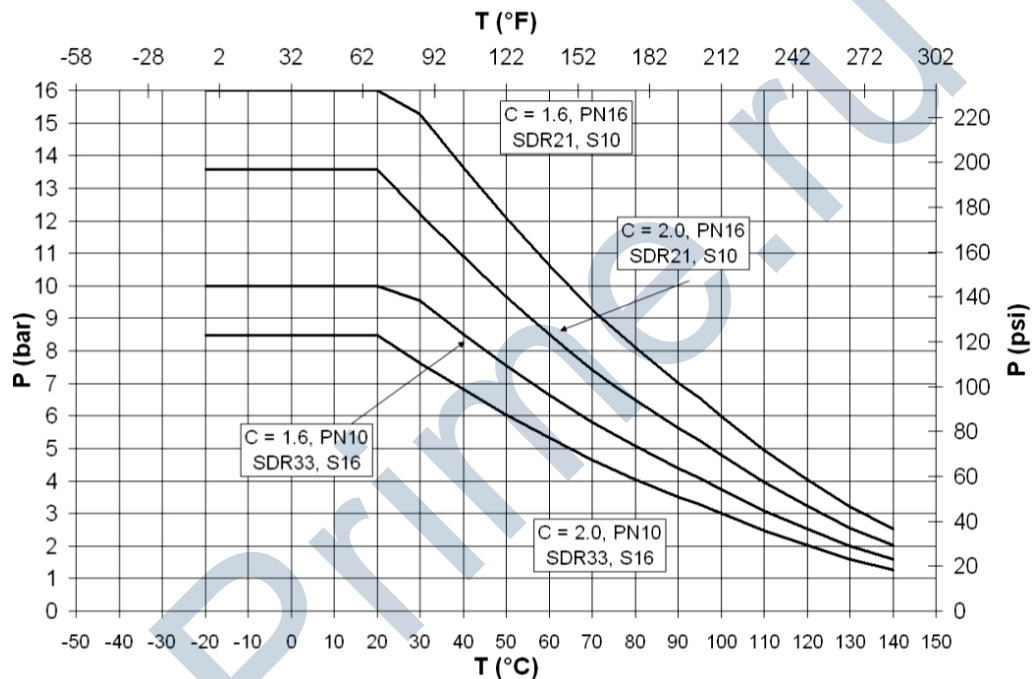
## SYGEF® Polyvinylidene fluoride (PVDF) virgin fluoropolymer

PVDF is a thermoplastic fluoropolymer with a melt point of 178°C and a wide service temperature range from -40°C to 140°C. The PVDF polymer chain is very linear and similar to PTFE Teflon® except it is not fully fluorinated and contains 3% hydrogen by weight. PVDF materials are ideal for use in aggressive chemical or ultrapure

water systems since they are basically inert, have high strength, and are readily weldable into system components. PVDF raw material is commonly available under the trade names Kynar®, supplied by Arkema Chemicals, and Solef®, supplied by Solvay Fluoropolymers.

### Application limit of SYGEF pipes and fittings

(25-year values with design factor C included in the calculation = 2.0 & 1.6)



*P* Pressure in Bar, PSI  
*T* Temperature in °C, °F

### Dedicated Fluoropolymer Production

GF Piping Systems produces SYGEF® PVDF piping system components under cleanroom conditions in our state of the art high purity manufacturing facilities in Switzerland and Germany. The entire production process is designed, dedicated and operated to produce high quality PVDF components in both Standard and High-Purity grades. GF IR-Plus™ & BCF®Plus fusion technologies are substantial improvements over existing jointing methods such as contact butt fusion and socket fusion.

Completing the system are SYGEF® PVDF butt fusion fittings and valves specifically designed for use with IR-63 Plus, IR-225 Plus and IR-315 Plus fusion machines, and the BCF-Plus “Bead-&-Crevice-Free” Fusion machine.

For less demanding applications, GF also offers a comprehensive range of Fittings and Valves for Socket Fusion jointing up to the dimension d63.



# GF Piping Systems Fluoropolymer Production – Ettenheim, Germany



**Extrusion of Pipes & Tubes d16 – d400**

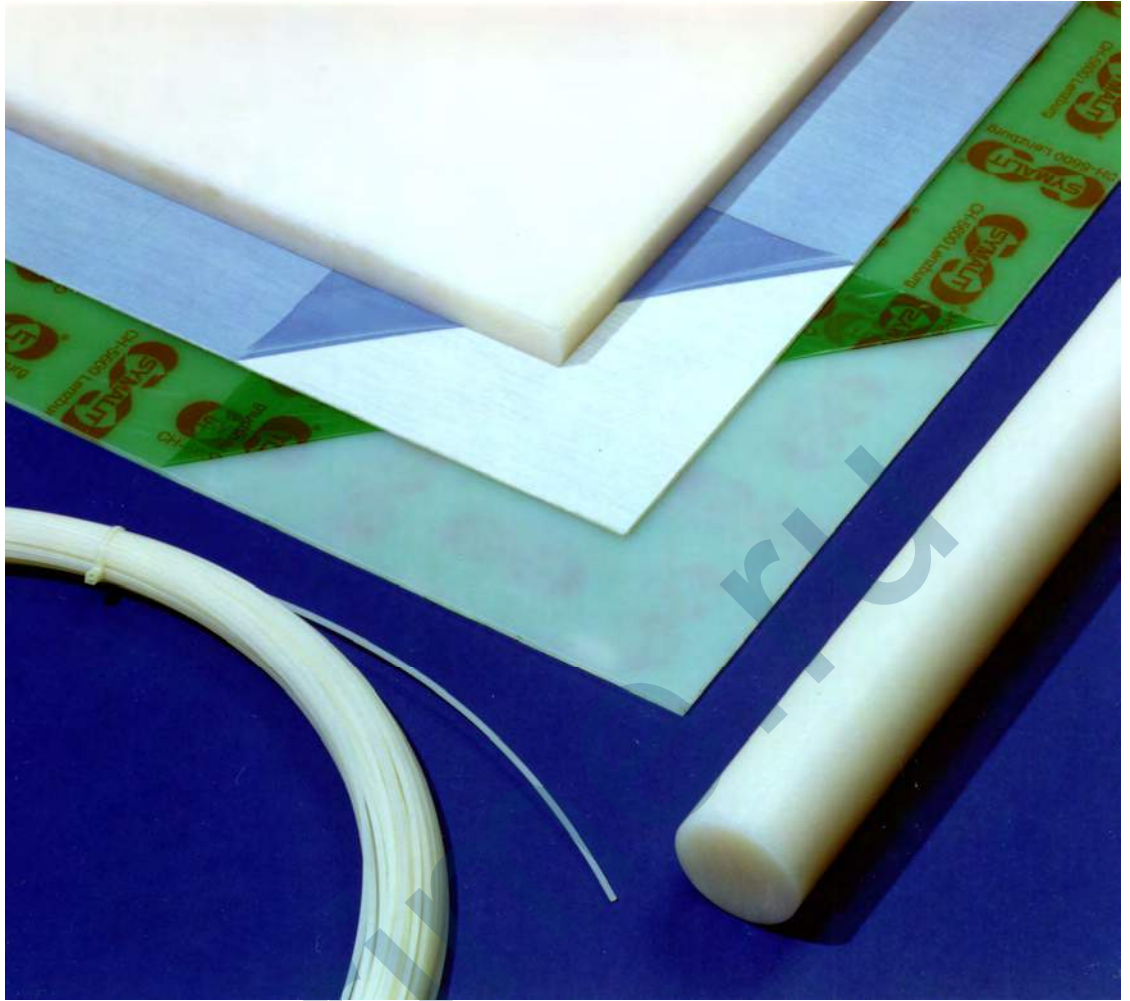


**Injection Moulding**



**100% Visual Inspection**

## Semifinished Products



- Stock Shapes of Bars, Rods and Blocks
- Sheets, Rolls and Lining Laminates
- Welding Rod and Cap Strips
- Special Pipes and Liner Pipes

In addition to our range of piping systems and jointing technologies, GF Piping Systems offers a range of Semifinished Products in Fluoropolymer materials:

- |                    |         |        |
|--------------------|---------|--------|
| - PVDF Standard    | - ECTFE | - FEP  |
| - PVDF High-Purity | - ETFE  | - MFA  |
| - PVDF Flex        | - PFA   | - PTFE |

Other materials such as PVC-U, PVC-C, ABS, PP & PE100 also available.

**Please consult our separate product range document for further information on Semifinished Products.**

## FUSEAL 25/50



GF Piping Systems Fuseal 25/50 corrosive waste piping system is produced from Kynar PVDF to provide excellent chemical resistance and flame/smoke retardance. Fuseal 25/50 is a dedicated drainage piping system, with fittings in drainage pattern design.

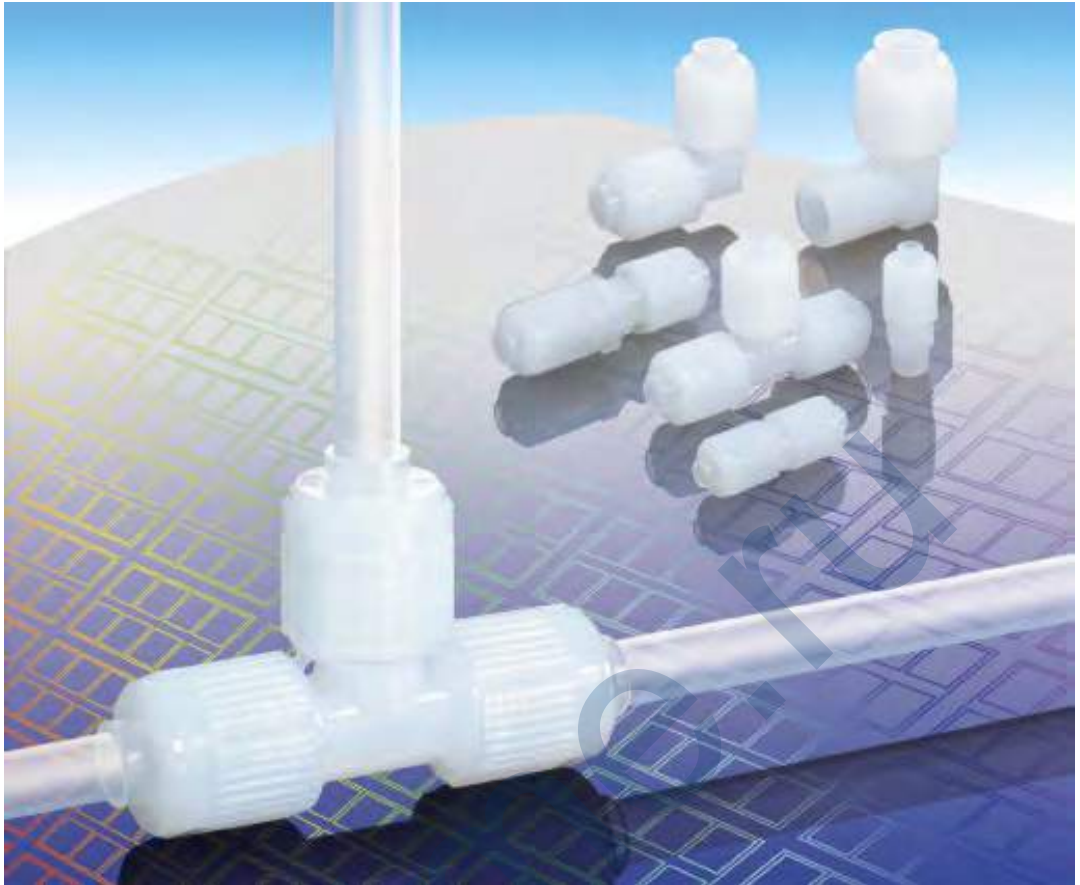
Joining is by electrofusion fittings (with MSA250-EX electrofusion control unit) or by mechanical joints and union connections. Fuseal 25/50 is also available in a double-containment system on request.

Fuseal is also available in PP and PP-FR (Flame Retardant) materials.

**Please consult our separate product range document for further information on FUSEAL 25/50.**



## SYGEF-PFA
















In partnership with SMC Corporation of Japan, GF Piping Systems introduces the SYGEF-PFA range of tubes, fittings and valves in High-Purity PFA material in the sizes  $\frac{1}{8}$ " to  $1\frac{1}{4}$ ".











- LVQ Valves
- LQ3 Flare-Type Fitting
- TL/TIL Tubing
- SRF/LVR Pressure Regulators
- PAF Diaphragm Pumps

SYGEF-PFA is ideally suited to the distribution of ultra-pure and highly corrosive fluids in various applications throughout Semiconductor and Microelectronics manufacturing, as well as Chemical Process Industries.

**Please consult our separate product range document for further information on SYGEF-PFA.**

# SYGEF® Standard

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# SYGEF® Standard – Product Specification

<b>Material</b>	Polyvinylidene fluoride (PVDF)
Colour	translucent
Density	~1.78g/cm <sup>3</sup> (ISO 1183 / ASTM D792)
Surface tension	30–35mJ/m <sup>2</sup>
Linear expansion coefficient	0.12–0.18mm/mK (DIN 53752)
E-module (tensile strength)	2100N/mm <sup>2</sup> (ISO 527/ASTM D790)
Thermal conductivity	0.19W/mK (DIN 52612)
Surface resistivity	5x10 <sup>14</sup> Ωcm (IEC 60093)
<b>Dimension</b>	d20 (½")–d225 (8") in accordance to ISO 10931
<b>Pressure rating</b>	Pipes/fittings: PN 16 (d20–d225), PN 10 (d90–d225) Valves: separate specification
<b>Temperature rating</b>	from –20°C to 140°C [–4°F–284°F]
<b>Production</b>	Fittings/valves: injection moulded Pipes: extruded Valves: injection moulded (additional available oil free treated and paint compatible / silicon free)
<b>Surface finish</b>	Inner surface Ra ≤0.5µm (20µin) for injection moulded and extruded components
<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</b> (ISO 10931)	Inclusions Visual inspection Surface finish Dimension tolerance Pressure testing
<b>Approvals/conformance<sup>(1)</sup></b>	ASME BPE FDA CFR 21 177.2510 USP 25 class VI (physiological non-toxic)
<b>Welding technology</b>	BCF® Plus, bead and crevice free fusion, size d20 (½")–d110 (4") IR® Plus, infrared fusion (DVS 2207-6), size d20 (½")–d225 (8") BF, butt fusion (DVS 2207-15)
<b>Documentation<sup>(2)</sup></b>	Certificate of Conformance with FDA, USP EN 10204 2.2 EN 10204 3.1b
<b>Packing<sup>(3)</sup></b>	Multiple components single bagged in specified bag
<b>Labeling</b>	Brand Name Product Description Code Number Material Dimension CE-labeling
<b>Main applications</b>	Uses include delivery of pharmaceutical grade purified water (PW) and DI water, using hot water, steam chemical or ozone sanitisation. Due to its excellent chemical resistance it is widely used in chemical distribution systems.

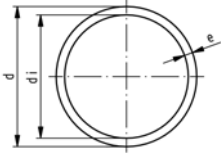
<sup>(1)</sup> For thermoplastic material only

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

<sup>(3)</sup> not for socket fusion products

# Pipes

75 48 02



## SYGEF Standard, Pipes, PN 16

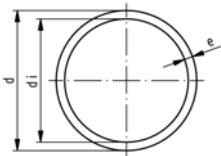
**Model:**

- Material: PVDF
- Length: Lengths of 5 m

d [mm]	PN	Code	e [mm]	di [mm]
16	16	175 480 202	1.9	12.2
20	16	175 480 203	1.9	16.2
25	16	175 480 204	1.9	21.2
32	16	175 480 205	2.4	27.2
40	16	175 480 206	2.4	35.2
50	16	175 480 207	3.0	44.0
63	16	175 480 208	3.0	57.0
75	16	175 480 209	3.6	37.8
90	16	175 480 210	4.3	81.4
110	16	175 480 211	5.3	99.4
140	16	175 480 213	6.7	126.6
160	16	175 480 214	7.7	144.6
200	16	175 480 216	9.6	180.8
225	16	175 480 217	10.8	203.4

PF 2 35 188 001

75 48 06



## SYGEF Standard, Pipes, PN 10

**Model:**

- Material: PVDF
- Length: Lengths of 5 m

\* on request

d [mm]	PN	Code	e [mm]	di [mm]
90	10	175 480 665	2.8	84.4
110	10	175 480 666	3.4	103.2
* 125	10	175 480 667	3.9	117.2
140	10	175 480 673	4.3	131.4
160	10	175 480 668	4.9	150.2
200	10	175 480 669	6.2	187.6
225	10	175 480 670	6.9	211.2
250	10	175 480 671	7.7	235.4
280	10	175 480 656	8.6	261.8
315	10	175 480 674	9.7	296.4

PF 2 35 188 002



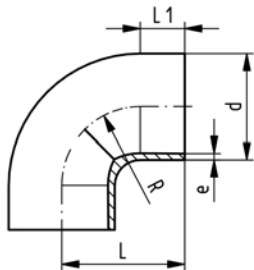
# Fittings for Butt Fusion

35 01 87

## SYGEF Standard, Bend 90°, PN 16

Model:

- Material: PVDF
- \* model with compact design and optimized flow values



PF 2 35 190 006

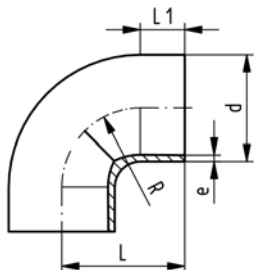
d [mm]	FM	PN	Code	kg	e [mm]	L [mm]	L1 [mm]	R [mm]
* 20	BCF, IR	16	<b>735 018 706</b>	0.015	1.9	38	23	15
* 25	BCF, IR	16	<b>735 018 707</b>	0.021	1.9	42	23	19
* 32	BCF, IR	16	<b>735 018 708</b>	0.035	2.4	46	22	24
* 40	BCF, IR	16	<b>735 018 709</b>	0.050	2.4	51	21	30
* 50	BCF, IR	16	<b>735 018 710</b>	0.087	3.0	58	21	37
* 63	BCF, IR	16	<b>735 018 711</b>	0.128	3.0	66	21	45
75	BCF, IR	16	<b>735 018 712</b>	0.243	3.6	75	23	62
90	BCF, IR	16	<b>735 018 713</b>	0.385	4.3	90	23	77
110	BCF, IR	16	<b>735 018 714</b>	0.643	5.3	110	23	98
140	IR	16	<b>735 018 716</b>	1.423	6.7	140	33	121
160	IR	16	<b>735 018 717</b>	2.052	7.7	160	33	141
200	IR	16	<b>735 018 719</b>	3.798	9.6	200	33	181
225	IR	16	<b>735 018 720</b>	5.274	10.8	220	33	200

35 01 85

## SYGEF Standard, Bend 90°, PN 10

Model:

- Material: PVDF



PF 2 35 190 002

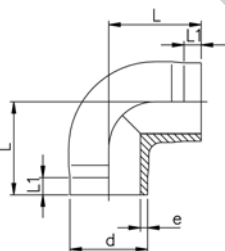
d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]	R [mm]
90	10	BCF, IR	<b>735 018 513</b>	0.294	2.8	90	23	77
110	10	BCF, IR	<b>735 018 514</b>	0.578	3.4	110	23	98
125	10	IR	<b>735 018 515</b>	0.670	3.9	125	28	112
140	10	IR	<b>735 018 516</b>	0.970	4.3	140	33	121
160	10	IR	<b>735 018 517</b>	1.440	4.9	160	33	141
200	10	IR	<b>735 018 519</b>	2.730	6.2	200	33	181
225	10	IR	<b>735 018 520</b>	3.900	6.9	220	33	200

35 10 86

## SYGEF Standard, Elbow 90°, PN 16

Model:

- Material: PVDF



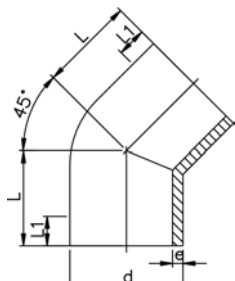
PF 2 35 190 007

d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]
20	16	BCF, IR	<b>735 108 606</b>	0.017	1.9	38	25
25	16	BCF, IR	<b>735 108 607</b>	0.023	1.9	42	26
32	16	BCF, IR	<b>735 108 608</b>	0.040	2.4	46	26
40	16	BCF, IR	<b>735 108 609</b>	0.060	2.4	51	28
50	16	BCF, IR	<b>735 108 610</b>	0.105	3.0	58	28
63	16	BCF, IR	<b>735 108 611</b>	0.180	3.0	66	28

35 15 86

**SYGEF Standard, Elbow 45°, PN 16****Model:**

- Material: PVDF



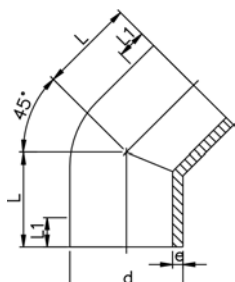
PF 2 35 190 008

d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]
20	16	BCF, IR	<b>735 158 606</b>	0.014	1.9	32	25
25	16	BCF, IR	<b>735 158 607</b>	0.019	1.9	34	26
32	16	BCF, IR	<b>735 158 608</b>	0.033	2.4	36	26
40	16	BCF, IR	<b>735 158 609</b>	0.048	2.4	39	28
50	16	BCF, IR	<b>735 158 610</b>	0.079	3.0	42	30
63	16	BCF, IR	<b>735 158 611</b>	0.116	3.0	47	31
75	16	BCF, IR	<b>735 158 612</b>	0.160	3.6	49	32
90	16	BCF, IR	<b>735 158 613</b>	0.260	4.3	57	37
110	16	BCF, IR	<b>735 158 614</b>	0.480	5.3	70	46
140	16	IR	<b>735 158 616</b>	1.000	6.7	88	57
160	16	IR	<b>735 158 617</b>	1.470	7.7	100	62
200	16	IR	<b>735 158 619</b>	2.800	9.6	124	77
225	16	IR	<b>735 158 620</b>	4.000	10.8	140	88

35 15 85

**SYGEF Standard, Elbow 45°, PN 10****Model:**

- Material: PVDF



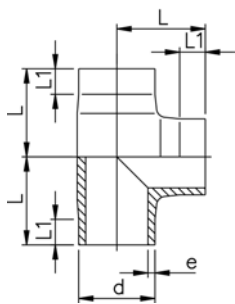
PF 2 35 190 003

d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]
90	10	BCF, IR	<b>735 158 513</b>	0.181	2.8	57	37
110	10	BCF, IR	<b>735 158 514</b>	0.330	3.4	70	46
125	10	IR	<b>735 158 515</b>	0.490	3.9	79	51
140	10	IR	<b>735 158 516</b>	0.680	4.3	88	57
160	10	IR	<b>735 158 517</b>	0.990	4.9	100	62
200	10	IR	<b>735 158 519</b>	1.940	6.2	124	77
225	10	IR	<b>735 158 520</b>	2.780	6.9	140	88

35 20 86

**SYGEF Standard, T 90° equal, PN 16****Model:**

- Material: PVDF



PF 2 35 190 001

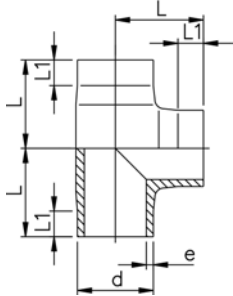
d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]
20	16	BCF, IR	<b>735 208 606</b>	0.023	1.9	38	25
25	16	BCF, IR	<b>735 208 607</b>	0.032	1.9	42	27
32	16	BCF, IR	<b>735 208 608</b>	0.056	2.4	46	27
40	16	BCF, IR	<b>735 208 609</b>	0.083	2.4	51	28
50	16	BCF, IR	<b>735 208 610</b>	0.140	3.0	58	28
63	16	BCF, IR	<b>735 208 611</b>	0.231	3.0	66	28
75	16	BCF, IR	<b>735 208 612</b>	0.370	3.6	75	32
90	16	BCF, IR	<b>735 208 613</b>	0.660	4.3	90	39
110	16	BCF, IR	<b>735 208 614</b>	1.210	5.3	110	48
140	16	IR	<b>735 208 616</b>	2.600	6.7	140	62
160	16	IR	<b>735 208 617</b>	3.500	7.7	160	71
200	16	IR	<b>735 208 619</b>	6.725	9.6	200	80
225	16	IR	<b>735 208 620</b>	9.010	10.8	220	86

35 20 85

**SYGEF Standard, T 90° equal, PN 10**

**Model:**

- Material: PVDF



PF 2 35 190 009

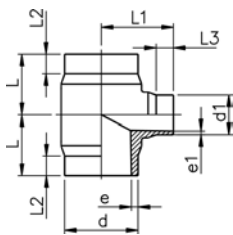
d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]
90	10	BCF, IR	<b>735 208 513</b>	0.397	2.8	90	39
110	10	BCF, IR	<b>735 208 514</b>	0.714	3.4	110	48
125	10	IR	<b>735 208 515</b>	1.280	3.9	125	56
140	10	IR	<b>735 208 516</b>	1.780	4.3	140	62
160	10	IR	<b>735 208 517</b>	2.570	4.9	160	71
200	10	IR	<b>735 208 519</b>	4.297	6.2	200	80
225	10	IR	<b>735 208 520</b>	7.250	6.9	220	86

35 20 86

**SYGEF Standard, T 90° reduced, PN 16**

**Model:**

- Material: PVDF



PF 2 35 426 001

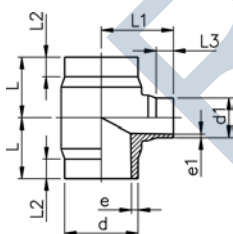
d - d1 [mm]	PN	FM	Code	kg	e [mm]	e1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
160 - 90	16	IR	<b>735 208 662</b>	3.200	7.7	4.3	155	130	60	25
160 - 110	16	IR	<b>735 208 661</b>	3.300	7.7	5.3	155	130	60	25
225 - 90	16	IR	<b>735 208 670</b>	6.000	10.8	4.3	155	160	60	25
225 - 110	16	IR	<b>735 208 669</b>	6.100	10.8	5.3	155	160	60	25

35 20 85

**SYGEF Standard, T 90° reduced, PN 10**

**Model:**

- Material: PVDF



PF 2 35 426 001

d - d1 [mm]	PN	FM	Code	kg	e [mm]	e1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
160 - 90	10	IR	<b>735 208 562</b>	2.300	4.9	4.3	155	130	60	25
160 - 110	10	IR	<b>735 208 561</b>	2.300	4.9	5.3	155	130	60	25
225 - 90	10	IR	<b>735 208 570</b>	4.400	6.9	4.3	155	160	60	25
225 - 110	10	IR	<b>735 208 569</b>	4.400	6.9	5.3	155	160	60	25

35 91 88



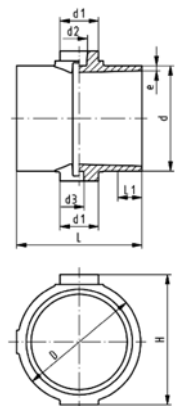
## SYGEF Plus, Instrument Installation Fitting, PN 16

**Model:**

- Material: PVDF-HP
- Suitable for hole diameters from 1/4" - 3/4"
- Injection-moulded version

**Note:**

- Hole needs to be milled, HAND HELD DRILLING MUST NOT BE DONE



PF 2 37 425 002

d [mm]	PN	FM	Code	kg	D [mm]	e [mm]	d1 [mm]	d2 [mm]	d3 [mm]	H [mm]	L [mm]	L1 [mm]
63	16	BCF, IR	<b>735 918 811</b>	0.235	85	3.0	40	17	10	89	120	25
75	16	BCF, IR	<b>735 918 812</b>	0.326	96	3.6	40	17	10	101	130	25
90	16	BCF, IR	<b>735 918 813</b>	0.418	110	4.3	40	17	10	116	130	25
110	16	BCF, IR	<b>735 918 814</b>	0.561	127	5.3	40	17	10	136	130	25

35 91 86



## SYGEF Plus, Instrument Installation Fitting, PN 16

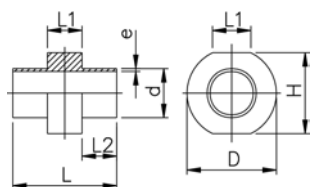
**Model:**

- Material: PVDF-HP
- Suitable for hole diameters from 1/8" - 3/4"
- Machined version

**Note:**

- Hole needs to be milled, HAND HELD DRILLING MUST NOT BE DONE

\* no stock item



PF 2 37 425 002

d [mm]	PN	FM	Code	kg	D [mm]	e [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]
* 63	16	BCF, IR	<b>735 918 611</b>	0.495	105	3.0	97	100	40	27
* 75	16	BCF, IR	<b>735 918 612</b>	0.554	115	3.6	108	90	40	22
* 90	16	BCF, IR	<b>735 918 613</b>	0.649	128	4.3	121	90	40	22
* 110	16	BCF, IR	<b>735 918 614</b>	0.778	145	5.3	139	90	40	22
* 125	16	IR	<b>735 918 615</b>	1.007	162	6.0	157	100	40	27
* 140	16	IR	<b>735 918 616</b>	1.185	176	6.7	171	110	40	32
* 160	16	IR	<b>735 918 617</b>	1.405	194	7.7	190	110	40	32
* 200	16	IR	<b>735 918 619</b>	1.871	231	9.6	228	110	40	32
* 225	16	IR	<b>735 918 620</b>	2.284	254	10.8	251	110	40	32

35 91 85



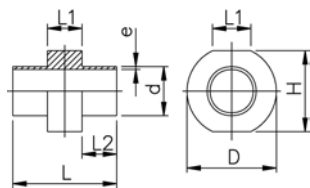
## SYGEF Plus, Instrument Installation Fitting, PN 10

**Model:**

- Material: PVDF-HP
- Suitable for hole diameters from 1/8" - 3/4"
- Machined version

**Note:**

- Hole needs to be milled, HAND HELD DRILLING MUST NOT BE DONE



PF 2 37 425 002

d [mm]	PN	FM	Code	kg	D [mm]	e [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]
125	10	IR	<b>735 918 565</b>	0.858	162	3.9	157	100	40	27
140	10	IR	<b>735 918 566</b>	1.003	176	4.4	171	110	40	32
160	10	IR	<b>735 918 567</b>	1.151	194	4.9	190	110	40	32
200	10	IR	<b>735 918 569</b>	1.486	231	6.2	228	110	40	32
225	10	IR	<b>735 918 570</b>	3.151	254	7.0	251	110	40	32

## SYGEF® Standard Sensor Connection Tee

The maximal solution  
for a minimal dead leg



### Your benefit with the Sensor Connection Tee:

- Easier cleaning (CIP)
- Minimal Biofilm building up
- Reduced installation costs
- Compact design
- Reliable sensor connection
- Fulfills FDA and USP class VI

### All available standards:

- ISO 1127
- DIN 32676
- ASME BPE
- MM
- 3A
- ISO 2852
- BS 4825 Metric & Inch
- DIN 3017
- JIS G3447
- SYGEF-Plus

### The SCT at a glance:

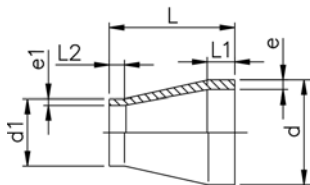
- Main line sizes d20 to d110 compatible with IR-Plus® & BCF®Plus fusion
- PN16 welding dimension (PN10 for d90 & d110 also available)
- Clamp connection up from d20 to d75 depending on main line dimension
- Fully customised solution, to suit your application

→ Please contact GF for further technical information

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**SYGEF Standard, Reducer, PN 16****Model:**

- Material: PVDF



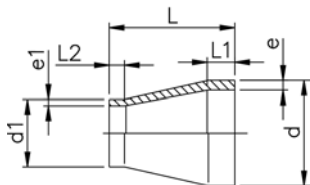
d - d1 [mm]	PN	FM	Code	kg	e [mm]	e1 [mm]	L [mm]	L1 [mm]	L2 [mm]
25 - 20	16	BCF, IR	<b>735 908 637</b>	0.012	1.9	1.9	50	22	22
32 - 20	16	BCF, IR	<b>735 908 642</b>	0.017	2.4	1.9	50	22	22
32 - 25	16	BCF, IR	<b>735 908 641</b>	0.018	2.4	1.9	50	22	22
40 - 20	16	BCF, IR	<b>735 908 648</b>	0.024	2.4	1.9	58	22	24
40 - 25	16	BCF, IR	<b>735 908 647</b>	0.025	2.4	1.9	55	22	24
40 - 32	16	BCF, IR	<b>735 908 646</b>	0.029	2.4	2.4	55	22	24
50 - 25	16	BCF, IR	<b>735 908 654</b>	0.031	3.0	1.9	60	22	25
50 - 32	16	BCF, IR	<b>735 908 653</b>	0.038	3.0	2.4	60	22	25
50 - 40	16	BCF, IR	<b>735 908 652</b>	0.040	3.0	2.4	60	22	25
63 - 32	16	BCF, IR	<b>735 908 660</b>	0.050	3.0	2.4	65	22	25
63 - 40	16	BCF, IR	<b>735 908 659</b>	0.052	3.0	2.4	65	22	25
63 - 50	16	BCF, IR	<b>735 908 658</b>	0.060	3.0	3.0	65	22	25
75 - 40	16	BCF, IR	<b>735 908 666</b>	0.069	3.6	2.4	68	24	25
75 - 50	16	BCF, IR	<b>735 908 665</b>	0.078	3.6	3.0	65	24	25
75 - 63	16	BCF, IR	<b>735 908 664</b>	0.080	3.6	3.0	65	24	25
90 - 63	16	BCF, IR	<b>735 908 671</b>	0.120	4.3	3.0	75	25	30
90 - 75	16	BCF, IR	<b>735 908 670</b>	0.130	4.3	3.6	75	25	35
110 - 63	16	BCF, IR	<b>735 908 678</b>	0.225	5.3	3.0	90	30	30
110 - 75	16	BCF, IR	<b>735 908 677</b>	0.213	5.3	3.6	90	30	35
110 - 90	16	BCF, IR	<b>735 908 676</b>	0.230	5.3	4.3	90	30	35
140 - 110	16	IR	<b>735 908 685</b>	0.450	6.7	5.3	110	40	40
160 - 110	16	IR	<b>735 908 690</b>	0.650	10.8	9.6	160	40	40
160 - 140	16	IR	<b>735 908 688</b>	0.450	7.7	5.3	120	40	40
200 - 160	16	IR	<b>735 908 692</b>	1.340	7.7	6.7	120	40	35
225 - 110	16	IR	<b>735 908 695</b>	1.540	10.8	5.3	160	50	40
225 - 160	16	IR	<b>735 908 696</b>	1.730	10.8	5.3	160	50	40
225 - 200	16	IR	<b>735 908 697</b>	1.980	10.8	7.7	160	55	50

PF 2 35 190 011

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**SYGEF Standard, Reducer, PN 10****Model:**

- Material: PVDF



d - d1 [mm]	PN [bar]	FM	Code	kg	e [mm]	e1 [mm]	L [mm]	L1 [mm]	L2 [mm]
90 - 63	10 / 16	BCF, IR	<b>735 908 551</b>	0.102	2.8	3.0	75	25	30
110 - 63	10 / 16	BCF, IR	<b>735 908 553</b>	0.164	3.4	3.0	90	30	30
110 - 90	10 / 10	BCF, IR	<b>735 908 555</b>	0.167	3.4	2.8	90	30	35
125 - 110	10 / 16	IR	<b>735 908 580</b>	0.270	3.9	5.3	100	35	40
140 - 110	10 / 16	IR	<b>735 908 585</b>	0.385	4.3	5.3	110	40	40
140 - 125	10 / 10	IR	<b>735 908 584</b>	0.340	4.3	3.9	110	40	40
160 - 110	10 / 10	IR	<b>735 908 561</b>	0.449	4.9	3.4	120	40	40
160 - 110	10 / 16	IR	<b>735 908 590</b>	0.425	4.9	5.3	120	40	40
160 - 140	10 / 10	IR	<b>735 908 588</b>	0.460	4.9	4.3	120	40	40
200 - 160	10 / 10	IR	<b>735 908 592</b>	0.830	6.2	4.9	145	50	40
225 - 110	10 / 10	IR	<b>735 908 566</b>	1.120	6.9	3.4	160	55	35
225 - 110	10 / 16	IR	<b>735 908 595</b>	0.940	6.9	5.3	160	55	35
225 - 160	10 / 10	IR	<b>735 908 596</b>	1.140	6.9	4.9	160	55	40
225 - 200	10 / 10	IR	<b>735 908 597</b>	1.200	6.9	6.2	160	55	50

PF 2 35 190 005

# Unions for Butt Fusion

35 52 86



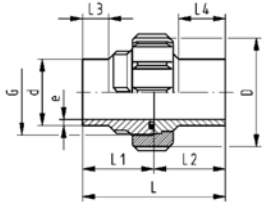
## SYGEF Standard, Union (FPM black), PN 16

**Model:**

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

**Note:**

- For the dimensions d75-110 please see instructions for the installation



d [mm]	PN	FM	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G [inch]
20	16	BCF, IR	735 528 606	0.081	43	1.9	106	53	53	25	37	1
25	16	BCF, IR	735 528 607	0.123	53	1.9	112	56	56	25	38	1 1/4
32	16	BCF, IR	735 528 608	0.167	60	2.4	118	59	59	25	40	1 1/2
40	16	BCF, IR	735 528 609	0.269	74	2.4	124	62	62	25	41	2
50	16	BCF, IR	735 528 610	0.370	82	3.0	130	65	65	25	43	2 1/4
63	16	BCF, IR	735 528 611	0.592	100	3.0	136	68	68	25	44	2 3/4
75	16	BCF, IR	735 528 612	0.740	133	3.6	132	66	66	24	34	S107.5x3.6
90	16	BCF, IR	735 528 613	0.730	133	4.3	130	65	65	24	48	S107.5x3.6
110	16	BCF, IR	735 528 614	1.020	155	5.3	130	65	65	25	45	S127.5x3.6

PF 2 35 421 040

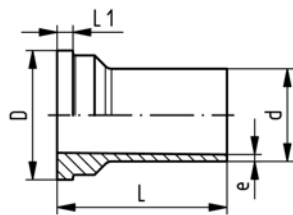


## SYGEF Plus, Union end, PN 16



**Model:**

- Material: PVDF-HP
- Suitable for SYGEF Plus Union Butt Fusion
- Suitable for Diaphragm Valve Type 314
- Suitable for Vortex Sensor



d [mm]	PN	FM	Code	SP	kg	D [mm]	e [mm]	L [mm]	L1 [mm]
20	16	BCF, IR	735 608 626	1	0.019	30	1.9	53	5
25	16	BCF, IR	735 608 627	1	0.032	39	1.9	56	5
32	16	BCF, IR	735 608 628	1	0.043	45	2.4	59	6
40	16	BCF, IR	735 608 629	1	0.070	57	2.4	62	6
50	16	BCF, IR	735 608 630	1	0.083	63	3.0	65	7
63	16	BCF, IR	735 608 631	1	0.130	78	3.0	68	8
75	16	BCF, IR	735 608 637	1	0.194	101	3.6	66	9
90	16	BCF, IR	735 608 638	1	0.189	101	4.3	65	9
110	16	BCF, IR	735 608 639	1	0.264	121	5.3	65	10

PF 2 37 230 999

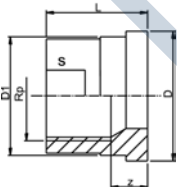
24 60 06



## Union End, Stainless Steel Rp

**Model:**

- Material: Stainless Steel 1.4404 (316L)
- Parallel female thread Rp

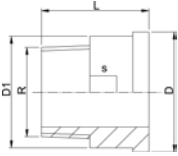


Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	s [mm]
3/8	16	724 600 655	0	0.030	9	24	22	19	19
1/2	16	724 600 656	0	0.060	11	30	28	24	24
3/4	16	724 600 657	0	0.100	11	39	36	26	29
1	16	724 600 658	0	0.140	12	45	42	29	36
1 1/4	16	724 600 659	0	0.230	14	57	53	33	45
1 1/2	16	724 600 660	0	0.320	15	63	59	34	54
2	16	724 600 661	0	0.450	15	78	74	39	63

PF 2 30 153 999



24 60 07



PF 2 30 153 999

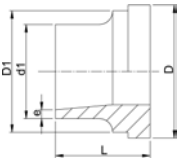
## Union End, Stainless Steel R

**Model:**

- Material: Stainless Steel 1.4404 (316L)
- Taper male thread R

R [inch]	PN	Code	SP	kg	D [mm]	D1 [mm]	L [mm]	s [mm]
3/8	16	<b>724 600 705</b>	0	0.050	24	22	30	19
1/2	16	<b>724 600 706</b>	0	0.090	30	28	34	24
3/4	16	<b>724 600 707</b>	0	0.120	39	36	36	32
1	16	<b>724 600 708</b>	0	0.190	45	42	40	37
1 1/4	16	<b>724 600 709</b>	0	0.350	57	53	46	48
1 1/2	16	<b>724 600 710</b>	0	0.400	63	59	48	54
2	16	<b>724 600 711</b>	0	0.660	78	74	55	69

24 60 55



PF 2 30 153 999

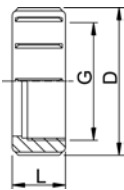
## Union End, Stainless Steel Welding End

**Model:**

- Material: Stainless Steel 1.4404 (316L)

d [mm]	d1 [mm]	PN	Code	SP	kg	D [mm]	D1 [mm]	L [mm]	e [mm]
16	17	16	<b>724 605 505</b>	0	0.030	24	22	18	1.6
20	21	16	<b>724 605 506</b>	0	0.050	30	28	22	2.0
25	26	16	<b>724 605 507</b>	0	0.080	39	36	23	2.0
32	33	16	<b>724 605 508</b>	0	0.110	45	42	26	2.0
40	42	16	<b>724 605 509</b>	0	0.190	57	53	26	2.0
50	48	16	<b>724 605 510</b>	0	0.220	63	59	28	2.0
63	60	16	<b>724 605 511</b>	0	0.370	78	74	32	2.6

35 69 04



PF 2 35 191 999

## SYGEF Standard, Union nut, PN 16

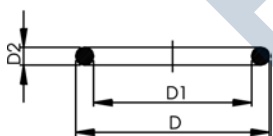
**Model:**

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

**Note:**

- For the dimensions d75-110 please see instructions for the installation

Socket Fusion d [mm]	Butt Fusion d [mm]	PN	Code	kg	D [mm]	G [inch]	L [mm]
16	16	16	<b>735 690 405</b>	0.013	35	3/4	21
20	20	16	<b>735 690 406</b>	0.023	43	1	22
25	25	16	<b>735 690 407</b>	0.047	53	1 1/4	24
32	32	16	<b>735 690 408</b>	0.048	60	1 1/2	26
40	40	16	<b>735 690 409</b>	0.097	74	2	29
50	50	16	<b>735 690 410</b>	0.146	82	2 1/4	33
63	63	16	<b>735 690 411</b>	0.145	100	2 3/4	35
	75 - 90	16	<b>735 690 422</b>	0.290	133	S 107,5x3,6	40
	110	16	<b>735 690 423</b>	0.420	155	S 127,5x3,6	42



## 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	SP	kg	D [mm]	D1 [mm]	D2 [mm]
<b>748 410 013</b>	<b>749 410 013</b>	100	0.011	80		
<b>748 410 014</b>	<b>749 410 014</b>	100	0.012	93		
<b>748 410 015</b>	<b>749 410 015</b>	100	0.015	112		



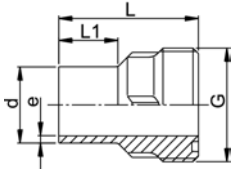


## SYGEF Plus, Union bush, PN 16



### Model:

- Material: PVDF-HP
- Suitable for SYGEF Plus Union Butt Fusion
- d75, d90 and d110 with buttress shaped thread



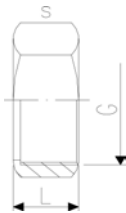
d [mm]	PN	FM	Code	SP	kg	G [inch]	e [mm]	L [mm]	L1 [mm]
20	16	BCF, IR	<b>735 648 626</b>	1	0.024	1	1.9	53	25
25	16	BCF, IR	<b>735 648 627</b>	1	0.041	1 1/4	4.9	56	25
32	16	BCF, IR	<b>735 648 628</b>	1	0.056	1 1/2	2.4	59	25
40	16	BCF, IR	<b>735 648 629</b>	1	0.089	2	2.4	62	25
50	16	BCF, IR	<b>735 648 630</b>	1	0.116	2 1/4	3.0	65	25
63	16	BCF, IR	<b>735 648 631</b>	1	0.172	2 3/4	3.0	68	25
75	16	BCF, IR	<b>735 648 637</b>	1	0.261	S 107.5 x 3.6	3.6	66	24
90	16	BCF, IR	<b>735 648 638</b>	1	0.258	S 107.5 x 3.6	4.3	65	24
110	16	BCF, IR	<b>735 648 639</b>	1	0.343	S 127.5 x 3.6	5.3	65	25

PF 2 37 230 999

## 24 69 01

## Union nut stainless steel 1.4404 (316L)

\* Octagon union nut



d [mm]	PN	Code	SP	kg	L [mm]	G [mm]	s [mm]
16	16	<b>724 690 105</b>	0	0.060	19	7 <sup>6</sup> / <sub>102</sub>	32
20	16	<b>724 690 106</b>	0	0.110	21	25	41
25	16	<b>724 690 107</b>	0	0.100	23	25 <sup>25</sup> / <sub>102</sub>	46
32	16	<b>724 690 108</b>	0	0.170	24	25 <sup>25</sup> / <sub>51</sub>	55
* 40	16	<b>724 690 109</b>	0	0.240	27	51	68
* 50	16	<b>724 690 110</b>	0	0.300	31	51 <sup>25</sup> / <sub>102</sub>	74
* 63	16	<b>724 690 111</b>	0	0.390	35	51 <sup>76</sup> / <sub>102</sub>	88

PF 2 30 153 999

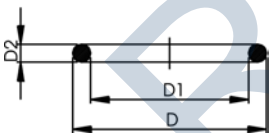
## EPDM 48 41 00 FPM 49 41 00

## O-Ring Gaskets

### Model:

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

\* for unions PP-H, PE and PVDF: 27 51 01, 27 52 01, 53 51 84, 53 52 86, 53 51 84, 53 52 84 und 35 52 86 only



d [mm]	DN [mm]	EPDM Code	FPM Code	SP	kg	D [mm]	D1 [mm]	D2 [mm]
20	15	<b>748 410 006</b>	<b>749 410 006</b>	0	0.002	27	20	3.53
25	20	<b>748 410 007</b>	<b>749 410 007</b>	100	0.002	35	28	3.53
32	25	<b>748 410 008</b>	<b>749 410 008</b>	100	0.002	40	33	3.53
40	32	<b>748 410 009</b>	<b>749 410 009</b>	0	0.006	51	41	5.34
50	40	<b>748 410 010</b>	<b>749 410 010</b>	0	0.007	58	47	5.34
63	50	<b>748 410 011</b>	<b>749 410 011</b>	100	0.010	70	60	5.34

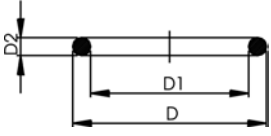
PF 2 30 162 006



## O-Ring Gaskets

### Model:

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



PF 2 30 162 008

d [mm]	DN [mm]	FFPM Code	SP	kg	D [mm]	D1 [mm]	D2 [mm]
20	15	<b>700 245 481</b>	0	0.002	27	20	4
25	20	<b>700 245 482</b>	100	0.002	35	28	4
32	25	<b>700 245 483</b>	100	0.002	40	33	4
40	32	<b>700 245 484</b>	0	0.006	51	41	5
50	40	<b>700 245 485</b>	0	0.007	58	47	5
63	50	<b>700 245 486</b>	100	0.010	70	60	5

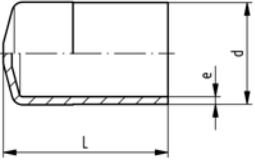


## SYGEF Standard, Cap, PN 16



### Model:

- Material: PVDF



PF 2 35 190 017

d [mm]	PN	FM	Code	e [mm]	L [mm]
20	16	BCF, IR	<b>735 968 006</b>	1.9	47
25	16	BCF, IR	<b>735 968 007</b>	1.9	47
32	16	BCF, IR	<b>735 968 008</b>	2.4	52

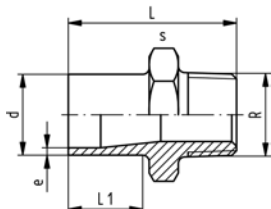
# Transition Fittings Butt Fusion

35 91 05

## SYGEF Standard Adaptor Nipple, male thread R, PN 16

**Model:**

- Material: PVDF
- With butt fusion spigot and BSP tapered male thread
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVDF
- Avoid stresses when installing and large changes in temperature



PF 2 35 421 021

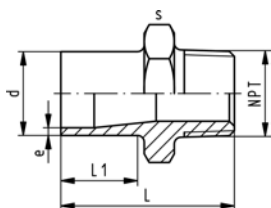
d [mm]	R [inch]	PN	FM	Code	kg	e [mm]	L [mm]	s [mm]	L1 [mm]
20	3/8	16	BCF, IR	735 910 555	0.023	1.9	50	32	26
20	1/2	16	BCF, IR	735 910 556	0.025	1.9	53	32	26
25	3/4	16	BCF, IR	735 910 557	0.032	1.9	55	36	26
32	1	16	BCF, IR	735 910 558	0.051	2.4	57	46	26
40	1 1/4	16	BCF, IR	735 910 559	0.075	2.4	60	55	26
50	1 1/2	16	BCF, IR	735 910 560	0.112	3.0	63	65	26
63	2	16	BCF, IR	735 910 561	0.179	3.0	69	75	27

35 91 45

## SYGEF Standard Adaptor Nipple, male thread NPT, PN 16

**Model:**

- Material: PVDF
- With butt fusion spigot and taper male thread NPT
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVDF
- Avoid stresses when installing and large changes in temperature



PF 2 35 421 022

d [mm]	NPT [inch]	PN	FM	Code	kg	e [mm]	L [mm]	s [mm]	L1 [mm]
20	3/8	16	BCF, IR	735 914 555	0.023	1.9	50	32	26
20	1/2	16	BCF, IR	735 914 556	0.025	1.9	53	32	26
25	3/4	16	BCF, IR	735 914 557	0.032	1.9	55	36	26
32	1	16	BCF, IR	735 914 558	0.052	2.4	57	46	26
40	1 1/4	16	BCF, IR	735 914 559	0.075	2.4	60	55	26
50	1 1/2	16	BCF, IR	735 914 560	0.112	3.0	63	65	26
63	2	16	BCF, IR	735 914 561	0.179	3.0	69	75	27

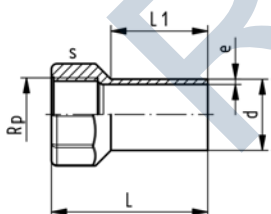
35 91 07

## SYGEF Standard Adaptor Socket, female thread Rp, PN 10



**Model:**

- Material: PVDF
- Welding dimension: PN16
- With butt fusion spigot and parallel female thread Rp
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVDF
- Avoid stresses when installing and large changes in temperature



PF 2 35 421 011

d [mm]	Rp [inch]	PN	FM	Code	e [mm]	L [mm]	s [mm]	L1 [mm]
20	3/8	10	BCF, IR	735 910 285	1.9	58	30	37
20	1/2	10	BCF, IR	735 910 286	1.9	58	30	37
25	3/4	10	BCF, IR	735 910 287	1.9	63	36	40
32	1	10	BCF, IR	735 910 288	2.4	71	46	44
40	1 1/4	10	BCF, IR	735 910 289	2.4	79	55	49
50	1 1/2	10	BCF, IR	735 910 290	3.0	84	60	55
63	2	10	BCF, IR	735 910 291	3.0	97	75	63

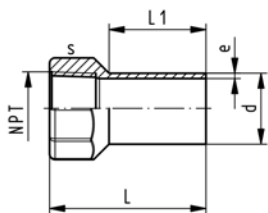
35 91 07



## SYGEF Standard Adaptor Socket, female thread NPT, PN 10

**Model:**

- Material: PVDF
- Welding dimension: PN16
- With butt fusion spigot and taper female thread NPT
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVDF
- Avoid stresses when installing and large changes in temperature



d [mm]	NPT [inch]	PN	FM	Code	e [mm]	L [mm]	s [mm]	L1 [mm]
20	3/8	10	BCF, IR	<b>735 914 285</b>	1.9	58	30	37
20	1/2	10	BCF, IR	<b>735 914 286</b>	1.9	58	30	37
25	3/4	10	BCF, IR	<b>735 914 287</b>	1.9	63	36	40
32	1	10	BCF, IR	<b>735 914 288</b>	2.4	71	46	44
40	1 1/4	10	BCF, IR	<b>735 914 289</b>	2.4	79	55	49
50	1 1/2	10	BCF, IR	<b>735 914 290</b>	3.0	84	60	55
63	2	10	BCF, IR	<b>735 914 291</b>	3.0	97	75	63

PF 2 35 421 012

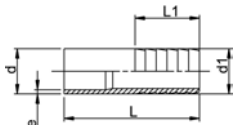
35 96 86



## SYGEF Standard, Hose Adapter, PN 16

**Model:**

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



d - d1 [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]
20 - 20	16	BCF, IR	<b>735 968 606</b>	0.015	1.9	64	27
25 - 25	16	BCF, IR	<b>735 968 607</b>	0.024	1.9	75	36
32 - 32	16	BCF, IR	<b>735 968 608</b>	0.042	2.4	82	36
40 - 40	16	BCF, IR	<b>735 968 609</b>	0.063	2.4	84	42
50 - 50	16	BCF, IR	<b>735 968 610</b>	0.084	3.0	90	48
63 - 60	16	BCF, IR	<b>735 968 611</b>	0.118	3.0	100	50

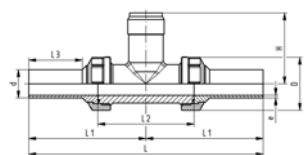
PF 2 35 421 050



## SYGEF Standard Installation Fitting Type 318 (FPM black) PN 16 for Butt Fusion systems

**Model:**

- Material: PVDF
- Threaded outlet 1 1/4" NPSM
- For Signet Paddlewheel Sensors Type -X0 (104 mm)
- Union end with butt fusion spigot PVDF
- supplied with sealing



d [mm]	PN	FM	Code	SP	kg
20	16	BCF, IR	<b>735 318 036</b>	0	0.250
25	16	BCF, IR	<b>735 318 037</b>	0	0.355
32	16	BCF, IR	<b>735 318 038</b>	0	0.427
40	16	BCF, IR	<b>735 318 039</b>	0	0.700
50	16	BCF, IR	<b>735 318 040</b>	0	0.850
63	16	BCF, IR	<b>735 318 041</b>	0	1.182

d [mm]	PN	e [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z [mm]	H [mm]	Sensor Type
20	16	1.9	45	196	90	37	98	76	X0
25	16	1.9	55	212	100	37	106	78	X0
32	16	2.4	62	228	110	40	114	81	X0
40	16	2.4	75	234	110	40	117	85	X0
50	16	3.0	84	250	120	43	125	89	X0
63	16	3.0	101	266	130	43	133	95	X0

PF 2 98 930 006

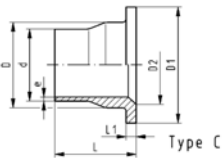
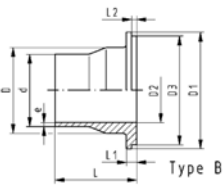
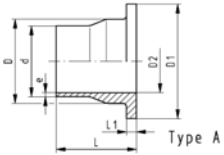
# Flange Adaptors, Flanges and Gaskets for Butt Fusion

35 79 88

## SYGEF Standard Flange Adaptor, jointing face serrated, PN 16

Model:

- Material: PVDF



d [mm]	DN [mm]	PN	FM	Code	kg
20	15	16	BCF, IR	735 798 806	0.029
25	20	16	BCF, IR	735 798 807	0.044
32	25	16	BCF, IR	735 798 808	0.066
40	32	16	BCF, IR	735 798 809	0.093
50	40	16	BCF, IR	735 798 810	0.129
63	50	16	BCF, IR	735 798 811	0.187
75	65	16	BCF, IR	735 798 812	0.298
90	80	16	BCF, IR	735 798 813	0.377
110	100	16	BCF, IR	735 798 814	0.540
140	125	16	IR	735 798 816	0.847
160	150	16	IR	735 798 817	1.200
200	200	16	IR	735 798 819	1.900
225	200	16	IR	735 798 820	2.000

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]	Type
20	26	45	15		1.9	54	6		A
25	32	58	20	54	1.9	56	7	4	B
32	40	68	26	63	2.4	58	7	4	B
40	49	78	34	73	2.4	68	8	4	B
50	60	88	43	82	3.0	69	8	4	B
63	75	102	56		3.0	72	9		A
75	89	122	66		3.6	80	10		A
90	105	138	78	133	4.3	81	12	4	B
110	125	158	100		5.3	81	13		C
140	155	188	127		6.7	90	16		C
160	175	212	151		7.7	93	17		C
200	232	268	207		9.6	102	22		C
225	235	268	207		10.8	102	22		C

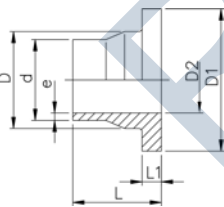
PF 2 35 190 010

35 79 88

## SYGEF Standard Flange Adaptor ANSI, jointing face serrated, PN 16

Model:

- Material: PVDF
- Other dimensions identical with metric version



d [mm]	PN	FM	Code	kg	D [mm]	D1 [mm]	D2 [mm]	e [mm]	L [mm]	L1 [mm]
25	16	BCF, IR	735 798 857	0.043	32	54	20	1.9	56	7
32	16	BCF, IR	735 798 858	0.063	40	63	26	2.4	58	7
40	16	BCF, IR	735 798 859	0.089	49	73	34	2.4	68	8
50	16	BCF, IR	735 798 860	0.123	60	82	43	3.0	69	8
90	16	BCF, IR	735 798 861	0.366	105	133	78	4.3	81	12

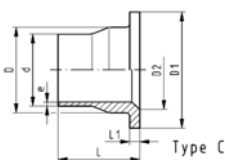
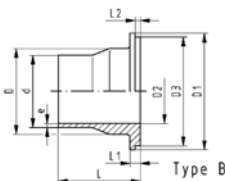
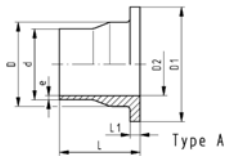
PF 2 35 190 010

35 79 88

## SYGEF Standard Flange Adaptor, jointing face serrated, PN 10

Model:

- Material: PVDF



PF 2 35 190 004

d [mm]	DN [mm]	PN	FM	Code	kg
90	80	10	BCF, IR	<b>735 798 863</b>	0.350
110	100	10	BCF, IR	<b>735 798 864</b>	0.456
125	100	10	IR	<b>735 798 865</b>	0.453
140	125	10	IR	<b>735 798 866</b>	0.710
160	150	10	IR	<b>735 798 867</b>	5.244
200	200	10	IR	<b>735 798 869</b>	1.744
225	200	10	IR	<b>735 798 870</b>	1.600

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]	Type
90	105	138	78	133	2.8	81	12	4	B
110	125	158	100		3.4	81	13		A
125	132	158	114		3.9	82	14		A
140	155	188	127		4.3	90	16		A
160	175	212	151		4.9	93	17		C
200	232	268	207		6.2	102	22		C
225	235	268	207		6.9	102	22		A

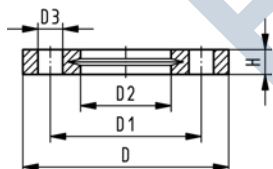
27 70 04  
27 70 05

## Backing Flanges, PP-V for Butt Fusion Systems metric

Model:

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

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



PF 2 34 238 030

d [mm]	Inch	DN [mm]	PN	Code	SP	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	A L	SC
120		15	16	<b>727 700 406</b>	56	0.080	95	65	28	14	16	4	M12
125		20	16	<b>727 700 407</b>	38	0.100	105	75	34	14	17	4	M12
132		25	16	<b>727 700 408</b>	80	0.140	115	85	42	14	18	4	M12
140		32	16	<b>727 700 409</b>	40	0.220	140	100	51	18	20	4	M16
150		40	16	<b>727 700 410</b>	30	0.210	150	110	62	18	22	4	M16
163		50	16	<b>727 700 411</b>	25	0.380	165	125	78	18	24	4	M16
175		65	16	<b>727 700 412</b>	19	0.480	185	145	92	18	26	4	M16
90		80	16	<b>727 700 513</b>	15	0.520	200	160	108	18	27	8	M16
110		100	16	<b>727 700 514</b>	13	0.680	220	180	128	18	28	8	M16
125		100	16	<b>727 700 515</b>	13	0.760	220	180	135	18	28	8	M16
140		125	16	<b>727 700 516</b>	10	0.800	250	210	158	18	30	8	M16
160	6	150	16	<b>727 700 517</b>	0	1.200	285	241	178	22	32	8	M20
180		150	16	<b>727 700 518</b>	0	1.200	285	240	188	22	32	8	M20
200	8	200	16	<b>727 700 519</b>	0	1.400	340	295	235	22	34	8	M20
225	9	200	16	<b>727 700 520</b>	0	1.400	340	295	238	22	34	8	M20
250		250	16	<b>727 700 521</b>	0	1.700	395	350	288	22	38	12	M20
280		250	16	<b>727 700 522</b>	0	1.700	395	350	294	22	38	12	M20
315		300	16	<b>727 700 523</b>	0	2.400	445	400	338	22	42	12	M20



27 70 02  
27 70 03

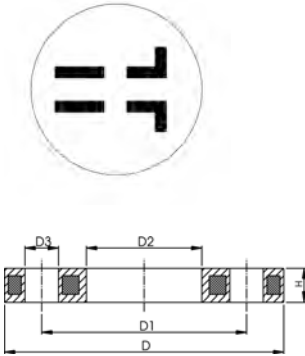
## Backing Flange, PP/Steel for Butt Fusion Systems metric



### 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]	A L	SC
20	15	16	<b>727 700 206</b>	0.220	95	65	28	14	12	4	M12
25	20	16	<b>727 700 207</b>	0.260	105	75	34	14	12	4	M12
32	25	16	<b>727 700 208</b>	0.430	115	85	42	14	16	4	M12
40	32	16	<b>727 700 209</b>	0.650	140	100	51	18	20	4	M16
50	40	16	<b>727 700 210</b>	0.820	150	110	62	18	20	4	M16
63	50	16	<b>727 700 211</b>	0.940	165	125	78	18	20	4	M16
75	65	16	<b>727 700 212</b>	1.300	185	145	92	18	20	4	M16
90	80	16	<b>727 700 313</b>	1.400	200	160	108	18	20	8	M16
110	100	16	<b>727 700 314</b>	1.580	220	180	128	18	20	8	M16
125	100	16	<b>727 700 315</b>	1.550	220	180	135	18	20	8	M16
140	125	16	<b>727 700 316</b>	2.360	250	210	158	18	24	8	M16
160	150	16	<b>727 700 317</b>	3.890	285	240	178	22	24	8	M20
180	150	16	<b>727 700 318</b>	3.410	285	240	188	22	24	8	M20
200	200	16	<b>727 700 319</b>	5.180	340	295	235	22	27	8	M20
225	200	16	<b>727 700 320</b>	5.150	340	295	238	22	27	8	M20
250	250	16	<b>727 700 321</b>	6.680	395	350	288	22	30	12	M20
280	250	16	<b>727 700 322</b>	6.580	395	350	294	22	30	12	M20
315	300	16	<b>727 700 323</b>	8.420	445	400	338	22	34	12	M20
355	350	16	<b>727 700 324</b>	15.790	515	460	376	22	40	16	M20
400	400	16	<b>727 700 325</b>	19.320	574	515	430	26	40	16	M24

PF 2 34 238 022

27 70 14  
27 70 15

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

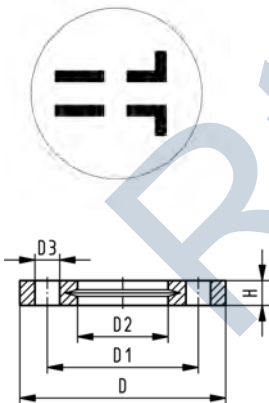


### Model:

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

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

AL: number of holes



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

PF 2 34 238 032

27 70 12

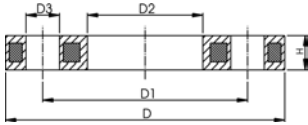


## Backing Flange, PP/Steel for Butt Fusion Systems Inch/ANSI

### Model:

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

AL: number of holes



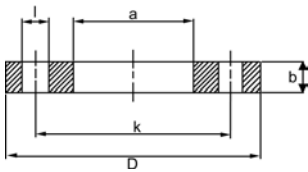
PF 2 34 238 023

DN [mm]	d [mm]	PN	Code	SP	kg	D1 [mm]	D2 [mm]	D3 [mm]	D [mm]	H [mm]	A L
15	20	16	<b>727 701 206</b>	72	0.210	60	28	16	95	12	4
20	25	16	<b>727 701 207</b>	45	0.250	70	34	16	105	12	4
25	32	16	<b>727 701 208</b>	34	0.420	79	42	16	115	16	4
32	40	16	<b>727 701 209</b>	20	0.670	89	51	16	140	16	4
40	50	16	<b>727 701 210</b>	17	0.860	98	62	16	150	18	4
50	63	16	<b>727 701 211</b>	15	0.930	121	78	19	165	18	4
65	75	16	<b>727 701 212</b>	11	1.340	140	92	19	185	18	4
80	90	16	<b>727 701 313</b>	9	1.550	152	108	19	200	20	4
100	110	16	<b>727 701 314</b>	13	1.840	190	128	19	229	20	8
200	200	16	<b>727 701 319</b>	0	5.180	298	235	22	340	27	8
200	225	16	<b>727 701 320</b>	0	5.150	298	238	22	340	27	8

## Backing Flange PVDF-Steel ANSI Flange Ring blue coated steel

Material: PVDF blue coated steel

Bolt holes drilled in accordance with ANSI B16.5, Class 150 pattern



PF 2 34 238 007

d [mm]	Inch	part number Code	SP	kg	Weight [lb]	D [mm]	a [mm]	k [mm]	b [mm]	l [mm]	Bolt Holes
20	½	<b>155 701 806</b>			0.50	89	28	60	7	16	4
25	¾	<b>155 701 807</b>			0.75	98	34	70	7	16	4
32	1	<b>155 701 808</b>			0.75	108	42	79	7	16	4
40	1 ¼	<b>155 701 809</b>			1.13	117	51	89	8	16	4
50	1 ½	<b>155 701 810</b>			1.31	127	62	98	8	16	4
63	2	<b>155 701 811</b>			2.13	152	78	121	10	19	4
75	2 ½	<b>155 701 812</b>	0	1.340	2.94	178	92	140	10	19	4
90	3	<b>155 701 813</b>			3.19	190	110	152	10	19	4
110	4	<b>155 703 814</b>			4.56	229	133	190	10	19	8
160	6	<b>155 701 917</b>			7.34	279	179	241	13	22	8
200	8	<b>155 701 919</b>	5	0.001	13.12	343	236	298	16	22	8
225	9	<b>155 701 920</b>			12.64	343	239	298	16	22	8
250	10	<b>155 701 921</b>			16.76	406	288	362	22	22	12
315	12	<b>155 701 923</b>			23.00	483	338	432	25	25	12

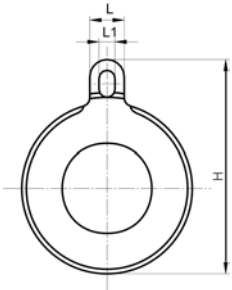




## SYGEF Plus Gasket

### Model:

- For Use with Steel Flange Rings
- \* Non-Returnable/Non-Cancelable



PF 2 37 344 001

d [mm]	Pipe Size [inch]	Code	SP	kg	H [mm]	L [mm]	L1 [mm]
25	3/4	<b>731 400 753</b>	1	0.035	76	20	13
32	1	<b>731 400 755</b>	1	0.040	91	25	16
40	1 1/4	<b>731 400 757</b>	1	0.030	101	25	16
50	1 1/2	<b>731 400 759</b>	1	0.055	110	25	16
63	2	<b>731 400 760</b>	1	0.080	128	25	16
75	2 1/2	<b>731 400 761</b>	1	0.100	148	25	16
90	3	<b>731 400 763</b>	1	0.110	161	25	16
110	4	<b>731 400 764</b>	1	0.165	189	25	16
160	6	<b>731 400 667</b>	1	0.200	244	30	20
200/225	8/9	<b>731 400 670</b>	1	0.305	300	30	20
250	10	<b>731 400 671</b>	0	0.001	360	35	22

Rtf-Prime.ru

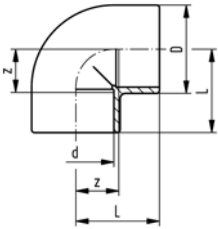
# Fittings for Socket Fusion

35 10 01

## SYGEF Standard, Elbow 90°, PN 16



**Model:**  
• Material: PVDF



d [mm]	PN	Code	kg	kg/m	D [mm]	L [mm]	z [mm]
16	16	<b>735 100 105</b>	0.029	0.029	26	25	12
20	16	<b>735 100 106</b>	0.026	0.026	27	28	14
25	16	<b>735 100 107</b>	0.038	0.038	32	32	16
32	16	<b>735 100 108</b>	0.065	0.065	40	38	20
40	16	<b>735 100 109</b>	0.104	0.104	49	44	24
50	16	<b>735 100 110</b>	0.164	0.164	60	51	28
63	16	<b>735 100 111</b>	0.284	0.284	75	62	35

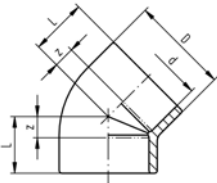
PF 2 35 189 001

35 15 01

## SYGEF Standard, Elbow 45°, PN 16



**Model:**  
• Material: PVDF



d [mm]	PN	Code	kg	kg/m	D [mm]	L [mm]	z [mm]
16	16	<b>735 150 105</b>	0.017	0.017	23	20	7
20	16	<b>735 150 106</b>	0.020	0.020	27	21	7
25	16	<b>735 150 107</b>	0.030	0.030	32	24	8
32	16	<b>735 150 108</b>	0.051	0.051	40	28	10
40	16	<b>735 150 109</b>	0.083	0.083	49	33	13
50	16	<b>735 150 110</b>	0.123	0.123	60	36	13
63	16	<b>735 150 111</b>	0.211	0.211	75	43	16

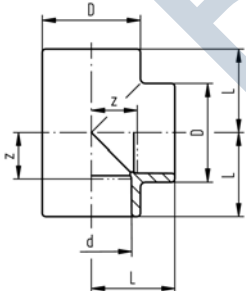
PF 2 35 189 002

35 20 01

## SYGEF Standard, T 90° equal, PN 16



**Model:**  
• Material: PVDF



d [mm]	PN	Code	kg	kg/m	D [mm]	L [mm]	z [mm]
16	16	<b>735 200 105</b>	0.039	0.039	26	25	12
20	16	<b>735 200 106</b>	0.035	0.035	27	28	14
25	16	<b>735 200 107</b>	0.050	0.050	32	32	16
32	16	<b>735 200 108</b>	0.085	0.085	40	38	20
40	16	<b>735 200 109</b>	0.135	0.135	49	44	24
50	16	<b>735 200 110</b>	0.208	0.208	60	51	28
63	16	<b>735 200 111</b>	0.360	0.360	75	62	35

PF 2 35 189 003

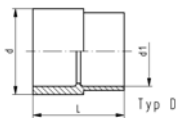
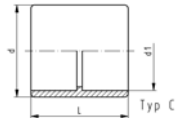
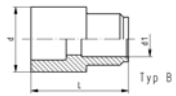
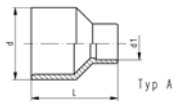
35 91 03

# SYGEF Standard, Reducing Bush, PN 16



Model:

- Material: PVDF



d - d1 [mm]	PN	Code	kg	kg/m	L [mm]	z [mm]	Type
20 - 16	16	<b>735 910 334</b>	0.017	0.017	35	22	B
25 - 20	16	<b>735 910 337</b>	0.017	0.017	37	23	A
32 - 20	16	<b>735 910 342</b>	0.022	0.022	43	29	A
32 - 25	16	<b>735 910 341</b>	0.023	0.023	39	23	C
40 - 20	16	<b>735 910 348</b>	0.033	0.033	48	34	A
40 - 25	16	<b>735 910 347</b>	0.037	0.037	48	32	A
40 - 32	16	<b>735 910 346</b>	0.037	0.037	43	25	C
50 - 20	16	<b>735 910 355</b>	0.059	0.059	54	40	A
50 - 25	16	<b>735 910 354</b>	0.058	0.058	54	38	A
50 - 32	16	<b>735 910 353</b>	0.062	0.062	54	36	A
50 - 40	16	<b>735 910 352</b>	0.063	0.063	48	28	C
63 - 20	16	<b>735 910 362</b>	0.103	0.103	64	50	A
63 - 25	16	<b>735 910 361</b>	0.105	0.105	64	48	A
63 - 32	16	<b>735 910 360</b>	0.108	0.108	64	46	A
63 - 40	16	<b>735 910 359</b>	0.117	0.117	64	44	A
63 - 50	16	<b>735 910 358</b>	0.105	0.105	54	31	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 d1	L	Z	Socket d	Socket d1	L	Z	Spigot d	Spigot d1	L	Z	Socket d	Spigot d1	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								
735 910 341	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				
735 910 346	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				
735 910 352	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				
735 910 358	16	54	63	50	54	31												

Please note: Illustration of the functions not inevitably conform to respective type!

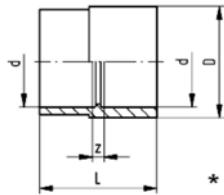
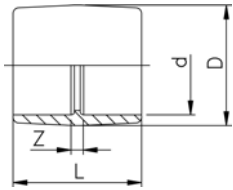
PF 2 35 189 005

35 91 01

**SYGEF Standard, Socket equal, PN 16**



**Model:**  
• Material: PVDF



PF 2 35 189 004

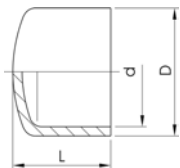
d [mm]	PN	Code	kg	kg/m	D [mm]	L [mm]	z [mm]
16	16	<b>735 910 105</b>	0.020	0.020	26	33	7
20	16	<b>735 910 106</b>	0.016	0.016	27	35	7
25	16	<b>735 910 107</b>	0.023	0.023	32	39	7
32	16	<b>735 910 108</b>	0.037	0.037	40	43	7
* 40	16	<b>735 910 109</b>	0.063	0.063	50	48	8
* 50	16	<b>735 910 110</b>	0.105	0.105	63	54	8
63	16	<b>735 910 111</b>	0.146	0.146	75	62	8

35 96 01

**SYGEF Standard, Cap, PN 16**



**Model:**  
• Material: PVDF



PF 2 35 189 006

d [mm]	PN	Code	kg	kg/m	D [mm]	L [mm]
16	16	<b>735 960 105</b>	0.013	0.013	25	24
20	16	<b>735 960 106</b>	0.011	0.011	27	23
25	16	<b>735 960 107</b>	0.017	0.017	32	26
32	16	<b>735 960 108</b>	0.028	0.028	40	30
40	16	<b>735 960 109</b>	0.045	0.045	49	34
50	16	<b>735 960 110</b>	0.073	0.073	60	39
63	16	<b>735 960 111</b>	0.128	0.128	75	46

# Unions for Socket Fusion

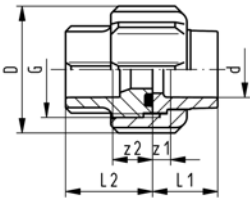
35 51 01

## SYGEF Standard, Union (FPM black), PN 16



**Model:**

- Material: PVDF
- **Supplied with:** O-Ring No. 49 41 00 FPM (e.g. Viton A®)
- Please see installation instruction



d [mm]	PN	Code	kg	kg/m	D [mm]	G [inch]	L1 [mm]	L2 [mm]	z1 [mm]	z [mm]
16	16	<b>735 510 105</b>	0.025	0.025	35	3/4	18	24	5	11
20	16	<b>735 510 106</b>	0.064	0.064	43	1	19	26	5	12
25	16	<b>735 510 107</b>	0.101	0.101	53	1 1/4	21	28	5	12
32	16	<b>735 510 108</b>	0.132	0.132	60	1 1/2	23	30	5	12
40	16	<b>735 510 109</b>	0.219	0.219	74	2	25	34	5	14
50	16	<b>735 510 110</b>	0.289	0.289	82	2 1/4	28	39	5	16
63	16	<b>735 510 111</b>	0.496	0.496	100	2 3/4	32	47	5	20

PF 2 35 191 002

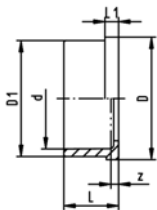
35 60 01

## SYGEF Standard, Union end, PN 16



**Model:**

- Material: PVDF
- Suitable for SYGEF Standard Union Socket Fusion
- Suitable for Diaphragm Valve Type 314
- Suitable for Vortex Sensor



d [mm]	PN	Code	kg	kg/m	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	<b>735 600 105</b>	0.006	0.006	24	22	18	4	5
20	16	<b>735 600 106</b>	0.011	0.011	30	28	19	5	5
25	16	<b>735 600 107</b>	0.022	0.022	39	36	21	5	5
32	16	<b>735 600 108</b>	0.026	0.026	45	42	23	6	5
40	16	<b>735 600 109</b>	0.046	0.046	57	53	25	6	5
50	16	<b>735 600 110</b>	0.054	0.054	63	59	28	7	5
63	16	<b>735 600 111</b>	0.079	0.079	78	74	32	7	5

PF 2 35 191 999

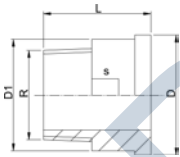
24 60 07

## Union End, Stainless Steel R



**Model:**

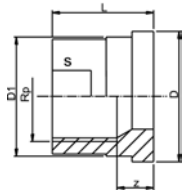
- Material: Stainless Steel 1.4404 (316L)
- Taper male thread R



R [inch]	PN	Code	SP	kg	D [mm]	D1 [mm]	L [mm]	s [mm]
3/8	16	<b>724 600 705</b>	0	0.050	24	22	30	19
1/2	16	<b>724 600 706</b>	0	0.090	30	28	34	24
3/4	16	<b>724 600 707</b>	0	0.120	39	36	36	32
1	16	<b>724 600 708</b>	0	0.190	45	42	40	37
1 1/4	16	<b>724 600 709</b>	0	0.350	57	53	46	48
1 1/2	16	<b>724 600 710</b>	0	0.400	63	59	48	54
2	16	<b>724 600 711</b>	0	0.660	78	74	55	69

PF 2 30 153 999

24 60 06



PF 2 30 153 999

## Union End, Stainless Steel

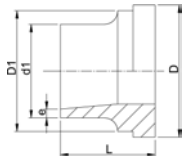
**Rp**

**Model:**

- Material: Stainless Steel 1.4404 (316L)
- Parallel female thread Rp

Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	s [mm]
3/8	16	<b>724 600 655</b>	0	0.030	9	24	22	19	19
1/2	16	<b>724 600 656</b>	0	0.060	11	30	28	24	24
3/4	16	<b>724 600 657</b>	0	0.100	11	39	36	26	29
1	16	<b>724 600 658</b>	0	0.140	12	45	42	29	36
1 1/4	16	<b>724 600 659</b>	0	0.230	14	57	53	33	45
1 1/2	16	<b>724 600 660</b>	0	0.320	15	63	59	34	54
2	16	<b>724 600 661</b>	0	0.450	15	78	74	39	63

24 60 55



PF 2 30 153 999

## Union End, Stainless Steel

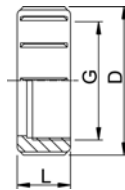
**Welding End**

**Model:**

- Material: Stainless Steel 1.4404 (316L)

d [mm]	d1 [mm]	PN	Code	SP	kg	D [mm]	D1 [mm]	L [mm]	e [mm]
16	17	16	<b>724 605 505</b>	0	0.030	24	22	18	1.6
20	21	16	<b>724 605 506</b>	0	0.050	30	28	22	2.0
25	26	16	<b>724 605 507</b>	0	0.080	39	36	23	2.0
32	33	16	<b>724 605 508</b>	0	0.110	45	42	26	2.0
40	42	16	<b>724 605 509</b>	0	0.190	57	53	26	2.0
50	48	16	<b>724 605 510</b>	0	0.220	63	59	28	2.0
63	60	16	<b>724 605 511</b>	0	0.370	78	74	32	2.6

35 69 04



PF 2 35 191 999

## SYGEF Standard, Union nut, PN 16

**Model:**

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

**Note:**

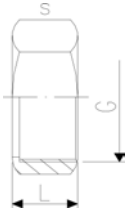
- For the dimensions d75-110 please see instructions for the installation

Socket Fusion d [mm]	Butt Fusion d [mm]	PN	Code	kg	kg/m	D [mm]	G [inch]	L [mm]
16	16	16	<b>735 690 405</b>	0.013	0.013	35	3/4	21
20	20	16	<b>735 690 406</b>	0.023	0.023	43	1	22
25	25	16	<b>735 690 407</b>	0.047	0.047	53	1 1/4	24
32	32	16	<b>735 690 408</b>	0.048	0.048	60	1 1/2	26
40	40	16	<b>735 690 409</b>	0.097	0.097	74	2	29
50	50	16	<b>735 690 410</b>	0.146	0.146	82	2 1/4	33
63	63	16	<b>735 690 411</b>	0.145	0.145	100	2 3/4	35

24 69 01

## Union nut stainless steel 1.4404 (316L)

\* Octagon union nut



PF 2 30 153 999

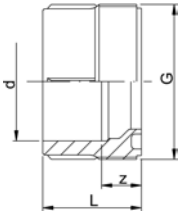
d [mm]	PN	Code	SP	kg	kg/m	L [mm]	G [mm]	s [mm]
16	16	<b>724 690 105</b>	0	0.060	0.060	19	$76/102$	32
20	16	<b>724 690 106</b>	0	0.110	0.110	21	25	41
25	16	<b>724 690 107</b>	0	0.100	0.100	23	$25^{25/102}$	46
32	16	<b>724 690 108</b>	0	0.170	0.170	24	$25^{29/51}$	55
* 40	16	<b>724 690 109</b>	0	0.240	0.240	27	51	68
* 50	16	<b>724 690 110</b>	0	0.300	0.300	31	$51^{29/102}$	74
* 63	16	<b>724 690 111</b>	0	0.390	0.390	35	$51^{76/102}$	88

35 64 01

## SYGEF Standard, Union bush, PN 16

Model:

- Material: PVDF
- Suitable for SYGEF Standard Union Socket Fusion



PF 2 35 191 999

d [mm]	PN	Code	kg	kg/m	G [inch]	L [mm]	z [mm]
16	16	<b>735 640 105</b>	0.011	0.011	3/4	24	11
20	16	<b>735 640 106</b>	0.019	0.019	1	26	12
25	16	<b>735 640 107</b>	0.031	0.031	1 1/4	28	12
32	16	<b>735 640 108</b>	0.042	0.042	1 1/2	30	12
40	16	<b>735 640 109</b>	0.069	0.069	2	34	14
50	16	<b>735 640 110</b>	0.091	0.091	2 1/4	39	16
63	16	<b>735 640 111</b>	0.161	0.161	2 3/4	47	20

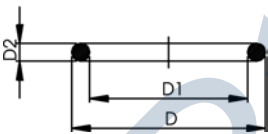
EPDM 48 41 00  
FPM 49 41 00

## O-Ring Gasket, FPM black

Model:

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

\* for unions PP-H, PE and PVDF: 27 51 01, 27 52 01, 53 51 84, 53 52 86, 53 51 84, 53 52 84 und 35 52 86 only



PF 2 30 162 006

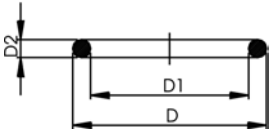
d [mm]	DN [mm]	EPDM Code	FPM Code	SP	kg	kg/m	D [mm]	D1 [mm]	D2 [mm]
16	10	<b>748 410 005</b>	<b>749 410 005</b>	0	0.002	0.002	21	16	2.62
20	15	<b>748 410 006</b>	<b>749 410 006</b>	0	0.002	0.002	27	20	3.53
25	20	<b>748 410 007</b>	<b>749 410 007</b>	100	0.002	0.002	35	28	3.53
32	25	<b>748 410 008</b>	<b>749 410 008</b>	100	0.002	0.002	40	33	3.53
40	32	<b>748 410 009</b>	<b>749 410 009</b>	0	0.006	0.006	51	41	5.34
50	40	<b>748 410 010</b>	<b>749 410 010</b>	0	0.007	0.007	58	47	5.34
63	50	<b>748 410 011</b>	<b>749 410 011</b>	100	0.010	0.010	70	60	5.34



## O-Ring Gaskets

### Model:

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



PF 2 30 162 008

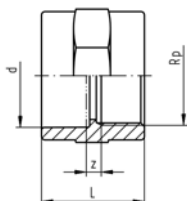
d [mm]	DN [mm]	FFPM Code	SP	kg	kg/m	D [mm]	D1 [mm]	D2 [mm]
20	15	<b>700 245 481</b>	0	0.002	0.002	27	20	4
25	20	<b>700 245 482</b>	100	0.002	0.002	35	28	4
32	25	<b>700 245 483</b>	100	0.002	0.002	40	33	4
40	32	<b>700 245 484</b>	0	0.006	0.006	51	41	5
50	40	<b>700 245 485</b>	0	0.007	0.007	58	47	5
63	50	<b>700 245 486</b>	100	0.010	0.010	70	60	5

Rtf-Prime.ru



# Transition Fittings for Socket Fusion

35 91 02



## SYGEF Standard

### Adaptor Socket, female thread - Rp, PN 16

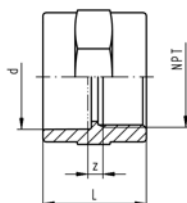
#### Model:

- Material: PVDF
- With socket fusion end and parallel female thread
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVDF
- Avoid stresses when installing and large changes in temperature

d [mm]	Rp [inch]	PN	Code	kg	kg/m	L [mm]	s [mm]	z [mm]
20	1/2	16	<b>735 910 206</b>	0.030	0.030	34	32	5
25	3/4	16	<b>735 910 207</b>	0.037	0.037	38	36	6
32	1	16	<b>735 910 208</b>	0.067	0.067	43	46	7
40	1 1/4	16	<b>735 910 209</b>	0.100	0.100	47	55	7
50	1 1/2	16	<b>735 910 210</b>	0.135	0.135	54	65	9
63	2	16	<b>735 910 211</b>	0.217	0.217	62	80	9

PF 2 35 191 001

35 91 42



## SYGEF Standard

### Adaptor Socket, female thread - metric, NPT, PN 16

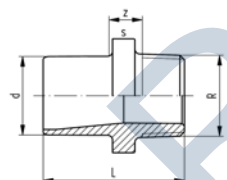
#### Model:

- Material: PVDF
- With socket fusion end and taper female thread
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVDF
- Avoid stresses when installing and large changes in temperature

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

PF 2 35 191 006

35 91 05



## SYGEF Standard,

### Adaptor Nipple, male thread - metric, R, PN 16

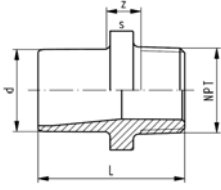
#### Model:

- Material: PVDF
- With socket fusion spigot metric and BSP tapered male thread
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVDF
- Avoid stresses when installing and large changes in temperature

d [mm]	R [inch]	PN	Code	kg	kg/m	L [mm]	s [mm]	z [mm]
16	3/8	16	<b>735 910 505</b>	0.015	0.015	37	27	12
20	1/2	16	<b>735 910 506</b>	0.025	0.025	53	32	25
25	3/4	16	<b>735 910 507</b>	0.032	0.032	55	36	24
32	1	16	<b>735 910 508</b>	0.052	0.052	57	46	22
40	1 1/4	16	<b>735 910 509</b>	0.076	0.076	60	55	21
50	1 1/2	16	<b>735 910 510</b>	0.112	0.112	63	65	19
63	2	16	<b>735 910 511</b>	0.163	0.163	69	75	18

PF 2 35 191 008

35 91 45



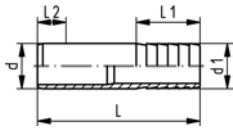
## SYGEF Standard, Adaptor Nipple, male thread - NPT, PN 16

### Model:

- Material: PVDF
- With socket fusion spigot and taper male thread
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVDF
- Avoid stresses when installing and large changes in temperature

d [mm]	NPT [inch]	PN	Code	kg	kg/m	L [mm]	s [mm]	z [mm]
16	3/8	16	<b>735 914 505</b>	0.014	0.014	37	27	12
20	1/2	16	<b>735 914 506</b>	0.025	0.025	53	32	25
25	3/4	16	<b>735 914 507</b>	0.033	0.033	55	36	24
32	1	16	<b>735 914 508</b>	0.052	0.052	57	46	22
40	1 1/4	16	<b>735 914 509</b>	0.076	0.076	60	55	21
50	1 1/2	16	<b>735 914 510</b>	0.114	0.114	63	65	19
63	2	16	<b>735 914 511</b>	0.164	0.164	69	75	18

PF 2 35 191 007



## SYGEF Standard, Hose Adapter, PN 16

### Model:

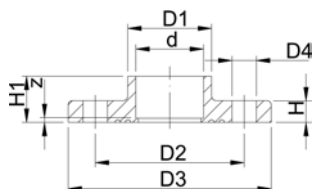
- Material: PVDF
- With socket fusion spigot metric and parallel hose connection

d - d1 [mm]	PN	Code	kg	kg/m	L [mm]	L1 [mm]	L2 [mm]
16 - 16	16	<b>735 960 405</b>	0.001	0.001	50	27	13
20 - 20	16	<b>735 960 406</b>	0.018	0.018	78	27	14
25 - 25	16	<b>735 960 407</b>	0.028	0.028	91	36	16
32 - 32	16	<b>735 960 408</b>	0.050	0.050	100	36	18
40 - 40	16	<b>735 960 409</b>	0.078	0.078	104	42	20
50 - 50	16	<b>735 968 610</b>	0.084	0.084	90	48	
63 - 60	16	<b>735 960 411</b>	0.126	0.126	100	50	27

PF 2 35 191 009

# Flange Adaptors, Flanges and Gaskets for Socket Fusion

## Fixed Flanges, socket fusion Combined jointing face: flat and serrated



**Model:**

- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

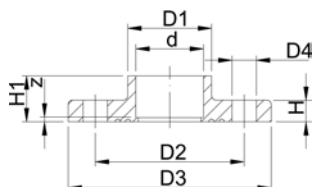
AL: number of holes

d [mm]	DN [mm]	Inch	PN	Code	SP	kg	kg/m
20	15	1/2	16	<b>735 740 106</b>	0	0.124	0.124
25	20	3/4	16	<b>735 740 107</b>	0	0.162	0.162
32	25	1	16	<b>735 740 108</b>	0	0.229	0.229
40	32	1 1/4	16	<b>735 740 109</b>	0	0.340	0.340
50	40	1 1/2	16	<b>735 740 110</b>	0	0.409	0.409
63	50	2	16	<b>735 740 111</b>	0	0.551	0.551

d [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	A L	z [mm]
20	27	65	93	14	12	19	4	5
25	33	75	103	14	13	21	4	4
32	40	85	115	14	14	23	4	4
40	50	100	137	18	15	25	4	4
50	61	110	147	18	16	27	4	4
63	76	125	162	18	18	31	4	4

PF 2 35 446 002

## Fixed Flanges, socket fusion Jointing face flat



**Model:**

- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

AL: number of holes

d [mm]	DN [mm]	Inch	PN	Code	SP	kg	kg/m
20	15	1 1/2	16	<b>735 730 106</b>	0	0.137	0.137
25	20	1 3/4	16	<b>735 730 107</b>	0	0.185	0.185
32	25	1	16	<b>735 730 108</b>	0	0.255	0.255
40	32	1 1/4	16	<b>735 730 109</b>	0	0.355	0.355
50	40	1 1/2	16	<b>735 730 110</b>	0	0.486	0.486
63	50	2	16	<b>735 730 111</b>	0	0.653	0.653

d [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	A L	z [mm]
20	27	65	93	14	12	19	4	5
25	33	75	103	14	13	21	4	5
32	40	85	115	14	14	23	4	5
40	50	100	137	18	15	25	4	5
50	61	110	147	18	16	27	4	5
63	76	125	162	18	18	31	4	5

PF 2 35 446 002

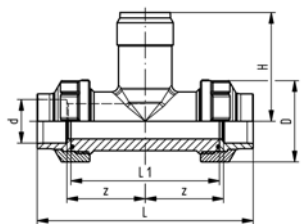


## SYGEF Standard Installation Fitting Type 310 (FPM black) PN 16 for Socket Fusion systems



### Model:

- Material: PVDF
- Threaded outlet 1 1/4" NPSM
- For Signet Paddlewheel Sensors Type -X0 (104 mm)
- Union end with fusion socket PVDF
- supplied with sealing



d [mm]	PN	Code	SP	kg	kg/m	D [mm]	z [mm]	L [mm]	L1 [mm]	H [mm]	Sensor Type
20	16	735 310 036	0	0.250	0.250	45	50	128	90	76	X0
25	16	735 310 037	0	0.355	0.355	55	55	142	100	78	X0
32	16	735 310 038	0	0.427	0.427	62	60	156	110	81	X0
40	16	735 310 039	0	0.700	0.700	75	60	160	110	85	X0
50	16	735 310 040	0	0.850	0.850	84	65	176	120	89	X0
63	16	735 310 041	0	1.182	1.182	101	70	194	130	95	X0

PF 2 98 930 006

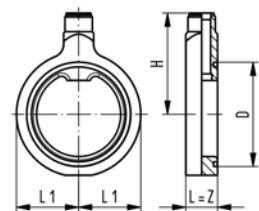


## SYGEF Standard Installation Fitting Type 311 (FPM black)



### Model:

- Material: PVDF
- Threaded outlet 1 1/4" NPSM
- For Signet paddlewheel sensors Type -X1 (137 mm)
- Suitable for backing flanges metric and inch
- Delivered with profile O-ring



d [mm]	DN [mm]	PN [bar]	Code	kg	kg/m	H [mm]	D [mm]	L [mm]	L1 [mm]	Sensor Type
75	65	10 / 16	735 311 042	0.841	0.841	135	88	48	61	X1
90	80	10 / 16	735 311 043	1.000	1.000	141	102	48	69	X1
110	100	10 / 16	735 311 044	1.159	1.159	152	132	48	79	X1
125	100	10 / 16	735 311 045	0.990	0.990	147	132	48	79	X1
140	125	10 / 16	735 311 046	1.428	1.428	153	157	48	94	X1
160	150	10 / 16	735 311 047	1.694	1.694	161	482	48	106	X1
200	200	10 / 16	735 311 049	2.643	2.643	175	236	48	134	X1
225	200	10 / 16	735 311 050	2.074	2.074	185	236	48	134	X1

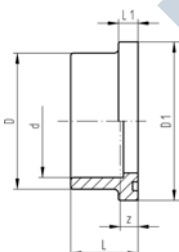
PF 2 98 930 006

35 81 01

## SYGEF Standard, Flange Adaptor with groove, PN 16

### Model:

- Material: PVDF
- Jointing face: With O-ring groove
- Counterpart: Flange Adaptor metric or ANSI
- Gasket: O-ring EPDM No. 48 41 01, FPM No. 49 41 01



d [mm]	PN	Code	kg	kg/m	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
20	16	735 810 106	0.015	0.015	27	34	22	9	8
25	16	735 810 107	0.022	0.022	33	41	24	10	8
32	16	735 810 108	0.036	0.036	41	50	26	10	8
40	16	735 810 109	0.055	0.055	50	61	30	13	10
50	16	735 810 110	0.080	0.080	61	73	33	13	10
63	16	735 810 111	0.138	0.138	76	90	37	14	10

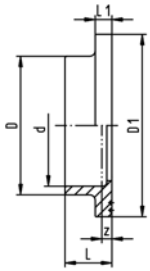
PF 2 35 191 005



## SYGEF Standard Flange Adaptor metric, jointing face serrated, PN 16

### Model:

- Material: PVDF
- Suitable for Flange Adaptor with groove
- Gasket: Profile Flange Gaskets **FPM** or **EPDM**



d [mm]	DN [mm]	PN	Code	kg	kg/m	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
20	15	16	<b>735 790 206</b>	0.020	0.020	27	45	19	6	3
25	20	16	<b>735 790 207</b>	0.037	0.037	33	58	21	7	3
32	25	16	<b>735 790 208</b>	0.051	0.051	41	68	23	7	3
40	32	16	<b>735 790 209</b>	0.073	0.073	50	78	25	8	3
50	40	16	<b>735 790 210</b>	0.095	0.095	61	88	28	8	3
63	50	16	<b>735 790 211</b>	0.142	0.142	76	102	32	9	3

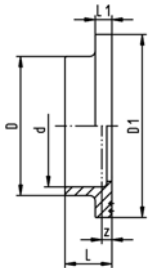
PF 2 35 191 003



## SYGEF Standard Flange Adaptor ANSI, jointing face serrated, PN 16

### Model:

- Material: PVDF
- Suitable for Flange Adaptor with groove
- Face dimension ANSI
- Gasket: Flat Gasket **FPM** or **EPDM**
- Gasket: Profile Flange Gaskets **FPM** or **EPDM**
- Dimensions d20 and d63 are identical to metric version



d [mm]	PN	Code	kg	kg/m	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
25	16	<b>735 790 257</b>	0.037	0.037	33	54	21	7	3
32	16	<b>735 790 258</b>	0.051	0.051	41	63	23	7	3
40	16	<b>735 790 259</b>	0.073	0.073	50	73	25	8	3
50	16	<b>735 790 260</b>	0.095	0.095	61	82	28	8	3

PF 2 35 191 003

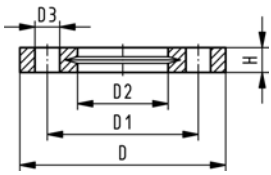
27 70 04  
27 70 05

## Backing Flanges, PP-V for Socket Systems metric

### Model:

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

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



PF 2 34 238 030

d [mm]	Inch	DN [mm]	PN	Code	SP	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	A L	SC
<sup>1</sup> 20		15	16	<b>727 700 406</b>	56	0.080	95	65	28	14	16	4	M12
<sup>1</sup> 25		20	16	<b>727 700 407</b>	38	0.100	105	75	34	14	17	4	M12
<sup>1</sup> 32		25	16	<b>727 700 408</b>	80	0.140	115	85	42	14	18	4	M12
<sup>1</sup> 40		32	16	<b>727 700 409</b>	40	0.220	140	100	51	18	20	4	M16
<sup>1</sup> 50		40	16	<b>727 700 410</b>	30	0.210	150	110	62	18	22	4	M16
<sup>1</sup> 63		50	16	<b>727 700 411</b>	25	0.380	165	125	78	18	24	4	M16

27 70 02

## Backing Flanges, PP/Steel for Socket Systems metric

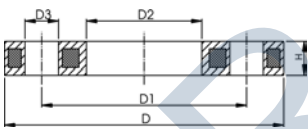
### Model:

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

<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

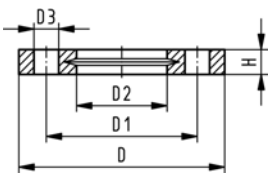
AL: number of holes



PF 2 34 238 020

d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	A L	SC
20	15	16	<b>727 700 206</b>	0.220	95	65	28	14	12	4	M12
25	20	16	<b>727 700 207</b>	0.260	105	75	34	14	12	4	M12
32	25	16	<b>727 700 208</b>	0.430	115	85	42	14	16	4	M12
40	32	16	<b>727 700 209</b>	0.650	140	100	51	18	20	4	M16
50	40	16	<b>727 700 210</b>	0.820	150	110	62	18	20	4	M16
63	50	16	<b>727 700 211</b>	0.940	165	125	78	18	20	4	M16

27 70 14  
27 70 15



PF 2 34 238 032

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

### Model:

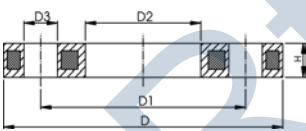
- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt-fixing as an assembly aid
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**

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

AL: number of holes

Inch	DN [mm]	PN	Code	kg	kg/m	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	A L	SC
1 1/2	15	16	<b>727 701 406</b>	0.080	0.080	95	60	28	16	16	4	M12
1 3/4	20	16	<b>727 701 407</b>	0.100	0.100	105	70	34	16	17	4	M12
1	25	16	<b>727 701 408</b>	0.140	0.140	115	79	42	16	18	4	M12
1 1/4	32	16	<b>727 701 409</b>	0.220	0.220	140	89	51	16	20	4	M16
1 1/2	40	16	<b>727 701 410</b>	0.210	0.210	150	98	62	16	22	4	M16
2	50	16	<b>727 701 411</b>	0.380	0.380	165	121	78	19	24	4	M16

27 70 12



PF 2 34 238 021

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

### Model:

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

AL: number of holes

DN [mm]	d [mm]	PN	Code	kg	kg/m	D1 [mm]	D2 [mm]	D3 [mm]	D [mm]	H [mm]	A L
15	20	16	<b>727 701 206</b>	0.210	0.210	60	28	16	95	12	4
20	25	16	<b>727 701 207</b>	0.250	0.250	70	34	16	105	12	4
25	32	16	<b>727 701 208</b>	0.420	0.420	79	42	16	115	16	4
32	40	16	<b>727 701 209</b>	0.670	0.670	89	51	16	140	16	4
40	50	16	<b>727 701 210</b>	0.860	0.860	98	62	16	150	18	4
50	63	16	<b>727 701 211</b>	0.930	0.930	121	78	19	165	18	4

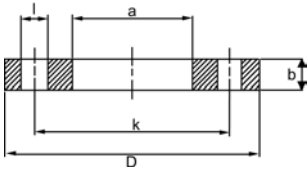




## Backing Flange PVDF-Steel ANSI Flange Ring blue coated steel

Material: PVDF blue coated steel

Bolt holes drilled in accordance with ANSI B16.5, Class 150 pattern



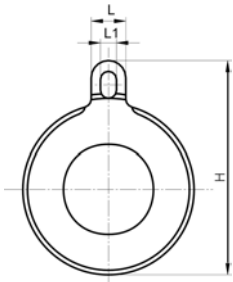
d [mm]	Inch	part number Code	SP	kg	kg/m	Weight [lb]	D [mm]	a [mm]	k [mm]	b [mm]	l [mm]	Bolt Holes
20	1/2	155 701 806				0.50	89	28	60	7	16	4
25	3/4	155 701 807				0.75	98	34	70	7	16	4
32	1	155 701 808				0.75	108	42	79	7	16	4
40	1 1/4	155 701 809				1.13	117	51	89	8	16	4
50	1 1/2	155 701 810				1.31	127	62	98	8	16	4
63	2	155 701 811				2.13	152	78	121	10	19	4
75	2 1/2	155 701 812	0	1.340	1.340	2.94	178	92	140	10	19	4
90	3	155 701 813				3.19	190	110	152	10	19	4
110	4	155 703 814				4.56	229	133	190	10	19	8

PF 2 34 238 007

## SYGEF Plus Gasket

Model:

- For Use with Steel Flange Rings
- \* Non-Returnable/Non-Cancelable



d [mm]	Pipe Size [inch]	Code	SP	kg	H [mm]	L [mm]	L1 [mm]
25	3/4	731 400 753	1	0.035	76	20	13
32	1	731 400 755	1	0.040	91	25	16
40	1 1/4	731 400 757	1	0.030	101	25	16
50	1 1/2	731 400 759	1	0.055	110	25	16
63	2	731 400 760	1	0.080	128	25	16
75	2 1/2	731 400 761	1	0.100	148	25	16
90	3	731 400 763	1	0.110	161	25	16
110	4	731 400 764	1	0.165	189	25	16
160	6	731 400 667	1	0.200	244	30	20
200/225	8/9	731 400 670	1	0.305	300	30	20
250	10	731 400 671	0	0.001	360	35	22

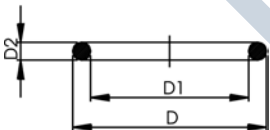
PF 2 37 344 001

EPDM 48 41 00  
FPM 49 41 00

## O-Ring Gaskets

Model:

- For Flange Adaptors
- Hardness approx. 65° Shore



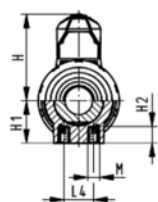
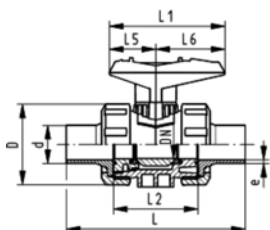
d [mm]	DN [mm]	EPDM Code	FPM Code	SP	kg	kg/m	D [mm]	D1 [mm]	D2 [mm]
16	10	748 410 000	749 410 000	0	0.002	0.002	26	19	3.53
20	15	748 410 001	749 410 001	100	0.002	0.002	31	23	3.53
32	25	748 410 002	749 410 002	100	0.003	0.003	43	36	3.53
40	32	748 410 003	749 410 003	0	0.007	0.007	55	44	5.34
50	40	748 410 012	749 410 012	100	0.008	0.008	64	53	5.34

PF 2 31 800 999

# Ball valves



DN10/15 - 50



## SYGEF Standard Ball valve type 546 With mounting inserts With butt fusion spigots IR-Plus metric

### Model:

- Material: PVDF
- 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 form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

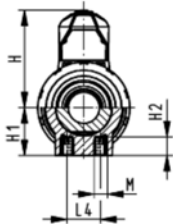
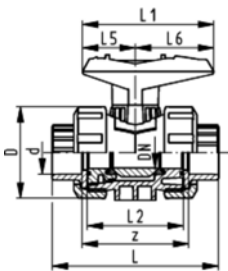
d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	16	185	<b>175 546 272</b>	0.205
25	20	16	350	<b>175 546 273</b>	0.310
32	25	16	700	<b>175 546 274</b>	0.460
40	32	16	1000	<b>175 546 275</b>	0.780
50	40	16	1600	<b>175 546 276</b>	1.110
63	50	16	3100	<b>175 546 277</b>	2.150

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	1,9
32	68	73	36	12	150	97	71	25	39	58	M6	2,4
40	84	90	44	15	171	128	85	45	54	74	M8	2,4
50	97	97	51	15	191	128	89	45	54	74	M8	3
63	124	116	64	15	220	152	101	45	66	87	M8	3

PF 2 35 540 801



DN10/15 - 50



## SYGEF Standard Ball valve type 546 With mounting inserts With fusion sockets metric

### Model:

- Material: PVDF
- 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 form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

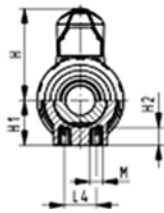
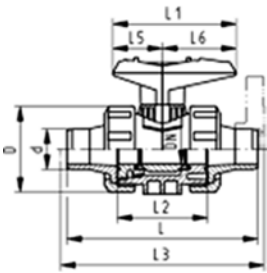
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	16	71	<b>175 546 411</b>	0.195
20	15	16	185	<b>175 546 412</b>	0.200
25	20	16	350	<b>175 546 413</b>	0.300
32	25	16	700	<b>175 546 414</b>	0.440
40	32	16	1000	<b>175 546 415</b>	0.760
50	40	16	1600	<b>175 546 416</b>	1.060
63	50	16	3100	<b>175 546 417</b>	2.055

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	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

PF 2 35 540 801



DN10/15 - 50



## SYGEF Standard Ball valve type 546 With mounting inserts With socket fusion spigots metric

### Model:

- Material: PVDF
- 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 form)
- 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]	FPM Code	kg
16	10	16	71	<b>175 546 051</b>	0.200
20	15	16	185	<b>175 546 052</b>	0.205
25	20	16	350	<b>175 546 053</b>	0.310
32	25	16	700	<b>175 546 054</b>	0.460
40	32	16	1000	<b>175 546 055</b>	0.780
50	40	16	1600	<b>175 546 056</b>	1.110
63	50	16	3100	<b>175 546 057</b>	2.150

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

PF 2 35 540 801



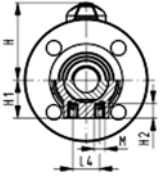
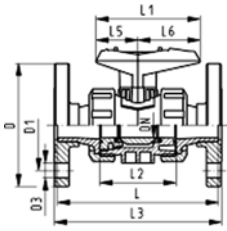
**SYGEF Standard  
Ball valve type 546  
With mounting inserts  
With fixed flanges PVDF serrated metric**

**Model:**

- Material: PVDF
- 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
- Overall length EN 558

**Option:**

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



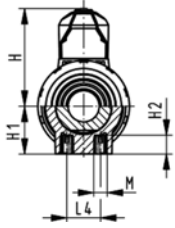
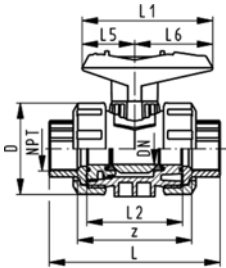
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	16	185	<b>175 546 192</b>	0.470
25	20	16	350	<b>175 546 193</b>	0.650
32	25	16	700	<b>175 546 194</b>	0.940
40	32	16	1000	<b>175 546 195</b>	1.570
50	40	16	1600	<b>175 546 196</b>	2.070
63	50	16	3100	<b>175 546 197</b>	3.490

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	93	65	14	57	27	12	120	77	56	130	25	32	45	M6
25	103	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	137	100	18	90	44	15	170	128	85	180	45	54	74	M8
50	147	110	18	97	51	15	190	128	89	200	45	54	74	M8
63	162	125	18	116	64	15	220	152	101	230	45	66	87	M8

PF 2 35 540 801



DN10/15 - 50



## SYGEF Standard Ball valve type 546 With mounting inserts With threaded sockets NPT

### Model:

- Material: PVDF
- 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 form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

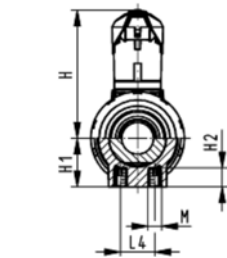
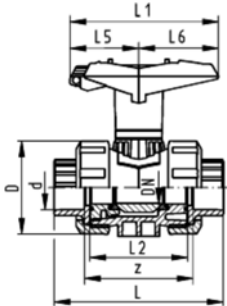
NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	71	<b>175 546 331</b>	0.205
1/2	15	10	185	<b>175 546 332</b>	0.220
3/4	20	10	350	<b>175 546 333</b>	0.325
1	25	10	700	<b>175 546 334</b>	0.490
1 1/4	32	10	1000	<b>175 546 335</b>	0.820
1 1/2	40	10	1600	<b>175 546 336</b>	1.135
2	50	10	3100	<b>175 546 337</b>	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	57	27	12	96	77	56	25	32	45	M6	69
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	101
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	135

PF 2 35 540 801



DN10/15 - 50



## SYGEF Standard Ball valve type 546 With lockable handle With fusion sockets metric

### Model:

- Material: PVDF
- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Lockable hand lever with ratchet settings
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

- Individual configuration of the valve (see form)
- 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]	FPM Code	kg
16	10	16	71	<b>175 546 431</b>	0.205
20	15	16	185	<b>175 546 432</b>	0.210
25	20	16	350	<b>175 546 433</b>	0.315
32	25	16	700	<b>175 546 434</b>	0.455
40	32	16	1000	<b>175 546 435</b>	0.785
50	40	16	1600	<b>175 546 436</b>	1.085
63	50	16	3100	<b>175 546 437</b>	2.085

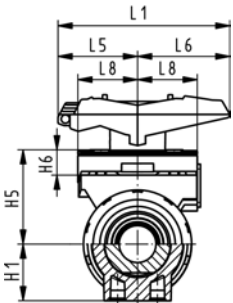
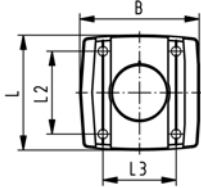
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
16	50	79	27	12	93	77	56	25	32	45	M6	67
20	50	79	27	12	95	77	56	25	32	45	M6	66
25	58	88	30	12	109	97	65	25	39	58	M6	77
32	68	94	36	12	119	97	71	25	39	58	M6	83
40	84	113	44	15	135	128	85	45	54	74	M8	99
50	97	119	51	15	147	128	89	45	54	74	M8	105
63	124	141	64	15	168	152	101	45	66	87	M8	117

PF 2 35 540 801





DN10/15 - 50



PF 2 31 798 999

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

### Model:

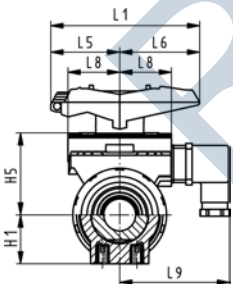
- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100
- The multifunctional module from d75 - d110 has a master gauge F07 according to EN ISO 5211.

d-d [mm]	DN-DN [mm]	Code	kg
16 - 20	10 - 15	<b>167 482 680</b>	0.055
25 - 32	20 - 25	<b>167 482 681</b>	0.070
40 - 50	32 - 40	<b>167 482 682</b>	0.080
- 63	- 50	<b>167 482 683</b>	0.120
75 - 90	65 - 80	<b>167 482 684</b>	0.135
- 110	- 100	<b>167 482 685</b>	0.175

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	



DN10/15 - 50



PF 2 31 798 999

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

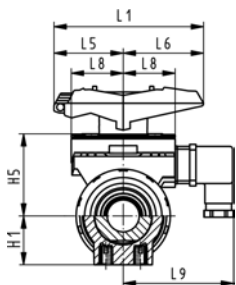
### Model:

- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- 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]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	<b>167 482 626</b>	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	<b>167 482 627</b>	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	<b>167 482 628</b>	0.135	44	72	140	66	75	41	80
- 63	- 50	<b>167 482 629</b>	0.175	64	94	165	78	87	46	85
75 - 90	65 - 80	<b>167 482 630</b>	0.460	85	157	270	64	206		
- 110	- 100	<b>167 482 631</b>	0.480	123	175	320	64	256		



DN10/15 - 50



PF 2 31 798 999

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

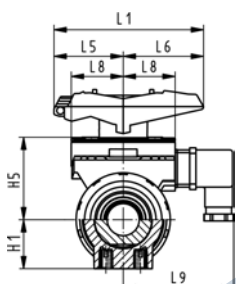
### Model:

- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- 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]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	<b>167 482 635</b>	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	<b>167 482 636</b>	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	<b>167 482 637</b>	0.135	44	72	140	66	75	41	80
- 63	- 50	<b>167 482 638</b>	0.175	64	94	165	78	87	46	85
75 - 90	65 - 80	<b>167 482 639</b>	0.460	85	157	270	64	206		
- 110	- 100	<b>167 482 640</b>	0.480	123	175	320	64	256		



DN10/15 - 50



PF 2 31 798 999

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

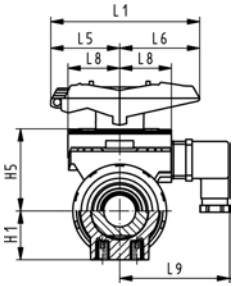
### Model:

- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- 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]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	<b>167 482 671</b>	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	<b>167 482 672</b>	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	<b>167 482 673</b>	0.135	44	72	140	66	75	41	80
- 63	- 50	<b>167 482 674</b>	0.175	64	94	165	78	87	46	85
75 - 90	65 - 80	<b>167 482 675</b>	0.460	85	157	270	64	206		
- 110	- 100	<b>167 482 676</b>	0.480	123	175	320	64	256		



DN10/15 - 50



PF 2 31 798 999

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

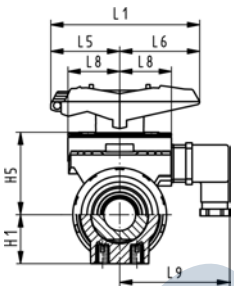
### Model:

- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- 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]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	<b>167 482 662</b>	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	<b>167 482 663</b>	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	<b>167 482 664</b>	0.135	44	72	140	66	75	41	80
- 63	- 50	<b>167 482 665</b>	0.175	64	94	165	78	87	46	85
75 - 90	65 - 80	<b>167 482 666</b>	0.460	85	157	270	64	206		
- 110	- 100	<b>167 482 667</b>	0.480	123	175	320	64	256		



DN10/15 - 50



PF 2 31 798 999

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

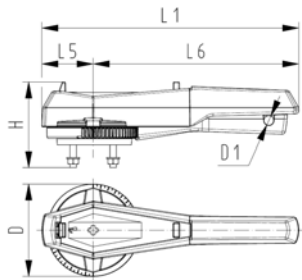
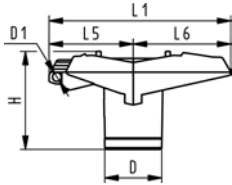


DN10/15 - 50

## Multifunctional handle 546 red (K11) With ratchet settings lockable

### Note:

- To retrofit the ball valve 546 with the multifunctional handle a multifunction module is necessary in the dimensions DN65-100



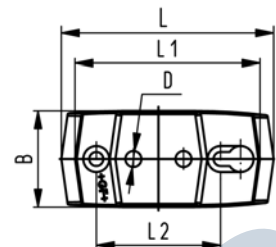
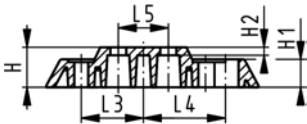
PF 2 31 567 998

d-d [mm]	DN-DN [mm]	Code	kg	D [mm]	D1 [mm]	H [mm]	L1 [mm]	L5 [mm]	L6 [mm]
16 - 20	10 - 15	<b>167 484 100</b>	0.026	26	5	53	87	42	45
- 25	- 20	<b>167 484 101</b>	0.045	34	5	59	108	50	58
- 32	- 25	<b>167 484 102</b>	0.045	34	5	59	108	50	58
- 40	- 32	<b>167 484 103</b>	0.082	40	5	69	140	66	75
- 50	- 40	<b>167 484 104</b>	0.082	40	5	69	140	66	75
- 63	- 50	<b>167 484 105</b>	0.104	44	5	80	165	78	87
- 75	- 65	<b>161 486 689</b>	0.480	115	12	105	270	64	206
- 90	- 80	<b>161 486 690</b>	0.480	115	12	105	270	64	206
110 - 140	100 - 125	<b>161 486 691</b>	0.480	115	12	107	320	64	256



## Mounting plate 546 PP-GF (L02)

- 2 mounting screws inclusive



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d-d [mm]	Inch [inch]	DN-DN [mm]	Code	kg
16 - 32	3/8 - 1	10 - 25	<b>167 484 110</b>	0.055
40 - 63	1 1/4 - 2	32 - 50	<b>167 484 111</b>	0.086

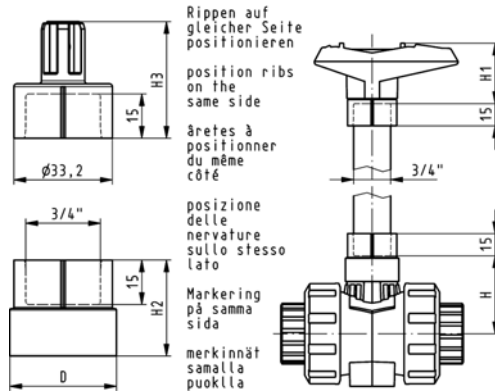
d-d [mm]	B [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]
16 - 32	48	8	20	14	4	106	92	62	31	41	25
40 - 63	54	9	20	14	4	149	134	104	52	62	45



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

- For Ball Valve Type 546

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>	0.037	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



PF 2 31 798 999

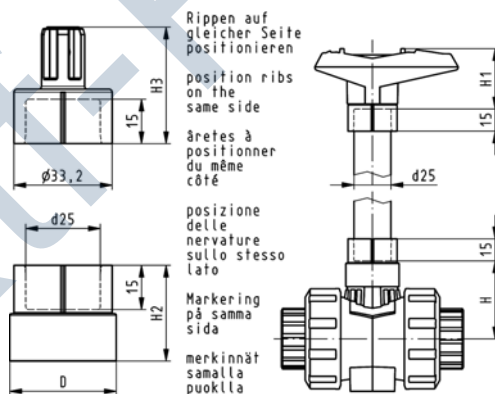


## Handle extension 546 PVC-U metric

### Model:

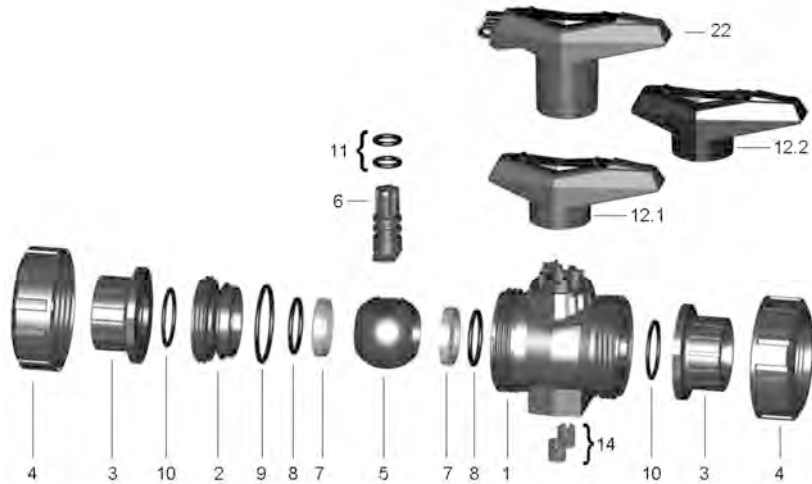
- For Ball Valve Type 546
- Composed of adapter sockets for handle connection and stem connection
- PVC-U pipe in suitable length has to be obtained on site

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>	0.032	41	52	29	36	26
25 - 32	20 - 25	<b>161 486 436</b>	0.037	50	62	32	39	36
40 - 50	32 - 40	<b>161 486 437</b>	0.047	65	76	34	44	40
- 63	- 50	<b>161 486 438</b>	0.058	84	87	37	48	44



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## Spare parts ball valve type 546



### Central part

#### Model:

- Every connecting pieces and union nuts are listed on product range industry valves
- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)

d [mm]	Inch	DN [mm]	PVDF FPM Code	kg
16	3/8	10	<b>175 482 963</b>	0.120
20	1/2	15	<b>175 482 963</b>	0.120
25	3/4	20	<b>175 482 964</b>	0.185
32	1	25	<b>175 482 965</b>	0.260
40	1 1/4	32	<b>175 482 966</b>	0.480
50	1 1/2	40	<b>175 482 967</b>	0.610
63	2	50	<b>175 482 968</b>	1.115
75	2 1/2	65	-	
90	3	80	-	
110	4	100	-	

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### Ball set

#### Model:

- Ball seals standard in PTFE
- Ball set consisting of: ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)



d [mm]	Inch	DN [mm]	PVDF FPM Code	kg
16	3/8	10	<b>175 483 275</b>	0.020
20	1/2	15	<b>175 483 275</b>	0.020
25	3/4	20	<b>175 483 276</b>	0.030
32	1	25	<b>175 483 277</b>	0.055
40	1 1/4	32	<b>175 483 278</b>	0.105
50	1 1/2	40	<b>175 483 279</b>	0.160
63	2	50	<b>175 483 280</b>	0.310
75	2 1/2	65	-	
90	3	80	-	
110	4	100	-	

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PF 2 32 541 998

## Lever

d [mm]	Inch	DN [mm]	Standard lever black Code	Multifunctional lever Code	kg
16	3/8	10	167 484 076	167 484 100	0.026
20	1/2	15	167 484 076	167 484 100	0.026
25	3/4	20	167 484 077	167 484 101	0.045
32	1	25	167 484 078	167 484 102	0.045
40	1 1/4	32	167 484 079	167 484 103	0.082
50	1 1/2	40	167 484 080	167 484 104	0.082
63	2	50	167 484 081	167 484 105	0.104
75	2 1/2	65	167 484 082	161 486 689	0.480
90	3	80	167 484 083	161 486 690	0.480
110	4	100	167 484 084	161 486 691	0.480

## Face seal



PF 2 32 541 998

d [mm]	Inch	DN [mm]	FPM Code	kg
16	3/8	10	749 410 059	0.002
20	1/2	15	749 410 059	0.002
25	3/4	20	749 410 106	0.002
32	1	25	749 410 151	0.002
40	1 1/4	32	749 410 062	0.005
50	1 1/2	40	749 410 003	0.007
63	2	50	749 410 231	0.002
75	2 1/2	65	749 410 119	0.010
90	3	80	749 410 023	0.012
110	4	100	749 410 254	0.030

## Seal set

### Model:

- Seal set consisting of: backing-, body-, face- and stem seal (8-11)



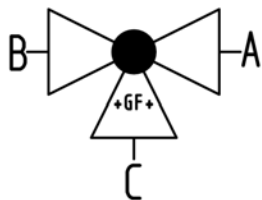
PF 2 32 541 998

d [mm]	Inch	DN [mm]	FPM Code	kg
16	3/8	10	161 486 410	0.003
20	1/2	15	161 486 410	0.003
25	3/4	20	161 486 411	0.005
32	1	25	161 486 412	0.006
40	1 1/4	32	161 486 413	0.010
50	1 1/2	40	161 486 414	0.023
63	2	50	161 486 415	0.031
75	2 1/2	65	161 486 416	0.024
90	3	80	161 486 417	0.034
110	4	100	161 486 418	0.058



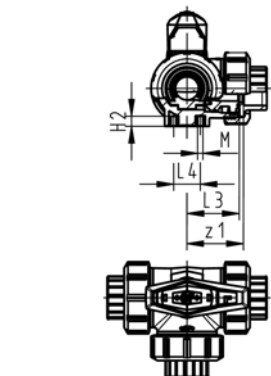
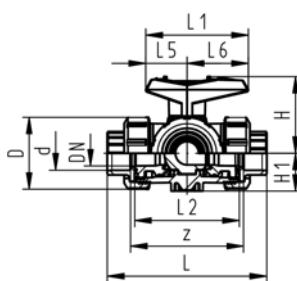
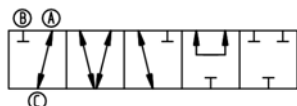


## SYGEF Standard 3-Way ball valve type 543 Horizontal/L-port With fusion sockets metric



### Model:

- Material: PVDF
- 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]	FPM Code	kg
16	10	10	50	<b>175 543 011</b>	0.312
20	15	10	75	<b>175 543 012</b>	0.320
25	20	10	150	<b>175 543 013</b>	0.461
32	25	10	280	<b>175 543 014</b>	0.704
40	32	10	480	<b>175 543 015</b>	1.199
50	40	10	620	<b>175 543 016</b>	1.778
63	50	10	1230	<b>175 543 017</b>	3.462

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

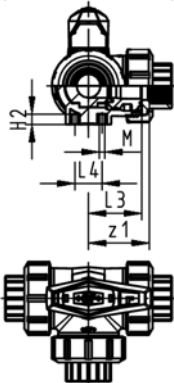
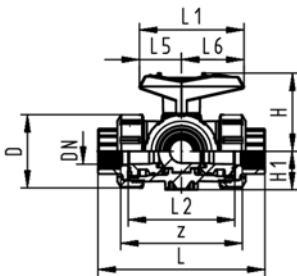
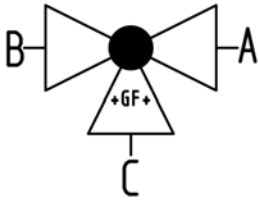
PF 2 35 735 801



## SYGEF Standard 3-Way ball valve type 543 Horizontal/L-port With threaded sockets NPT

### Model:

- Material: PVDF
- 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



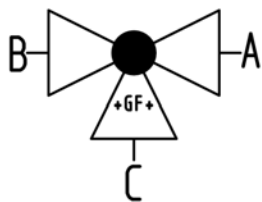
NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	50	<b>175 543 071</b>	0.312
1/2	15	10	75	<b>175 543 072</b>	0.320
3/4	20	10	150	<b>175 543 073</b>	0.461
1	25	10	280	<b>175 543 074</b>	0.704
1 1/4	32	10	480	<b>175 543 075</b>	1.199
1 1/2	40	10	620	<b>175 543 076</b>	1.778
2	50	10	1230	<b>175 543 077</b>	3.462

NPT [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	80	40
3/4	58	131	97	85	43	25	39	58	67	32	8	6	95	48
1	68	154	97	98	49	25	39	58	73	36	8	6	110	55
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	157	79
2	124	258	152	176	88	45	66	87	116	65	9	8	210	105

PF 2 35 735 801

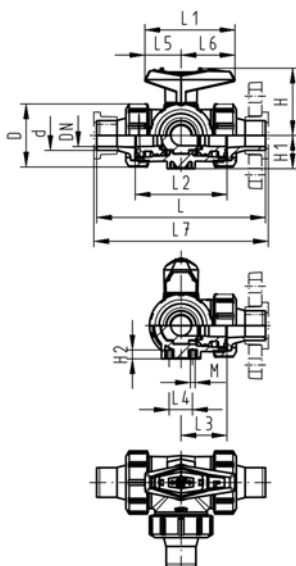
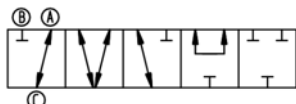


## SYGEF Standard 3-Way ball valve type 543 Horizontal/L-port With socket fusion spigots metric



### Model:

- Material: PVDF
- 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



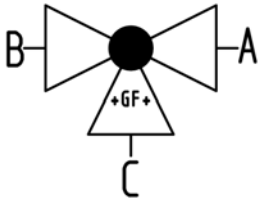
d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	50	<b>175 543 031</b>	0.320
20	15	10	75	<b>175 543 032</b>	0.332
25	20	10	150	<b>175 543 033</b>	0.480
32	25	10	280	<b>175 543 034</b>	0.735
40	32	10	480	<b>175 543 035</b>	1.226
50	40	10	620	<b>175 543 036</b>	1.859
63	50	10	1230	<b>175 543 037</b>	3.624

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

PF 2 35 735 801

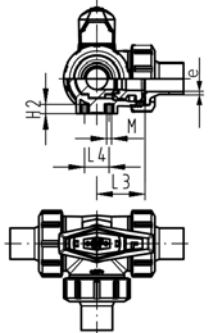
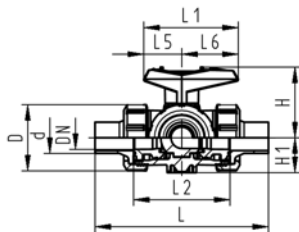
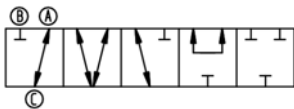


# SYGEF Standard 3-Way ball valve type 543 Horizontal/L-port With butt fusion spigots IR-Plus metric



### Model:

- Material: PVDF
- 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



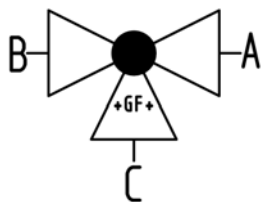
d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	75	175 543 052	0.332
25	20	10	150	175 543 053	0.480
32	25	10	280	175 543 054	0.735
40	32	10	480	175 543 055	1.226
50	40	10	620	175 543 056	1.859
63	50	10	1230	175 543 057	3.624

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	1.9
32	68	178	97	98	49	25	39	58	73	36	8	6	2.4
40	84	204	128	118	59	45	54	74	90	45	9	8	2.4
50	97	237	128	135	68	45	54	74	97	51	9	8	3.0
63	124	296	152	176	88	45	66	87	116	65	9	8	3.0

PF 2 35 735 801

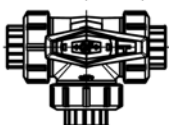
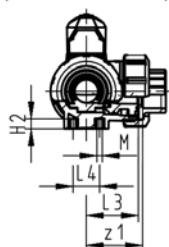
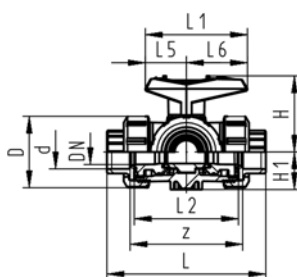
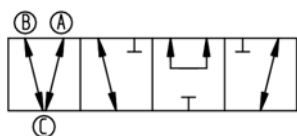


## SYGEF Standard 3-Way ball valve type 543 Horizontal/T-port With fusion sockets metric



### Model:

- Material: PVDF
- 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



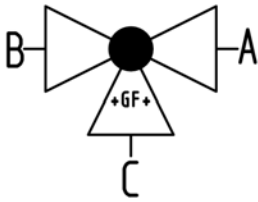
d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	140	<b>175 543 111</b>	0.311
20	15	10	200	<b>175 543 112</b>	0.319
25	20	10	470	<b>175 543 113</b>	0.458
32	25	10	793	<b>175 543 114</b>	0.695
40	32	10	1290	<b>175 543 115</b>	1.185
50	40	10	1910	<b>175 543 116</b>	1.751
63	50	10	3100	<b>175 543 117</b>	3.405

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]	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

PF 2 35 735 801

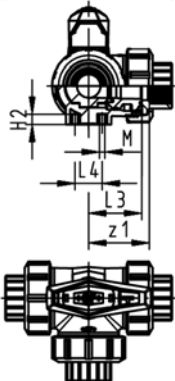
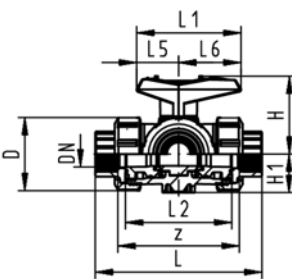
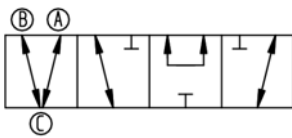


## SYGEF Standard 3-Way ball valve type 543 Horizontal/T-port With threaded sockets NPT



### Model:

- Material: PVDF
- 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



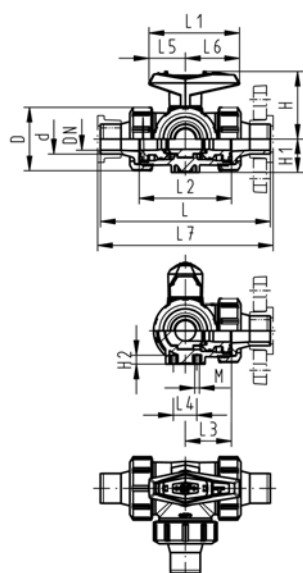
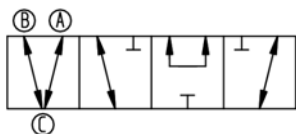
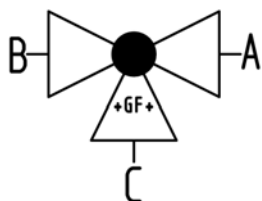
NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	140	<b>175 543 171</b>	0.311
1/2	15	10	200	<b>175 543 172</b>	0.319
3/4	20	10	470	<b>175 543 173</b>	0.458
1	25	10	793	<b>175 543 174</b>	0.695
1 1/4	32	10	1290	<b>175 543 175</b>	1.185
1 1/2	40	10	1910	<b>175 543 176</b>	1.751
2	50	10	3100	<b>175 543 177</b>	3.405

NPT [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	80	40
3/4	58	131	97	85	43	25	39	58	67	32	8	6	95	48
1	68	154	97	98	49	25	39	58	73	36	8	6	110	55
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	157	79
2	124	258	152	176	88	45	66	87	116	65	9	8	210	105

PF 2 35 735 801



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



### Model:

- Material: PVDF
- 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 (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	140	<b>175 543 131</b>	0.319
20	15	10	200	<b>175 543 132</b>	0.330
25	20	10	470	<b>175 543 133</b>	0.478
32	25	10	793	<b>175 543 134</b>	0.726
40	32	10	1290	<b>175 543 135</b>	1.212
50	40	10	1910	<b>175 543 136</b>	1.832
63	50	10	3100	<b>175 543 137</b>	3.566

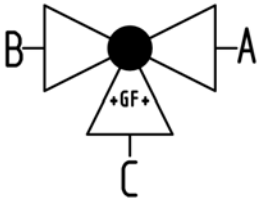
d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
16	50	126	77	72	36	25	32	45	133	57	28	8	6
20	50	136	77	72	36	25	32	45	144	57	28	8	6
25	58	159	97	85	43	25	39	58	170	67	32	8	6
32	68	178	97	98	49	25	39	58	191	73	36	8	6
40	84	204	128	118	59	45	54	74	223	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

PF 2 35 735 801



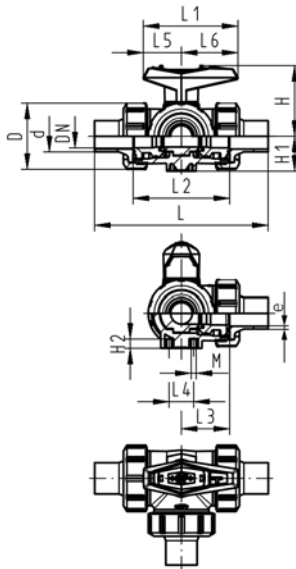
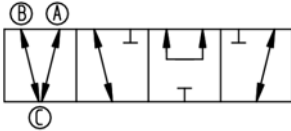


# SYGEF Standard 3-Way ball valve type 543 Horizontal/T-port With butt fusion spigots IR-Plus metric



### Model:

- Material: PVDF
- 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



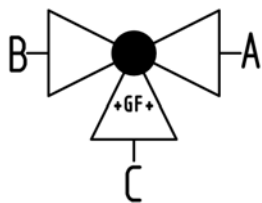
d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	200	<b>175 543 152</b>	0.330
25	20	10	470	<b>175 543 153</b>	0.478
32	25	10	793	<b>175 543 154</b>	0.726
40	32	10	1290	<b>175 543 155</b>	1.212
50	40	10	1910	<b>175 543 156</b>	1.832
63	50	10	3100	<b>175 543 157</b>	3.566

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	1.9
32	68	178	97	98	49	25	39	58	73	36	8	6	2.4
40	84	204	128	118	59	45	54	74	90	45	9	8	2.4
50	97	237	128	135	68	45	54	74	97	51	9	8	3.0
63	124	296	152	176	88	45	66	87	116	65	9	8	3.0

PF 2 35 735 801



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

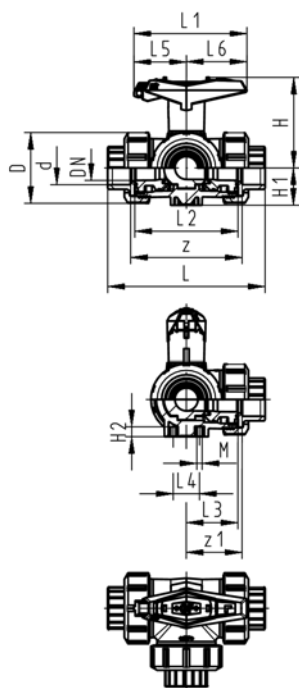


**Model:**

- Material: PVDF
- 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]	FPM Code	kg
16	10	10	50	<b>175 543 641</b>	0.330
20	15	10	75	<b>175 543 642</b>	0.338
25	20	10	150	<b>175 543 643</b>	0.483
32	25	10	280	<b>175 543 644</b>	0.726
40	32	10	480	<b>175 543 645</b>	1.229
50	40	10	620	<b>175 543 646</b>	1.808
63	50	10	1230	<b>175 543 647</b>	3.502

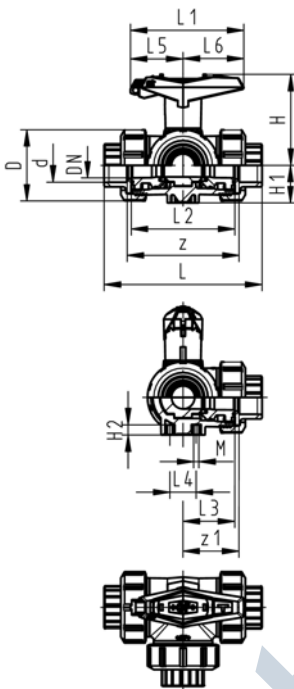
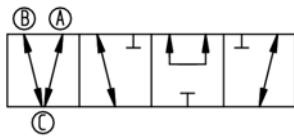
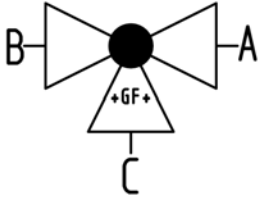


d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
16	50	110	87	72	36	25	42	45	79	28	8	6	82	41
20	50	112	87	72	36	25	42	45	79	28	8	6	82	41
25	58	129	108	85	43	25	50	58	88	32	8	6	97	49
32	68	146	108	98	49	25	50	58	94	36	8	6	110	55
40	84	170	141	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

PF 2 35 735 801



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



### Model:

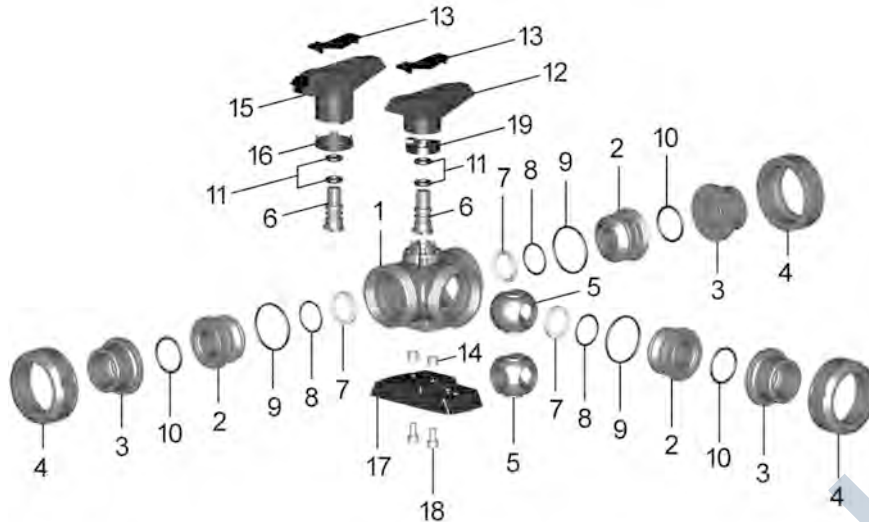
- Material: PVDF
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- 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 (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	140	<b>175 543 651</b>	0.329
20	15	10	200	<b>175 543 652</b>	0.337
25	20	10	470	<b>175 543 653</b>	0.480
32	25	10	793	<b>175 543 654</b>	0.717
40	32	10	1290	<b>175 543 655</b>	1.215
50	40	10	1910	<b>175 543 656</b>	1.781
63	50	10	3100	<b>175 543 657</b>	3.444

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

PF 2 35 735 801

## Spare parts ball valve type 543 horizontal



### Central part L-port

#### Model:

- Every connecting pieces and union nuts are listed on product range industry valves
- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)

d [mm]	Inch	DN [mm]	PVDF FPM Code	kg
16	3/8	10	<b>175 483 602</b>	0.000
20	1/2	15	<b>175 483 602</b>	0.000
25	3/4	20	<b>175 483 603</b>	0.000
32	1	25	<b>175 483 604</b>	0.000
40	1 1/4	32	<b>175 483 605</b>	0.000
50	1 1/2	40	<b>175 483 606</b>	0.000
63	2	50	<b>175 483 607</b>	0.000

PF 2 31 001 999



### Central part T-port

#### Model:

- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)

d [mm]	DN [mm]	PVDF FPM Code	kg
16	10	<b>175 483 612</b>	0.000
20	15	<b>175 483 612</b>	0.000
25	20	<b>175 483 613</b>	0.000
32	25	<b>175 483 614</b>	0.000
40	32	<b>175 483 615</b>	0.000
50	40	<b>175 483 616</b>	0.000
63	50	<b>175 483 617</b>	0.000

PF 2 31 001 999



## Ball set L-port

### Model:

- Ball seals standard in PTFE
- Ball set consisting of: lever (12), ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)

d [mm]	Inch	DN [mm]	PVDF FPM Code	kg
16	3/8	10	175 483 642	3.224
20	1/2	15	175 483 642	3.224
25	3/4	20	175 483 643	6.177
32	1	25	175 483 644	8.826
40	1 1/4	32	175 483 645	0.152
50	1 1/2	40	175 483 646	0.237
63	2	50	175 483 647	0.403

PF 2 31 001 999



## Ball set T-port

### Model:

- Ball seals standard in PTFE
- Ball set consisting of: lever (12), ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)

d [mm]	Inch	DN [mm]	PVDF FPM Code	kg
16	3/8	10	175 483 652	3.096
20	1/2	15	175 483 652	3.096
25	3/4	20	175 483 653	5.921
32	1	25	175 483 654	7.929
40	1 1/4	32	175 483 655	0.138
50	1 1/2	40	175 483 656	0.210
63	2	50	175 483 657	0.346

PF 2 31 001 999



## Lever

d [mm]	Inch	DN [mm]	Standard lever L-port black Code	Standard lever T-port black Code	Multifunctional-lever L-port red Code
16	3/8	10	167 484 376	167 484 576	167 484 442
20	1/2	15	167 484 376	167 484 576	167 484 442
25	3/4	20	167 484 377	167 484 577	167 484 443
32	1	25	167 484 378	167 484 578	167 484 444
40	1 1/4	32	167 484 379	167 484 579	167 484 445
50	1 1/2	40	167 484 380	167 484 580	167 484 446
63	2	50	167 484 381	167 484 581	167 484 447

d [mm]	Inch	DN [mm]	Multifunctional-lever T-port red Code	kg
16	3/8	10	167 484 542	0.026
20	1/2	15	167 484 542	0.026
25	3/4	20	167 484 543	0.045
32	1	25	167 484 544	0.045
40	1 1/4	32	167 484 545	0.082
50	1 1/2	40	167 484 546	0.082
63	2	50	167 484 547	0.104

PF 2 31 001 999



## Face seal

d [mm]	Inch	DN [mm]	FPM Code	kg
16	3/8	10	749 410 059	0.002
20	1/2	15	749 410 059	0.002
25	3/4	20	749 410 106	0.002
32	1	25	749 410 151	0.002
40	1 1/4	32	749 410 062	0.005
50	1 1/2	40	749 410 003	0.007
63	2	50	749 410 231	0.002

PF 2 31 001 999



## Seal set

### Model:

- Seal set consisting of: backing-, body-, face- and stem seal (8-11)

d [mm]	Inch	DN [mm]	FPM Code	kg
16	3/8	10	<b>161 488 248</b>	0.011
20	1/2	15	<b>161 488 248</b>	0.011
25	3/4	20	<b>161 488 249</b>	0.011
32	1	25	<b>161 488 250</b>	0.014
40	1 1/4	32	<b>161 488 251</b>	0.014
50	1 1/2	40	<b>161 488 252</b>	0.026
63	2	50	<b>161 488 253</b>	0.032

PF 2 31 001 999



## Turn limiter 90°

d [mm]	Inch	DN [mm]	Code	kg
16	3/8	10	<b>167 482 479</b>	0.001
20	1/2	15	<b>167 482 479</b>	0.001
25	3/4	20	<b>167 482 480</b>	0.002
32	1	25	<b>167 482 480</b>	0.002
40	1 1/4	32	<b>167 482 481</b>	0.004
50	1 1/2	40	<b>167 482 481</b>	0.004
63	2	50	<b>167 482 482</b>	0.004

PF 2 31 001 999



## Assembly kit

### Model:

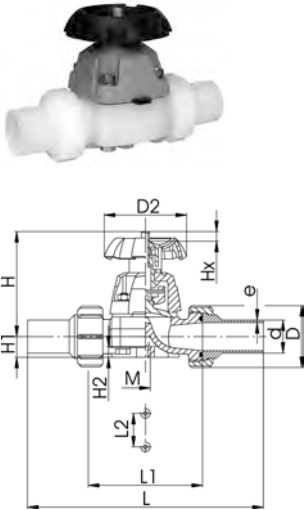
- Intermediate element for ball valve type 543 horizontal and electric or pneumatic actuators EA21; PA11/21
- Including screws and position indicator for actuators

d [mm]	Inch [inch]	DN [mm]	Code	kg
16 - 20	3/8 - 1/2	10 - 15	<b>167 484 941</b>	0.000
25 - 32	3/4 - 1	20 - 25	<b>167 484 942</b>	0.000
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 484 943</b>	0.000
63	2	50	<b>167 484 944</b>	0.000

PF 2 31 001 999

# Diaphragm valves

## SYGEF Standard Diaphragm valve type 314 With butt fusion spigots metric

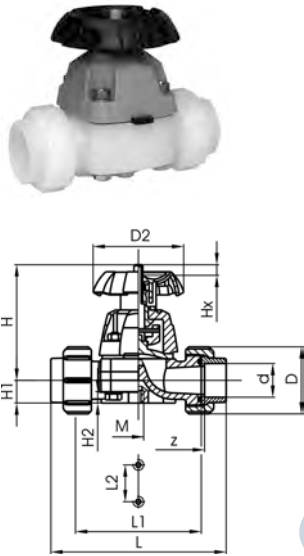


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE with EPDM supp. Diaphragm Code	kg
20	15	10	72	175 314 532	0.485
25	20	10	137	175 314 533	0.710
32	25	10	207	175 314 534	0.970
40	32	10	354	175 314 535	1.545
50	40	10	517	175 314 536	2.040
63	50	10	713	175 314 537	3.537

d [mm]	D [mm]	D2 [mm]	e [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	M
20	45	80	1.9	90	14	12	196	90	25	M6
25	55	80	1.9	101	18	12	220	108	25	M6
32	62	94	2.4	117	22	12	234	116	25	M6
40	75	117	2.4	127	26	15	258	134	45	M8
50	84	117	3.0	139	32	15	284	154	45	M8
63	101	152	3.0	172	39	15	320	184	45	M8

PF 2 35 193 006

## SYGEF Standard Diaphragm valve type 314 With fusion sockets metric



### Model:

- Material: PVDF
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)
- For easy installation and removal
- Short overall length

### Option:

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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE with EPDM supp. Diaphragm Code	kg
20	15	10	72	175 314 432	0.470
25	20	10	137	175 314 433	0.687
32	25	10	207	175 314 434	0.935
40	32	10	354	175 314 435	1.500
50	40	10	517	175 314 436	1.960
63	50	10	713	175 314 437	3.470

d [mm]	D [mm]	D2 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	M	z [mm]
20	45	80	90	14	12	128	90	25	M6	100
25	55	80	101	18	12	150	108	25	M6	118
32	62	94	117	22	12	162	116	25	M6	126
40	75	117	127	26	15	184	134	45	M8	144
50	84	117	139	32	15	210	154	45	M8	164
63	101	152	172	39	15	248	184	45	M8	194

PF 2 35 193 006





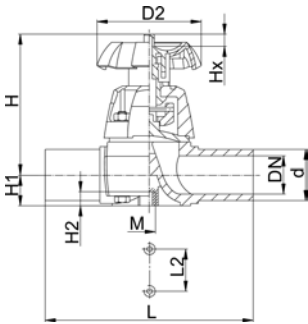
## SYGEF Standard Diaphragm valve type 315 With butt fusion spigots metric

### Model:

- Material: PVDF
- Welding dimension: PN16
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)
- Further versions : with diaphragm FPM on request

### Option:

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



PF 2 35 193 001

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE with EPDM supp. diaphragm Code	kg	D2 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L2 [mm]	M
20	15	10	72	<b>175 315 532</b>	0.360	80	90	14	12	124	25	M6
25	20	10	137	<b>175 315 533</b>	0.560	80	102	18	12	144	25	M6
32	25	10	207	<b>175 315 534</b>	0.804	94	119	21	12	154	25	M6
40	32	10	354	<b>175 315 535</b>	1.025	117	126	26	15	174	45	M8
50	40	10	517	<b>175 315 536</b>	1.480	117	139	33	15	194	45	M8
63	50	10	713	<b>175 315 537</b>	2.581	152	172	39	15	224	45	M8



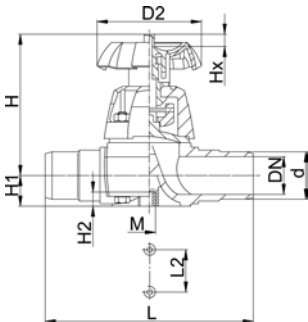
## SYGEF Standard Diaphragm valve type 315 With socket fusion spigots metric

### Model:

- Material: PVDF
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)
- Further versions : with diaphragm FPM on request

### Option:

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



PF 2 35 193 001

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE with EPDM supp. diaphragm Code	kg	D2 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L2 [mm]	M
20	15	10	72	<b>175 315 432</b>	0.350	80	90	14	12	124	25	M6
25	20	10	137	<b>175 315 433</b>	0.570	80	102	18	12	144	25	M6
32	25	10	207	<b>175 315 434</b>	0.805	94	119	21	12	154	25	M6
40	32	10	354	<b>175 315 435</b>	1.000	117	126	26	15	174	45	M8
50	40	10	517	<b>175 315 436</b>	1.500	117	139	33	15	194	45	M8
63	50	10	713	<b>175 315 437</b>	2.680	152	172	39	15	224	45	M8



## SYGEF Standard Diaphragm valve type 317 With flanges metric

### Model:

- Material: PVDF
- DN 15-65 with backing flange
- DN 80-150 with fixed flange
- Overall length according to EN 558
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)

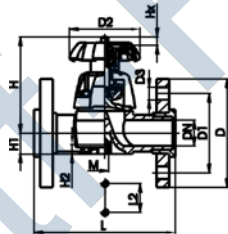
### Option:

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

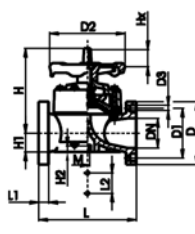
\* DN80 and DN150 fixed flanges metric and Inch ANSI B16.5

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE with EPDM supp. diaphragm Code	kg
20	15	½	10	72	175 317 432	1.000
25	20	¾	10	137	175 317 433	0.858
32	25	1	10	207	175 317 434	1.000
40	32	1 ½	10	354	175 317 435	2.270
50	40	1 ½	10	517	175 317 436	2.260
63	50	2	10	713	175 317 437	3.700
75	65	2 ½	10	992	175 317 438	5.700
* 90	80	3	10	1700	175 317 009	10.700
110	100	4	10	2700	175 317 010	14.890
* 160	150	6	7	6033	175 317 012	31.500

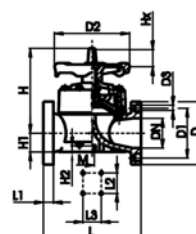
d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	Lift = Hx [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	M	A L
20	95	65	80	14	90	14	12	8	130		25		M6	4
25	105	75	80	14	102	18	12	11	150		25		M6	4
32	115	85	94	14	119	21	12	13	160		25		M6	4
40	140	100	117	18	126	26	15	16	180		45		M8	4
50	150	110	117	18	139	33	15	21	200		45		M8	4
63	165	125	152	18	172	39	15	28	230		45		M8	4
75	185	145	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	180	270	18	302	68	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

PF 2 35 193 002



## SYGEF Standard Diaphragm valve type 317 With flanges ANSI

### Model:

- Material: PVDF
- DN 15-65 with backing flange
- DN 80-150 with fixed flange
- Overall length according to EN 558
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)

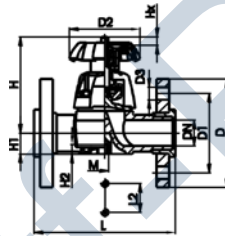
### Option:

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

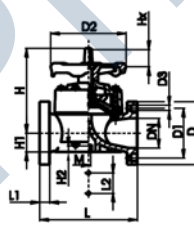
\* DN80 and DN150 fixed flanges metric and Inch ANSI B16.5

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE with EPDM supp. diaphragm Code	kg
20	15	½	10	72	<b>175 317 532</b>	0.550
25	20	¾	10	137	<b>175 317 533</b>	1.210
32	25	1	10	207	<b>175 317 534</b>	1.210
40	32	1 ¼	10	354	<b>175 317 535</b>	2.270
50	40	1 ½	10	517	<b>175 317 536</b>	2.280
63	50	2	10	713	<b>175 317 537</b>	3.681
75	65	2 ½	10	992	<b>175 317 538</b>	6.000
110	100	4	10	2700	<b>175 317 340</b>	14.950

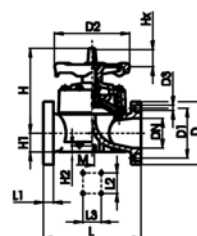
d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	Lift = Hx [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	M	A L
20	95	61	80	14	90	14	12	8	130		25		M6	4
25	105	70	80	14	93	18	12	11	150		25		M6	4
32	115	80	94	14	119	21	12	13	160		25		M6	4
40	140	89	117	18	126	26	15	16	180		45		M8	4
50	150	99	117	18	139	33	15	21	200		45		M8	4
63	165	121	152	18	172	39	15	28	230		45		M8	4
75	185	140	152	18	201	46	15	30	290		70		M8	4
110	225	191	270	18	304	69	23	50	350	35	120		M12	8



DN 15-65



DN 80-100



DN 150

PF 2 35 193 003

## Spare parts diaphragm valve type 314



### Bonnet complete

#### Model:

- Without diaphragm (1, 3)



PF 2 68 332 999

d [mm]	DN [mm]	PTFE diaphragm Code	kg
20	15	161 484 632	0.185
25	20	161 484 633	0.299
32	25	161 484 634	0.367
40	32	161 484 635	0.361
50	40	161 484 636	0.422
63	50	161 484 637	0.896



PF 2 68 332 999

### Diaphragm (2)

d [mm]	DN [mm]	PTFE/EPDM Code	kg
20	15	161 311 698	0.025
25	20	161 311 699	0.035
32	25	161 311 700	0.060
40	32	161 311 701	0.083
50	40	161 311 702	0.106
63	50	161 311 703	0.150



PF 2 68 332 999

### Pressure spindle (3)

d [mm]	DN [mm]	PTFE diaphragm Code	kg
20	15	161 484 696	0.060
25	20	161 484 697	0.105
32	25	161 484 698	0.046
40	32	161 484 699	0.062
50	40	161 484 700	0.057
63	50	161 484 701	0.113



### Fastening set (4)

d [mm]	DN [mm]	for PVC-U PVC- C ABS Code	kg
20	15	<b>161 484 704</b>	0.067
25	20	<b>161 484 705</b>	0.073
32	25	<b>161 484 706</b>	0.150
40	32	<b>161 484 707</b>	0.168
50	40	<b>161 484 708</b>	0.327
63	50	<b>161 484 709</b>	0.525

PF 2 68 332 999



### Valve body (5)

d [mm]	Inch	DN [mm]	PVDF Code	kg
20	1/2	15	<b>175 481 977</b>	0.101
25	3/4	20	<b>175 481 978</b>	0.176
32	1	25	<b>175 481 979</b>	0.265
40	1 1/4	32	<b>175 481 980</b>	0.455
50	1 1/2	40	<b>175 481 981</b>	0.710
63	2	50	<b>175 481 982</b>	1.125

PF 2 68 332 999



### Union nut

d [mm]	Inch	DN [mm]	PVDF Code	kg
20	1/2	15	<b>735 690 406</b>	0.023
25	3/4	20	<b>735 690 407</b>	0.047
32	1	25	<b>735 690 408</b>	0.048
40	1 1/4	32	<b>735 690 409</b>	0.097
50	1 1/2	40	<b>735 690 410</b>	0.146
63	2	50	<b>735 690 411</b>	0.145

PF 2 68 332 999



### Valve end

d [mm]	Inch	DN [mm]	PVDF metric Code	kg
20	1/2	15	<b>735 600 106</b>	0.011
25	3/4	20	<b>735 600 107</b>	0.022
32	1	25	<b>735 600 108</b>	0.026
40	1 1/4	32	<b>735 600 109</b>	0.046
50	1 1/2	40	<b>735 600 110</b>	0.054
63	2	50	<b>735 600 111</b>	0.079

PF 2 68 332 999



### Valve end with spigot

d [mm]	DN [mm]	PVDF Code	kg
20	15	<b>735 608 606</b>	0.025
25	20	<b>735 608 607</b>	0.032
32	25	<b>735 608 608</b>	0.044
40	32	<b>735 608 609</b>	0.072
50	40	<b>735 608 610</b>	0.086
63	50	<b>735 608 611</b>	0.138

PF 2 68 332 999



### Union end seal for PVC-U valves

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg	
20	½	15	748 410 038	749 410 038	0.002	
25	¾	20	748 410 044	749 410 044	0.003	
32	1	25	748 410 195	749 410 195	0.003	
40	1 ¼	32	748 410 052	749 410 052	0.003	
50	1 ½	40	748 410 134	749 410 134	0.003	
63	2	50	748 410 135	749 410 135	0.003	

PF 2 68 332 999



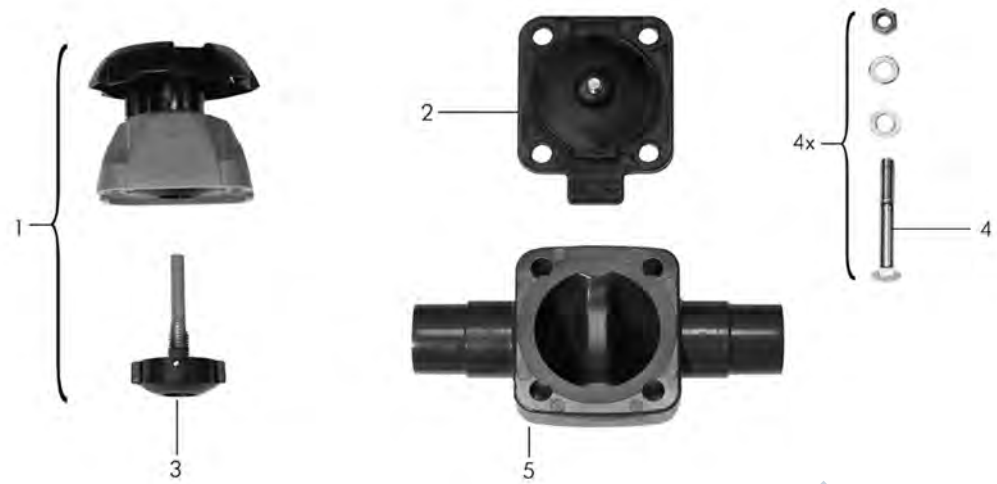
### Union end seal for PP-H and PVDF valves

d [mm]	DN [mm]	EPDM Code	FPM Code	kg	
20	15	748 410 006	749 410 006	0.002	
25	20	748 410 007	749 410 007	0.002	
32	25	748 410 008	749 410 008	0.002	
40	32	748 410 009	749 410 009	0.006	
50	40	748 410 010	749 410 010	0.007	
63	50	748 410 011	749 410 011	0.010	

PF 2 68 332 999

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## Spare parts diaphragm valve type 315



### Bonnet complete

Model:

- Without diaphragm (1, 3)



PF 2 34 236 999

d [mm]	DN [mm]	PTFE diaphragm Code	kg
20	15	161 484 632	0.185
25	20	161 484 633	0.299
32	25	161 484 634	0.367
40	32	161 484 635	0.361
50	40	161 484 636	0.422
63	50	161 484 637	0.896

### Diaphragm (2)



PF 2 34 236 999

d [mm]	DN [mm]	PTFE/EPDM Code	kg
20	15	161 311 698	0.025
25	20	161 311 699	0.035
32	25	161 311 700	0.060
40	32	161 311 701	0.083
50	40	161 311 702	0.106
63	50	161 311 703	0.150

### Pressure spindle (3)



PF 2 34 236 999

d [mm]	DN [mm]	PTFE diaphragm Code	kg
20	15	161 484 696	0.060
25	20	161 484 697	0.105
32	25	161 484 698	0.046
40	32	161 484 699	0.062
50	40	161 484 700	0.057
63	50	161 484 701	0.113





### Fastening set (4)

d [mm]	DN [mm]	for PVC-U PVC- C ABS Code	kg	
20	15	<b>161 484 704</b>	0.067	
25	20	<b>161 484 705</b>	0.073	
32	25	<b>161 484 706</b>	0.150	
40	32	<b>161 484 707</b>	0.168	
50	40	<b>161 484 708</b>	0.327	
63	50	<b>161 484 709</b>	0.525	

PF 2 34 236 999



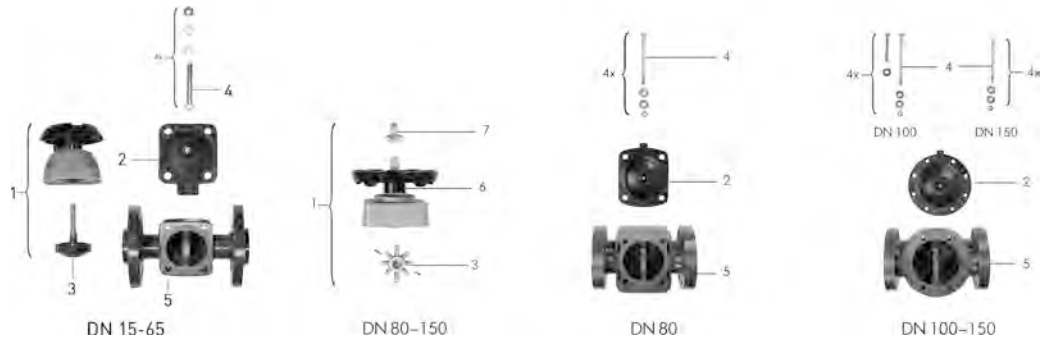
### Valve body metric (5)

d [mm]	DN [mm]	PVDF socket fusion spigot Code	PVDF butt fusion spigot IR Code	kg	
20	15	<b>175 480 069</b>	<b>175 481 840</b>	0.093	
25	20	<b>175 480 070</b>	<b>175 481 841</b>	0.158	
32	25	<b>175 480 071</b>	<b>175 481 842</b>	0.238	
40	32	<b>175 480 072</b>	<b>175 481 843</b>	0.410	
50	40	<b>175 480 073</b>	<b>175 481 844</b>	0.635	
63	50	<b>175 480 074</b>	<b>175 481 845</b>	1.047	

PF 2 34 236 999

Rtf-Prime.ru

## Spare parts diaphragm valve type 317



### Bonnet complete

#### Model:

- Without diaphragm (1, 3)



PF 2 34 236 999

d [mm]	Inch	DN [mm]	PTFE diaphragm Code	kg
20	1/2	15	<b>161 484 632</b>	0.185
25	3/4	20	<b>161 484 633</b>	0.299
32	1	25	<b>161 484 634</b>	0.367
40	1 1/4	32	<b>161 484 635</b>	0.361
50	1 1/2	40	<b>161 484 636</b>	0.422
63	2	50	<b>161 484 637</b>	0.896
75	2 1/2	65	<b>161 484 638</b>	1.526
90	3	80	<b>161 482 516</b>	3.967
110	4	100	<b>161 482 517</b>	5.700
160	6	150	<b>161 482 906</b>	14.040

### Diaphragm (2)



PF 2 34 236 999

d [mm]	Inch	DN [mm]	PTFE/EPDM Code	kg
20	1/2	15	<b>161 311 698</b>	0.025
25	3/4	20	<b>161 311 699</b>	0.035
32	1	25	<b>161 311 700</b>	0.060
40	1 1/4	32	<b>161 311 701</b>	0.083
50	1 1/2	40	<b>161 311 702</b>	0.106
63	2	50	<b>161 311 703</b>	0.150
75	2 1/2	65	<b>161 480 240</b>	0.252
90	3	80	<b>161 480 241</b>	0.390
110	4	100	<b>161 480 242</b>	0.630
160	6	150	<b>161 482 760</b>	1.421

### Pressure spindle (3)



PF 2 34 236 999

d [mm]	Inch	DN [mm]	PTFE diaphragm Code	kg
20	1/2	15	<b>161 484 696</b>	0.060
25	3/4	20	<b>161 484 697</b>	0.105
32	1	25	<b>161 484 698</b>	0.046
40	1 1/4	32	<b>161 484 699</b>	0.062
50	1 1/2	40	<b>161 484 700</b>	0.057
63	2	50	<b>161 484 701</b>	0.113
75	2 1/2	65	<b>161 484 702</b>	0.134
90	3	80	<b>161 483 020</b>	0.335
110	4	100	<b>161 483 021</b>	0.495
125	6	150	<b>161 483 023</b>	4.500



### Fastening set (4)

d [mm]	Inch	DN [mm]	for PVC-U PVC- C ABS Code	kg
20	1/2	15	<b>161 484 704</b>	0.067
25	3/4	20	<b>161 484 705</b>	0.073
32	1	25	<b>161 484 706</b>	0.150
40	1 1/4	32	<b>161 484 707</b>	0.168
50	1 1/2	40	<b>161 484 708</b>	0.327
63	2	50	<b>161 484 709</b>	0.525
75	2 1/2	65	<b>161 483 032</b>	0.679
90	3	80	<b>161 483 033</b>	0.845
110	4	100	<b>161 483 034</b>	1.440
160	6	150	<b>161 483 037</b>	0.400

PF 2 34 236 999



### Valve body with backing/flange (5)

Inch	d [mm]	DN [mm]	PVDF metric Code	PVDF ANSI Code	PVDF JIS Code	kg
1/2	20	15	<b>175 482 975</b>	<b>175 482 993</b>	<b>175 481 943</b>	0.288
3/4	25	20	<b>175 482 976</b>	<b>175 482 994</b>	<b>175 481 944</b>	0.405
1	32	25	<b>175 482 977</b>	<b>175 482 995</b>	<b>175 481 945</b>	0.643
1 1/4	40	32	<b>175 482 978</b>	<b>175 482 996</b>	<b>175 481 946</b>	0.917
1 1/2	50	40	<b>175 482 979</b>	<b>175 482 997</b>	<b>175 481 947</b>	1.212
2	63	50	<b>175 482 980</b>	<b>175 482 998</b>	<b>175 481 948</b>	1.782
2 1/2	75	65	<b>175 482 981</b>	<b>175 482 999</b>	<b>175 481 949</b>	2.596
3	90	80	<b>175 480 189</b>	<b>175 480 747</b>	<b>175 480 737</b>	4.750
4	110	100	<b>175 480 190</b>	<b>175 480 748</b>	<b>175 480 738</b>	7.300
6	160	150	<b>175 481 002</b>	<b>175 481 002</b>	<b>175 481 002</b>	15.300

PF 2 34 236 999



### O-ring seal (6)

d [mm]	DN [mm]	EPDM Code
90	80	-
110	100	-
160	150	<b>748 410 212</b>

PF 2 34 236 999

### Indicator cap (7)

d [mm]	Inch	DN [mm]	PVC-U SAN Code	kg
90	3	80	<b>161 481 759</b>	0.032
110	4	100	<b>161 481 760</b>	0.035
160	6	150	<b>161 482 744</b>	0.010

PF 2 34 236 999

# Butterfly valves

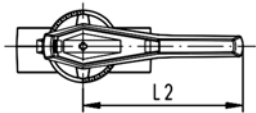
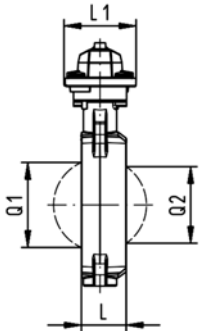
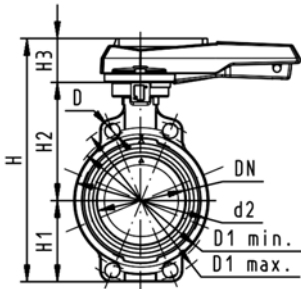
## SYGEF Standard Butterfly valve type 567 Hand lever with ratchet settings



### Model:

- Material: PVDF
- 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
- We recommend for the dimensions DN250 and DN300 only 6 bar maximum system pressure for the hand lever version

Model with PTFE seal in DN250 and DN300 available from June 2009



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>175 567 002</b>	1.080
75	65	2 ½	10	2200	<b>175 567 003</b>	1.192
90	80	3	10	3000	<b>175 567 004</b>	1.372
110	100	4	10	6500	<b>175 567 005</b>	2.072
140	125	5	10	11500	<b>175 567 006</b>	2.667
160	150	6	10	16600	<b>175 567 007</b>	3.887
225	200	8	10	39600	<b>175 567 008</b>	6.545
280	250	10	10	55200	<b>175 567 009</b>	14.623
315	300	12	10	80000	<b>175 567 010</b>	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	120.0	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

PF 2 35 566 002

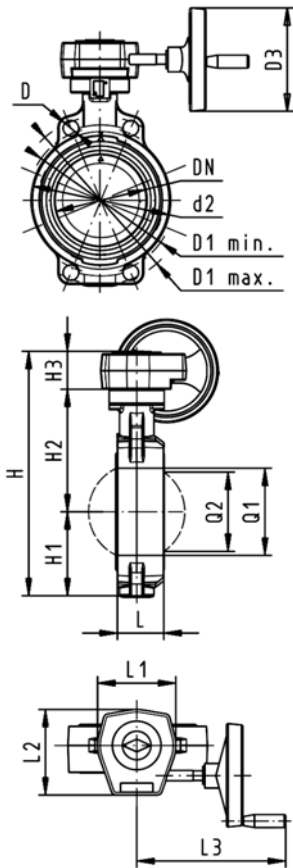


## SYGEF Standard Butterfly valve type 567 Reduction gear with handwheel

### Model:

- Material: PVDF
- 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

Model with PTFE seal in DN250 and DN300 available from June 2009



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>175 567 022</b>	3.118
75	65	2 1/2	10	2200	<b>175 567 023</b>	3.230
90	80	3	10	3000	<b>175 567 024</b>	3.410
110	100	4	10	6500	<b>175 567 025</b>	4.062
140	125	5	10	11500	<b>175 567 026</b>	4.657
160	150	6	10	16600	<b>175 567 027</b>	5.877
225	200	8	10	39600	<b>175 567 028</b>	7.998
280	250	10	10	55200	<b>175 567 029</b>	15.873
315	300	12	10	80000	<b>175 567 030</b>	20.763

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	120.0	125.0	104	160	278	77	134	60	45	120	132	236	40
75	19	139.7	145.0	115	160	291	83	140	60	46	120	132	236	54
90	19	150.0	160.0	131	160	303	89	146	60	49	120	132	236	67
110	19	175.0	190.5	160	160	339	104	167	60	56	120	132	236	88
140	23	210.0	215.9	187	160	365	117	181	60	64	120	132	236	113
160	24	241.3	241.3	215	160	387	130	189	60	72	120	132	236	139
225	23	290.0	295.0	267	160	436	158	210	60	73	120	132	236	178
280	25	353.0	362.0	329	160	529	205	264	60	113	134	151	261	210
315	25	400.0	432.0	379	160	573	228	285	60	113	134	151	261	256

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

PF 2 35 566 002

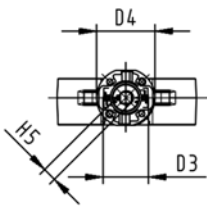
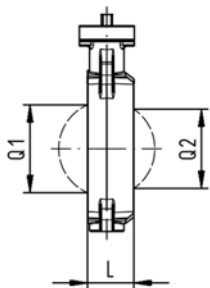
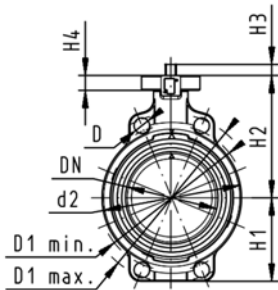


## SYGEF Standard Butterfly valve type 567 Bare shaft

### Model:

- Material: PVDF
- 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
- Interface F07 for the dimensions DN50-200 according to DIN/ISO 5211
- Interface F10 for the dimensions DN250-300 according to DIN/ISO 5211

Model with PTFE seal in DN250 and DN300 available from June 2009



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>175 567 822</b>	0.858
75	65	2 1/2	10	2200	<b>175 567 823</b>	0.970
90	80	3	10	3000	<b>175 567 824</b>	1.150
110	100	4	10	6500	<b>175 567 825</b>	1.802
140	125	5	10	11500	<b>175 567 826</b>	2.397
160	150	6	10	16600	<b>175 567 827</b>	3.617
225	200	8	10	39600	<b>175 567 828</b>	5.738
280	250	10	10	55200	<b>175 567 829</b>	12.673
315	300	12	10	80000	<b>175 567 830</b>	17.563

d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	Q1 [mm]
63	19	120.0	125.0	104	70	90	222	77	134	27	23	11	45	40
75	19	139.7	145.0	115	70	90	235	83	140	27	23	11	46	54
90	19	150.0	160.0	131	70	90	247	89	146	27	23	11	49	67
110	19	175.0	190.5	161	70	90	287	104	167	16	23	14	56	88
140	23	210.0	215.9	187	70	90	313	117	181	16	23	14	64	113
160	24	241.3	241.3	215	70	90	335	130	189	19	23	17	72	139
225	23	290.0	295.0	267	70	90	387	158	210	19	23	17	73	178
280	25	353.0	362.0	329	102	125	509	205	264	40	23	22	113	210
315	25	400.0	432.0	379	102	125	553	228	285	40	23	22	113	256

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

PF 2 35 566 004

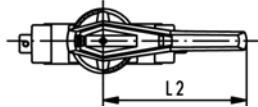
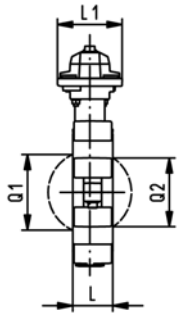
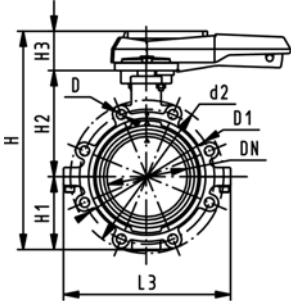


## SYGEF Standard Lugstyle butterfly valve type 568 Hand lever with ratchet settings

### Model:

- Material: PVDF
- 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

Model with PTFE seal in DN50 - DN80 on request



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>175 568 002</b>	3.170
75	65	2 ½	10	2200	<b>175 568 003</b>	3.533
90	80	3	10	3000	<b>175 568 004</b>	4.590
110	100	4	10	6500	<b>175 568 005</b>	6.170
140	125	5	10	11500	<b>175 568 006</b>	8.151
160	150	6	10	16600	<b>175 568 007</b>	10.370
225	200	8	10	39600	<b>175 568 008</b>	16.521

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

PF 2 35 569 002



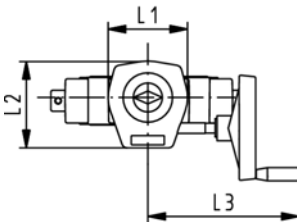
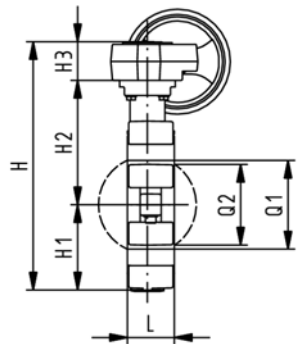
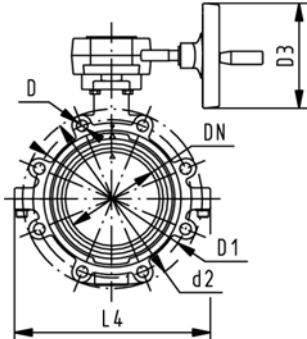


## SYGEF Standard Lugstyle butterfly valve type 568 Reduction gear with handwheel

### Model:

- Material: PVDF
- 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

Model with PTFE seal in DN50 - DN80 on request



PF 2 35 569 002

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>175 568 022</b>	5.208
75	65	2 ½	10	2200	<b>175 568 023</b>	5.571
90	80	3	10	3000	<b>175 568 024</b>	6.628
110	100	4	10	6500	<b>175 568 025</b>	8.160
140	125	5	10	11500	<b>175 568 026</b>	10.141
160	150	6	10	16600	<b>175 568 027</b>	12.360
225	200	8	10	39600	<b>175 568 028</b>	17.974

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]	Q2 [mm]
63	150	M16	125	160	279	77	134	60	45	120	132	236	150	40	
75	170	M16	145	160	291	83	140	60	46	120	132	236	160	54	35
90	184	M16	160	160	303	89	146	60	49	120	132	236	205	67	50
110	216	M16	180	160	339	104	167	60	56	120	132	236	244	88	74
140	246	M16	210	160	366	117	181	60	64	120	132	236	272	113	97
160	273	M20	240	160	387	130	189	60	72	120	132	236	297	139	123
225	334	M20	295	160	436	158	210	60	73	120	132	236	360	178	169

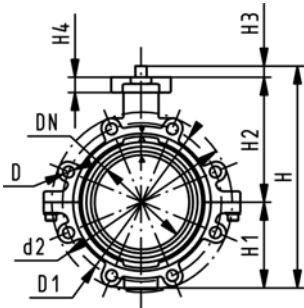


## SYGEF Standard Lugstyle butterfly valve type 568 Bare shaft

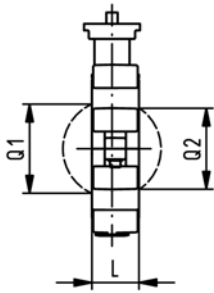
### Model:

- Material: PVDF
- 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

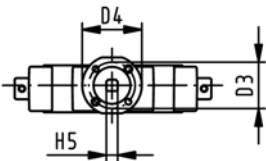
Model with PTFE seal in DN50 - DN80 on request



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>175 568 822</b>	2.948
75	65	2 ½	10	2200	<b>175 568 823</b>	3.311
90	80	3	10	3000	<b>175 568 824</b>	4.368
110	100	4	10	6500	<b>175 568 825</b>	5.900
140	125	5	10	11500	<b>175 568 826</b>	7.881
160	150	6	10	16600	<b>175 568 827</b>	10.100
225	200	8	10	39600	<b>175 568 828</b>	15.714



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



PF 2 35 569 998

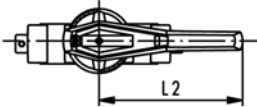
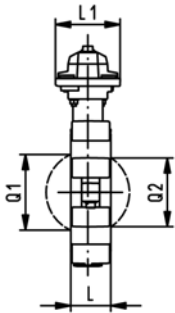
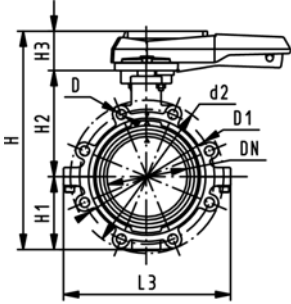


## SYGEF Standard Lugstyle butterfly valve 568 ANSI Hand lever with ratchet settings

### Model:

- Material: PVDF
- 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

Model with PTFE seal in DN50 - DN80 on request



Inch	d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
2	63	50	10	1470	<b>175 568 102</b>	3.170
2 1/2	75	65	10	2200	<b>175 568 103</b>	3.533
3	90	80	10	3000	<b>175 568 104</b>	3.961
4	110	100	10	6500	<b>175 568 105</b>	6.170
5	140	125	10	11500	<b>175 568 106</b>	8.151
6	160	150	10	16600	<b>175 568 107</b>	10.370
8	225	200	10	39600	<b>175 568 108</b>	16.521

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 1/2	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

PF 2 35 569 002

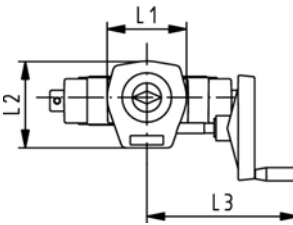
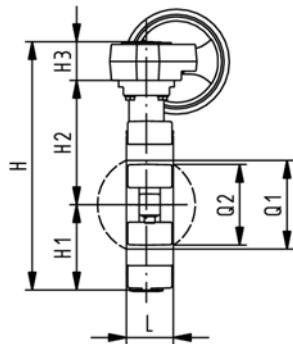
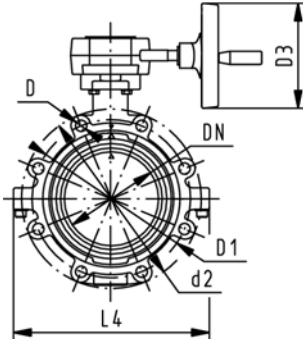


## SYGEF Standard Lugstyle butterfly valve 568 ANSI Reduction gear with handwheel

### Model:

- Material: PVDF
- 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

Model with PTFE seal in DN50 - DN80 on request



PF 2 35 569 002

Inch	d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
2	63	50	10	1470	<b>175 568 122</b>	5.208
2 ½	75	65	10	2200	<b>175 568 123</b>	5.571
3	90	80	10	3000	<b>175 568 124</b>	5.999
4	110	100	10	6500	<b>175 568 125</b>	8.160
5	140	125	10	11500	<b>175 568 126</b>	10.141
6	160	150	10	16600	<b>175 568 127</b>	12.360
8	225	200	10	39600	<b>175 568 128</b>	17.974

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	160	279	77	134	60	45	120	132	236	150	40
2 ½	170	UNC 5/8	138	160	291	83	140	60	46	120	132	236	160	54
3	177	UNC 5/8	152	160	303	89	146	60	49	120	132	236	175	67
4	216	UNC 5/8	191	160	339	104	167	60	56	120	132	236	244	88
5	246	UNC 3/4	216	160	366	117	181	60	64	120	132	236	272	113
6	273	UNC 3/4	241	160	387	130	189	60	72	120	132	236	297	139
8	334	UNC 3/4	298	160	436	158	210	60	73	120	132	236	360	178

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

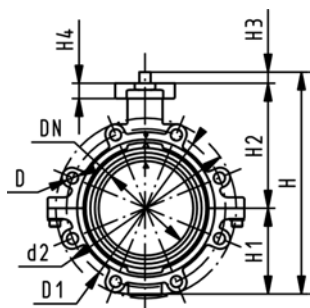


## SYGEF Standard Lugstyle butterfly valve 568 ANSI Bare shaft

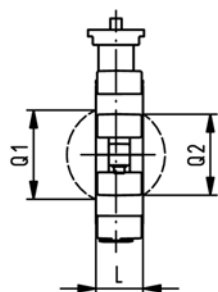
### Model:

- Material: PVDF
- 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

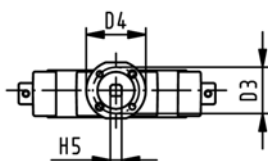
Model with PTFE seal in DN50 - DN80 on request



Inch	d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
2	63	50	10	1470	<b>175 568 922</b>	2.948
2 ½	75	65	10	2200	<b>175 568 923</b>	3.311
3	90	80	10	3000	<b>175 568 924</b>	3.739
4	110	100	10	6500	<b>175 568 925</b>	5.900
5	140	125	10	11500	<b>175 568 926</b>	7.881
6	160	150	10	16600	<b>175 568 927</b>	10.100
8	225	200	10	39600	<b>175 568 928</b>	15.714

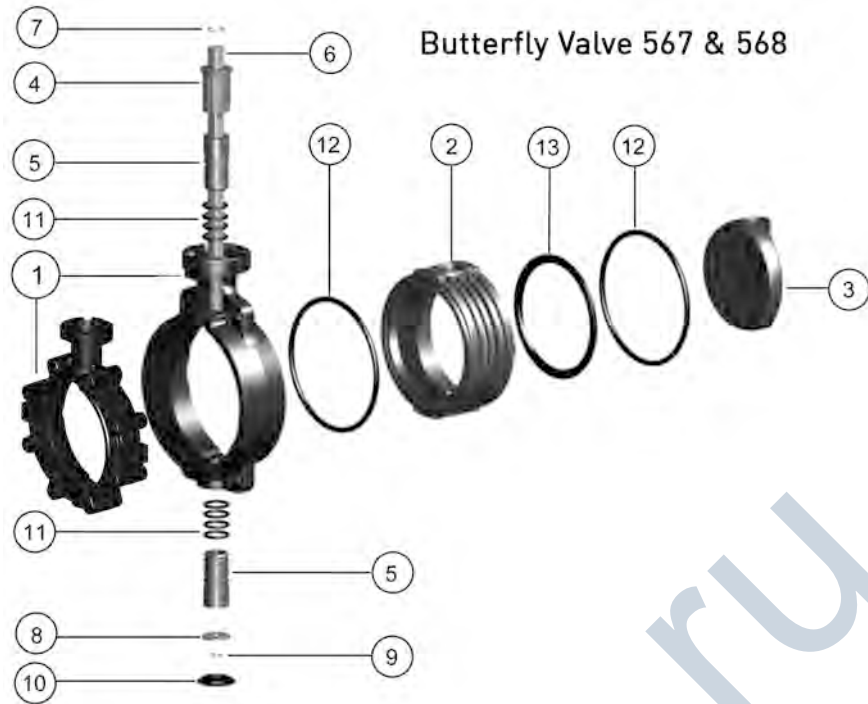


Inch	d2 [mm]	D	D1 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	Q1 [mm]	Q2 [mm]
2	150	UNC 5/8	121	70	90	222	77	134	27	23	45	40	
2 ½	170	UNC 5/8	138	70	90	235	83	140	27	23	46	54	35
3	177	UNC 5/8	152	70	90	247	89	146	27	23	49	67	50
4	216	UNC 5/8	191	70	90	287	104	167	16	23	56	88	74
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



PF 2 35 569 998

## Spare parts butterfly valve type 567/568



### Inner body

#### Model:

- Inner body consisting of: inner body (2) and profile seal (13)

d [mm]	Inch	DN [mm]	PVDF FPM Code	kg
63	2	50	<b>175 483 413</b>	0.190
75	2 ½	65	<b>175 483 414</b>	0.230
90	3	80	<b>175 483 415</b>	0.326
110	4	100	<b>175 483 416</b>	0.581
140	5	125	<b>175 483 417</b>	0.858
160	6	150	<b>175 483 418</b>	1.063
225	8	200	<b>175 483 419</b>	1.823
280	10	250	<b>175 483 420</b>	4.368
315	12	300	<b>175 483 421</b>	5.691

PF 2 34 637 998



### Flange gasket (12)

#### Model:

- included in delivery 2 pcs.

d [mm]	Inch	DN [mm]	FPM Code	kg
63	2	50	<b>161 486 979</b>	0.012
75	2 ½	65	<b>161 486 980</b>	0.014
90	3	80	<b>161 486 981</b>	0.016
110	4	100	<b>161 486 982</b>	0.036
125	5	125	<b>161 486 983</b>	0.043
160	6	150	<b>161 486 984</b>	0.050
225	8	200	<b>161 486 985</b>	0.064
280	10	250	<b>161 486 986</b>	0.091
315	12	300	<b>161 486 987</b>	0.104

PF 2 34 637 998



### Disc (3)

d [mm]	Inch	DN [mm]	PVDF Code	kg
63	2	50	<b>175 483 251</b>	0.045
75	2 ½	65	<b>175 483 252</b>	0.082
90	3	80	<b>175 483 253</b>	0.132
110	4	100	<b>175 483 254</b>	0.254
140	5	125	<b>175 483 255</b>	0.456
160	6	150	<b>175 483 256</b>	0.000
225	8	200	<b>175 483 257</b>	2.029
280	10	250	<b>175 483 258</b>	6.068
315	12	300	<b>175 483 259</b>	9.442

PF 2 34 637 998



### Bearing bush (5, 11)

**Model:**

- included in delivery 2 pcs.
- With O-ring

d [mm]	Inch	DN [mm]	PVDF FPM Code	kg
63	2	50	<b>175 483 426</b>	0.038
75	2 ½	65	<b>175 483 426</b>	0.038
90	3	80	<b>175 483 426</b>	0.038
110	4	100	<b>175 483 427</b>	0.069
140	5	125	<b>175 483 427</b>	0.069
160	6	150	<b>175 483 428</b>	0.145
225	8	200	<b>175 483 428</b>	0.145
280	10	250	<b>175 483 429</b>	
315	12	300	<b>175 483 429</b>	

PF 2 34 637 998



### End stop PP glasfiber reinforced (4)

d [mm]	Inch	DN [mm]	Code	kg
63	2	50	<b>167 483 251</b>	0.023
75	2 ½	65	<b>167 483 251</b>	0.023
90	3	80	<b>167 483 251</b>	0.023
110	4	100	<b>167 483 252</b>	0.033
140	5	125	<b>167 483 252</b>	0.033
160	6	150	<b>167 483 253</b>	0.049
225	8	200	<b>167 483 253</b>	0.049
280	10	250	<b>167 483 254</b>	0.096
315	12	300	<b>167 483 254</b>	0.096

PF 2 34 637 998



### Shaft set

**Model:**

- Shaft set consisting of: shaft chrom steel 1.4301 AISI 304 (6), retention ring (7, 9) and washer (8)

d [mm]	Inch	DN [mm]	Code	kg
63	2	50	<b>161 486 899</b>	0.225
75	2 ½	65	<b>161 486 900</b>	0.237
90	3	80	<b>161 486 901</b>	0.249
110	4	100	<b>161 486 902</b>	0.429
140	5	125	<b>161 486 903</b>	0.469
160	6	150	<b>161 486 904</b>	0.749
225	8	200	<b>161 486 905</b>	0.844
280	10	250	<b>161 486 906</b>	0.000
315	12	300	<b>161 486 907</b>	2.536

PF 2 34 637 998





## Lever

d [mm]	Inch	DN [mm]	with index plate Code	with fine adjustment Code	kg
63	2	50	<b>161 486 690</b>	<b>161 486 325</b>	0.485
75	2 ½	65	<b>161 486 690</b>	<b>161 486 325</b>	0.485
90	3	80	<b>161 486 690</b>	<b>161 486 325</b>	0.485
110	4	100	<b>161 486 691</b>	<b>161 486 326</b>	0.540
140	5	125	<b>161 486 691</b>	<b>161 486 326</b>	0.540
160	6	150	<b>161 486 694</b>	<b>161 486 327</b>	0.537
225	8	200	<b>161 486 695</b>	<b>161 486 328</b>	1.375
280	10	250	<b>161 486 697</b>		0.330
315	12	300	<b>161 486 697</b>		0.330

PF 2 34 637 998



## Integrated position indicator Automatic AU

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

PF 3 39 643 999



## 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>	0.063
3	150 - 200	<b>161 486 010</b>	0.063

PF 3 39 643 999



## 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

PF 3 39 643 999



## 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

PF 3 39 643 999



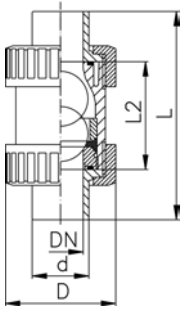
## Integrated position indicator Electric NPN

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

PF 3 39 643 999

# Ball check valves

## SYGEF Standard Ball check valve type 360 With butt fusion spigots metric



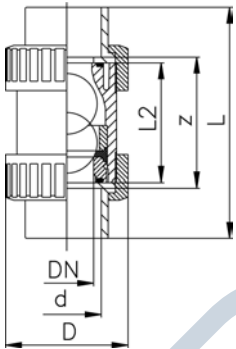
PF 2 35 195 001

### Model:

- Material: PVDF
- For easy installation and removal
- Ball is sealing at a minimum water column 1m
- Vibration free even at high flow velocity
- FPM ball seal

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	
20	15	16	150	<b>175 360 492</b>	0.156	46	130	62	
25	20	16	330	<b>175 360 493</b>	0.259	56	144	74	
32	25	16	390	<b>175 360 494</b>	0.406	67	150	78	
40	32	16	710	<b>175 360 495</b>	0.676	82	171	88	
50	40	16	900	<b>175 360 496</b>	1.086	98	191	94	
63	50	16	1390	<b>175 360 497</b>	2.029	120	220	113	

## SYGEF Standard Ball check valve type 360 With fusion sockets metric



PF 2 35 195 001

### Model:

- Material: PVDF
- For easy installation and removal
- Ball is sealing at a minimum water column 1m
- Vibration free even at high flow velocity
- FPM ball seal

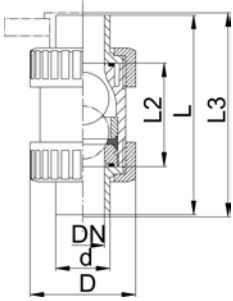
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	z [mm]	
16	10	16	170	<b>175 360 411</b>	0.152	46	98	62	72	
20	15	16	150	<b>175 360 412</b>	0.153	46	101	62	73	
25	20	16	330	<b>175 360 413</b>	0.253	56	119	74	87	
32	25	16	390	<b>175 360 414</b>	0.395	67	130	78	94	
40	32	16	710	<b>175 360 415</b>	0.625	82	149	88	109	
50	40	16	900	<b>175 360 416</b>	1.045	98	162	94	116	
63	50	16	1390	<b>175 360 417</b>	1.990	120	195	113	141	



## SYGEF Standard Ball check valve type 360 With socket fusion spigots metric

### Model:

- Material: PVDF
- For easy installation and removal
- Ball is sealing at a minimum water column 1m
- Vibration free even at high flow velocity
- FPM ball seal



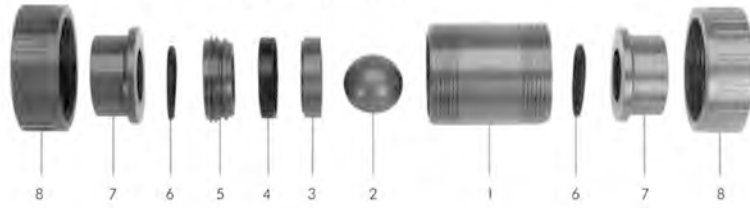
PF 2 35 195 001

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	L3 [mm]
16	10	16	170	<b>175 360 451</b>	0.155	46	109	62	120
20	15	16	150	<b>175 360 452</b>	0.156	46	119	62	130
25	20	16	330	<b>175 360 453</b>	0.259	56	140	74	150
32	25	16	390	<b>175 360 454</b>	0.406	67	150	78	160
40	32	16	710	<b>175 360 455</b>	0.676	82	171	88	180
50	40	16	900	<b>175 360 456</b>	1.086	98	191	94	200
63	50	16	1390	<b>175 360 457</b>	2.029	120	220	113	230

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## Spare parts ball check valve type 360

### DN 10-50



### DN 80



### Central part

**Model:**

- Central part consisting of: body (1), ball (2), support ring (3), sealing ring (4) and uni-on bush (5)

PF 2 34 181 999

### Ball (2)



d [mm]	DN [mm]	PVDF Code	kg
16	10	175 480 153	0.010
20	15	175 480 153	0.010
25	20	175 480 154	0.014
32	25	175 480 155	0.028
40	32	175 480 156	0.064
50	40	175 480 157	0.093
63	50	175 480 158	0.214

PF 2 34 181 999

### Sealing ring (4)



d [mm]	DN [mm]	FPM Code	kg
16	10	161 483 265	0.004
20	15	161 483 265	0.004
25	20	161 483 266	0.006
32	25	161 483 267	0.003
40	32	161 483 268	0.015
50	40	161 483 269	0.025
63	50	161 483 270	0.050
90	80	161 480 149	0.080

PF 2 34 181 999

### Face seal (6)



d [mm]	DN [mm]	FPM Code	kg
16	10	749 410 042	0.002
20	15	749 410 042	0.002
25	20	749 410 116	0.030
32	25	749 410 103	0.002
40	32	749 410 027	0.003
50	40	749 410 010	0.007
63	50	749 410 011	0.010
90	80	749 410 099	0.015

PF 2 34 181 999



### Union nut (8)

d [mm]	DN [mm]	PVDF Code	kg
16	10	175 480 819	0.025
20	15	175 480 819	0.025
25	20	175 480 820	0.042
32	25	175 480 821	0.062
40	32	175 480 822	0.105
50	40	175 480 823	0.170
63	50	175 480 824	0.310

PF 2 34 181 999



### Valve end with socket (7)

d [mm]	Inch	DN [mm]	PVDF metric Code	kg
16	1/2	10	175 480 031	0.012
20	3/8	15	175 480 032	0.012
25	1	20	175 480 033	0.021
32	1 1/4	25	175 480 034	0.031
40	1 1/2	32	175 480 035	0.056
50	2	40	175 480 036	0.088
63	3	50	175 480 037	0.150

PF 2 34 181 999



### Valve end with spigot (7)

d [mm]	DN [mm]	PVDF metric Code	kg
16	10	175 480 787	0.012
20	15	175 480 788	0.015
25	20	175 480 789	0.025
32	25	175 480 790	0.045
40	32	175 480 791	0.068
50	40	175 480 792	0.109
63	50	175 480 793	0.195

PF 2 34 181 999



### Threaded bush (7)

Inch	DN [mm]	PVDF NPT Code	kg
3/8	10	175 480 727	0.017
1/2	15	175 480 728	0.014
3/4	20	175 480 729	0.022
1	25	175 480 730	0.035
1 1/4	32	175 480 731	0.069
1 1/2	40	175 480 732	0.108
2	50	175 480 733	0.193

PF 2 34 181 999



### Fixed flange jointing face serrated metric

d [mm]	DN [mm]	PVDF Code	kg
20	15	735 740 106	0.124
25	20	735 740 107	0.162
32	25	735 740 108	0.229
40	32	735 740 109	0.340
50	40	735 740 110	0.409
63	50	735 740 111	0.551

PF 2 34 181 999



## Seal set (4, 6)

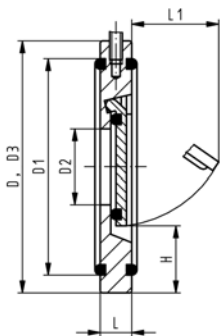
d [mm]	DN [mm]	FPM Code	kg	
16	10	<b>161 482 920</b>	0.003	
20	15	<b>161 482 920</b>	0.003	
25	20	<b>161 482 921</b>	0.007	
32	25	<b>161 482 922</b>	0.011	
40	32	<b>161 482 923</b>	0.016	
50	40	<b>161 482 924</b>	0.032	
63	50	<b>161 482 925</b>	0.065	

PF 2 34 181 999

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# Check valves

## SYGEF Standard Wafer check valve type 369 Without spring



### Model:

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

### Installation instruction:

- Installation between metric flange adaptors
- 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)

### Note:

- In order to install the wafer check valves properly, Georg Fischer recommends flange adaptors of the next larger diameter of the valve (e.g. wafer check valve d90 with two flange adaptors d110)

Available with flange gasket from January 2009

d [mm]	DN [mm]	PN	FPM Code	kg
40	32	6	175 369 022	0.170
50	40	6	175 369 023	0.210
63	50	6	175 369 024	0.330
75	65	6	175 369 025	0.420
90	80	6	175 369 026	0.510
110	100	6	175 369 027	0.710
140	125	6	175 369 029	0.970
160	150	6	175 369 030	1.420
225	200	6	175 369 031	2.710
280	250	6	175 369 032	4.520
315	300	6	175 369 033	6.900

d [mm]	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	H [mm]	Opening pressure vertical [mbar]	Opening pressure horizontal [mbar]	Tightness from water column [m]
40	85	59	18	15	22	25	10	1	2.0
50	95	74	22	16	27	27	10	1	2.0
63	109	90	32	18	40	29	10	1	2.0
75	129	110	40	20	55	31	10	1	2.0
90	144	125	54	20	67	32	10	1	2.0
110	164	150	70	23	67	31	10	1	2.0
140	195	178	92	23	94	35	10	1	2.0
160	220	192	105	26	100	41	10	1	2.0
225	275	256	154	35	152	38	18	1	2.0
280	330	306	192	40	180	41	18	1	2.0
315	380	342	227	45	215	41	18	1	2.0

PF 2 35 195 006



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

### Model:

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

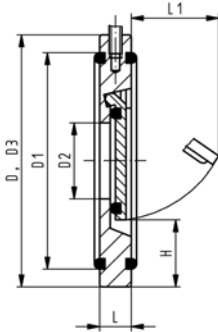
### Installation instruction:

- Installation between metric flange adaptors
- 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

### Note:

- In order to install the wafer check valves properly, Georg Fischer recommends flange adaptors of the next larger diameter of the valve (e.g. wafer check valve d90 with two flange adaptors d110)

Available with flange gasket from January 2009



d [mm]	DN [mm]	PN	FPM Code	kg
40	32	6	175 369 062	0.170
50	40	6	175 369 063	0.210
63	50	6	175 369 064	0.330
75	65	6	175 369 065	0.420
90	80	6	175 369 066	0.510
110	100	6	175 369 067	0.710
140	125	6	175 369 069	0.970
160	150	6	175 369 070	1.420
225	200	6	175 369 071	2.710
280	250	6	175 369 072	4.520
315	300	6	175 369 073	6.900

d [mm]	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	H [mm]	Opening pressure vertical [mbar]	Opening pressure horizontal [mbar]	Tightness from water column [m]
40	85	59	18	15	22	25	30	20	2.0
50	95	74	22	16	27	27	30	20	2.0
63	109	90	32	18	40	29	30	20	2.0
75	129	110	40	20	55	31	30	20	2.0
90	144	125	54	20	67	32	30	20	2.0
110	164	150	70	23	67	31	30	20	2.0
140	195	178	92	23	94	35	30	20	2.0
160	220	192	105	26	100	41	30	20	2.0
225	275	256	154	35	152	38	38	20	2.0
280	330	306	192	40	180	41	38	20	2.0
315	380	342	227	45	215	41	38	20	2.0

PF 2 35 195 006





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

### Model:

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

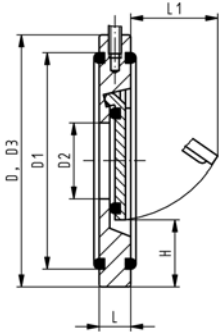
### Installation instruction:

- Installation between metric flange adaptors
- 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

### Note:

- In order to install the wafer check valves properly, Georg Fischer recommends flange adaptors of the next larger diameter of the valve (e.g. wafer check valve d90 with two flange adaptors d110)

Available with flange gasket from January 2009

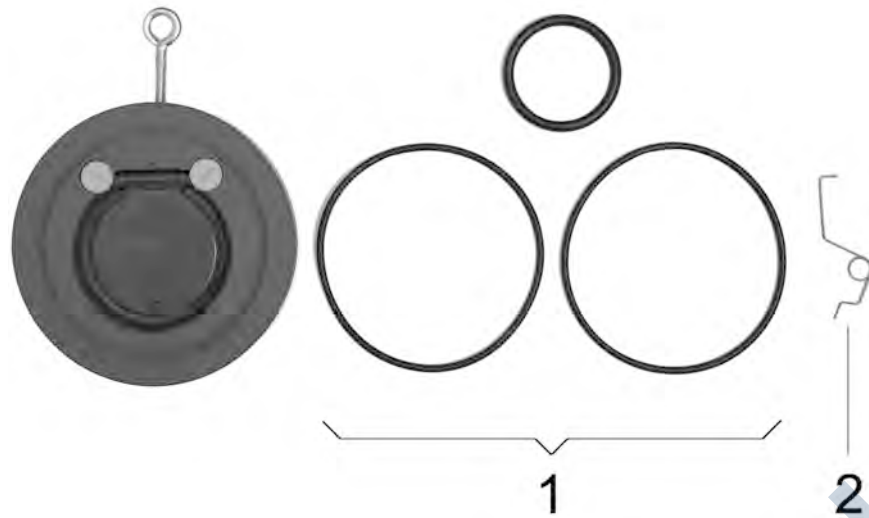


d [mm]	DN [mm]	PN	FPM Code	kg
40	32	6	<b>175 369 102</b>	0.170
50	40	6	<b>175 369 103</b>	0.210
63	50	6	<b>175 369 104</b>	0.330
75	65	6	<b>175 369 105</b>	0.420
90	80	6	<b>175 369 106</b>	0.510
110	100	6	<b>175 369 107</b>	0.710
140	125	6	<b>175 369 109</b>	0.970
160	150	6	<b>175 369 110</b>	1.420
225	200	6	<b>175 369 111</b>	2.710
280	250	6	<b>175 369 112</b>	4.520
315	300	6	<b>175 369 113</b>	6.900

d [mm]	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	H [mm]	Opening pressure vertical [mbar]	Opening pressure horizontal [mbar]	Tightness from water column [m]
40	85	59	18	15	22	25	30	20	2.0
50	95	74	22	16	27	27	30	20	2.0
63	109	90	32	18	40	29	30	20	2.0
75	129	110	40	20	55	31	30	20	2.0
90	144	125	54	20	67	32	30	20	2.0
110	164	150	70	23	67	31	30	20	2.0
140	195	178	92	23	94	35	30	20	2.0
160	220	192	105	26	100	41	30	20	2.0
225	275	256	154	35	152	38	38	20	2.0
280	330	306	192	40	180	41	38	20	2.0
315	380	342	227	45	215	41	38	20	2.0

PF 2 35 195 006

## Spare parts wafer check valve type 369



### Flange gasket (1)



PF 2 35 195 999

d [mm]	DN [mm]	FPM Code	kg
40	32	161 484 887	0.004
50	40	161 486 979	0.012
63	50	161 486 980	0.014
75	65	161 486 981	0.016
90	80	161 486 982	0.036
110	100	161 486 982	0.036
140	125	161 486 984	0.050
160	150	161 486 984	0.050
225	200	161 486 993	0.070
280	250	161 486 986	0.091
315	300	161 486 987	0.104

### Disc set (2)



PF 2 35 195 999

d [mm]	DN [mm]	PVDF FPM Code	kg
40	32	175 369 142	0.005
50	40	175 369 143	0.010
63	50	175 369 144	0.022
75	65	175 369 145	0.041
90	80	175 369 146	0.055
110	100	175 369 147	0.114
140	125	175 369 148	0.168
160	150	175 369 149	0.250
225	200	175 369 150	0.615
280	250	175 369 151	1.081
315	300	175 369 152	1.628

### Spring (3)



PF 2 35 195 999

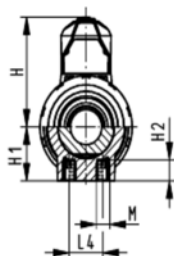
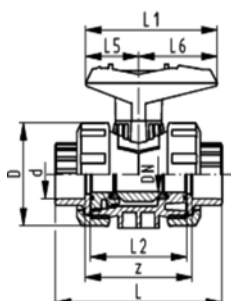
d [mm]	DN [mm]	V4A Code	Hastelloy C Code	kg
40	32	161 484 900	161 484 912	0.001
50	40	161 484 901	161 484 913	0.001
63	50	161 484 902	161 484 914	0.001
75	65	161 484 903	161 484 915	0.001
90	80	161 484 904	161 484 916	0.002
110	100	161 484 905	161 484 917	0.002
140	125	161 484 905	161 484 917	0.002
160	150	161 484 907	161 484 919	0.006
225	200	161 484 908	161 484 920	0.019
280	250	161 484 909	161 484 921	0.027
315	300	161 484 910	161 484 922	0.043

# Ball valves silicone free/paint compatible

## SYGEF Standard silicone free Ball valve type 546 With fusion sockets metric



DN10/15 - 50



### Model:

- Material: PVDF / silicone free cleaned
- Ball seals PVDF
- For easy installation and removal
- 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 form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

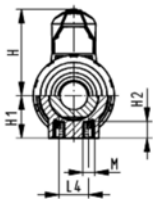
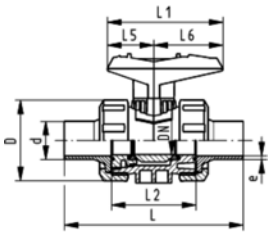
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	16	71	<b>175 546 691</b>	0.195
20	15	16	185	<b>175 546 692</b>	0.200
25	20	16	350	<b>175 546 693</b>	0.300
32	25	16	700	<b>175 546 694</b>	0.440
40	32	16	1000	<b>175 546 695</b>	0.760
50	40	16	1600	<b>175 546 696</b>	1.060
63	50	16	3100	<b>175 546 697</b>	2.055

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	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

PF 2 35 540 801



DN10/15 - 50



## SYGEF Standard silicone free Ball valve type 546 With butt fusion spigots IR-Plus metric

### Model:

- Material: PVDF / silicone free cleaned
- Ball seals PVDF
- For easy installation and removal
- 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 form)
- 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]	FPM Code	kg
20	15	16	185	<b>175 546 752</b>	0.205
25	20	16	350	<b>175 546 753</b>	0.310
32	25	16	700	<b>175 546 754</b>	0.460
40	32	16	1000	<b>175 546 755</b>	0.780
50	40	16	1600	<b>175 546 756</b>	1.110
63	50	16	3100	<b>175 546 757</b>	2.150

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	1,9
32	68	73	36	12	150	97	71	25	39	58	M6	2,4
40	84	90	44	15	171	128	85	45	54	74	M8	2,4
50	97	97	51	15	191	128	89	45	54	74	M8	3
63	124	116	64	15	220	152	101	45	66	87	M8	3

PF 2 35 540 801

# Ball check valve

75 36 06

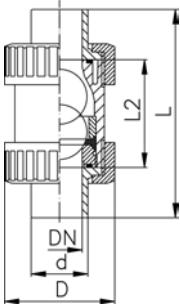


## SYGEF Standard silicone free Ball check valve type 360 With butt fusion spigots metric

**Model:**

- Material: PVDF / silicone free cleaned
- For easy installation and removal
- Ball is sealing at a minimum water column of 2 m. Vibration free even at high velocity
- FPM ball seal

Attention; make sure the inner diameter is not reduced by leaving residues of the fusion (danger of turbulence)



PF 2 37 207 001

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg	D [mm]	L [mm]	L2 [mm]
16	10	16	170	<b>175 360 671</b>	0.155	46	109	62
20	15	16	150	<b>175 360 672</b>	0.156	46	130	62
25	20	16	330	<b>175 360 673</b>	0.259	56	144	74
32	25	16	390	<b>175 360 674</b>	0.406	67	150	78
40	32	16	710	<b>175 360 675</b>	0.676	82	171	88
50	40	16	900	<b>175 360 676</b>	1.086	98	191	94
63	50	16	1390	<b>175 360 677</b>	2.029	120	220	113

75 36 06

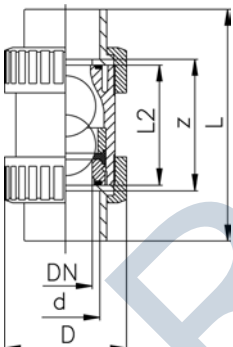


## SYGEF Standard silicone free Ball check valve type 360 With fusion sockets metric

**Model:**

- Material: PVDF / silicone free cleaned
- For easy installation and removal
- Ball is sealing at a minimum water column of 2 m. Vibration free even at high velocity
- FPM ball seal

Attention; make sure the inner diameter is not reduced by leaving residues of the fusion (danger of turbulence)



PF 2 37 207 001

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	z [mm]
16	10	16	170	<b>175 360 611</b>	0.152	46	98	62	72
20	15	16	150	<b>175 360 612</b>	0.153	46	101	62	73
25	20	16	330	<b>175 360 613</b>	0.253	56	119	74	87
32	25	16	390	<b>175 360 614</b>	0.395	67	130	78	94
40	32	16	710	<b>175 360 615</b>	0.663	82	149	88	109
50	40	16	900	<b>175 360 616</b>	1.045	98	162	94	116
63	50	16	1390	<b>175 360 617</b>	1.960	120	195	113	141

75 36 06

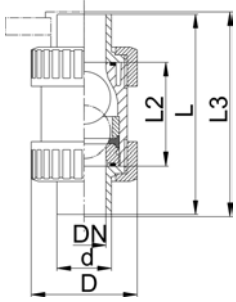


**SYGEF Standard silicone free  
Ball check valve type 360  
With socket fusion spigots metric**

**Model:**

- Material: PVDF / silicone free cleaned
- For easy installation and removal
- Ball is sealing at a minimum water column of 2 m. Vibration free even at high velocity
- FPM ball seal

Attention; make sure the inner diameter is not reduced by leaving residues of the fusion (danger of turbulence)



PF 2 37 207 001

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg	D [mm]	L [mm]	L1 [mm]	L3 [mm]
16	10	16	170	<b>175 360 631</b>	0.155	46	109	62	120
20	15	16	150	<b>175 360 632</b>	0.156	46	119	62	130
25	20	16	330	<b>175 360 633</b>	0.259	56	140	74	150
32	25	16	390	<b>175 360 634</b>	0.406	67	150	78	160
40	32	16	710	<b>175 360 635</b>	0.676	82	171	88	180
50	40	16	900	<b>175 360 636</b>	1.086	98	191	94	200
63	50	16	1390	<b>175 360 637</b>	2.029	120	220	113	230

Rtf-Prime.ru

# Ball valves electric



DN10/15 - 50

## SYGEF Standard Ball valve type 107 100-230V With manual emergency override With fusion sockets metric

### Model:

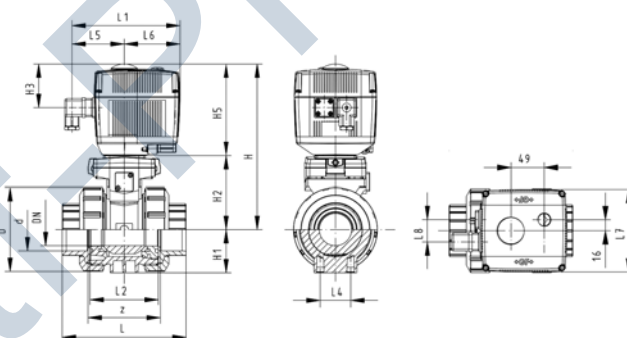
- Material: PVDF
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	70	199 107 802	2.100
20	15	10	185	199 107 803	2.100
25	20	10	350	199 107 804	2.200
32	25	10	700	199 107 805	2.300
40	32	10	1000	199 107 806	2.600
50	40	10	1600	199 107 807	3.000
63	50	10	3100	199 107 808	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	92	161	56	25	79	83	122	67	64
20	50	200	27	64	64	137	95	161	56	25	79	83	122	67	64
25	58	209	30	73	64	137	110	161	65	25	79	83	122	67	72
32	68	209	36	73	64	137	123	161	71	25	79	83	122	67	79
40	84	220	44	84	64	137	146	161	85	45	79	83	122	67	94
50	97	220	51	84	64	137	157	161	89	45	79	83	122	67	95
63	124	243	64	106	64	137	183	161	101	45	79	83	122	67	107



PF 3 39 695 035



DN10/15 - 50

## SYGEF Standard Ball valve type 107 100-230V With manual emergency override With fusion spigots metric

### Model:

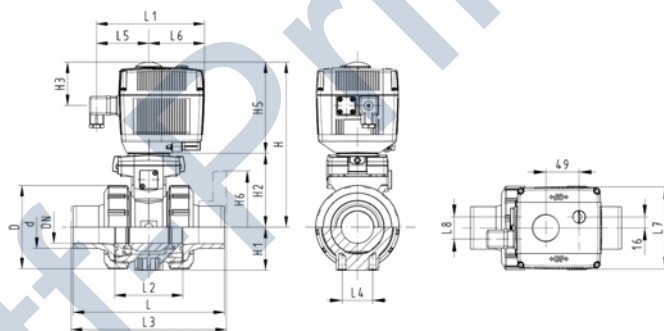
- Material: PVDF
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 107 812</b>	2.100
20	15	10	185	<b>199 107 813</b>	2.100
25	20	10	350	<b>199 107 814</b>	2.200
32	25	10	700	<b>199 107 815</b>	2.300
40	32	10	1000	<b>199 107 816</b>	2.600
50	40	10	1600	<b>199 107 817</b>	3.000
63	50	10	3100	<b>199 107 818</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	114	161	56	0	25	79	83	122	67
20	50	200	27	64	64	137	124	161	56	130	25	79	83	122	67
25	58	209	30	73	64	137	144	161	65	150	25	79	83	122	67
32	68	209	36	73	64	137	154	161	71	160	25	79	83	122	67
40	84	220	44	84	64	137	174	161	85	180	45	79	83	122	67
50	97	220	51	84	64	137	194	161	89	200	45	79	83	122	67
63	124	243	64	106	64	137	224	161	101	230	45	79	83	122	67



PF 3 39 695 035





DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 107 100-230V**  
**With manual emergency override**  
**With butt fusion spigots IR-Plus metric**

**Model:**

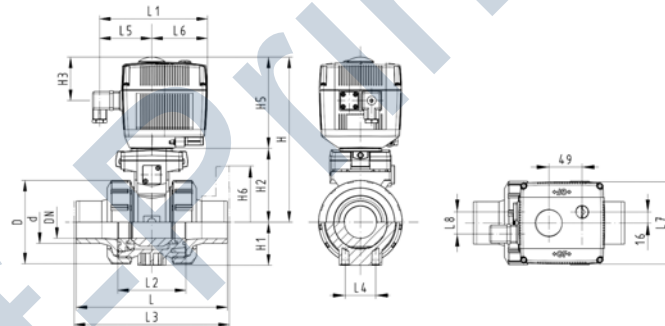
- Material: PVDF
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	185	<b>199 107 423</b>	2.100
25	20	10	350	<b>199 107 424</b>	2.200
32	25	10	700	<b>199 107 425</b>	2.300
40	32	10	1000	<b>199 107 426</b>	2.600
50	40	10	1600	<b>199 107 427</b>	3.000
63	50	10	3100	<b>199 107 428</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]
20	50	200	27	64	64	137	130	161	56	25	79	83	122	67
25	58	209	30	73	64	137	143	161	65	25	79	83	122	67
32	68	209	36	73	64	137	150	161	71	25	79	83	122	67
40	84	220	44	84	64	137	171	161	85	45	79	83	122	67
50	97	220	51	84	64	137	191	161	89	45	79	83	122	67
63	124	243	64	106	64	137	220	161	101	45	79	83	122	67



PF 3 39 695 035



DN10/15 - 50

## SYGEF Standard Ball valve type 107 100-230V With manual emergency override With fixed flanges PVDF serrated metric

### Model:

- Material: PVDF
- 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 EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

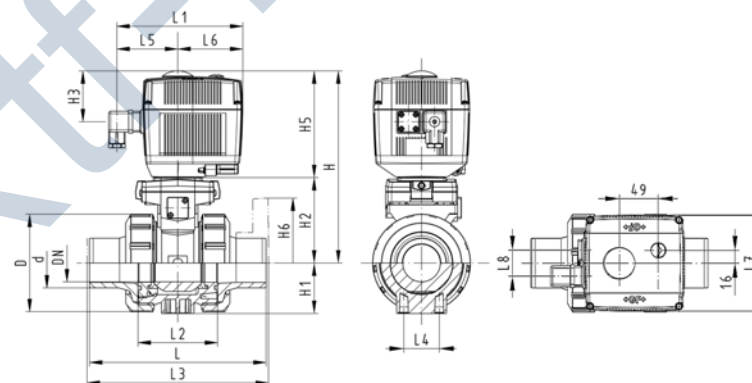
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	1/2	10	185	<b>199 107 843</b>	2.300
25	20	3/4	10	350	<b>199 107 844</b>	2.500
32	25	1	10	700	<b>199 107 845</b>	2.700
40	32	1 1/4	10	1000	<b>199 107 846</b>	3.200
50	40	1 1/2	10	1600	<b>199 107 847</b>	3.700
63	50	2	10	3100	<b>199 107 848</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	201	27	64	65	138	48	124	160	56	130	25	77	83	122
25	58	210	30	73	65	138	53	144	160	65	150	25	77	83	122
32	68	210	36	73	65	138	58	154	160	71	160	25	77	83	122
40	84	221	44	84	65	138	70	174	160	85	180	45	77	83	122
50	97	221	51	84	65	138	75	194	160	89	200	45	77	83	122
63	124	244	64	106	65	138	83	224	160	101	230	45	77	83	122

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



PF 3 39 695 035



DN10/15 - 50

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

### Model:

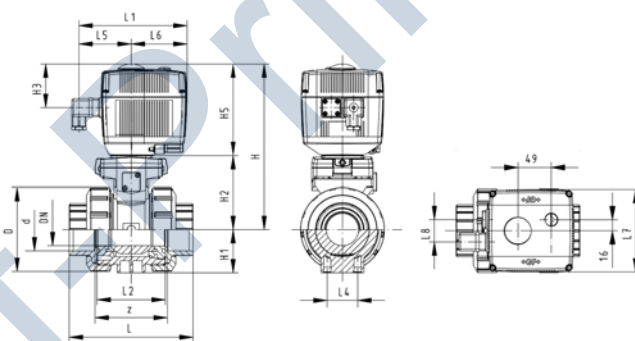
- Material: PVDF
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 107 822</b>	2.100
20	15	10	185	<b>199 107 823</b>	2.100
25	20	10	350	<b>199 107 824</b>	2.200
32	25	10	700	<b>199 107 825</b>	2.300
40	32	10	1000	<b>199 107 826</b>	2.600
50	40	10	1600	<b>199 107 827</b>	3.000
63	50	10	3100	<b>199 107 828</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	92	161	56	25	79	83	122	67	64
20	50	200	27	64	64	137	95	161	56	25	79	83	122	67	64
25	58	209	30	73	64	137	110	161	65	25	79	83	122	67	72
32	68	209	36	73	64	137	123	161	71	25	79	83	122	67	79
40	84	220	44	84	64	137	146	161	85	45	79	83	122	67	94
50	97	220	51	84	64	137	157	161	89	45	79	83	122	67	95
63	124	243	64	106	64	137	183	161	101	45	79	83	122	67	107



PF 3 39 695 035



DN10/15 - 50

## SYGEF Standard Ball valve type 107 24V With manual emergency override With fusion spigots metric

### Model:

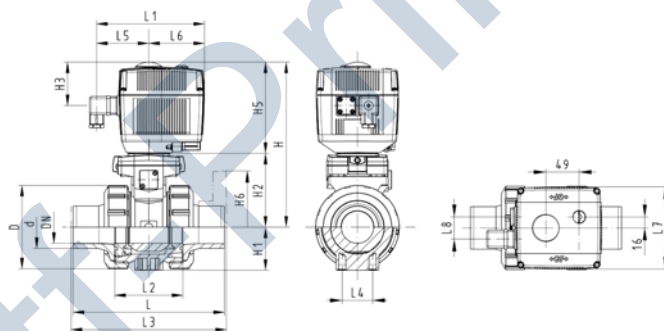
- Material: PVDF
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 107 832</b>	2.100
20	15	10	185	<b>199 107 833</b>	2.100
25	20	10	350	<b>199 107 834</b>	2.200
32	25	10	700	<b>199 107 835</b>	2.300
40	32	10	1000	<b>199 107 836</b>	2.600
50	40	10	1600	<b>199 107 837</b>	3.000
63	50	10	3100	<b>199 107 838</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	114	161	56	0	25	79	83	122	67
20	50	200	27	64	64	137	124	161	56	130	25	79	83	122	67
25	58	209	30	73	64	137	144	161	65	150	25	79	83	122	67
32	68	209	36	73	64	137	154	161	71	160	25	79	83	122	67
40	84	220	44	84	64	137	174	161	85	180	45	79	83	122	67
50	97	220	51	84	64	137	194	161	89	200	45	79	83	122	67
63	124	243	64	106	64	137	224	161	101	230	45	79	83	122	67



PF 3 39 695 035



**SYGEF Standard**  
**Ball valve type 107 24V**  
**With manual emergency override**  
**With butt fusion spigots IR-Plus metric**

**Model:**

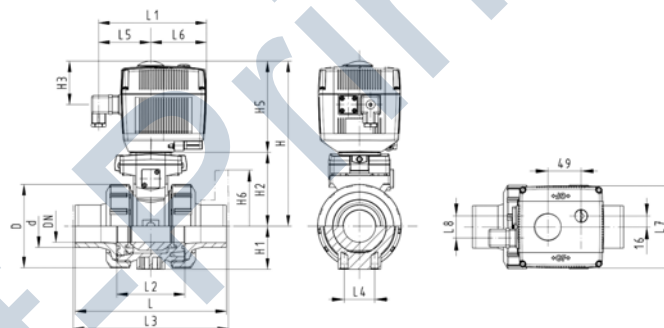
- Material: PVDF
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	10	185	<b>199 107 433</b>	2.100
25	20	10	350	<b>199 107 434</b>	2.200
32	25	10	700	<b>199 107 435</b>	2.300
40	32	10	1000	<b>199 107 436</b>	2.600
50	40	10	1600	<b>199 107 437</b>	3.000
63	50	10	3100	<b>199 107 438</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]
20	50	200	27	64	64	137	130	161	56	25	79	83	122	67
25	58	209	30	73	64	137	143	161	65	25	79	83	122	67
32	68	209	36	73	64	137	150	161	71	25	79	83	122	67
40	84	220	44	84	64	137	171	161	85	45	79	83	122	67
50	97	220	51	84	64	137	191	161	89	45	79	83	122	67
63	124	243	64	106	64	137	220	161	101	45	79	83	122	67



PF 3 39 695 035



DN10/15 - 50

## SYGEF Standard Ball valve type 107 24V With manual emergency override With fixed flanges PVDF serrated metric

### Model:

- Material: PVDF
- 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 EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

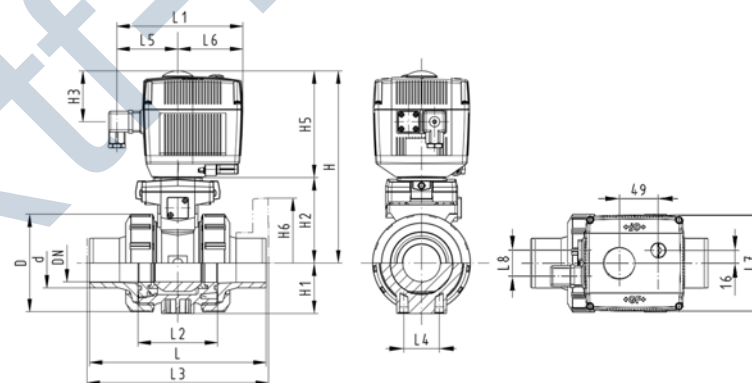
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	<b>199 107 853</b>	2.300
25	20	¾	10	350	<b>199 107 854</b>	2.500
32	25	1	10	700	<b>199 107 855</b>	2.700
40	32	1 ¼	10	1000	<b>199 107 856</b>	3.200
50	40	1 ½	10	1600	<b>199 107 857</b>	3.700
63	50	2	10	3100	<b>199 107 858</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	201	27	64	65	138	48	124	160	56	130	25	77	83	122
25	58	210	30	73	65	138	53	144	160	65	150	25	77	83	122
32	68	210	36	73	65	138	58	154	160	71	160	25	77	83	122
40	84	221	44	84	65	138	70	174	160	85	180	45	77	83	122
50	97	221	51	84	65	138	75	194	160	89	200	45	77	83	122
63	124	244	64	106	65	138	83	224	160	101	230	45	77	83	122

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



PF 3 39 695 035



DN10/15 - 50

## SYGEF Standard Ball valve type 132 100-230V With manual emergency override With fusion sockets metric

### Model:

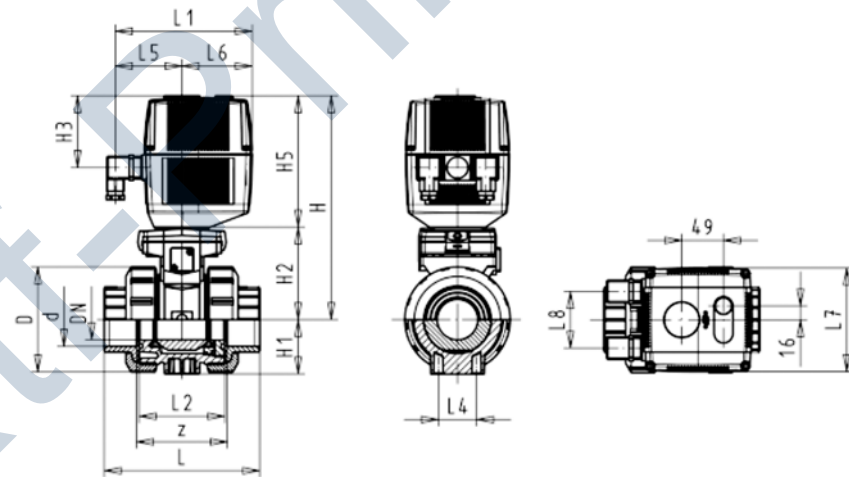
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	199 132 012	2.100
20	15	10	185	199 132 013	2.100
25	20	10	350	199 132 014	2.200
32	25	10	700	199 132 015	2.300
40	32	10	1000	199 132 016	2.600
50	40	10	1600	199 132 017	3.000
63	50	10	3100	199 132 018	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	231	27	64	94	167	92	180	56	25	97	83	122	66	64
20	50	231	27	64	94	167	95	180	56	25	97	83	122	66	64
25	58	240	30	73	94	167	110	180	65	25	97	83	122	66	72
32	68	240	36	73	94	167	123	180	71	25	97	83	122	66	79
40	84	251	44	84	94	167	146	180	85	45	97	83	122	66	94
50	97	251	51	84	94	167	157	180	89	45	97	83	122	66	95
63	124	273	64	106	94	167	183	180	101	45	97	83	122	66	107



PF 3 39 695 035



**SYGEF Standard**  
**Ball valve type 132 100-230V**  
**With manual emergency override**  
**With fusion spigots metric**

**Model:**

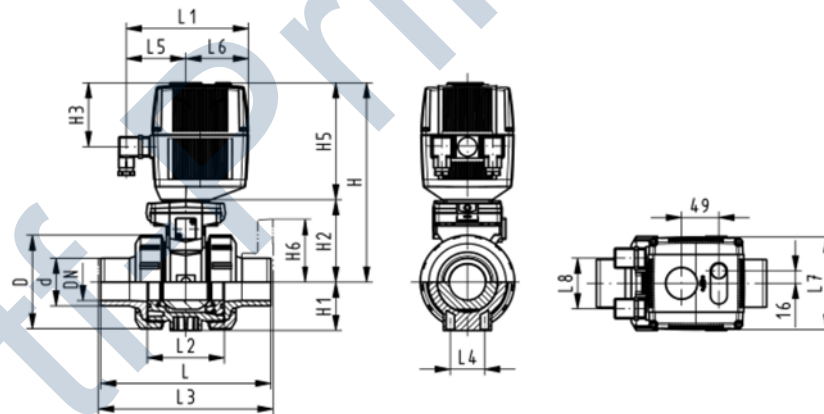
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 132 032</b>	2.100
20	15	10	185	<b>199 132 033</b>	2.100
25	20	10	350	<b>199 132 034</b>	2.200
32	25	10	700	<b>199 132 035</b>	2.300
40	32	10	1000	<b>199 132 036</b>	2.600
50	40	10	1600	<b>199 132 037</b>	3.000
63	50	10	3100	<b>199 132 038</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	231	27	64	94	167	114	180	56	130	25	97	83	122	66
20	50	231	27	64	94	167	124	180	56	130	25	97	83	122	66
25	58	240	30	73	94	167	144	180	65	150	25	97	83	122	66
32	68	240	36	73	94	167	154	180	71	160	25	97	83	122	66
40	84	251	44	84	94	167	174	180	85	180	45	97	83	122	66
50	97	251	51	84	94	167	194	180	89	200	45	97	83	122	66
63	124	273	64	106	94	167	224	180	101	230	45	97	83	122	66



PF 3 39 695 035





**SYGEF Standard**  
**Ball valve type 132 100-230V**  
**With manual emergency override**  
**With butt fusion spigots IR-Plus metric**

**Model:**

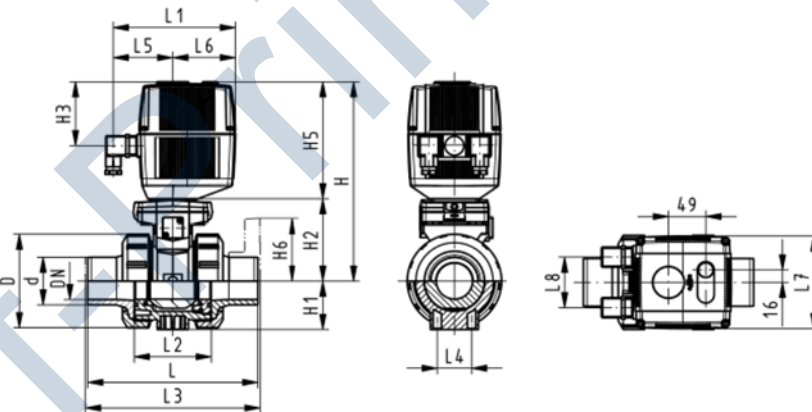
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	185	<b>199 132 113</b>	2.100
25	20	10	350	<b>199 132 114</b>	2.200
32	25	10	700	<b>199 132 115</b>	2.300
40	32	10	1000	<b>199 132 116</b>	2.600
50	40	10	1600	<b>199 132 117</b>	3.000
63	50	10	3100	<b>199 132 118</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]
20	50	231	27	64	94	167	130	180	56	25	97	83	122	66
25	58	240	30	73	94	167	143	180	65	25	97	83	122	66
32	68	240	36	73	94	167	150	180	71	25	97	83	122	66
40	84	251	44	84	94	167	171	180	85	45	97	83	122	66
50	97	251	51	84	94	167	191	180	89	45	97	83	122	66
63	124	273	64	106	94	167	220	180	101	45	97	83	122	66



PF 3 39 695 035



**SYGEF Standard**  
**Ball valve type 132 100-230V**  
**With manual emergency override**  
**With fixed flanges PVDF serrated metric**

**Model:**

- Material: PVDF
- Built on with electric actuator EA21
- 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 EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

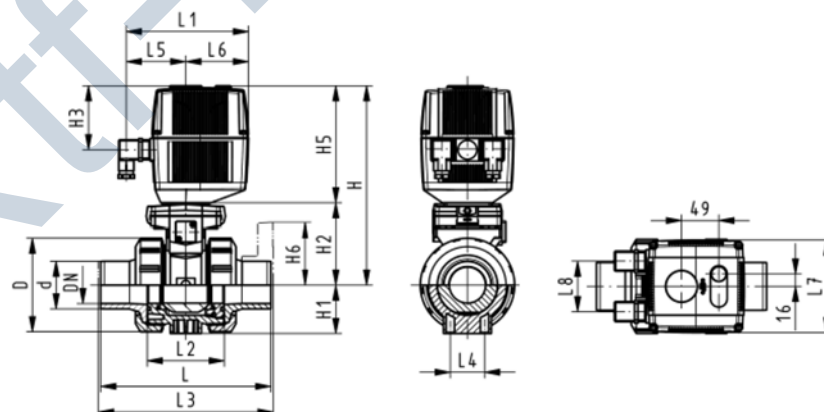
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	1/2	10	185	<b>199 132 083</b>	2.300
25	20	3/4	10	350	<b>199 132 084</b>	2.500
32	25	1	10	700	<b>199 132 085</b>	2.700
40	32	1 1/4	10	1000	<b>199 132 086</b>	3.200
50	40	1 1/2	10	1600	<b>199 132 087</b>	3.700
63	50	2	10	3100	<b>199 132 088</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	124	180	56	130	25	98	83	122
25	58	240	30	73	94	167	53	144	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	154	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	174	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	194	180	89	200	45	98	83	122
63	124	273	64	106	94	167	83	224	180	101	230	45	97	83	122

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



PF 3 39 695 035



DN10/15 - 50

## SYGEF Standard Ball valve type 132 100-230V With manual emergency override With threaded sockets NPT

### Model:

- Material: PVDF
- Built on with electric actuator EA21
- 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

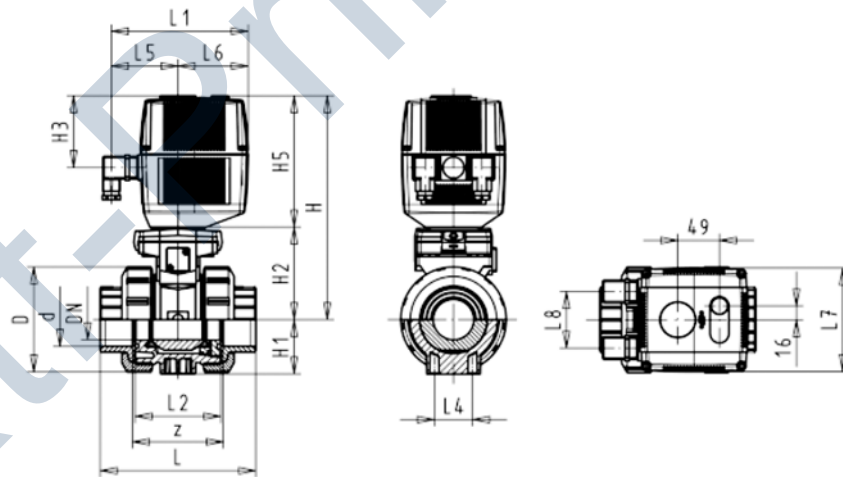
### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
3/8	10	10	70	<b>199 132 412</b>
1/2	15	10	185	<b>199 132 413</b>
3/4	20	10	350	<b>199 132 414</b>
1	25	10	700	<b>199 132 415</b>
1 1/4	32	10	1000	<b>199 132 416</b>
1 1/2	40	10	1600	<b>199 132 417</b>
2	50	10	3100	<b>199 132 418</b>

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]	L8 [mm]	z [mm]
3/8	50	231	27	64	94	167	96	180	56	25	97	83	122	66	69
1/2	50	231	27	64	94	167	99	180	56	25	97	83	122	66	64
3/4	58	240	30	73	94	167	111	180	65	25	97	83	122	66	76
1	68	240	36	73	94	167	127	180	71	25	97	83	122	66	83
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	66	101
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	66	111
2	124	273	64	106	94	167	183	180	101	45	97	83	122	66	135



PF 3 39 695 035



DN10/15 - 50

## SYGEF Standard Ball valve type 132 24V With manual emergency override With fusion sockets metric

### Model:

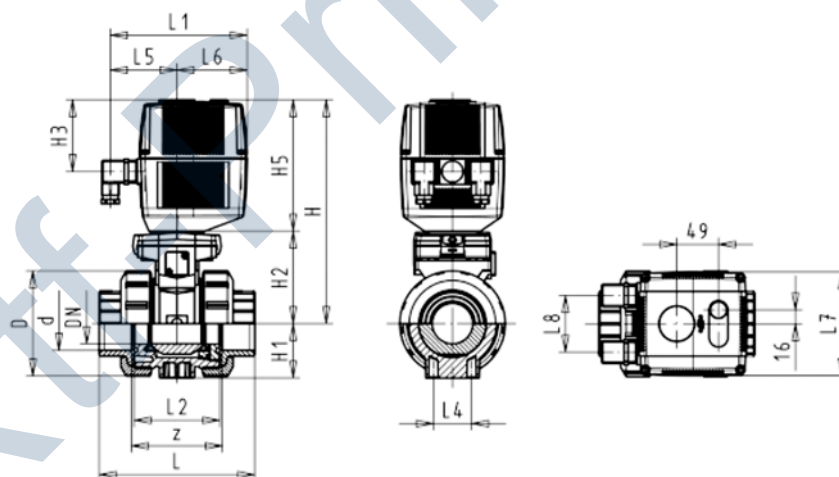
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 132 052</b>	2.100
20	15	10	185	<b>199 132 053</b>	2.100
25	20	10	350	<b>199 132 054</b>	2.200
32	25	10	700	<b>199 132 055</b>	2.300
40	32	10	1000	<b>199 132 056</b>	2.600
50	40	10	1600	<b>199 132 057</b>	3.000
63	50	10	3100	<b>199 132 058</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	231	27	64	94	167	92	180	56	25	97	83	122	66	64
20	50	231	27	64	94	167	95	180	56	25	97	83	122	66	64
25	58	240	30	73	94	167	110	180	65	25	97	83	122	66	72
32	68	240	36	73	94	167	123	180	71	25	97	83	122	66	79
40	84	251	44	84	94	167	146	180	85	45	97	83	122	66	94
50	97	251	51	84	94	167	157	180	89	45	97	83	122	66	95
63	124	273	64	106	94	167	183	180	101	45	97	83	122	66	107



PF 3 39 695 035



## SYGEF Standard Ball valve type 132 24V With manual emergency override With fusion spigots metric

### Model:

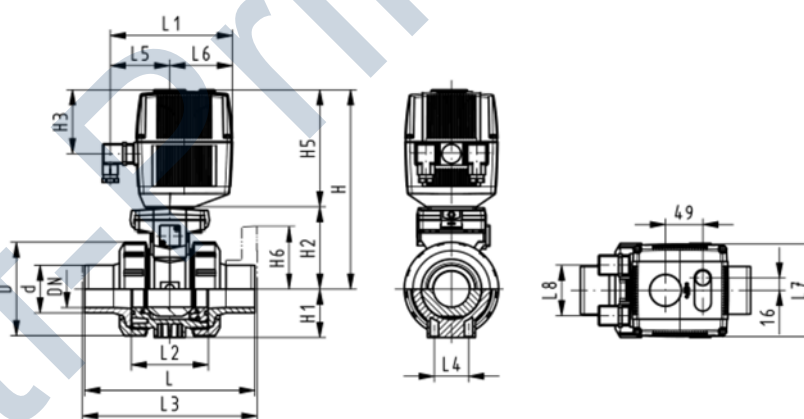
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 132 072</b>	2.100
20	15	10	185	<b>199 132 073</b>	2.100
25	20	10	350	<b>199 132 074</b>	2.200
32	25	10	700	<b>199 132 075</b>	2.300
40	32	10	1000	<b>199 132 076</b>	2.600
50	40	10	1600	<b>199 132 077</b>	3.000
63	50	10	3100	<b>199 132 078</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	231	27	64	94	167	114	180	56	130	25	97	83	122	66
20	50	231	27	64	94	167	124	180	56	130	25	97	83	122	66
25	58	240	30	73	94	167	144	180	65	150	25	97	83	122	66
32	68	240	36	73	94	167	154	180	71	160	25	97	83	122	66
40	84	251	44	84	94	167	174	180	85	180	45	97	83	122	66
50	97	251	51	84	94	167	194	180	89	200	45	97	83	122	66
63	124	273	64	106	94	167	224	180	101	230	45	97	83	122	66



PF 3 39 695 035



**SYGEF Standard**  
**Ball valve type 132 24V**  
**With manual emergency override**  
**With butt fusion spigots IR-Plus metric**

**Model:**

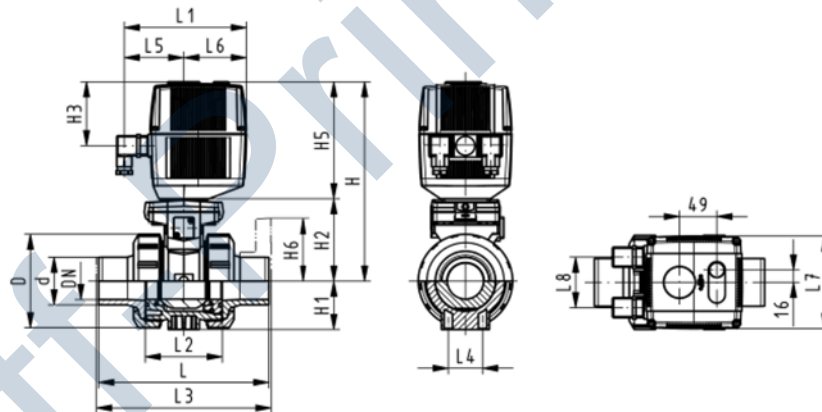
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	10	185	<b>199 132 153</b>	2.100
25	20	10	350	<b>199 132 154</b>	2.200
32	25	10	700	<b>199 132 155</b>	2.300
40	32	10	1000	<b>199 132 156</b>	2.600
50	40	10	1600	<b>199 132 157</b>	3.000
63	50	10	3100	<b>199 132 158</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]
20	50	231	27	64	94	167	130	180	56	25	97	83	122	66
25	58	240	30	73	94	167	143	180	65	25	97	83	122	66
32	68	240	36	73	94	167	150	180	71	25	97	83	122	66
40	84	251	44	84	94	167	171	180	85	45	97	83	122	66
50	97	251	51	84	94	167	191	180	89	45	97	83	122	66
63	124	273	64	106	94	167	220	180	101	45	97	83	122	66



PF 3 39 695 035



DN10/15 - 50

## SYGEF Standard Ball valve type 132 24V With manual emergency override With fixed flanges PVDF serrated metric

### Model:

- Material: PVDF
- Built on with electric actuator EA21
- 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 EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

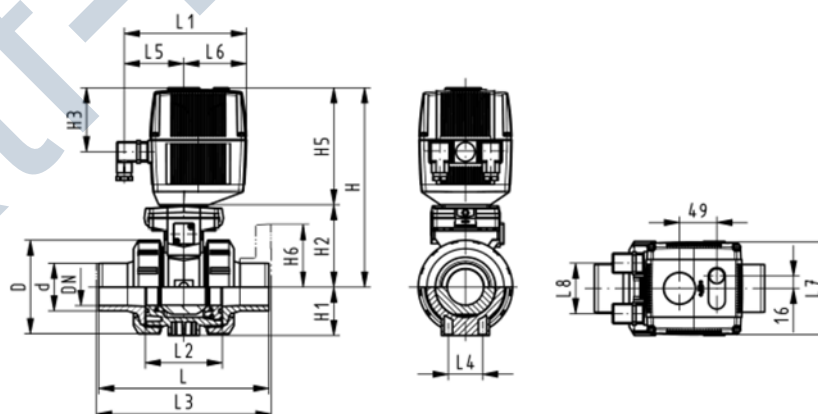
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	1/2	10	185	<b>199 132 093</b>	2.300
25	20	3/4	10	350	<b>199 132 094</b>	2.500
32	25	1	10	700	<b>199 132 095</b>	2.700
40	32	1 1/4	10	1000	<b>199 132 096</b>	3.200
50	40	1 1/2	10	1600	<b>199 132 097</b>	3.700
63	50	2	10	3100	<b>199 132 098</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	124	180	56	130	25	98	83	122
25	58	240	30	73	94	167	53	144	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	154	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	174	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	194	180	89	200	45	98	83	122
63	124	273	64	106	94	167	83	224	180	101	230	45	97	83	122

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



PF 3 39 695 035



DN10/15 - 50

## SYGEF Standard Ball valve type 132 24V With manual emergency override With threaded sockets NPT

### Model:

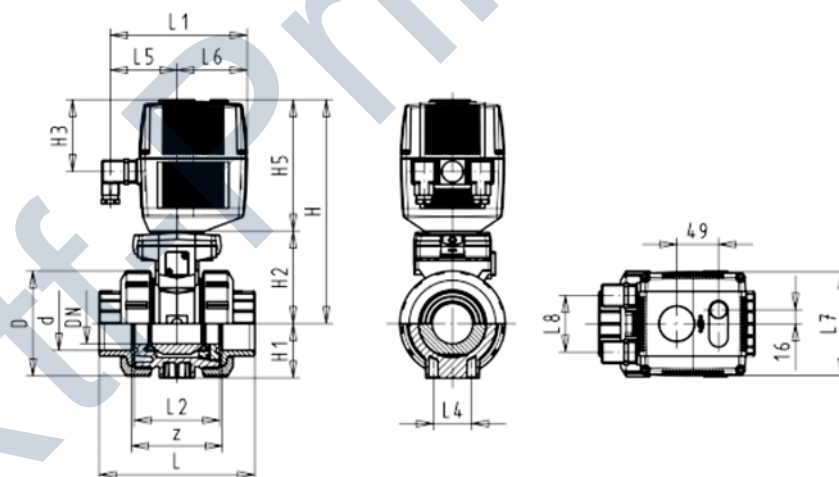
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
3/8	10	10	70	199 132 432
1/2	15	10	185	199 132 433
3/4	20	10	350	199 132 434
1	25	10	700	199 132 435
1 1/4	32	10	1000	199 132 436
1 1/2	40	10	1600	199 132 437
2	50	10	3100	199 132 438

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]	L8 [mm]	z [mm]
3/8	50	231	27	64	94	167	96	180	56	25	97	83	122	66	69
1/2	50	231	27	64	94	167	99	180	56	25	97	83	122	66	64
3/4	58	240	30	73	94	167	111	180	65	25	97	83	122	66	76
1	68	240	36	73	94	167	127	180	71	25	97	83	122	66	83
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	66	101
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	66	111
2	124	273	64	106	94	167	183	180	101	45	97	83	122	66	135



PF 3 39 695 035



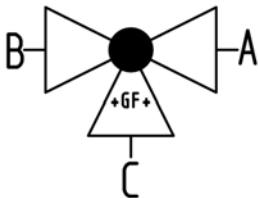


# SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 100-230V With manual emergency override With fusion sockets metric



### Model:

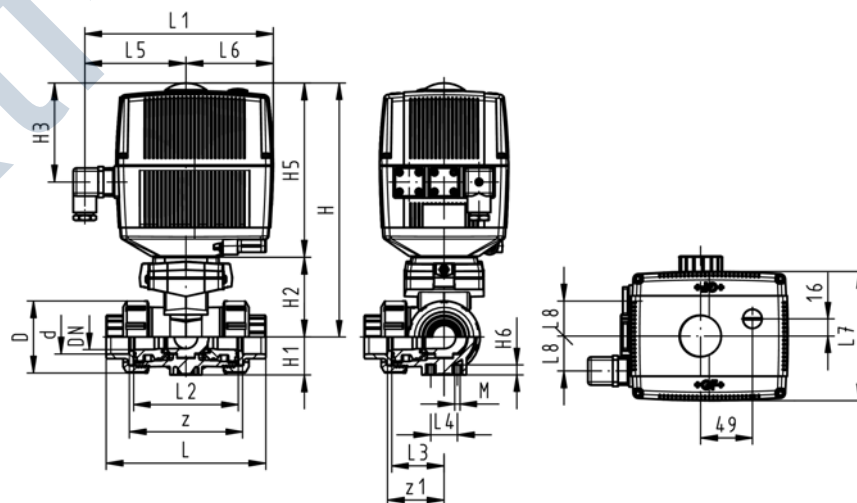
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	50	199 187 092	2.190
20	15	10	75	199 187 093	2.198
25	20	10	150	199 187 094	2.356
32	25	10	280	199 187 095	2.600
40	32	10	480	199 187 096	3.131
50	40	10	620	199 187 097	3.710
63	50	10	1230	199 187 098	5.440

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



PF 3 39 980 035

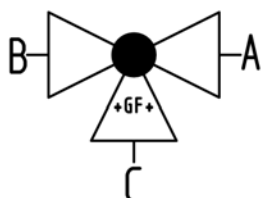


**SYGEF Standard**  
**3-Way ball valve type 187**  
**Horizontal/L-port 100-230V**  
**With manual emergency override**  
**With threaded sockets NPT**



**Model:**

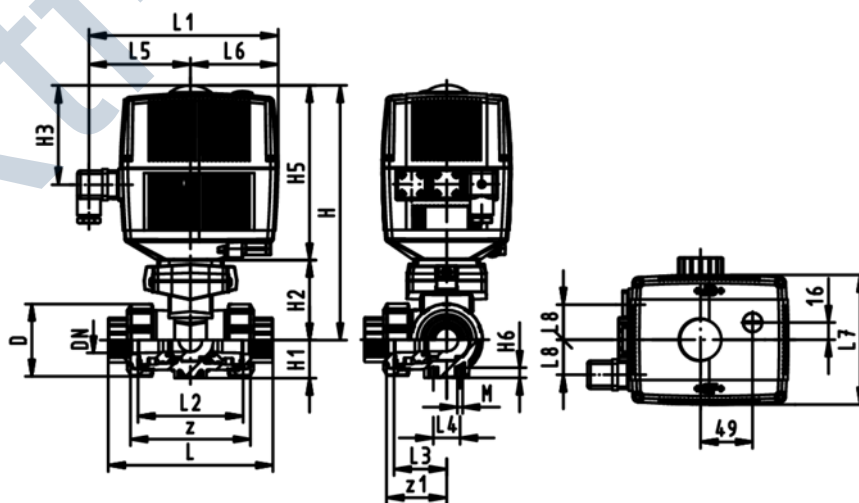
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	50	<b>199 187 242</b>	2.190
1/2	15	10	75	<b>199 187 243</b>	2.198
3/4	20	10	150	<b>199 187 244</b>	2.356
1	25	10	280	<b>199 187 245</b>	2.600
1 1/4	32	10	480	<b>199 187 246</b>	3.131
1 1/2	40	10	620	<b>199 187 247</b>	3.710
2	50	10	1230	<b>199 187 248</b>	5.440

NPT [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

NPT [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	86	43
1/2	33	6	80	40
3/4	33	6	95	48
1	33	6	110	55
1 1/4	33	8	132	66
1 1/2	33	8	157	79
2	33	8	210	105



PF 3 39 980 035

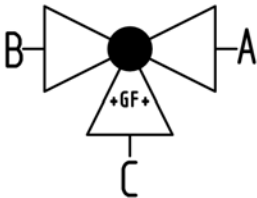


# SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 100-230V With manual emergency override With socket fusion spigots metric



### Model:

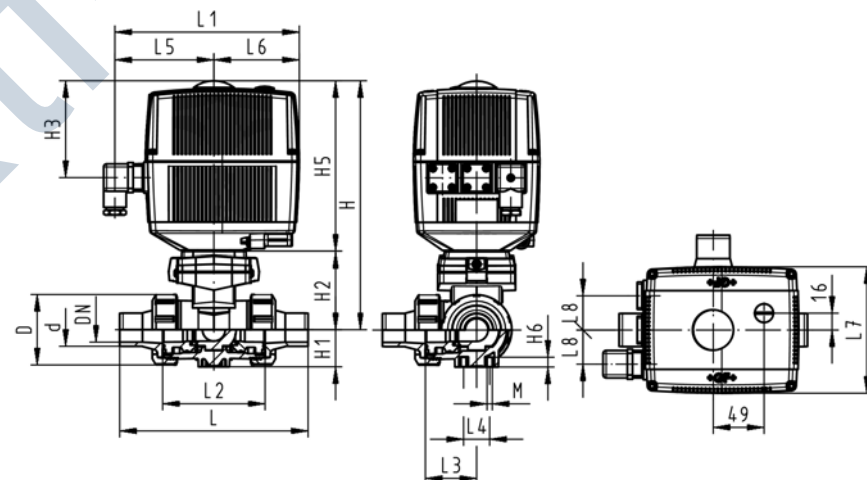
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	50	199 187 012	2.198
20	15	10	75	199 187 013	2.209
25	20	10	150	199 187 014	2.376
32	25	10	280	199 187 015	2.630
40	32	10	480	199 187 016	3.158
50	40	10	620	199 187 017	3.791
63	50	10	1230	199 187 018	5.602

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



PF 3 39 980 035

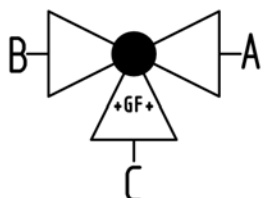


**SYGEF Standard**  
**3-Way ball valve type 187**  
**Horizontal/L-port 100-230V**  
**With manual emergency override**  
**With butt fusion spigots IR-Plus metric**



**Model:**

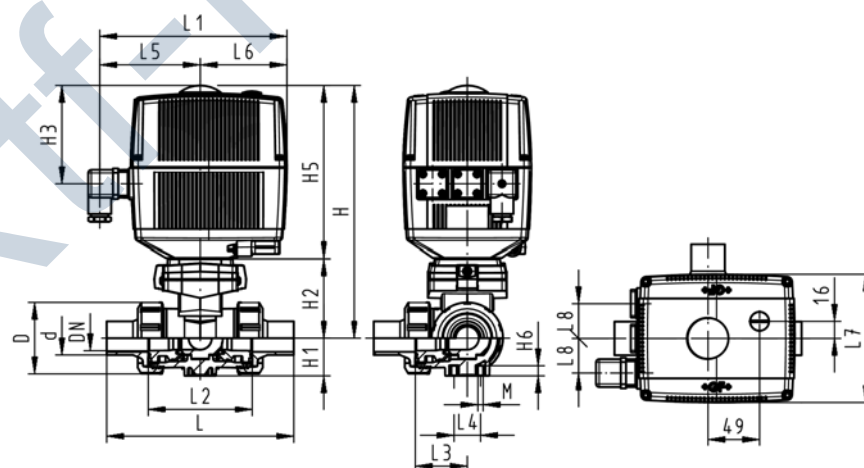
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	75	<b>199 187 053</b>	2.209
25	20	10	150	<b>199 187 054</b>	2.376
32	25	10	280	<b>199 187 055</b>	2.630
40	32	10	480	<b>199 187 056</b>	3.158
50	40	10	620	<b>199 187 057</b>	3.791
63	50	10	1230	<b>199 187 058</b>	5.602

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



PF 3 39 980 035

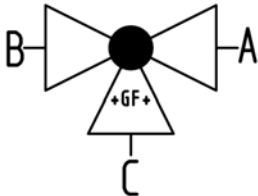


# SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 24V With manual emergency override With fusion sockets metric



### Model:

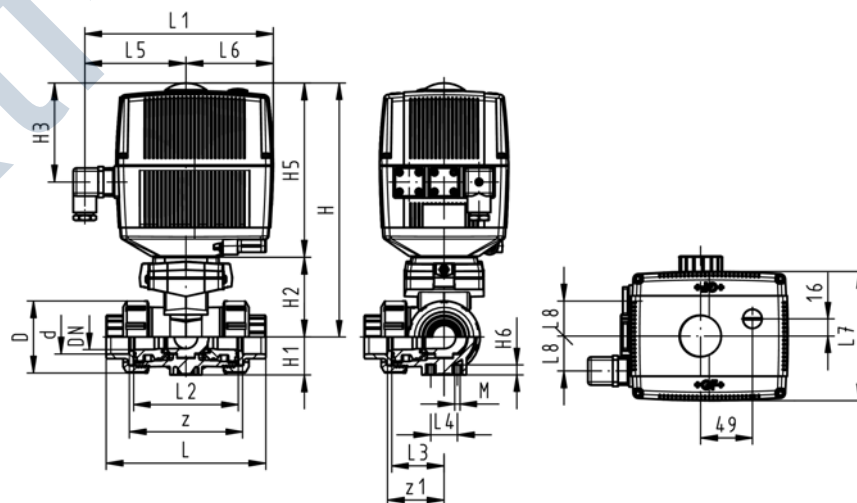
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	50	199 187 212	2.190
20	15	10	75	199 187 213	2.198
25	20	10	150	199 187 214	2.356
32	25	10	280	199 187 215	2.600
40	32	10	480	199 187 216	3.131
50	40	10	620	199 187 217	3.710
63	50	10	1230	199 187 218	5.440

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



PF 3 39 980 035

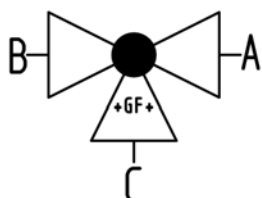


**SYGEF Standard**  
**3-Way ball valve type 187**  
**Horizontal/L-port 24V**  
**With manual emergency override**  
**With threaded sockets NPT**



**Model:**

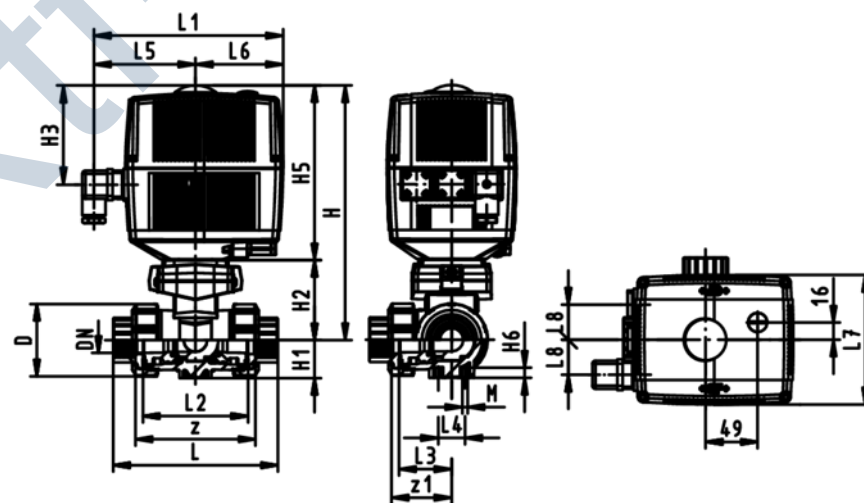
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	50	<b>199 187 262</b>	2.190
1/2	15	10	75	<b>199 187 263</b>	2.198
3/4	20	10	150	<b>199 187 264</b>	2.356
1	25	10	280	<b>199 187 265</b>	2.600
1 1/4	32	10	480	<b>199 187 266</b>	3.131
1 1/2	40	10	620	<b>199 187 267</b>	3.710
2	50	10	1230	<b>199 187 268</b>	5.440

NPT [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

NPT [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	86	43
1/2	33	6	80	40
3/4	33	6	95	48
1	33	6	110	55
1 1/4	33	8	132	66
1 1/2	33	8	157	79
2	33	8	210	105



PF 3 39 980 035



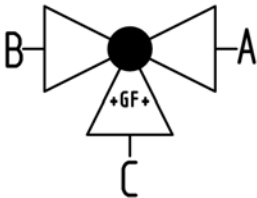


# SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 24V With manual emergency override With socket fusion spigots metric



### Model:

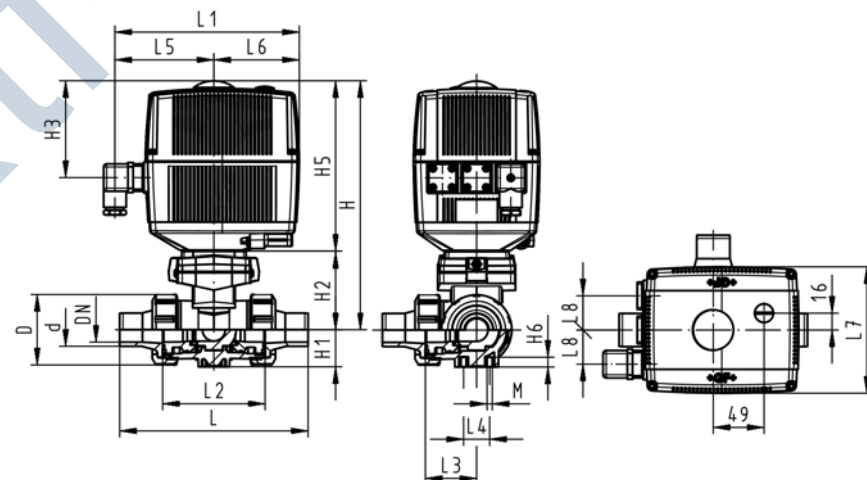
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	50	<b>199 187 132</b>	2.198
20	15	10	75	<b>199 187 133</b>	2.209
25	20	10	150	<b>199 187 134</b>	2.376
32	25	10	280	<b>199 187 135</b>	2.630
40	32	10	480	<b>199 187 136</b>	3.158
50	40	10	620	<b>199 187 137</b>	3.791
63	50	10	1230	<b>199 187 138</b>	5.602

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



PF 3 39 980 035

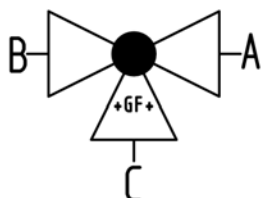


**SYGEF Standard**  
**3-Way ball valve type 187**  
**Horizontal/L-port 24V**  
**With manual emergency override**  
**With butt fusion spigots IR-Plus metric**



**Model:**

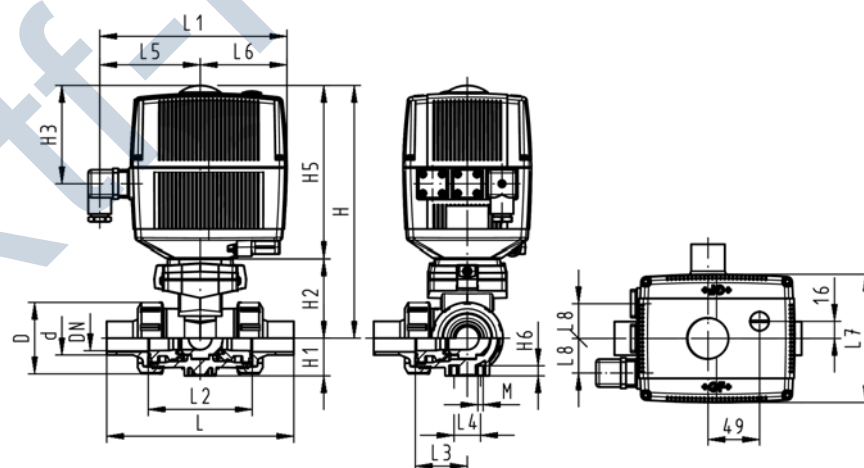
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	75	<b>199 187 173</b>	2.209
25	20	10	150	<b>199 187 174</b>	2.376
32	25	10	280	<b>199 187 175</b>	2.630
40	32	10	480	<b>199 187 176</b>	3.158
50	40	10	620	<b>199 187 177</b>	3.791
63	50	10	1230	<b>199 187 178</b>	5.602

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



PF 3 39 980 035



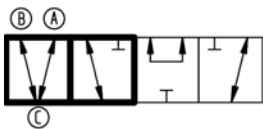
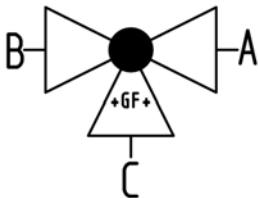


# SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 100-230V With manual emergency override With fusion sockets metric



### Model:

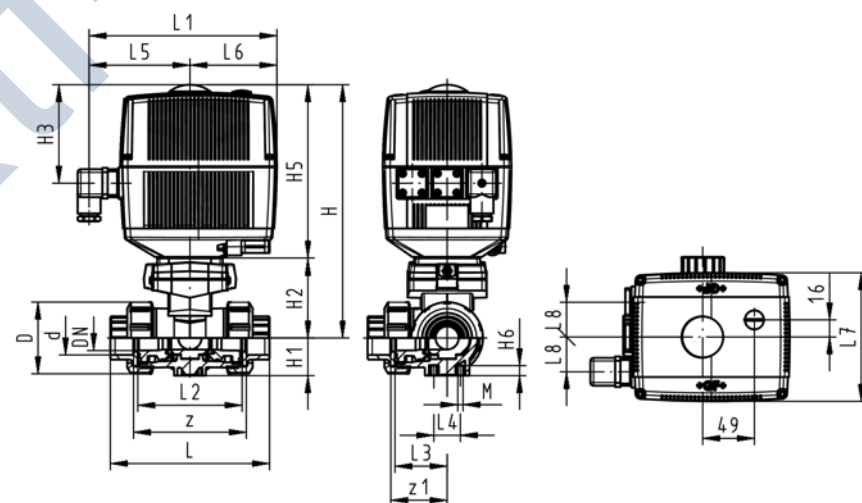
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	140	199 187 112	2.189
20	15	10	200	199 187 113	2.196
25	20	10	470	199 187 114	2.354
32	25	10	793	199 187 115	2.591
40	32	10	1290	199 187 116	3.117
50	40	10	1910	199 187 117	3.683
63	50	10	3100	199 187 118	5.383

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 [mm]	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



PF 3 39 980 035

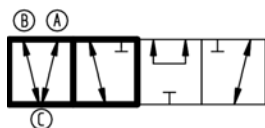
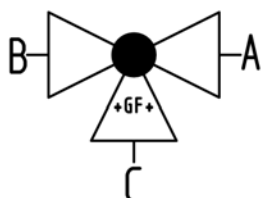


**SYGEF Standard**  
**3-Way ball valve type 187**  
**Horizontal/T-port 100-230V**  
**With manual emergency override**  
**With threaded sockets NPT**



**Model:**

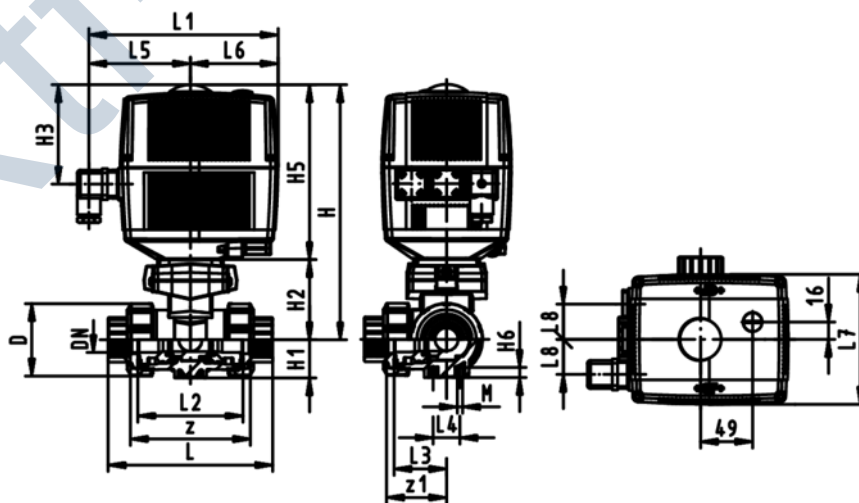
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	140	<b>199 187 252</b>	2.189
1/2	15	10	200	<b>199 187 253</b>	2.196
3/4	20	10	470	<b>199 187 254</b>	2.354
1	25	10	793	<b>199 187 255</b>	2.591
1 1/4	32	10	1290	<b>199 187 256</b>	3.117
1 1/2	40	10	1910	<b>199 187 257</b>	3.683
2	50	10	3100	<b>199 187 258</b>	5.383

NPT [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

NPT [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	86	43
1/2	33	6	80	40
3/4	33	6	95	48
1	33	6	110	55
1 1/4	33	8	132	66
1 1/2	33	8	157	79
2	33	8	210	105



PF 3 39 980 035

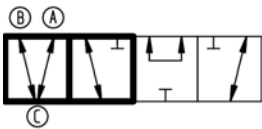
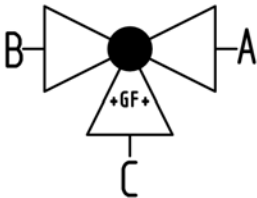


# SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 100-230V With manual emergency override With socket fusion spigots metric



### Model:

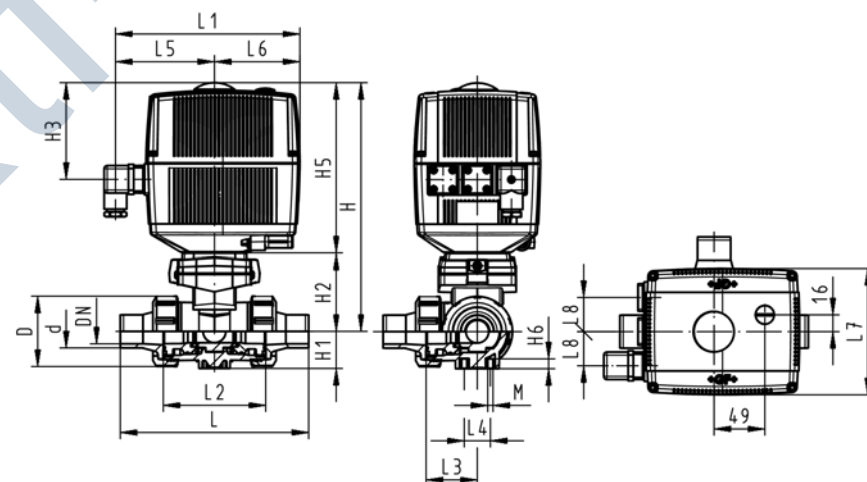
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	140	<b>199 187 032</b>	2.196
20	15	10	200	<b>199 187 033</b>	2.208
25	20	10	470	<b>199 187 034</b>	2.373
32	25	10	793	<b>199 187 035</b>	2.622
40	32	10	1290	<b>199 187 036</b>	3.144
50	40	10	1910	<b>199 187 037</b>	3.764
63	50	10	3100	<b>199 187 038</b>	5.544

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



PF 3 39 980 035

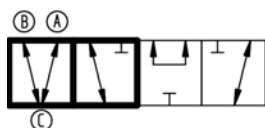
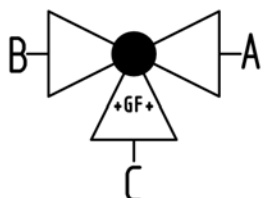


**SYGEF Standard**  
**3-Way ball valve type 187**  
**Horizontal/T-port 100-230V**  
**With manual emergency override**  
**With butt fusion spigots IR-Plus metric**



**Model:**

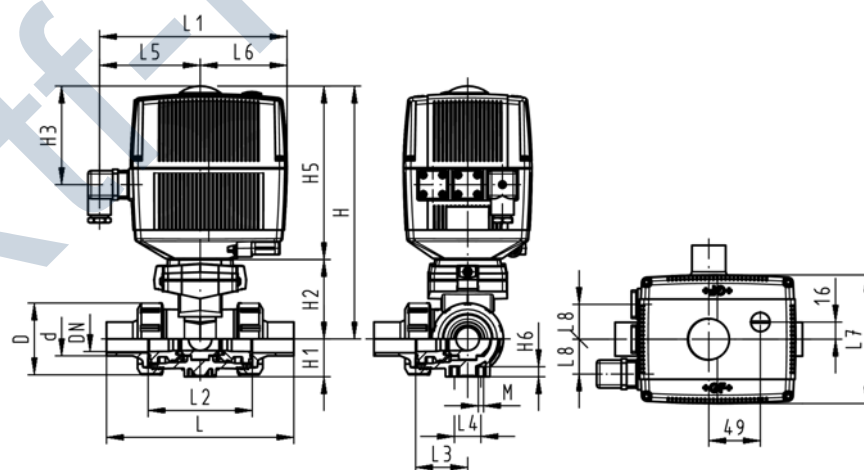
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	200	<b>199 187 073</b>	2.208
25	20	10	470	<b>199 187 074</b>	2.373
32	25	10	793	<b>199 187 075</b>	2.622
40	32	10	1290	<b>199 187 076</b>	3.144
50	40	10	1910	<b>199 187 077</b>	3.764
63	50	10	3100	<b>199 187 078</b>	5.544

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



PF 3 39 980 035

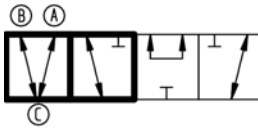
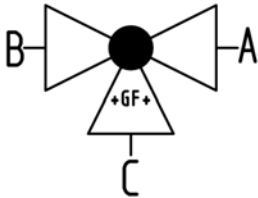


# SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 24V With manual emergency override With fusion sockets metric



### Model:

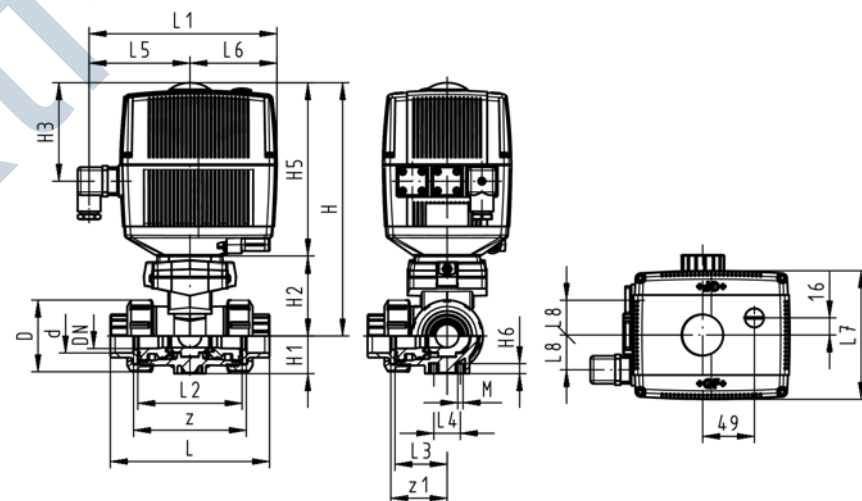
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	140	<b>199 187 232</b>	2.189
20	15	10	200	<b>199 187 233</b>	2.196
25	20	10	470	<b>199 187 234</b>	2.354
32	25	10	793	<b>199 187 235</b>	2.591
40	32	10	1290	<b>199 187 236</b>	3.117
50	40	10	1910	<b>199 187 237</b>	3.683
63	50	10	3100	<b>199 187 238</b>	5.383

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 [mm]	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



PF 3 39 980 035

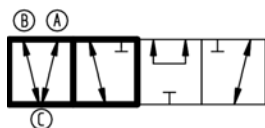
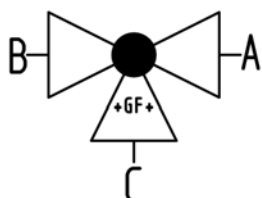


**SYGEF Standard**  
**3-Way ball valve type 187**  
**Horizontal/T-port 24V**  
**With manual emergency override**  
**With threaded sockets NPT**



**Model:**

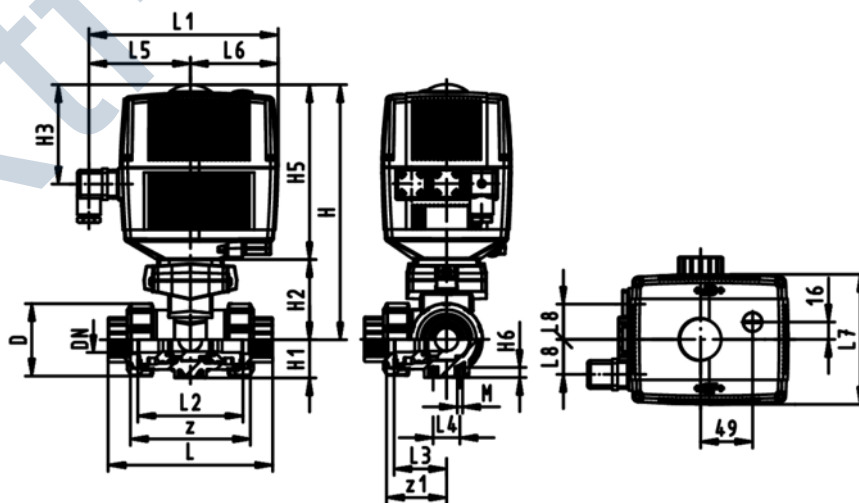
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	140	<b>199 187 272</b>	2.189
1/2	15	10	200	<b>199 187 273</b>	2.196
3/4	20	10	470	<b>199 187 274</b>	2.354
1	25	10	793	<b>199 187 275</b>	2.591
1 1/4	32	10	1290	<b>199 187 276</b>	3.117
1 1/2	40	10	1910	<b>199 187 277</b>	3.683
2	50	10	3100	<b>199 187 278</b>	5.383

NPT [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

NPT [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	86	43
1/2	33	6	80	40
3/4	33	6	95	48
1	33	6	110	55
1 1/4	33	8	132	66
1 1/2	33	8	157	79
2	33	8	210	105



PF 3 39 980 035



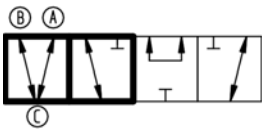
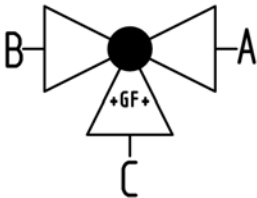


# SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 24V With manual emergency override With socket fusion spigots metric



### Model:

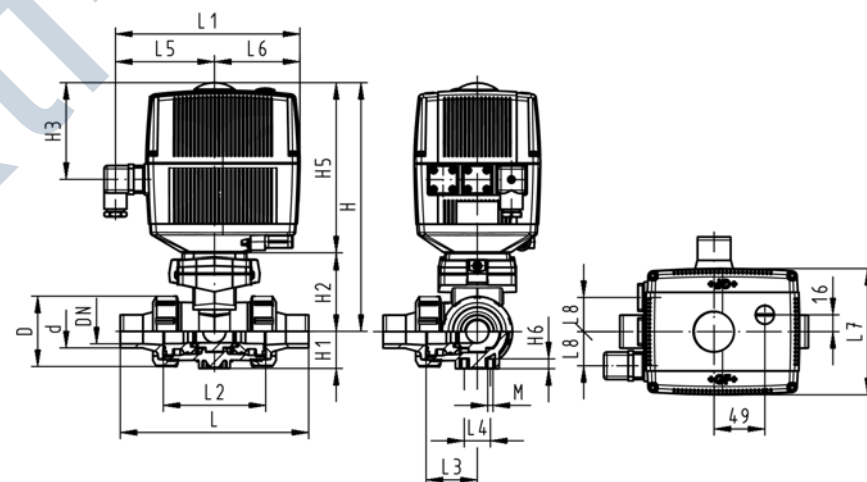
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	140	<b>199 187 152</b>	2.196
20	15	10	200	<b>199 187 153</b>	2.208
25	20	10	470	<b>199 187 154</b>	2.373
32	25	10	793	<b>199 187 155</b>	2.622
40	32	10	1290	<b>199 187 156</b>	3.144
50	40	10	1910	<b>199 187 157</b>	3.764
63	50	10	3100	<b>199 187 158</b>	5.544

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



PF 3 39 980 035

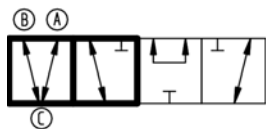
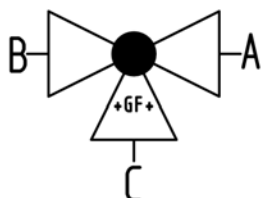


**SYGEF Standard**  
**3-Way ball valve type 187**  
**Horizontal/T-port 24V**  
**With manual emergency override**  
**With butt fusion spigots IR-Plus metric**



**Model:**

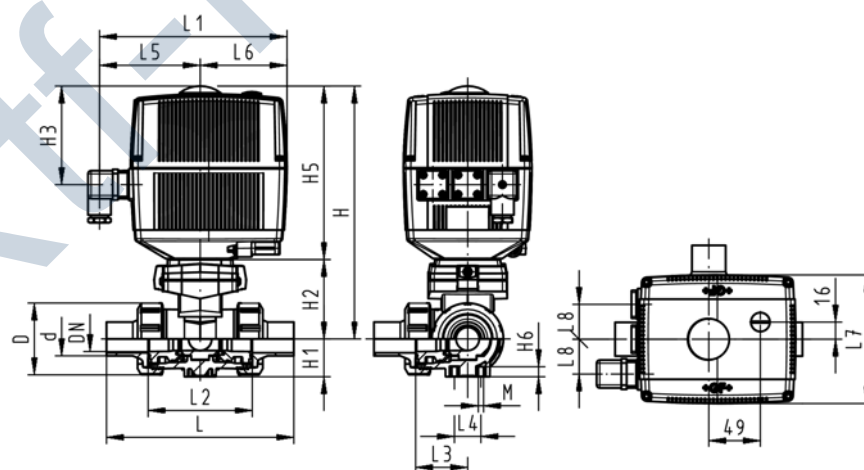
- Material: PVDF
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	200	<b>199 187 193</b>	2.208
25	20	10	470	<b>199 187 194</b>	2.373
32	25	10	793	<b>199 187 195</b>	2.622
40	32	10	1290	<b>199 187 196</b>	3.144
50	40	10	1910	<b>199 187 197</b>	3.764
63	50	10	3100	<b>199 187 198</b>	5.544

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



PF 3 39 980 035



# Ball valves pneumatic



DN10/15 - 50

## SYGEF Standard Ball valve type 232 Function FC (Fail safe to close) With manual override With fusion Sockets metric

### Model:

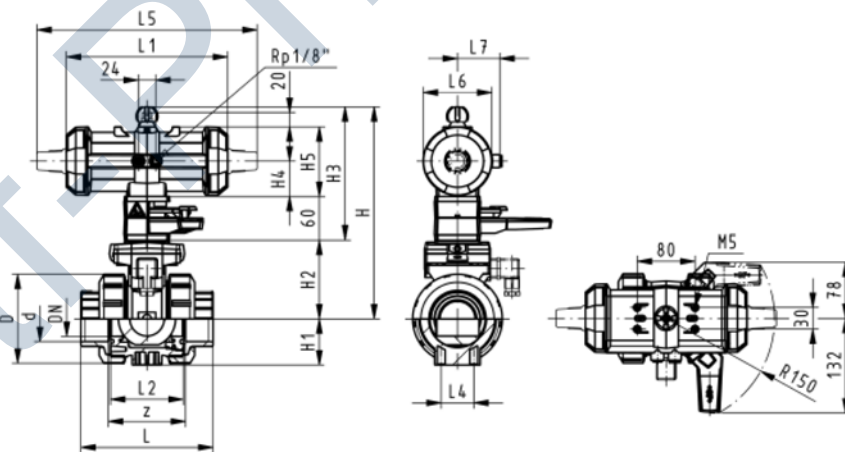
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	199 232 012	1.500
20	15	10	185	199 232 013	1.500
25	20	10	350	199 232 014	1.600
32	25	10	700	199 232 015	1.700
40	32	10	1000	199 232 016	2.800
50	40	10	1600	199 232 017	3.100
63	50	10	3100	199 232 018	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	92	194	56	25	261	76	48	64
20	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
63	124	224	64	106	187	51	99	183	224	101	45	305	95	59	107



PF 3 39 695 035



DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function FC (Fail safe to close)**  
**With manual override**  
**With fusion spigots metric**

**Model:**

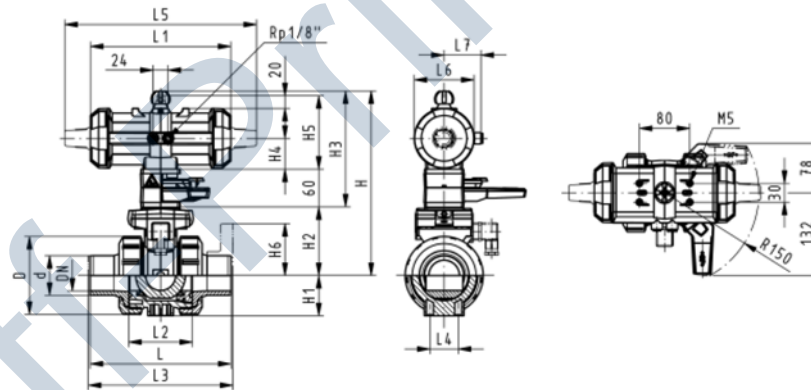
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 032</b>	1.500
20	15	10	185	<b>199 232 033</b>	1.500
25	20	10	350	<b>199 232 034</b>	1.600
32	25	10	700	<b>199 232 035</b>	1.700
40	32	10	1000	<b>199 232 036</b>	2.800
50	40	10	1600	<b>199 232 037</b>	3.100
63	50	10	3100	<b>199 232 038</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	92	194	56	130	25	261	76	48
20	50	159	27	62	168	40	77	95	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	110	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	123	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	146	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	157	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	183	224	101	230	45	305	95	59



PF 3 39 695 035



DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function FC (Fail safe to close)**  
**With manual override**  
**With fixed flanges PVDF serrated metric**

**Model:**

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

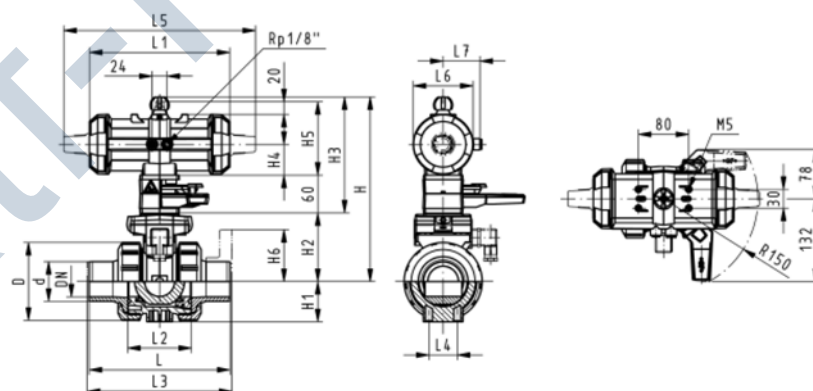
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	199 232 003	1.700
25	20	¾	10	350	199 232 004	1.900
32	25	1	10	700	199 232 005	2.100
40	32	1 ¼	10	1000	199 232 006	3.400
50	40	1 ½	10	1600	199 232 007	3.900
63	50	2	10	3100	199 232 008	5.000

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	27	62	168	40	77	48	124	194	56	130	25	261	76
25	58	168	30	71	168	40	77	53	144	194	65	150	25	261	76
32	68	168	36	71	168	40	77	58	154	194	71	160	25	261	76
40	84	202	44	84	187	51	99	70	174	224	85	180	45	305	95
50	97	202	51	84	187	51	99	75	194	224	89	200	45	305	95
63	124	225	64	106	187	51	99	83	224	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59



PF 3 39 695 035



DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function FC (Fail safe to close)**  
**With manual override**  
**With butt fusion spigots IR-Plus metric**

**Model:**

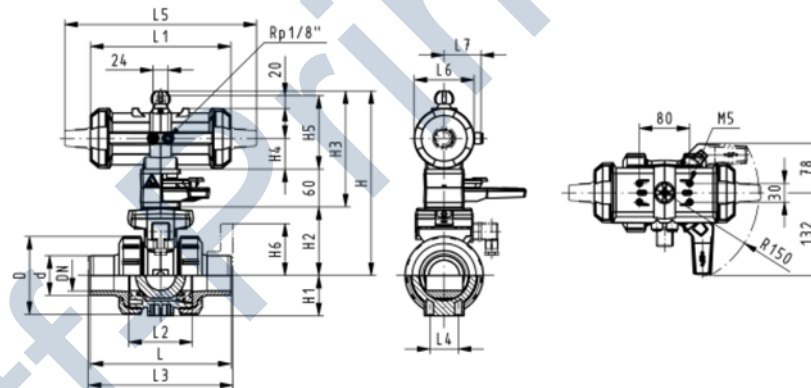
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	185	<b>199 232 713</b>	1.200
25	20	10	350	<b>199 232 714</b>	1.300
32	25	10	700	<b>199 232 715</b>	1.400
40	32	10	1000	<b>199 232 716</b>	2.800
50	40	10	1600	<b>199 232 717</b>	2.800
63	50	10	3100	<b>199 232 718</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]
20	50	159	27	62	168	40	77	130	194	56	25	261	76	48
25	58	168	30	71	168	40	77	130	194	65	25	261	76	48
32	68	168	36	71	168	40	77	130	194	71	25	261	76	48
40	84	202	44	84	187	51	99	130	224	85	45	305	95	59
50	97	202	51	84	187	51	99	130	224	89	45	305	95	59
63	124	225	64	106	187	51	99	130	224	101	45	305	95	59



PF 3 39 695 035



DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**With manual override**  
**With butt fusion spigots IR-Plus metric**

**Model:**

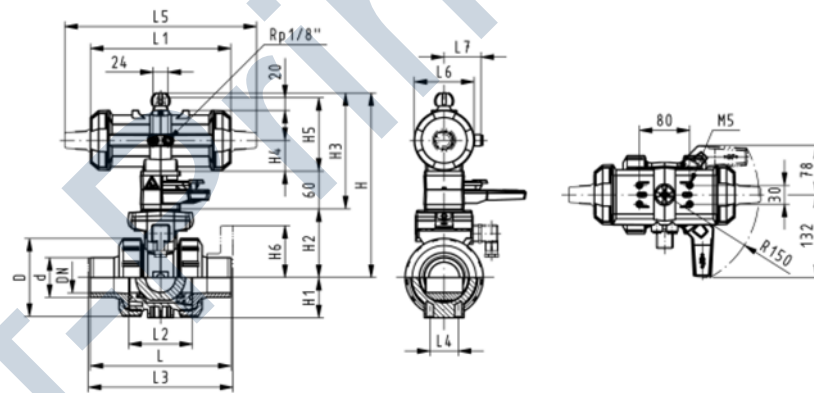
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	185	199 232 753	1.200
25	20	10	350	199 232 754	1.300
32	25	10	700	199 232 755	1.400
40	32	10	1000	199 232 756	2.500
50	40	10	1600	199 232 757	2.800
63	50	10	3100	199 232 758	3.700

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]
20	50	159	27	62	168	40	77	130	194	56	25	261	76	48
25	58	168	30	71	168	40	77	130	194	65	25	261	76	48
32	68	168	36	71	168	40	77	130	194	71	25	261	76	48
40	84	202	44	84	187	51	99	130	224	85	45	305	95	59
50	97	202	51	84	187	51	99	130	224	89	45	305	95	59
63	124	225	64	106	187	51	99	130	224	101	45	305	95	59



PF 3 39 695 035



DN10/15 - 50

**SYGEF Standard  
Ball valve type 232  
Function FO (Fail safe to open)  
With manual override  
With fusion sockets metric**

**Model:**

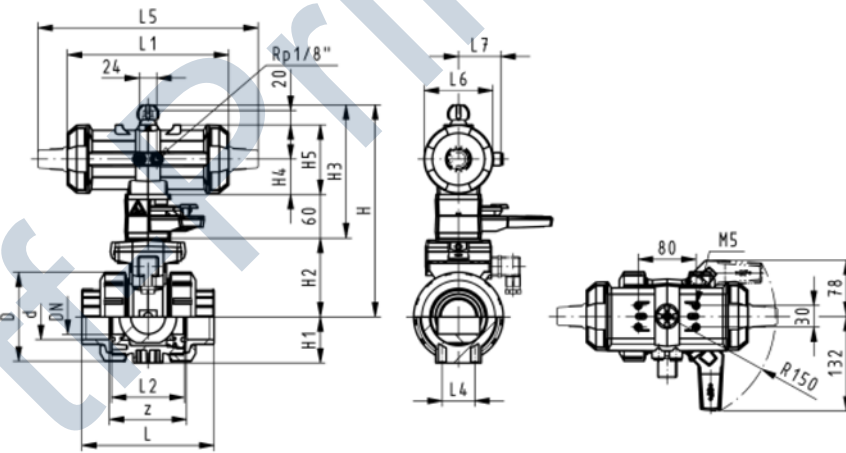
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 052</b>	1.500
20	15	10	185	<b>199 232 053</b>	1.500
25	20	10	350	<b>199 232 054</b>	1.600
32	25	10	700	<b>199 232 055</b>	1.700
40	32	10	1000	<b>199 232 056</b>	2.800
50	40	10	1600	<b>199 232 057</b>	3.100
63	50	10	3100	<b>199 232 058</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	159	27	62	168	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107



PF 3 39 695 035



DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**With manual override**  
**With fusion spigots metric**

**Model:**

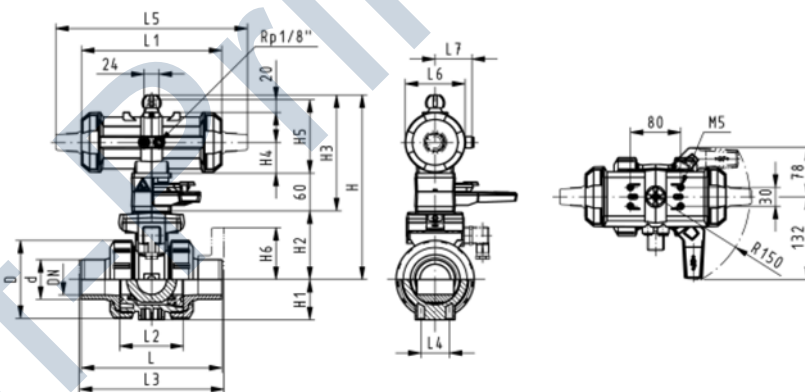
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	199 232 072	1.500
20	15	10	185	199 232 073	1.500
25	20	10	350	199 232 074	1.600
32	25	10	700	199 232 075	1.700
40	32	10	1000	199 232 076	2.800
50	40	10	1600	199 232 077	3.100
63	50	10	3100	199 232 078	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	92	194	56	130	25	261	76	48
20	50	159	27	62	168	40	77	95	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	110	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	123	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	146	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	157	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	183	224	101	230	45	305	95	59



PF 3 39 695 035





DN10/15 - 50

**SYGEF Standard  
Ball valve type 232  
Function FO (Fail safe to open)  
With manual override  
With fixed flanges PVDF serrated metric**

**Model:**

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

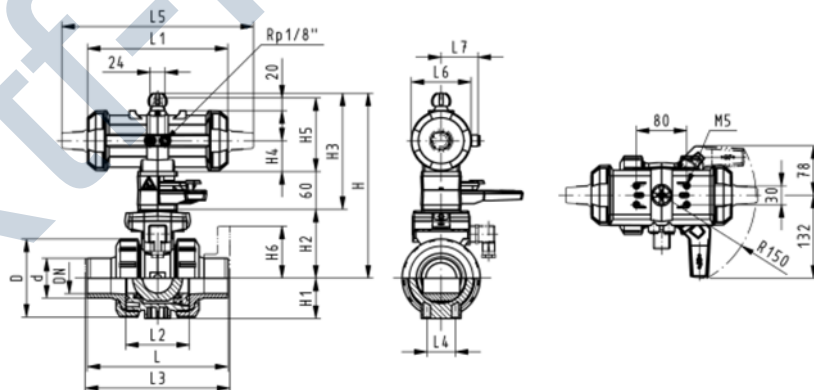
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	1/2	10	185	<b>199 232 023</b>	1.700
25	20	3/4	10	350	<b>199 232 024</b>	1.900
32	25	1	10	700	<b>199 232 025</b>	2.100
40	32	1 1/4	10	1000	<b>199 232 026</b>	3.400
50	40	1 1/2	10	1600	<b>199 232 027</b>	3.900
63	50	2	10	3100	<b>199 232 028</b>	5.000

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	27	62	168	40	77	48	124	194	56	130	25	261	76
25	58	168	30	71	168	40	77	53	144	194	65	150	25	261	76
32	68	168	36	71	168	40	77	58	154	194	71	160	25	261	76
40	84	202	44	84	187	51	99	70	174	224	85	180	45	305	95
50	97	202	51	84	187	51	99	75	194	224	89	200	45	305	95
63	124	225	64	106	187	51	99	83	224	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59



PF 3 39 695 035





DN10/15 - 50

**SYGEF Standard  
Ball valve type 232  
Function DA (Double acting)  
With manual override  
With fusion sockets metric**

**Model:**

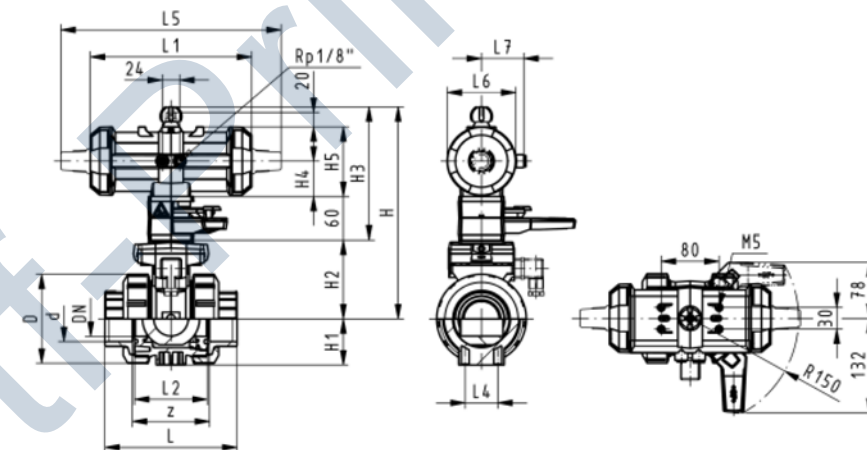
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	199 232 092	1.500
20	15	10	185	199 232 093	1.500
25	20	10	350	199 232 094	1.600
32	25	10	700	199 232 095	1.700
40	32	10	1000	199 232 096	2.800
50	40	10	1600	199 232 097	3.100
63	50	10	3100	199 232 098	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	92	194	56	25	261	76	48	64
20	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107



PF 3 39 695 035



DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function DA (Double acting)**  
**With manual override**  
**With fusion spigots metric**

**Model:**

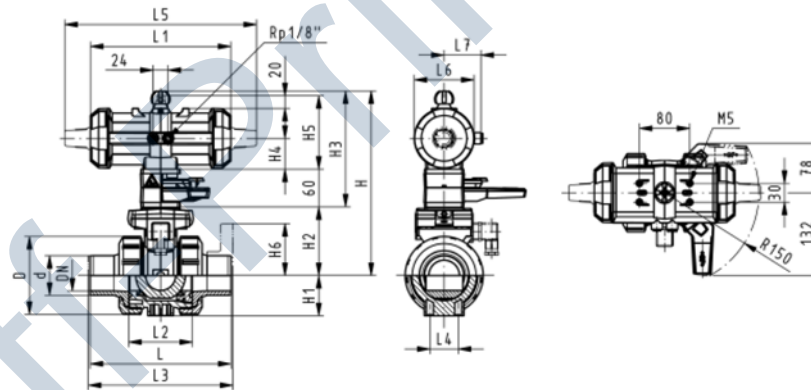
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 112</b>	1.500
20	15	10	185	<b>199 232 113</b>	1.500
25	20	10	350	<b>199 232 114</b>	1.600
32	25	10	700	<b>199 232 115</b>	1.700
40	32	10	1000	<b>199 232 116</b>	2.800
50	40	10	1600	<b>199 232 117</b>	3.100
63	50	10	3100	<b>199 232 118</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	92	194	56	130	25	261	76	48
20	50	159	27	62	168	40	77	95	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	110	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	123	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	146	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	157	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	183	224	101	230	45	305	95	59



PF 3 39 695 035



DN10/15 - 50

## SYGEF Standard Ball valve type 232 Function DA (Double acting) With manual override With fixed flanges PVDF serrated metric

### Model:

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

- Individual configuration of the valve (see form)

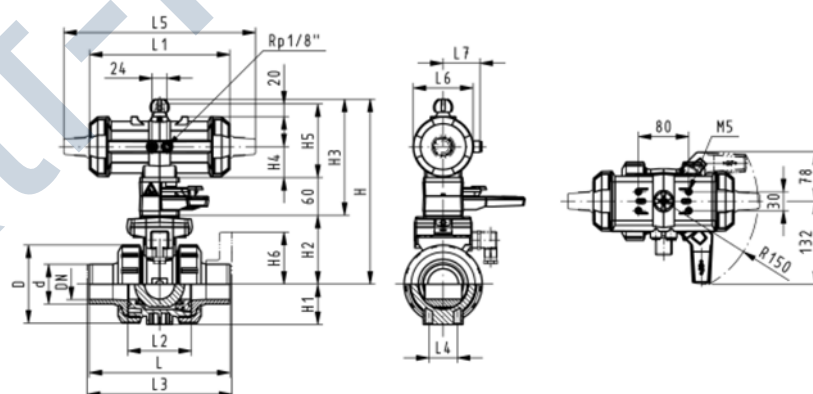
d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg										
20	15	1/2	10	185	199 232 043	1.700										
25	20	3/4	10	350	199 232 044	1.900										
32	25	1	10	700	199 232 045	2.100										
40	32	1 1/4	10	1000	199 232 046	3.400										
50	40	1 1/2	10	1600	199 232 047	3.900										
63	50	2	10	3100	199 232 048	5.000										

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	27	62	168	40	77	48	124	194	56	130	25	261	76
25	58	168	30	71	168	40	77	53	144	194	65	150	25	261	76
32	68	168	36	71	168	40	77	58	154	194	71	160	25	261	76
40	84	202	44	84	187	51	99	70	174	224	85	180	45	305	95
50	97	202	51	84	187	51	99	75	194	224	89	200	45	305	95
63	124	225	64	106	187	51	99	83	224	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59



PF 3 39 695 035



DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function DA (Double acting)**  
**With manual override**  
**With butt fusion spigots IR-Plus metric**

**Model:**

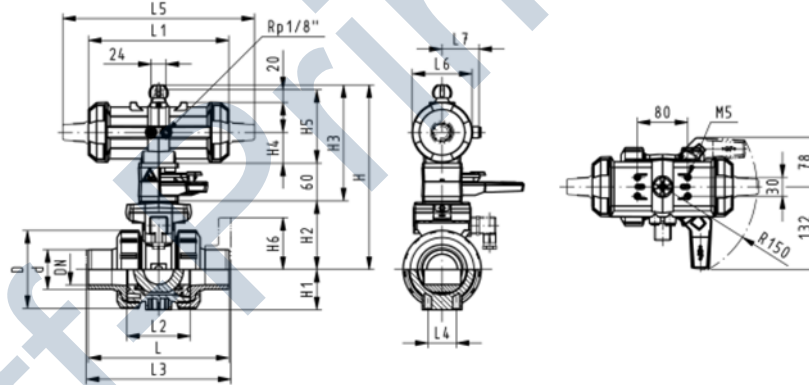
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	185	<b>199 232 793</b>	1.200
25	20	10	350	<b>199 232 794</b>	1.300
32	25	10	700	<b>199 232 795</b>	1.400
40	32	10	1000	<b>199 232 796</b>	2.500
50	40	10	1600	<b>199 232 797</b>	2.800
63	50	10	3100	<b>199 232 798</b>	3.700

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]
20	50	159	27	62	168	40	77	130	194	56	25	261	76	48
25	58	168	30	71	168	40	77	130	194	65	25	261	76	48
32	68	168	36	71	168	40	77	130	194	71	25	261	76	48
40	84	202	44	84	187	51	99	130	224	85	45	305	95	59
50	97	202	51	84	187	51	99	130	224	89	45	305	95	59
63	124	225	64	106	187	51	99	130	224	101	45	305	95	59



PF 3 39 695 035



DN10/15 - 50

**SYGEF Standard  
Ball valve type 232  
Function FC (Fail safe to close)  
Without manual override  
With fusion sockets metric**

**Model:**

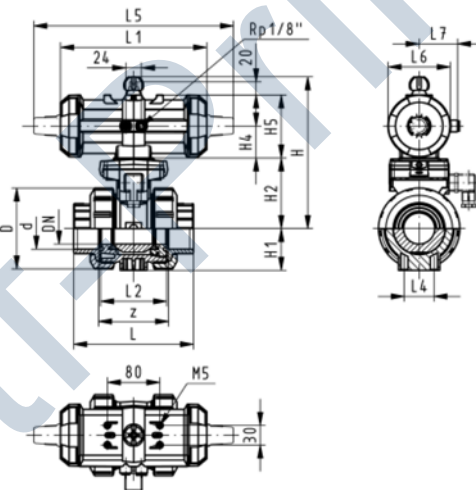
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 132</b>	1.200
20	15	10	185	<b>199 232 133</b>	1.200
25	20	10	350	<b>199 232 134</b>	1.300
32	25	10	700	<b>199 232 135</b>	1.400
40	32	10	1000	<b>199 232 136</b>	2.500
50	40	10	1600	<b>199 232 137</b>	2.800
63	50	10	3100	<b>199 232 138</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [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	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	51	99	183	224	101	45	305	95	59	107



PF 3 39 696 035



DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function FC (Fail safe to close)**  
**Without manual override**  
**With fusion spigots metric**

**Model:**

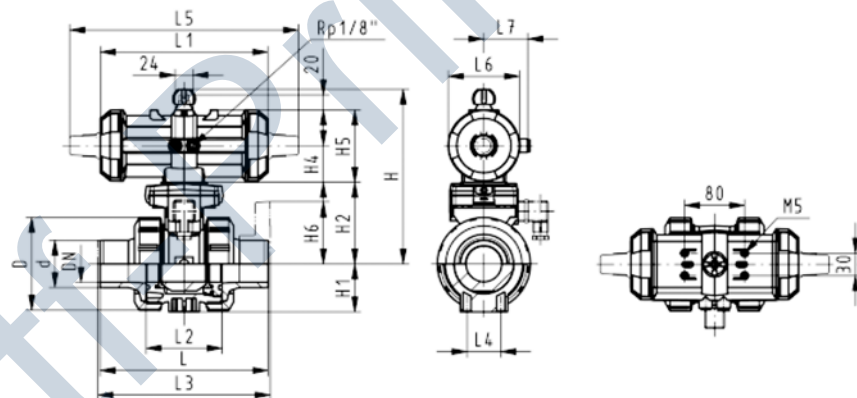
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 152</b>	1.200
20	15	10	185	<b>199 232 153</b>	1.200
25	20	10	350	<b>199 232 154</b>	1.300
32	25	10	700	<b>199 232 155</b>	1.400
40	32	10	1000	<b>199 232 156</b>	2.500
50	40	10	1600	<b>199 232 157</b>	2.800
63	50	10	3100	<b>199 232 158</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [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	40	77	114	194	56	130	25	261	76	48
20	50	159	27	62	40	77	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	224	224	101	230	45	305	95	59



PF 3 39 696 035



DN10/15 - 50

**SYGEF Standard  
Ball valve type 232  
Function FC (Fail safe to close)  
Without manual override  
With fixed flanges PVDF serrated metric**

**Model:**

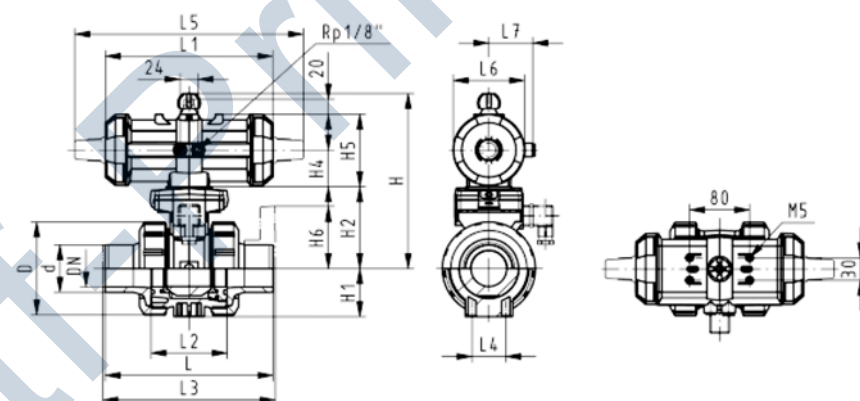
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	1/2	10	185	<b>199 232 063</b>	1.400
25	20	3/4	10	350	<b>199 232 064</b>	1.600
32	25	1	10	700	<b>199 232 065</b>	1.800
40	32	1 1/4	10	1000	<b>199 232 066</b>	3.100
50	40	1 1/2	10	1600	<b>199 232 067</b>	3.600
63	50	2	10	3100	<b>199 232 068</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	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	53	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	58	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	70	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	75	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	83	224	224	101	230	45	305	95	59



PF 3 39 696 035





DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function FC (Fail safe to close)**  
**Without manual override**  
**With butt fusion spigots IR-Plus metric**

**Model:**

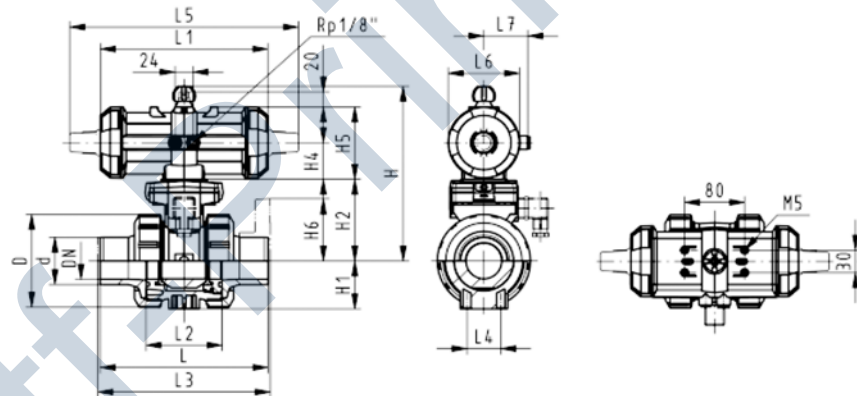
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	185	<b>199 232 833</b>	1.200
25	20	10	350	<b>199 232 834</b>	1.300
32	25	10	700	<b>199 232 835</b>	1.700
40	32	10	1000	<b>199 232 836</b>	2.500
50	40	10	1600	<b>199 232 837</b>	2.800
63	50	10	3100	<b>199 232 838</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	40	77	130	194	56	25	261	76	48
25	58	168	30	71	40	77	130	194	65	25	261	76	48
32	68	168	36	71	40	77	130	194	71	25	261	76	48
40	84	202	44	84	51	99	130	224	85	45	305	95	59
50	97	202	51	84	51	99	130	224	89	45	305	95	59
63	124	225	64	106	51	99	130	224	101	45	305	95	59



PF 3 39 696 035



DN10/15 - 50

**SYGEF Standard  
Ball valve type 232  
Function FO (Fail safe to open)  
Without manual override  
With fusion sockets metric**

**Model:**

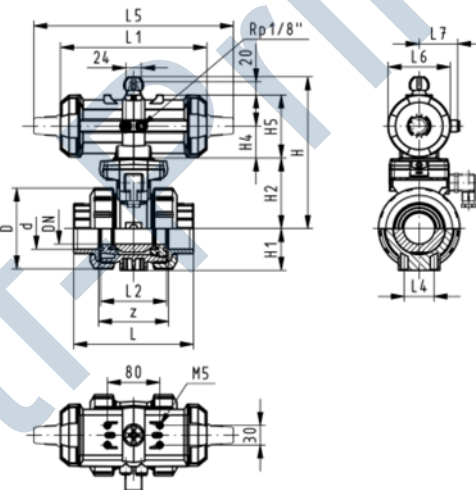
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	199 232 172	1.200
20	15	10	185	199 232 173	1.200
25	20	10	350	199 232 174	1.300
32	25	10	700	199 232 175	1.400
40	32	10	1000	199 232 176	2.500
50	40	10	1600	199 232 177	2.800
63	50	10	3100	199 232 178	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [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	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	51	99	183	224	101	45	305	95	59	107



PF 3 39 696 035



DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**Without manual override**  
**With fusion spigots metric**

**Model:**

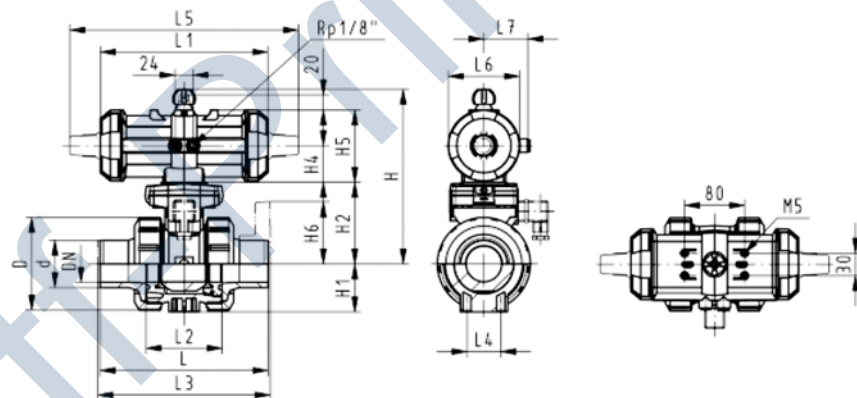
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 192</b>	1.200
20	15	10	185	<b>199 232 193</b>	1.200
25	20	10	350	<b>199 232 194</b>	1.300
32	25	10	700	<b>199 232 195</b>	1.400
40	32	10	1000	<b>199 232 196</b>	2.500
50	40	10	1600	<b>199 232 197</b>	2.800
63	50	10	3100	<b>199 232 198</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [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	40	77	114	194	56	130	25	261	76	48
20	50	159	27	62	40	77	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	224	224	101	230	45	305	95	59



PF 3 39 696 035



DN10/15 - 50

**SYGEF Standard  
Ball valve type 232  
Function FO (Fail safe to open)  
Without manual override  
With fixed flanges PVDF serrated metric**

**Model:**

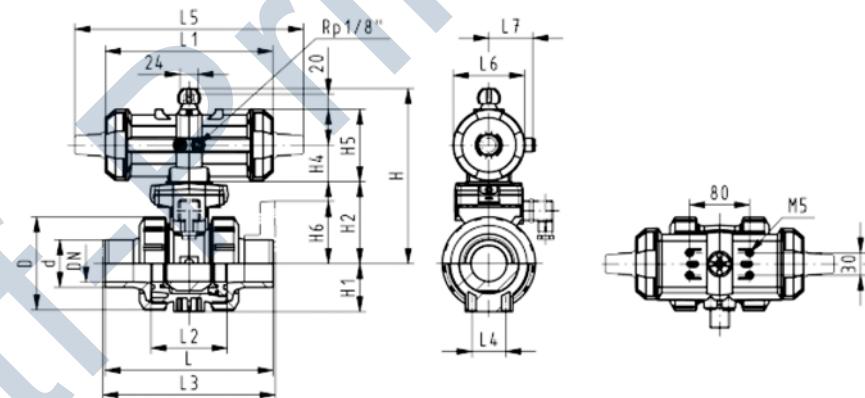
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	1/2	10	185	<b>199 232 083</b>	1.400
25	20	3/4	10	350	<b>199 232 084</b>	1.600
32	25	1	10	700	<b>199 232 085</b>	1.800
40	32	1 1/4	10	1000	<b>199 232 086</b>	3.100
50	40	1 1/2	10	1600	<b>199 232 087</b>	3.600
63	50	2	10	3100	<b>199 232 088</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	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	53	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	58	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	70	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	75	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	83	224	224	101	230	45	305	95	59



PF 3 39 696 035



DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**Without manual override**  
**With butt fusion spigots IR-Plus metric**

**Model:**

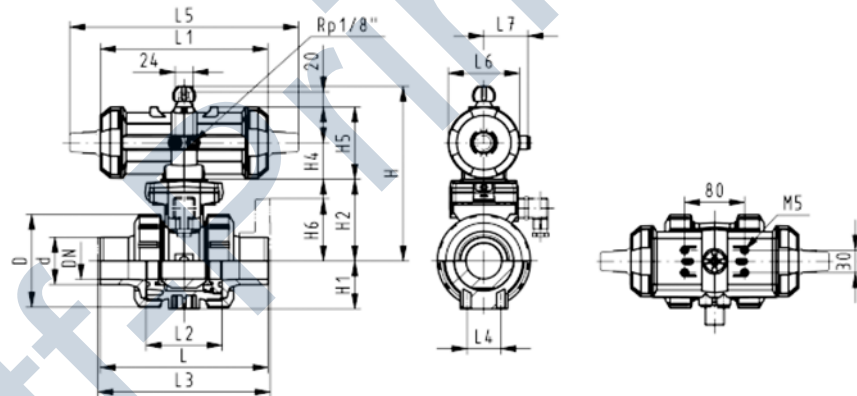
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	10	185	<b>199 232 873</b>	1.200
25	20	10	350	<b>199 232 874</b>	1.300
32	25	10	700	<b>199 232 875</b>	1.400
40	32	10	1000	<b>199 232 876</b>	2.500
50	40	10	1600	<b>199 232 877</b>	2.800
63	50	10	3100	<b>199 232 878</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	40	77	130	194	56	25	261	76	48
25	58	168	30	71	40	77	130	194	65	25	261	76	48
32	68	168	36	71	40	77	130	194	71	25	261	76	48
40	84	202	44	84	51	99	130	224	85	45	305	95	59
50	97	202	51	84	51	99	130	224	89	45	305	95	59
63	124	225	64	106	51	99	130	224	101	45	305	95	59



PF 3 39 696 035



DN10/15 - 50

**SYGEF Standard**  
**Ball valve type 232**  
**Function DA (Double acting)**  
**Without manual override**  
**With butt fusion spigots IR-Plus metric**

**Model:**

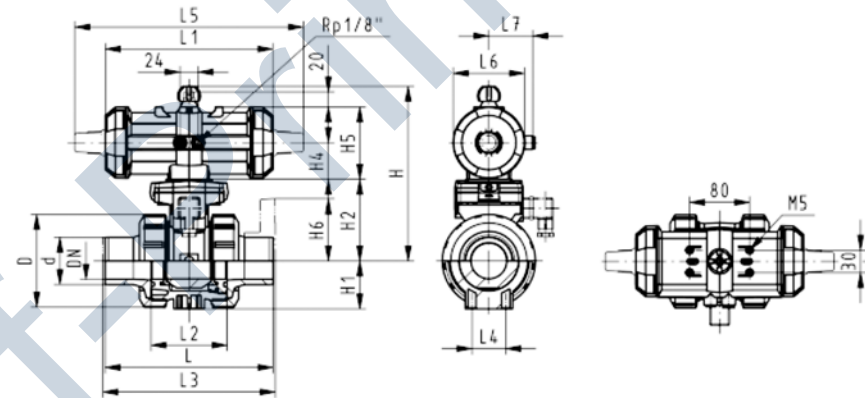
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	10	185	<b>199 232 913</b>	1.200
25	20	10	350	<b>199 232 914</b>	1.300
32	25	10	700	<b>199 232 915</b>	1.400
40	32	10	1000	<b>199 232 916</b>	2.500
50	40	10	1600	<b>199 232 917</b>	2.800
63	50	10	3100	<b>199 232 918</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	40	77	130	194	56	25	261	76	48
25	58	168	30	71	40	77	130	194	65	25	261	76	48
32	68	168	36	71	40	77	130	194	71	25	261	76	48
40	84	202	44	84	51	99	130	224	85	45	305	95	59
50	97	202	51	84	51	99	130	224	89	45	305	95	59
63	124	225	64	106	51	99	130	224	101	45	305	95	59



PF 3 39 695 035



DN10/15 - 50

**SYGEF Standard  
Ball valve type 232  
Function DA (Double acting)  
Without manual override  
With fusion sockets metric**

**Model:**

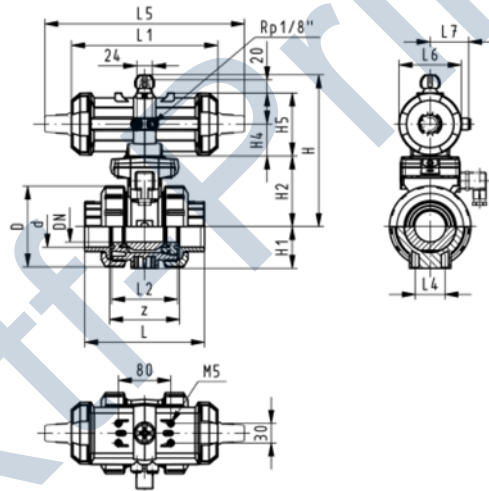
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 212</b>	1.200
20	15	10	185	<b>199 232 213</b>	1.200
25	20	10	350	<b>199 232 214</b>	1.300
32	25	10	700	<b>199 232 215</b>	1.400
40	32	10	1000	<b>199 232 216</b>	2.500
50	40	10	1600	<b>199 232 217</b>	2.800
63	50	10	3100	<b>199 232 218</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [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	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	51	99	183	224	101	45	305	95	59	107



PF 3 39 695 035



DN10/15 - 50

**SYGEF Standard  
Ball valve type 232  
Function DA (Double acting)  
Without manual override  
With fusion spigots metric**

**Model:**

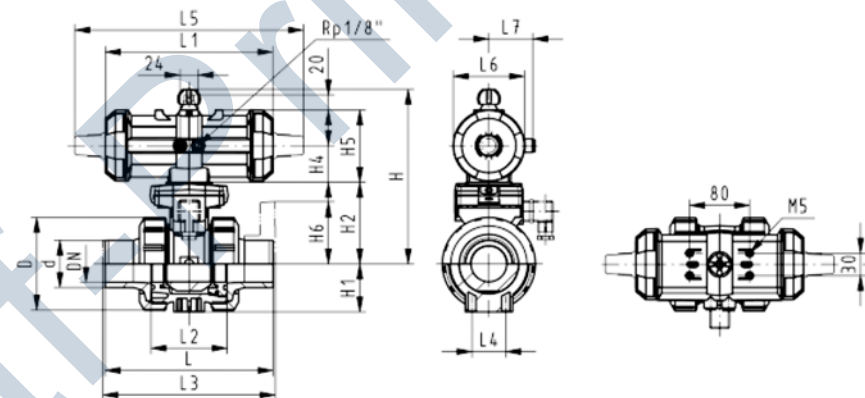
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	199 232 232	1.200
20	15	10	185	199 232 233	1.200
25	20	10	350	199 232 234	1.300
32	25	10	700	199 232 235	1.400
40	32	10	1000	199 232 236	2.500
50	40	10	1600	199 232 237	2.800
63	50	10	3100	199 232 238	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [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	40	77	114	194	56	130	25	261	76	48
20	50	159	27	62	40	77	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	224	224	101	230	45	305	95	59



PF 3 39 695 035





DN10/15 - 50

**SYGEF Standard  
Ball valve type 232  
Function DA (Double acting)  
Without manual override  
With fixed flanges PVDF serrated metric**

**Model:**

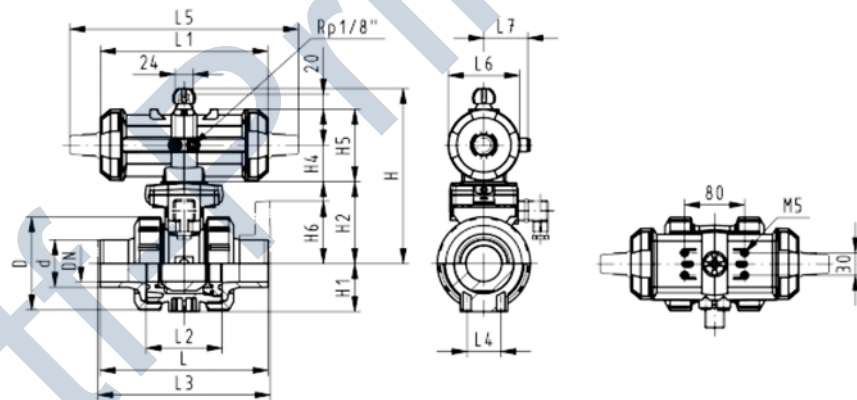
- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	1/2	10	185	<b>199 232 103</b>	1.400
25	20	3/4	10	350	<b>199 232 104</b>	1.600
32	25	1	10	700	<b>199 232 105</b>	1.800
40	32	1 1/4	10	1000	<b>199 232 106</b>	3.100
50	40	1 1/2	10	1600	<b>199 232 107</b>	3.600
63	50	2	10	3100	<b>199 232 108</b>	4.700

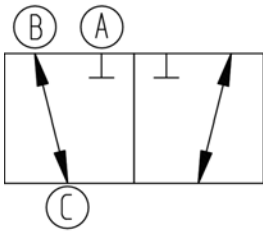
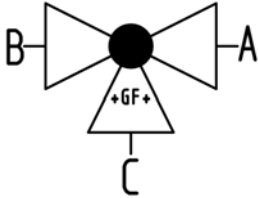
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	40	77	48	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	53	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	58	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	70	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	75	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	83	224	224	101	230	45	305	95	59



PF 3 39 695 035



# SYGEF Standard 3-Way ball valve type 287 Horizontal/L-port Without manual override With fusion sockets metric



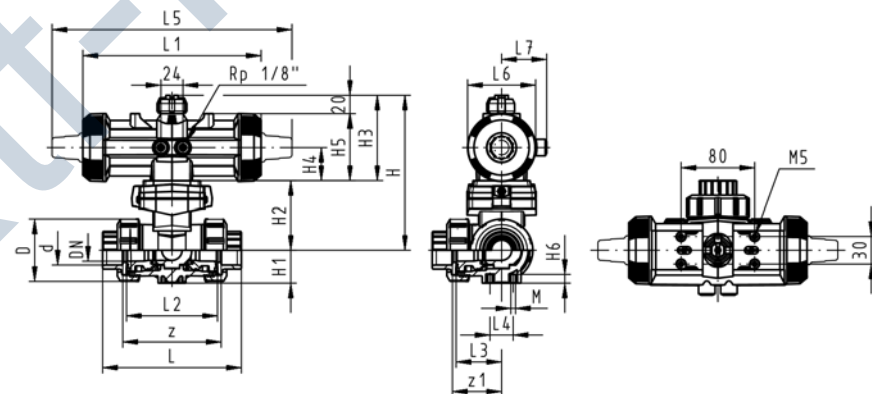
### Model:

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- 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]	FPM Code	kg
16	10	10	50	199 287 092	1.183
20	15	10	75	199 287 093	1.191
25	20	10	150	199 287 094	1.349
32	25	10	280	199 287 095	1.593
40	32	10	480	199 287 096	2.800
50	40	10	620	199 287 097	3.379
63	50	10	1230	199 287 098	5.109

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

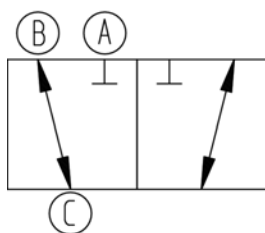
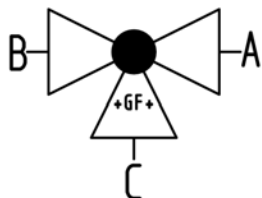
d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	82	41
20	48	6	82	41
25	48	6	97	49
32	48	6	110	55
40	59	8	132	66
50	59	8	151	76
63	59	8	188	94



PF 3 39 981 035



**SYGEF Standard**  
**3-Way ball valve type 287**  
**Horizontal/L-port**  
**Without manual override**  
**With socket fusion pigots metric**



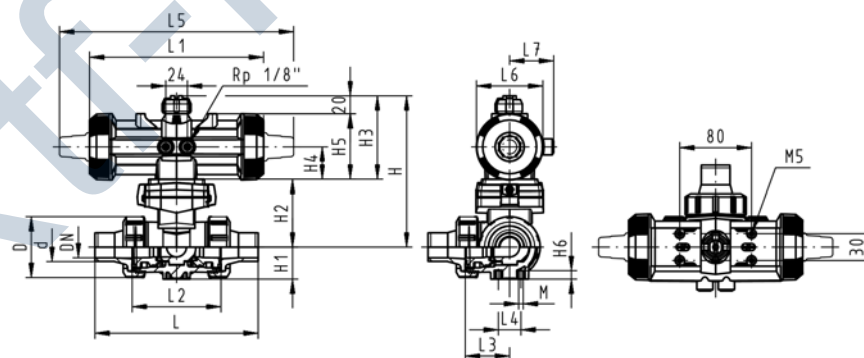
**Model:**

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- 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 (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	50	199 287 012	1.191
20	15	10	75	199 287 013	1.202
25	20	10	150	199 287 014	1.369
32	25	10	280	199 287 015	1.623
40	32	10	480	199 287 016	2.827
50	40	10	620	199 287 017	3.460
63	50	10	1230	199 287 018	5.271

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

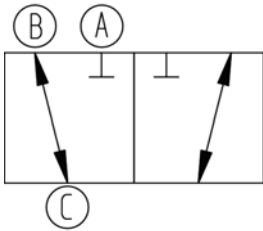
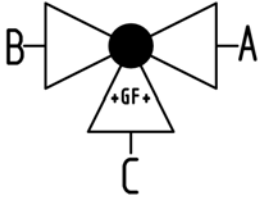
d [mm]	L7 [mm]	M
16	48	6
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8



PF 3 39 981 035



**SYGEF Standard  
3-Way ball valve type 287  
Horizontal/L-port  
Without manual override  
With butt fusion spigots IR-Plus metric**



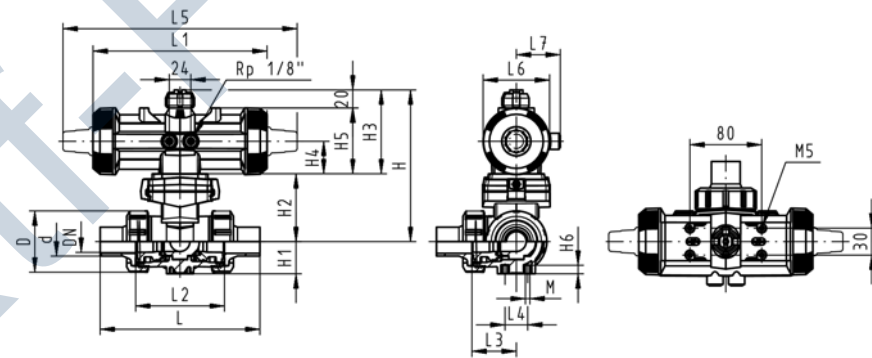
**Model:**

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- 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]	FPM Code	kg
20	15	10	75	199 287 053	1.202
25	20	10	150	199 287 054	1.369
32	25	10	280	199 287 055	1.623
40	32	10	480	199 287 056	2.827
50	40	10	620	199 287 057	3.460
63	50	10	1230	199 287 058	5.271

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

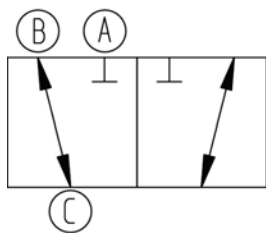
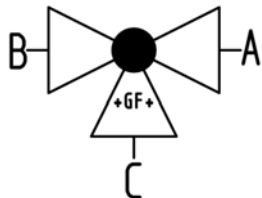
d [mm]	L7 [mm]	M
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8



PF 3 39 981 035



## SYGEF Standard 3-Way ball valve type 287 Horizontal/L-port Without manual override With threaded sockets NPT



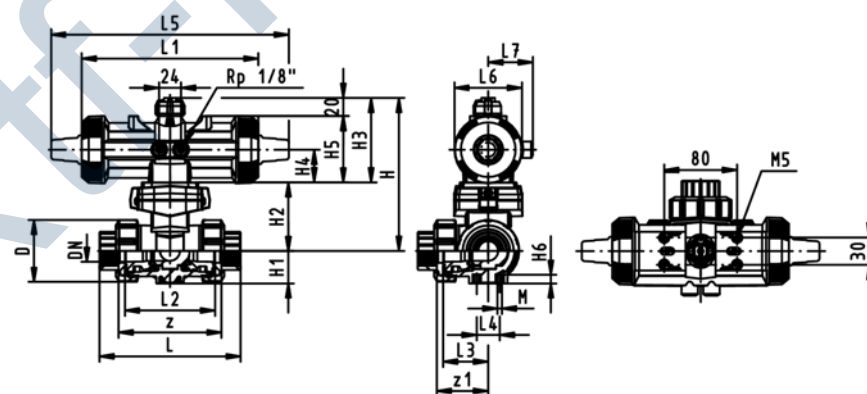
### Model:

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- 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

NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	50	<b>199 287 242</b>	1.183
1/2	15	10	75	<b>199 287 243</b>	1.191
3/4	20	10	150	<b>199 287 244</b>	1.349
1	25	10	280	<b>199 287 245</b>	1.593
1 1/4	32	10	480	<b>199 287 246</b>	2.800
1 1/2	40	10	620	<b>199 287 247</b>	3.379
2	50	10	1230	<b>199 287 248</b>	5.109

NPT [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

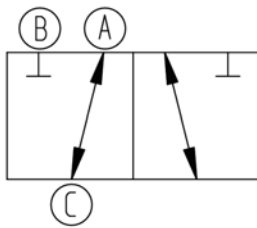
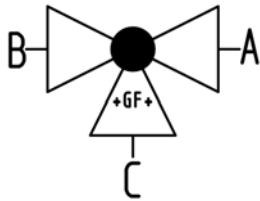
NPT [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	86	43
1/2	48	6	80	40
3/4	48	6	95	48
1	48	6	110	55
1 1/4	59	8	132	66
1 1/2	59	8	157	79
2	59	8	210	105



PF 3 39 981 035



# SYGEF Standard 3-Way ball valve type 287 Horizontal/L-port DA (Double acting) Without manual override With fusion sockets metric



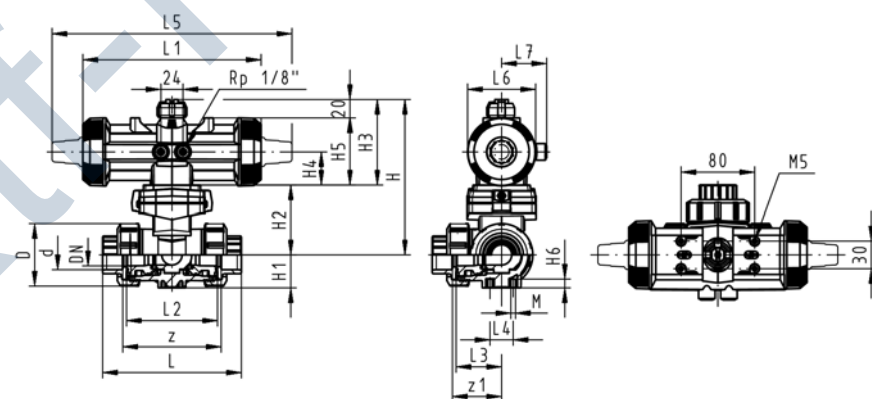
### Model:

- Material: PVDF
- 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]	FPM Code	kg
16	10	10	50	199 287 212	9.929
20	15	10	75	199 287 213	1.001
25	20	10	150	199 287 214	1.159
32	25	10	280	199 287 215	1.403
40	32	10	480	199 287 216	2.376
50	40	10	620	199 287 217	2.955
63	50	10	1230	199 287 218	4.685

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

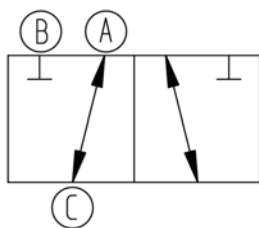
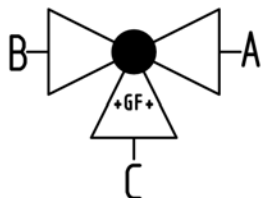
d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	82	41
20	48	6	82	41
25	48	6	97	49
32	48	6	110	55
40	59	8	132	66
50	59	8	151	76
63	59	8	188	94



PF 3 39 981 035



**SYGEF Standard**  
**3-Way ball valve type 287**  
**Horizontal/L-port DA (Double acting)**  
**Without manual override**  
**With socket fusion pigots metric**



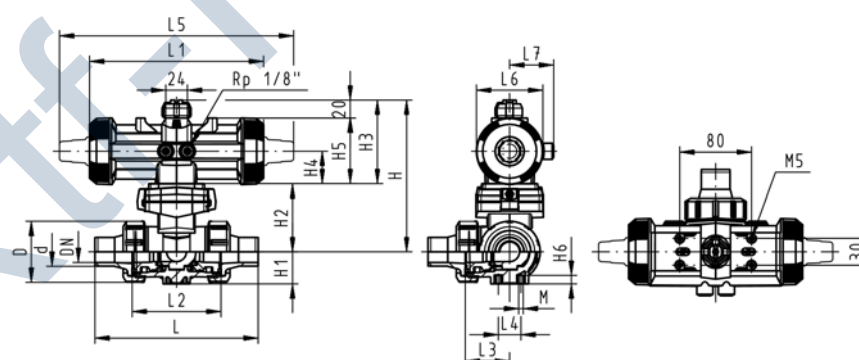
**Model:**

- Material: PVDF
- 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°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	50	<b>199 287 132</b>	1.001
20	15	10	75	<b>199 287 133</b>	1.012
25	20	10	150	<b>199 287 134</b>	1.179
32	25	10	280	<b>199 287 135</b>	1.433
40	32	10	480	<b>199 287 136</b>	2.403
50	40	10	620	<b>199 287 137</b>	3.036
63	50	10	1230	<b>199 287 138</b>	4.847

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

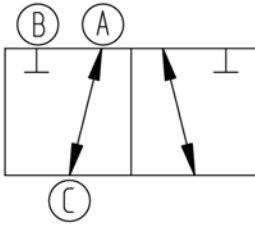
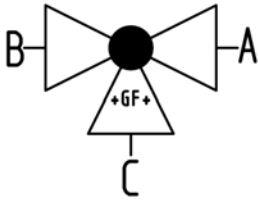


PF 3 39 981 035





**SYGEF Standard**  
**3-Way ball valve type 287**  
**Horizontal/L-port DA (Double acting)**  
**Without manual override**  
**With butt fusion spigots IR-Plus metric**



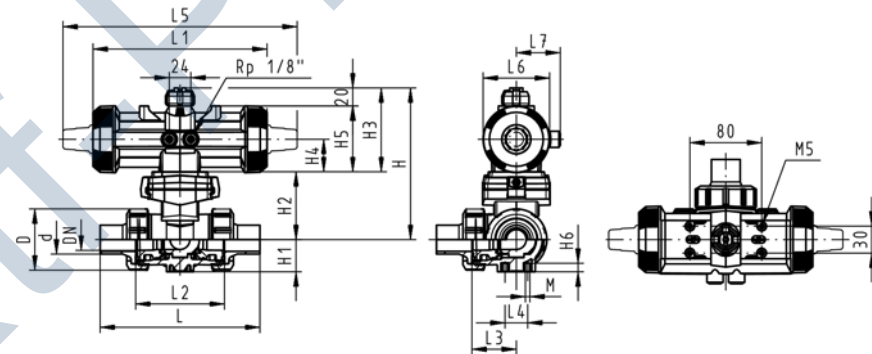
**Model:**

- Material: PVDF
- 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°< 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	75	199 287 173	1.012
25	20	10	150	199 287 174	1.179
32	25	10	280	199 287 175	1.433
40	32	10	480	199 287 176	2.403
50	40	10	620	199 287 177	3.036
63	50	10	1230	199 287 178	4.847

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

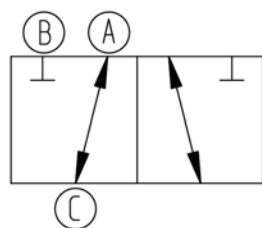
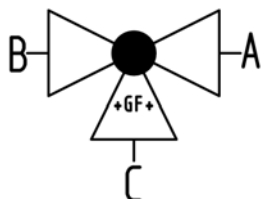


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**SYGEF Standard**  
**3-Way ball valve type 287**  
**Horizontal/L-port DA (Double acting)**  
**Without manual override**  
**With threaded sockets NPT**



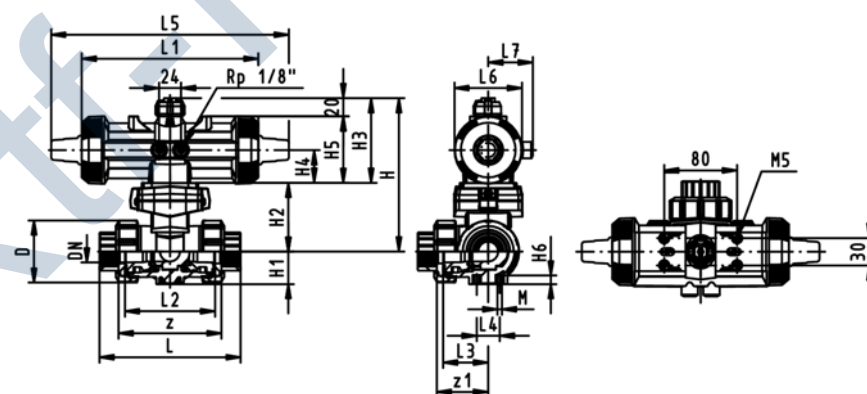
**Model:**

- Material: PVDF
- 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°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	50	<b>199 287 262</b>	9.929
1/2	15	10	75	<b>199 287 263</b>	1.001
3/4	20	10	150	<b>199 287 264</b>	1.159
1	25	10	280	<b>199 287 265</b>	1.403
1 1/4	32	10	480	<b>199 287 266</b>	2.376
1 1/2	40	10	620	<b>199 287 267</b>	2.955
2	50	10	1230	<b>199 287 268</b>	4.685

NPT [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

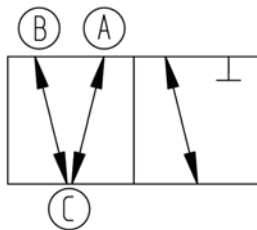
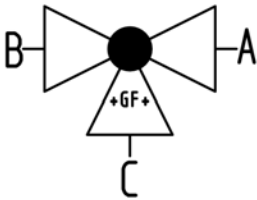
NPT [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	86	43
1/2	48	6	80	40
3/4	48	6	95	48
1	48	6	110	55
1 1/4	59	8	132	66
1 1/2	59	8	157	79
2	59	8	210	105



PF 3 39 981 035



## SYGEF Standard 3-Way ball valve type 287 Horizontal/T-port DA (Double acting) Without manual override With fusion sockets metric



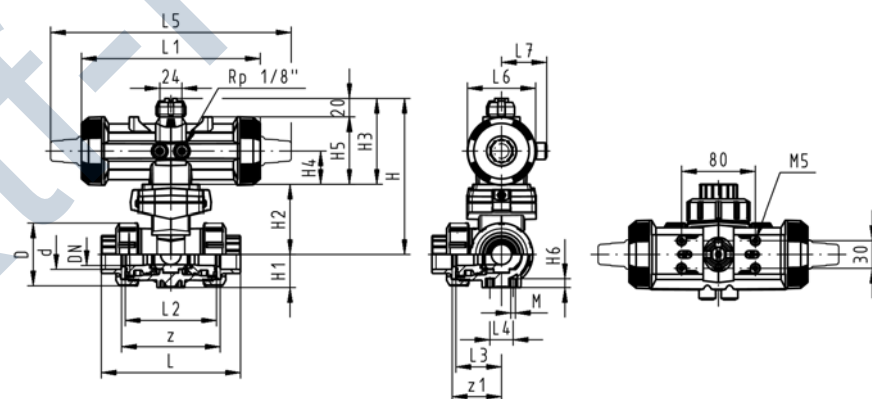
### Model:

- Material: PVDF
- 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°< 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	140	<b>199 287 232</b>	9.916
20	15	10	200	<b>199 287 233</b>	9.993
25	20	10	470	<b>199 287 234</b>	1.157
32	25	10	793	<b>199 287 235</b>	1.394
40	32	10	1290	<b>199 287 236</b>	2.362
50	40	10	1910	<b>199 287 237</b>	2.928
63	50	10	3100	<b>199 287 238</b>	4.628

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

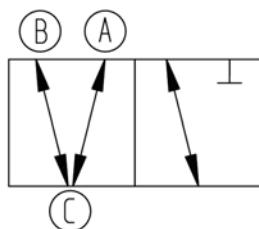
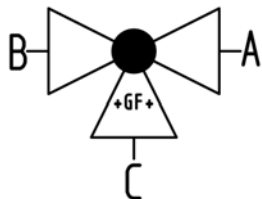
d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	82	41
20	48	6	82	41
25	48	6	97	49
32	48	6	110	55
40	59	8	132	66
50	59	8	151	76
63	59	8	188	94



PF 3 39 981 035



**SYGEF Standard**  
**3-Way ball valve type 287**  
**Horizontal/T-port DA (Double acting)**  
**Without manual override**  
**With socket fusion pigots metric**



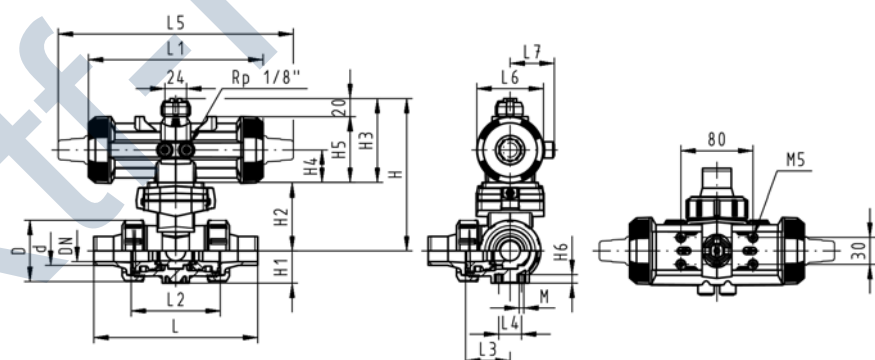
**Model:**

- Material: PVDF
- 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°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	140	<b>199 287 152</b>	9.993
20	15	10	200	<b>199 287 153</b>	1.011
25	20	10	470	<b>199 287 154</b>	1.176
32	25	10	793	<b>199 287 155</b>	1.425
40	32	10	1290	<b>199 287 156</b>	2.389
50	40	10	1910	<b>199 287 157</b>	3.009
63	50	10	3100	<b>199 287 158</b>	4.789

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

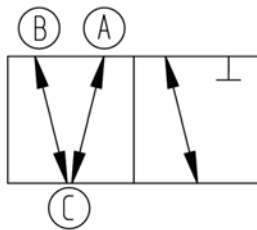
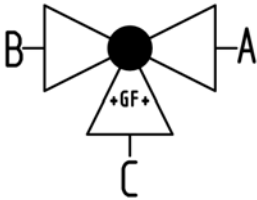
d [mm]	L7 [mm]	M
16	48	6
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8



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**SYGEF Standard**  
**3-Way ball valve type 287**  
**Horizontal/T-port DA (Double acting)**  
**Without manual override**  
**With butt fusion spigots IR-Plus metric**



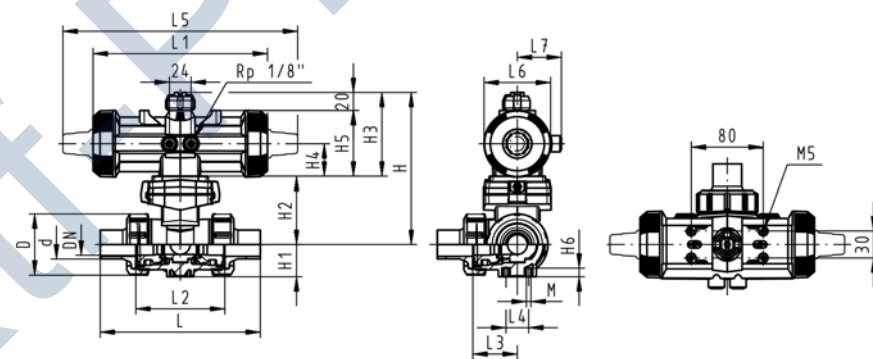
**Model:**

- Material: PVDF
- 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°< 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
20	15	10	140	<b>199 287 193</b>	1.011
25	20	10	200	<b>199 287 194</b>	1.176
32	25	10	470	<b>199 287 195</b>	1.425
40	32	10	793	<b>199 287 196</b>	2.389
50	40	10	1290	<b>199 287 197</b>	3.009
63	50	10	3100	<b>199 287 198</b>	4.789

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



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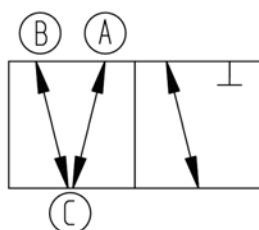
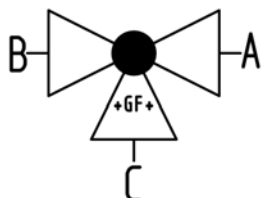
# SYGEF Standard

## 3-Way ball valve type 287

### Horizontal/T-port DA (Double acting)

### Without manual override

### With threaded sockets NPT



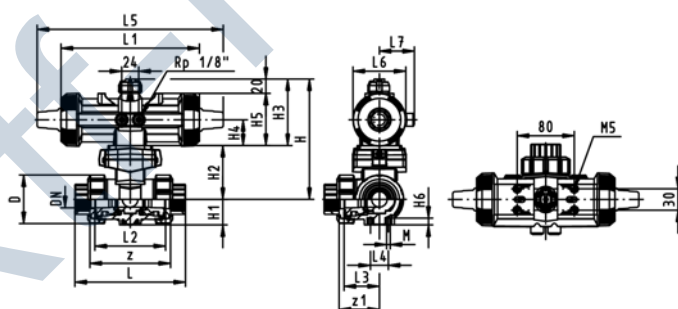
#### Model:

- Material: PVDF
- 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°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	140	<b>199 287 272</b>	9.916
1/2	15	10	200	<b>199 287 273</b>	9.993
3/4	20	10	470	<b>199 287 274</b>	1.157
1	25	10	793	<b>199 287 275</b>	1.394
1 1/4	32	10	1290	<b>199 287 276</b>	2.362
1 1/2	40	10	1910	<b>199 287 277</b>	2.928
2	50	10	3100	<b>199 287 278</b>	4.628

NPT [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

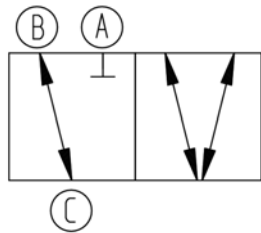
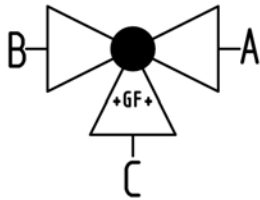
NPT [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	86	43
1/2	48	6	80	40
3/4	48	6	95	48
1	48	6	110	55
1 1/4	59	8	132	66
1 1/2	59	8	157	79
2	59	8	210	105



PF 3 39 981 035



# SYGEF Standard 3-Way ball valve type 287 Horizontal/T-port Without manual override With fusion sockets metric



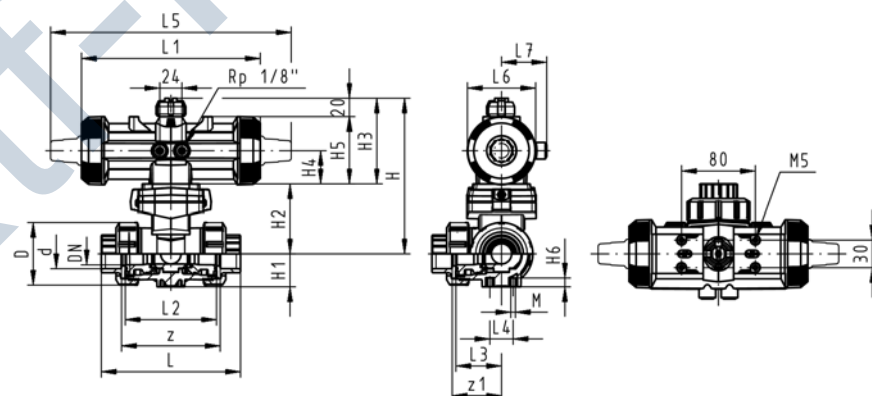
### Model:

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- 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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	140	<b>199 287 112</b>	1.182
20	15	10	200	<b>199 287 113</b>	1.189
25	20	10	470	<b>199 287 114</b>	1.347
32	25	10	793	<b>199 287 115</b>	1.584
40	32	10	1290	<b>199 287 116</b>	2.786
50	40	10	1910	<b>199 287 117</b>	3.352
63	50	10	3100	<b>199 287 118</b>	5.052

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

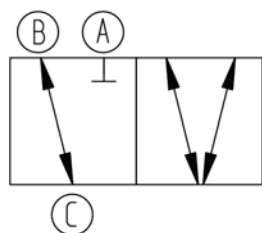
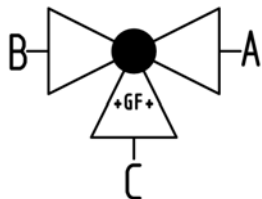
d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	82	41
20	48	6	82	41
25	48	6	97	49
32	48	6	110	55
40	59	8	132	66
50	59	8	151	76
63	59	8	188	94



PF 3 39 981 035



**SYGEF Standard**  
**3-Way ball valve type 287**  
**Horizontal/T-port**  
**Without manual override**  
**With socket fusion pigots metric**



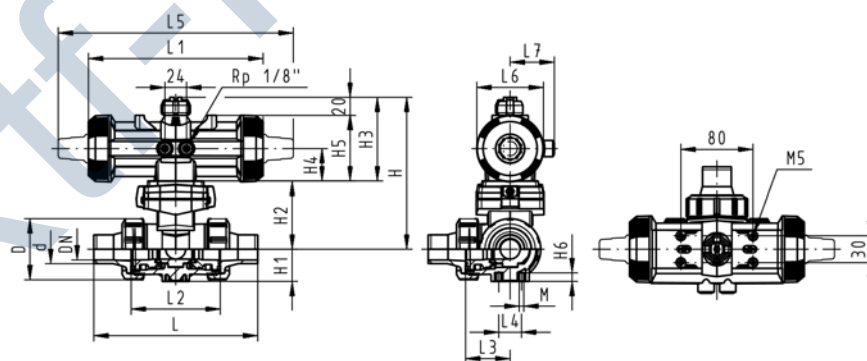
**Model:**

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- 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 (Δp=1 bar) [l/min]	FPM Code	kg
16	10	10	140	<b>199 287 032</b>	1.189
20	15	10	200	<b>199 287 033</b>	1.201
25	20	10	470	<b>199 287 034</b>	1.366
32	25	10	793	<b>199 287 035</b>	1.615
40	32	10	1290	<b>199 287 036</b>	2.813
50	40	10	1910	<b>199 287 037</b>	3.433
63	50	10	3100	<b>199 287 038</b>	5.213

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

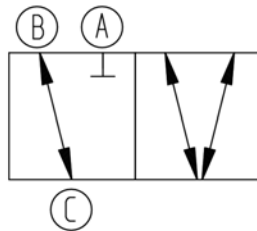
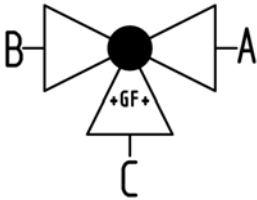


PF 3 39 981 035





**SYGEF Standard  
3-Way ball valve type 287  
Horizontal/T-port  
Without manual override  
With butt fusion spigots IR-Plus metric**



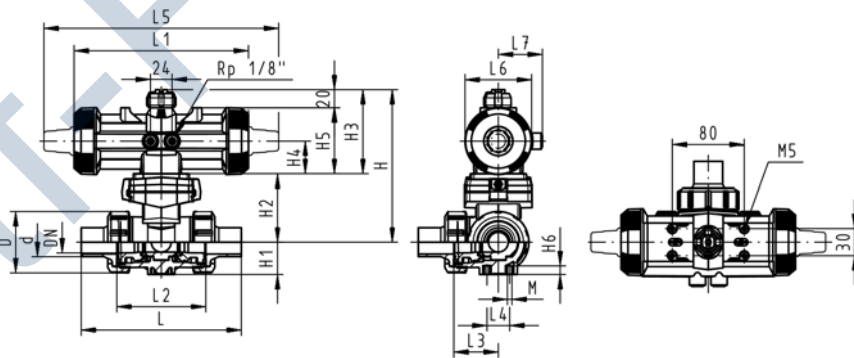
**Model:**

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- 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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	10	200	199 287 073	1.201
25	20	10	470	199 287 074	1.366
32	25	10	793	199 287 075	1.615
40	32	10	1290	199 287 076	2.813
50	40	10	1910	199 287 077	3.433
63	50	10	3100	199 287 078	5.213

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

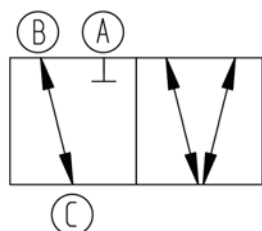
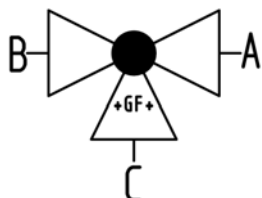
d [mm]	L7 [mm]	M
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8



PF 3 39 981 035



## SYGEF Standard 3-Way ball valve type 287 Horizontal/T-port Without manual override With threaded sockets NPT



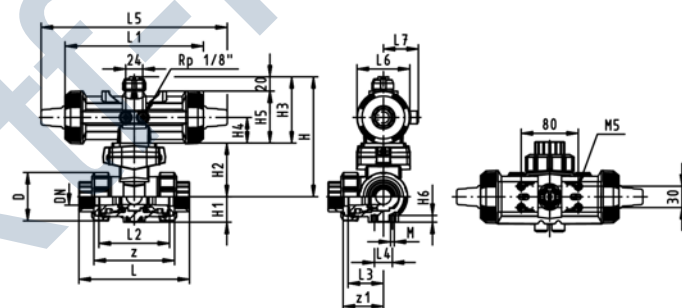
### Model:

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- 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

NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	140	<b>199 287 252</b>	1.182
1/2	15	10	200	<b>199 287 253</b>	1.189
3/4	20	10	470	<b>199 287 254</b>	1.347
1	25	10	793	<b>199 287 255</b>	1.584
1 1/4	32	10	1290	<b>199 287 256</b>	2.786
1 1/2	40	10	1910	<b>199 287 257</b>	3.352
2	50	10	3100	<b>199 287 258</b>	5.052

NPT [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

NPT [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	86	43
1/2	48	6	80	40
3/4	48	6	95	48
1	48	6	110	55
1 1/4	59	8	132	66
1 1/2	59	8	157	79
2	59	8	210	105



PF 3 39 981 035

# Diaphragm valves pneumatic

## SYGEF Standard

### Diaphragm valve type DIASTAR 028

#### Function FC (Fail safe to close)

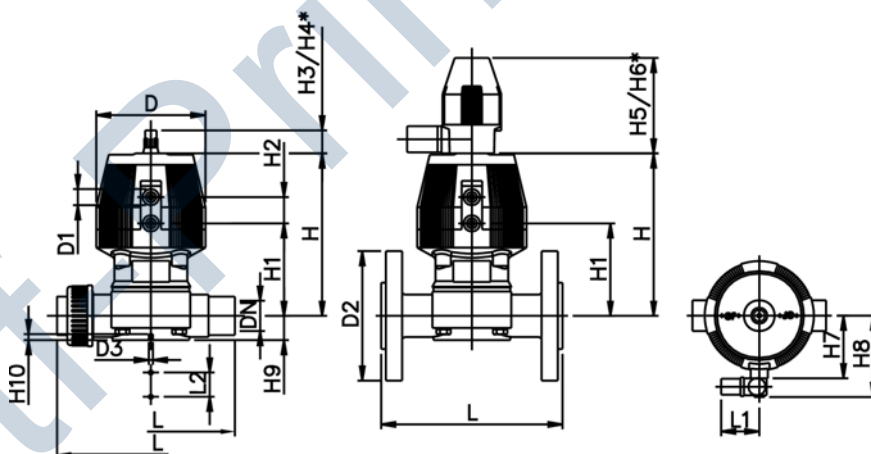
#### Unions with butt fusion spigots IR metric



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	5	72	199 028 491	0.530
25	20	7	120	199 028 492	1.000
32	25	7	238	199 028 493	1.390
40	32	7	341	199 028 494	1.870
50	40	7	460	199 028 495	3.030
63	50	7	685	199 028 496	3.880

d [mm]	D [mm]	D1 G [inch]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	196	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	220	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	234	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	258	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	284	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	320	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 143

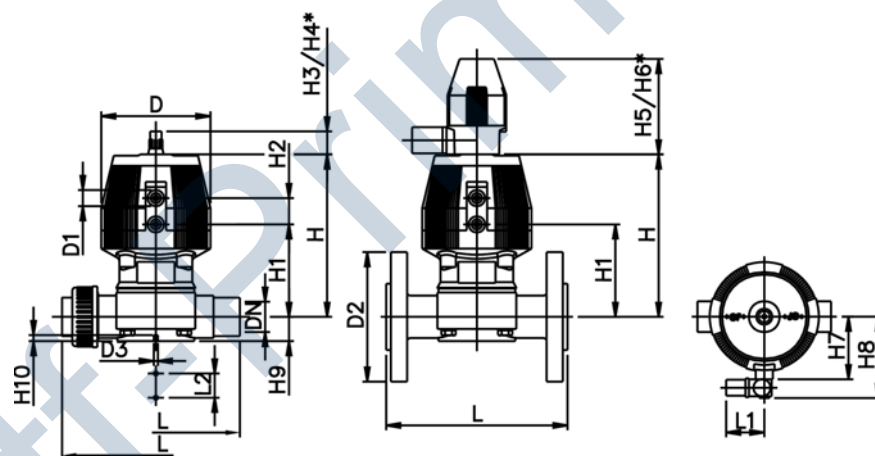


**SYGEF Standard**  
**Diaphragm valve type DIASTAR 028**  
**Function FC (Fail safe to close)**  
**Unions with fusion sockets metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	5	72	<b>199 028 193</b>	0.836
25	20	7	120	<b>199 028 194</b>	0.870
32	25	7	238	<b>199 028 195</b>	1.505
40	32	7	341	<b>199 028 196</b>	2.604
50	40	7	460	<b>199 028 197</b>	2.250
63	50	7	685	<b>199 028 198</b>	3.500

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	128	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	150	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	162	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	184	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	210	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	248	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 143

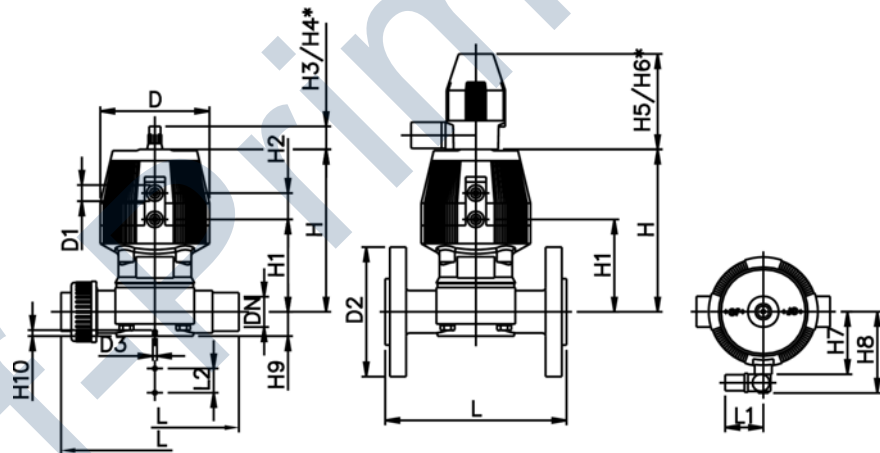


**SYGEF Standard**  
**Diaphragm valve type DIASTAR 028**  
**Function FC (Fail safe to close)**  
**With butt fusion spigots IR metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	5	72	199 028 961	0.520
25	20	7	120	199 028 962	0.950
32	25	7	238	199 028 963	1.500
40	32	7	341	199 028 964	1.810
50	40	7	460	199 028 965	3.350
63	50	7	685	199 028 966	6.270

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 143



**SYGEF Standard**  
**Diaphragm valve type DIASTAR 028**  
**Function FC (Fail safe to close)**  
**With fusion spigots metric**

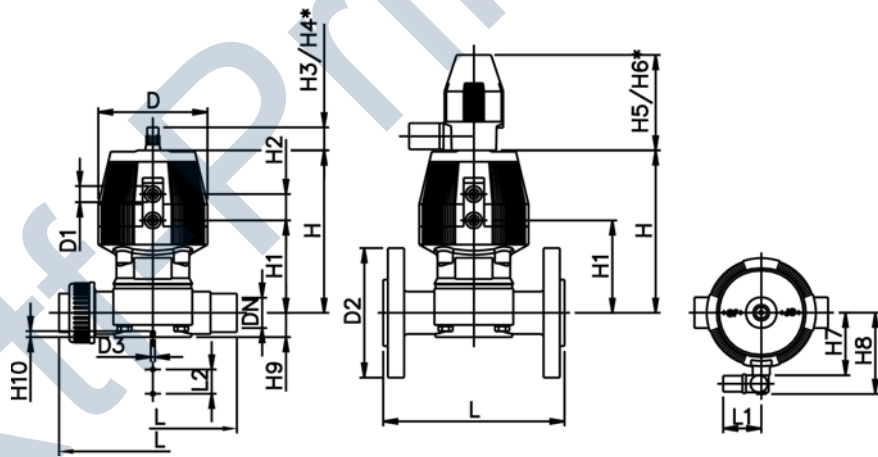
**Model:**

- Material: PVDF
- With position indicator / Working pressure: **one side**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	5	72	<b>199 028 321</b>	0.520
25	20	7	120	<b>199 028 322</b>	0.950
32	25	7	238	<b>199 028 323</b>	1.370
40	32	7	341	<b>199 028 324</b>	1.810
50	40	7	460	<b>199 028 325</b>	3.350
63	50	7	685	<b>199 028 326</b>	6.270

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 143



**SYGEF Standard**  
**Diaphragm valve type DIASTAR 028**  
**Function FC (Fail safe to close)**  
**With backing flanges PP-V metric**

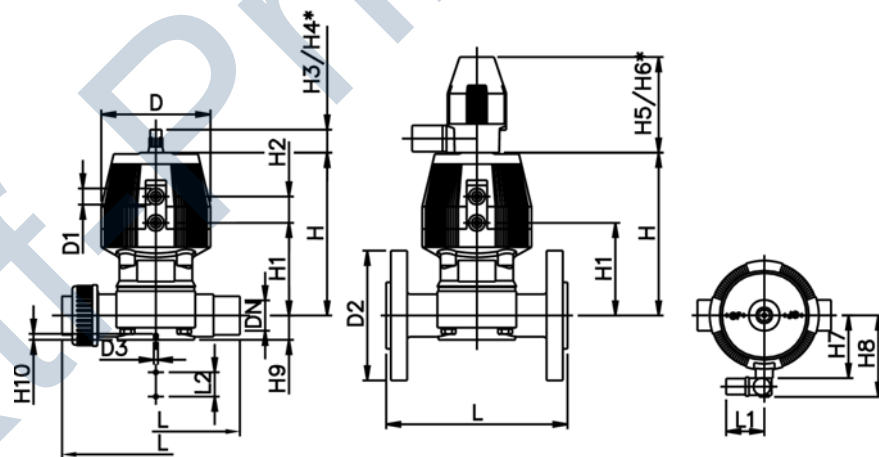
**Model:**

- Material: PVDF
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	1/2	5	72	<b>199 028 351</b>	0.520
25	20	3/4	7	120	<b>199 028 352</b>	0.950
32	25	1	7	238	<b>199 028 353</b>	1.370
40	32	1 1/4	7	341	<b>199 028 354</b>	1.810
50	40	1 1/2	7	460	<b>199 028 355</b>	3.350
63	50	2	7	685	<b>199 028 356</b>	6.270

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	68	1/8	95	6	130	60	25	98	59	24	23	44	100	155
25	96	1/8	105	6	150	60	25	127	71	25	23	44	100	155
32	96	1/8	115	6	160	60	25	141	85	25	23	44	100	155
40	120	1/8	140	8	180	60	45	167	97	26	36	64	100	160
50	150	1/4	150	8	200	60	45	198	108	36	36	64	100	170
63	150	1/4	165	8	230	60	45	216	126	36	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	44	76	14	12	8
25	56	88	18	12	10
32	56	88	21	12	12
40	68	100	26	15	14
50	85	117	33	15	18
63	85	117	39	15	22



PF 3 39 212 143





**SYGEF Standard**  
**Diaphragm valve type DIASTAR 028**  
**Function FC (Fail safe to close)**  
**With backing flanges PP-V ANSI**

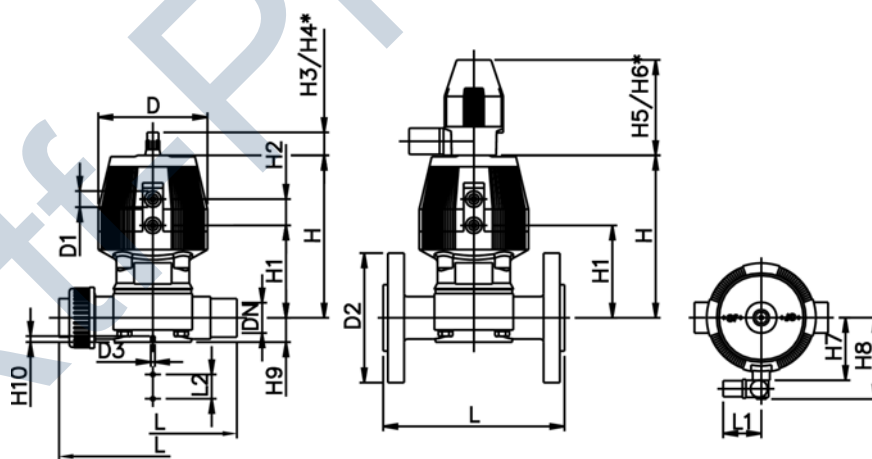
**Model:**

- Material: PVDF
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: **one side**

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
1/2	15	5	72	<b>199 028 361</b>	0.890
3/4	20	7	120	<b>199 028 362</b>	
1	25	7	238	<b>199 028 363</b>	1.370
1 1/4	32	7	341	<b>199 028 364</b>	
1 1/2	40	7	460	<b>199 028 365</b>	3.350
2	50	7	685	<b>199 028 366</b>	6.270

Inch	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
1/2	68	1/8	95	6	130	60	25	98	59	24	23	44	100	155
3/4	96	1/8	105	6	150	60	25	127	71	25	23	44	100	155
1	96	1/8	115	6	160	60	25	141	85	25	23	44	100	155
1 1/4	120	1/8	140	8	180	60	45	167	97	26	36	64	100	160
1 1/2	150	1/4	150	8	200	60	45	198	108	36	36	64	100	170
2	150	1/4	165	8	230	60	45	216	126	36	36	64	100	170

Inch	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
1/2	44	76	14	12	8
3/4	56	88	18	12	10
1	56	88	21	12	12
1 1/4	68	100	26	15	14
1 1/2	85	117	33	15	18
2	85	117	39	15	22



PF 3 39 212 143

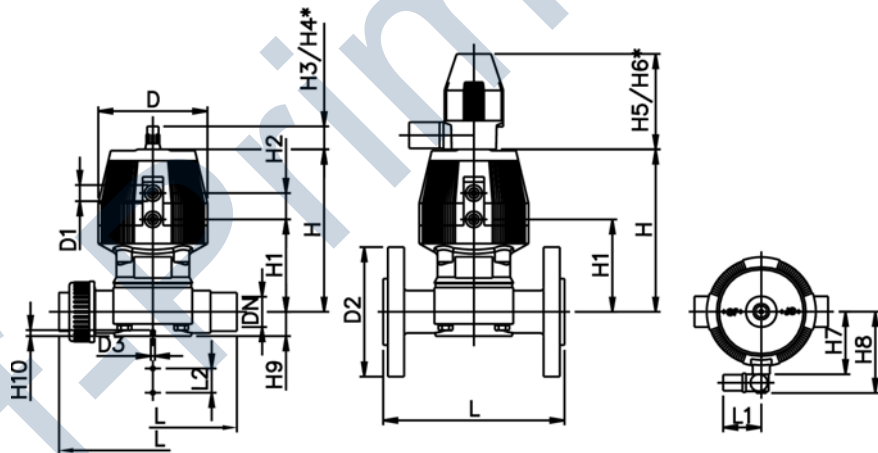


**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function FC (Fail safe to close)**  
**Unions with butt fusion spigots IR metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	199 027 491	0.836
25	20	10	120	199 027 492	0.836
32	25	10	238	199 027 493	1.505
40	32	10	341	199 027 494	2.604
50	40	10	460	199 027 495	2.604
63	50	10	685	199 027 496	2.604

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	96	1/8	6	196	60	25	125	69	25	23	44	100	155	56
25	96	1/8	6	220	60	25	127	71	25	23	44	100	155	56
32	120	1/8	6	234	60	25	163	93	26	36	64	100	155	68
40	150	1/4	8	258	60	45	196	106	36	36	64	100	160	85
50	180	1/4	8	284	60	45	227	119	37	36	64	100	170	101
63	180	1/4	8	320	60	45	241	133	37	36	64	100	170	101

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	86	14	12	8
25	88	18	12	10
32	100	21	12	12
40	117	26	15	14
50	133	33	15	18
63	133	39	15	22



PF 3 39 212 044

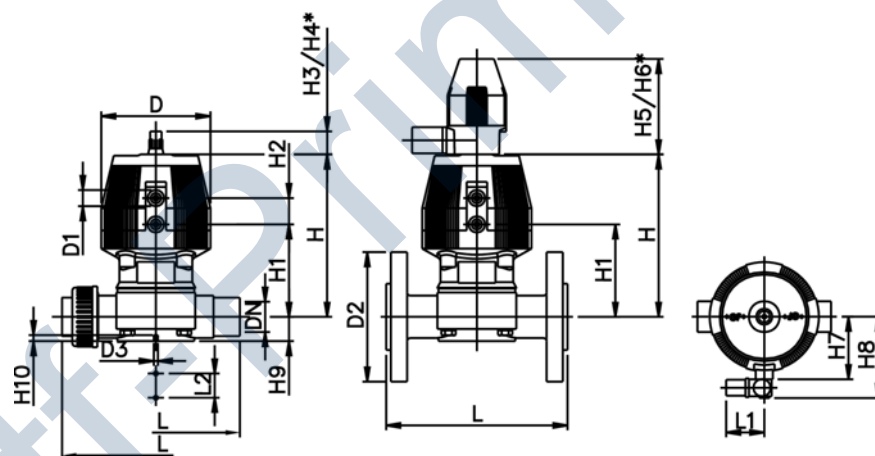


**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function FC (Fail safe to close)**  
**Unions with fusion sockets metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	<b>199 027 321</b>	0.836
25	20	10	120	<b>199 027 322</b>	0.836
32	25	10	238	<b>199 027 323</b>	2.400
40	32	10	341	<b>199 027 324</b>	3.500
50	40	10	460	<b>199 027 325</b>	2.604
63	50	10	685	<b>199 027 326</b>	2.604

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	96	1/8	6	128	60	25	125	69	25	23	44	100	155	56
25	96	1/8	6	150	60	25	127	71	25	23	44	100	155	56
32	120	1/8	6	162	60	25	163	93	26	36	64	100	155	68
40	150	1/4	8	184	60	45	196	106	36	36	64	100	160	85
50	180	1/4	8	210	60	45	227	119	37	36	64	100	170	101
63	180	1/4	8	248	60	45	241	133	37	36	64	100	170	101

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	86	14	12	8
25	88	18	12	10
32	100	21	12	12
40	117	26	15	14
50	133	33	15	18
63	133	39	15	22



PF 3 39 212 044

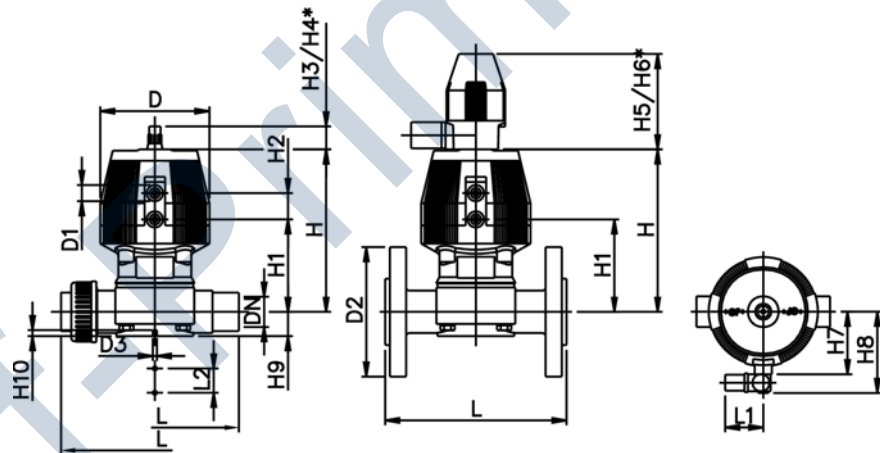


**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function FC (Fail safe to close)**  
**With butt fusion spigots IR metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	199 027 971	0.805
25	20	10	120	199 027 972	0.882
32	25	10	238	199 027 973	1.597
40	32	10	341	199 027 974	2.496
50	40	10	460	199 027 975	4.240
63	50	10	685	199 027 976	4.806

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	96	1/8	6	124	60	25	125	69	25	23	44	100	155	56
25	96	1/8	6	144	60	25	127	71	25	23	44	100	155	56
32	120	1/8	6	154	60	25	163	93	26	36	64	100	155	68
40	150	1/4	8	174	60	45	196	106	36	36	64	100	160	85
50	180	1/4	8	194	60	45	227	119	37	36	64	100	170	101
63	180	1/4	8	224	60	45	241	133	37	36	64	100	170	101

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	86	14	12	8
25	88	18	12	10
32	100	21	12	12
40	117	26	15	14
50	133	33	15	18
63	133	39	15	22



PF 3 39 212 044



**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function FC (Fail safe to close)**  
**With fusion spigots metric**

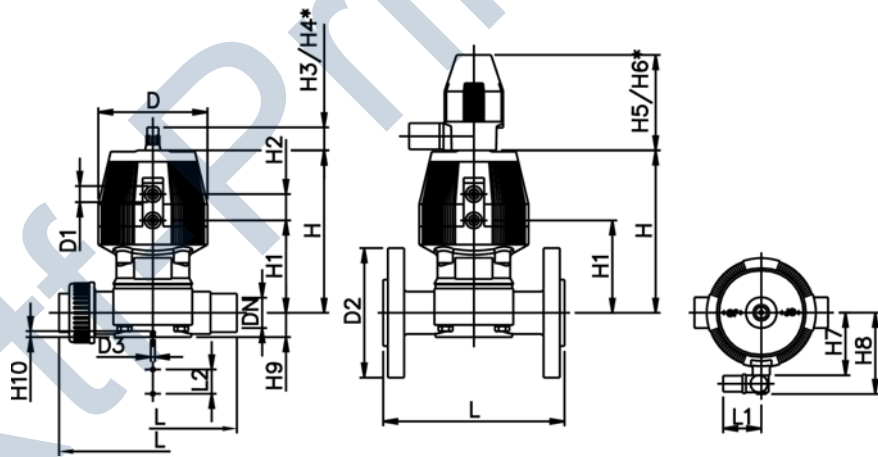
**Model:**

- Material: PVDF
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	<b>199 025 321</b>	0.805
25	20	10	120	<b>199 025 322</b>	0.882
32	25	10	238	<b>199 025 323</b>	1.597
40	32	10	341	<b>199 025 324</b>	2.496
50	40	10	460	<b>199 025 325</b>	4.240
63	50	10	685	<b>199 025 326</b>	4.806

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	96	3/8	6	124	60	25	125	69	25	23	44	100	155	56
25	96	3/8	6	144	60	25	127	71	25	23	44	100	155	56
32	120	1/2	6	154	60	25	163	93	26	36	64	100	155	68
40	150	1/2	8	174	60	45	196	106	36	36	64	100	160	85
50	180	1/2	8	194	60	45	227	119	37	36	64	100	170	101
63	180	1/2	8	224	60	45	241	133	37	36	64	100	170	101

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	86	14	12	8
25	88	18	12	10
32	100	21	12	12
40	117	26	15	14
50	133	33	15	18
63	133	39	15	22



PF 3 39 212 044



## SYGEF Standard Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With backing flanges PP-V metric

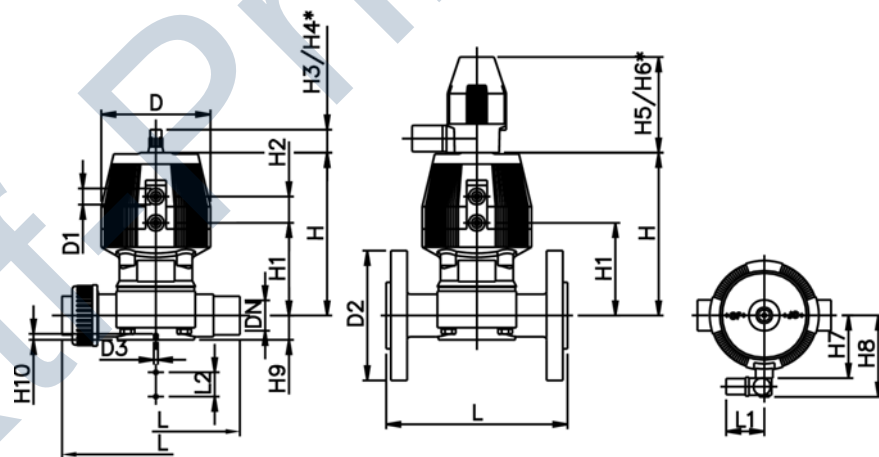
### Model:

- Material: PVDF
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	1/2	10	72	<b>199 025 351</b>	0.839
25	20	3/4	10	120	<b>199 025 352</b>	0.936
32	25	1	10	238	<b>199 025 353</b>	2.700
40	32	1 1/4	10	341	<b>199 025 354</b>	3.800
50	40	1 1/2	10	460	<b>199 025 355</b>	4.665
63	50	2	10	685	<b>199 025 356</b>	5.353

d [mm]	D [mm]	D1_G [inch]	D3 [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	96	1/8	6	95	130	60	25	125	69	25	23	44	100	155
25	96	1/8	6	105	150	60	25	127	71	25	23	44	100	155
32	120	1/8	6	115	160	60	25	163	93	26	36	64	100	155
40	150	1/4	8	140	180	60	45	196	106	36	36	64	100	160
50	180	1/4	8	150	200	60	45	227	119	37	36	64	100	170
63	180	1/4	8	165	230	60	45	241	133	37	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	56	86	14	12	8
25	56	88	18	12	10
32	68	100	21	12	12
40	85	117	26	15	14
50	101	133	33	15	18
63	101	133	39	15	22



PF 3 39 212 044



**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function FC (Fail safe to close)**  
**With fixed flanges PVDF metric**

**Model:**

- Material: PVDF
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: on one side

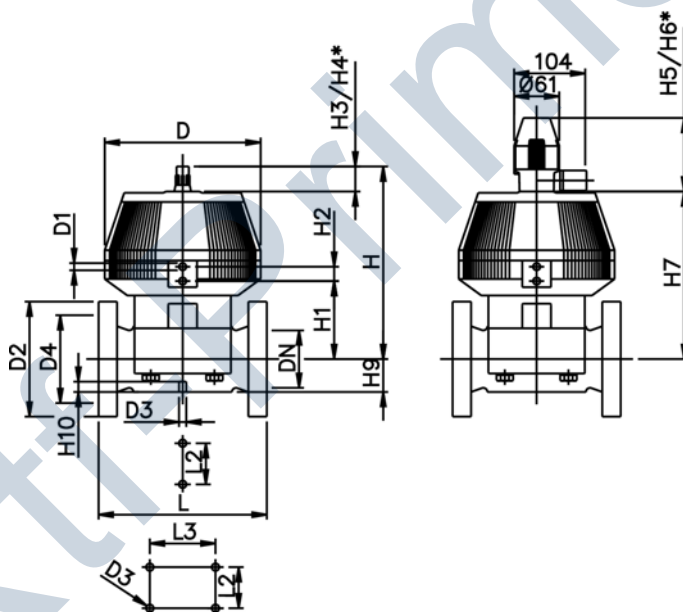
\* With backing flanges PP-V

\*\* 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]	PTFE/EPDM Code	kg
* 75	65	2 ½	10	992	<b>199 025 357</b>	13.600
** 90	80	3	10	1700	<b>199 025 358</b>	17.400
110	100	4	8	2700	<b>199 025 359</b>	24.700

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
* 75	280	¼	185	8	145	290	70	344	148	24	46	100	129	195
** 90	280	¼	200	12	160	310	120	348	150	24	46	100	129	195
110	335	¼	225	12	180	350	120	395	176	24	46	100	129	195

d [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 75	298	46	15
** 90	302	57	15
110	349	69	20



PF 3 39 212 044





## SYGEF Standard Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With backing flanges PP-V ANSI

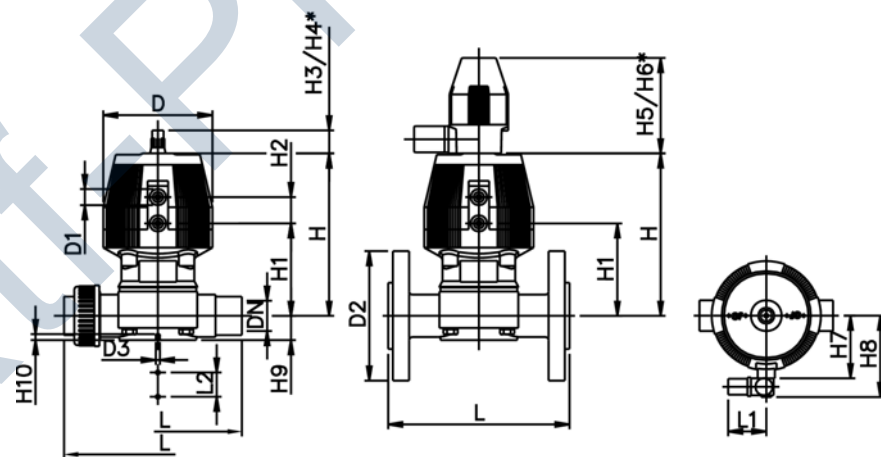
### Model:

- Material: PVDF
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: **both sides**

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
1/2	15	10	72	<b>199 025 601</b>	0.839
3/4	20	10	120	<b>199 025 602</b>	0.936
1	25	10	238	<b>199 025 603</b>	1.705
1 1/4	32	10	341	<b>199 025 604</b>	2.904
1 1/2	40	10	460	<b>199 025 605</b>	4.665
2	50	10	685	<b>199 025 606</b>	5.353

Inch	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
1/2	96	3/8	6	95	130	60	25	125	69	25	23	44	100	155
3/4	96	3/8	6	105	150	60	25	127	71	25	23	44	100	155
1	120	3/8	6	115	160	60	25	163	93	26	36	64	100	155
1 1/4	150	1/4	8	140	180	60	45	196	106	36	36	64	100	160
1 1/2	180	1/4	8	150	200	60	45	227	119	37	36	64	100	170
2	180	1/4	8	165	230	60	45	241	133	37	36	64	100	170

Inch	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
1/2	56	86	14	12	8
3/4	56	88	18	12	10
1	68	100	21	12	12
1 1/4	85	117	26	15	14
1 1/2	101	133	33	15	18
2	101	133	39	15	22



PF 3 39 212 044



**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function FC (Fail safe to close)**  
**With fixed flanges PVDF ANSI**

**Model:**

- Material: PVDF
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: on one side

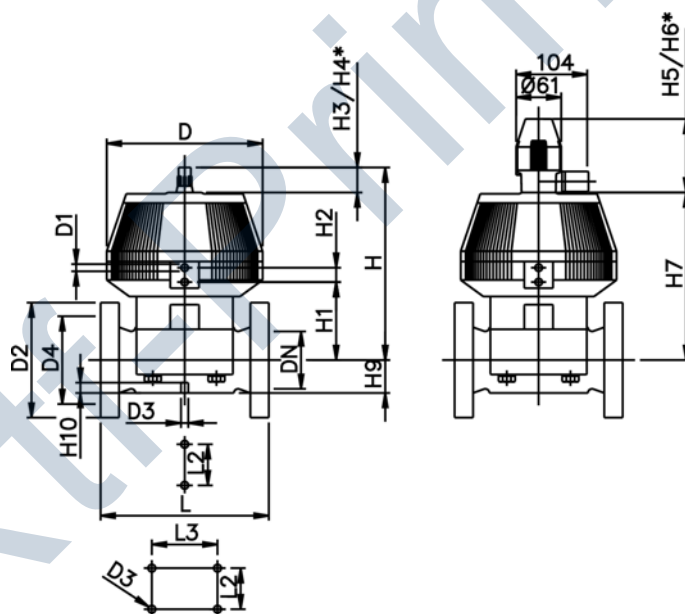
\* With backing flanges PP-V

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
* 2 1/2	65	10	992	<b>199 025 327</b>	14.200
** 3	80	10	1700	<b>199 025 358</b>	17.400
4	100	8	2700	<b>199 025 329</b>	26.500

Inch	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
* 2 1/2	280	1/4	185	8	145	290	70	344	148	24	46	100	129	195
** 3	280	1/4	200	12	160	310	120	348	150	24	46	100	129	195
4	335	1/4	225	12	180	350	120	395	176	24	46	100	129	195

Inch	H7 [mm]	H9 [mm]	H10 [mm]
* 2 1/2	298	46	15
** 3	302	57	15
4	349	69	20



PF 3 39 212 044

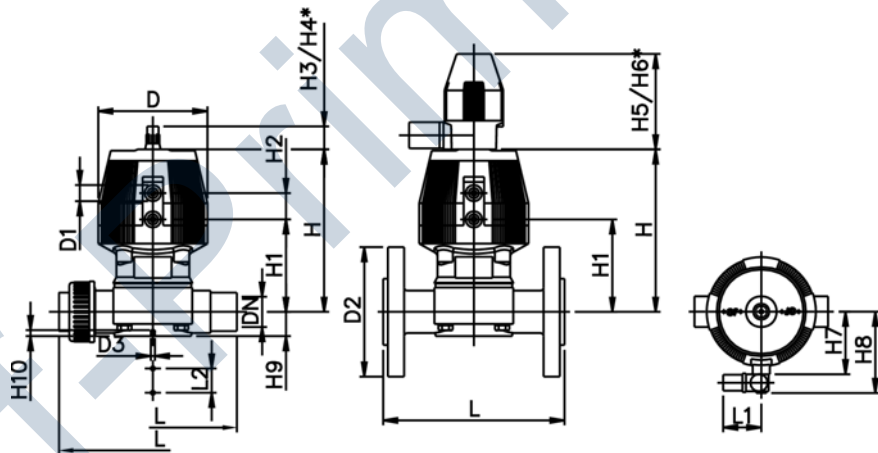


**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function FO (Fail safe to open)**  
**Unions with fusion sockets metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	199 027 331	0.624
25	20	10	120	199 027 332	0.950
32	25	10	238	199 027 333	1.360
40	32	10	341	199 027 334	1.580
50	40	10	460	199 027 335	2.910
63	50	10	685	199 027 336	5.310

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	128	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	150	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	162	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	184	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	210	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	248	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 045

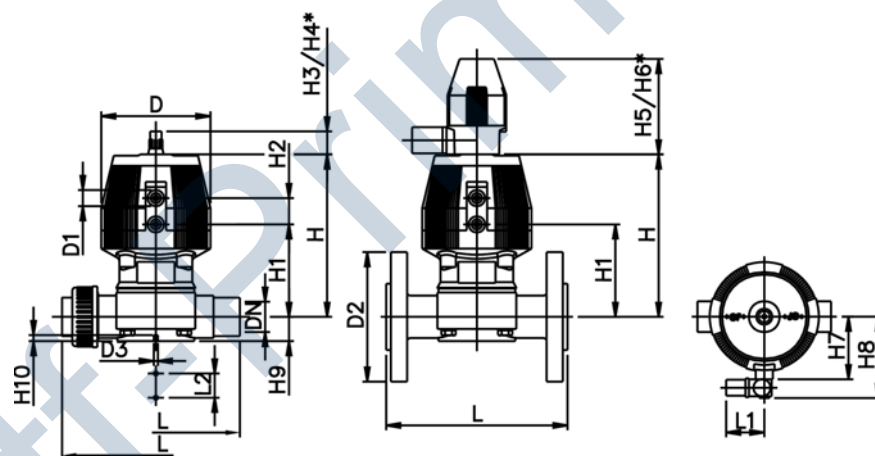


**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function FO (Fail safe to open)**  
**Unions with butt fusion spigots IR metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	<b>199 027 501</b>	0.836
25	20	10	120	<b>199 027 502</b>	0.836
32	25	10	238	<b>199 027 503</b>	0.624
40	32	10	341	<b>199 027 504</b>	2.604
50	40	10	460	<b>199 027 505</b>	4.165
63	50	10	685	<b>199 027 506</b>	4.553

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	196	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	220	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	234	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	258	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	284	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	320	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 045

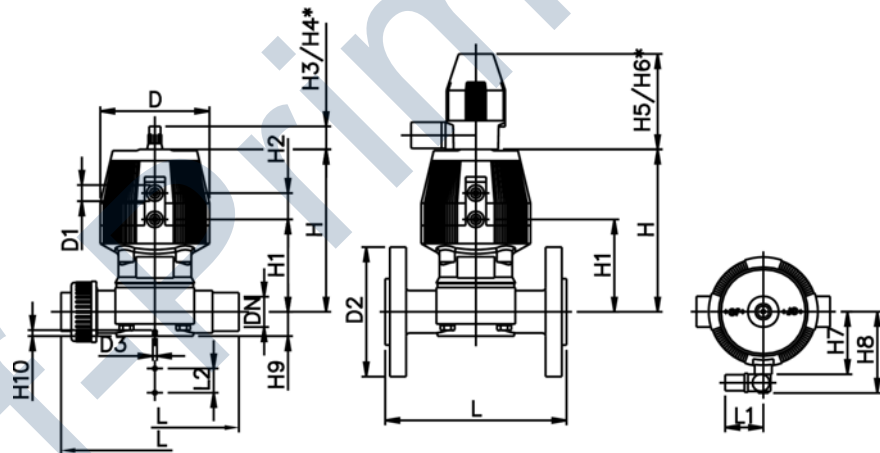


**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function FO (Fail safe to open)**  
**With butt fusion spigots IR metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	199 027 977	0.454
25	20	10	120	199 027 978	0.740
32	25	10	238	199 027 979	1.160
40	32	10	341	199 027 980	1.390
50	40	10	460	199 027 981	2.510
63	50	10	685	199 027 982	5.430

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 045



**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function FO (Fail safe to open)**  
**With fusion spigots metric**

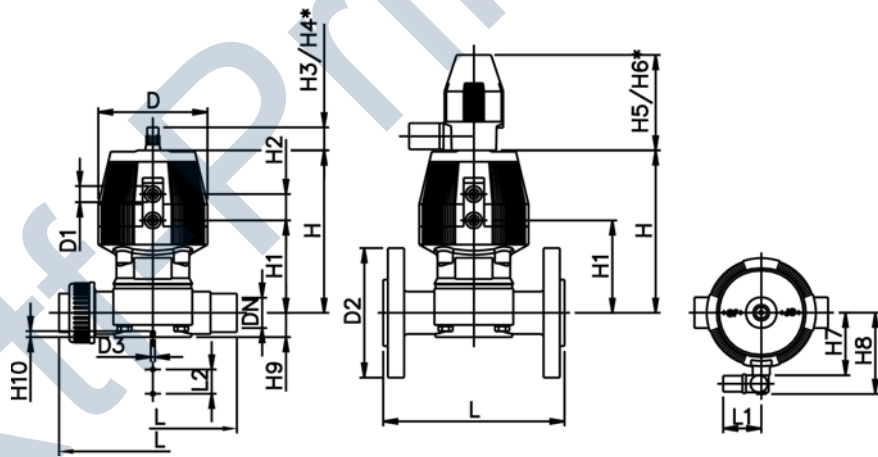
**Model:**

- Material: PVDF
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	<b>199 025 331</b>	0.454
25	20	10	120	<b>199 025 332</b>	0.740
32	25	10	238	<b>199 025 333</b>	1.160
40	32	10	341	<b>199 025 334</b>	1.390
50	40	10	460	<b>199 025 335</b>	2.510
63	50	10	685	<b>199 025 336</b>	5.430

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 045



**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function FO (Fail safe to open)**  
**With backing flanges PP-V metric**

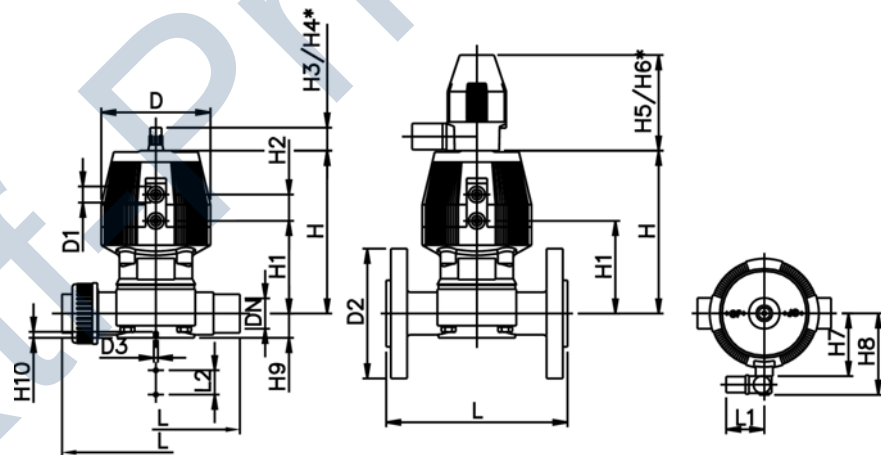
**Model:**

- Material: PVDF
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	1/2	10	72	<b>199 025 361</b>	0.824
25	20	3/4	10	120	<b>199 025 362</b>	1.090
32	25	1	10	238	<b>199 025 363</b>	1.610
40	32	1 1/4	10	341	<b>199 025 364</b>	1.950
50	40	1 1/2	10	460	<b>199 025 365</b>	3.010
63	50	2	10	685	<b>199 025 366</b>	5.510

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	68	1/8	95	6	130	60	25	98	59	24	23	44	100	155
25	96	1/8	105	6	150	60	25	127	71	25	23	44	100	155
32	96	1/8	115	6	160	60	25	141	85	25	23	44	100	155
40	120	1/8	140	8	180	60	45	167	97	26	36	64	100	160
50	150	1/4	150	8	200	60	45	198	108	36	36	64	100	170
63	150	1/4	165	8	230	60	45	216	126	36	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	44	76	14	12	8
25	56	88	18	12	10
32	56	88	21	12	12
40	68	100	26	15	14
50	85	117	33	15	18
63	85	117	39	15	22



PF 3 39 212 045



## SYGEF Standard Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With fixed flanges PVDF metric

### Model:

- Material: PVDF
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: on one side

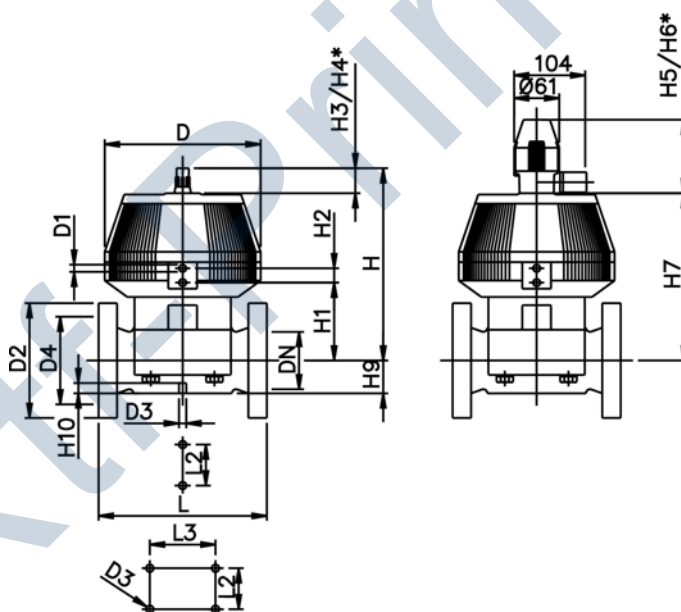
\* With backing flanges PP-V

\*\* 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]	PTFE/EPDM Code	kg
* 75	65	2 ½	10	992	<b>199 025 367</b>	13.600
** 90	80	3	10	1700	<b>199 025 368</b>	17.400
110	100	4	8	2700	<b>199 025 369</b>	24.700
** 160	150	6	6	6033	<b>199 025 370</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



PF 3 39 212 045





## SYGEF Standard Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With backing flanges PP-V ANSI

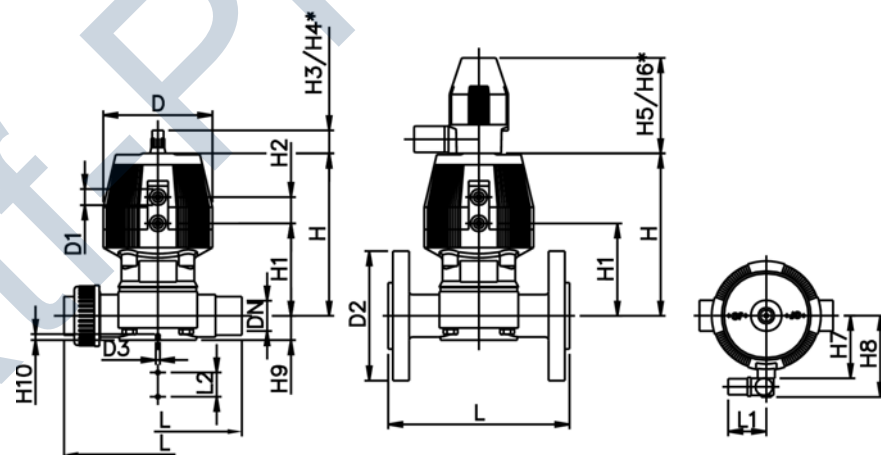
### Model:

- Material: PVDF
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: **both sides**

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
1/2	15	10	72	<b>199 025 611</b>	0.824
3/4	20	10	120	<b>199 025 612</b>	1.090
1	25	10	238	<b>199 025 613</b>	1.610
1 1/4	32	10	341	<b>199 025 614</b>	1.950
1 1/2	40	10	460	<b>199 025 615</b>	3.010
2	50	10	685	<b>199 025 616</b>	5.510

Inch	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
1/2	68	1/8	95	6	130	60	25	98	59	24	23	44	100	155
3/4	96	1/8	105	6	150	60	25	127	71	25	23	44	100	155
1	96	1/8	115	6	160	60	25	141	85	25	23	44	100	155
1 1/4	120	1/8	140	8	180	60	45	167	97	26	36	64	100	160
1 1/2	150	1/4	150	8	200	60	45	198	108	36	36	64	100	170
2	150	1/4	165	8	230	60	45	216	126	36	36	64	100	170

Inch	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
1/2	44	76	14	12	8
3/4	56	88	18	12	10
1	56	88	21	12	12
1 1/4	68	100	26	15	14
1 1/2	85	117	33	15	18
2	85	117	39	15	22



PF 3 39 212 045



## SYGEF Standard Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With fixed flanges PVDF ANSI

### Model:

- Material: PVDF
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: on one side

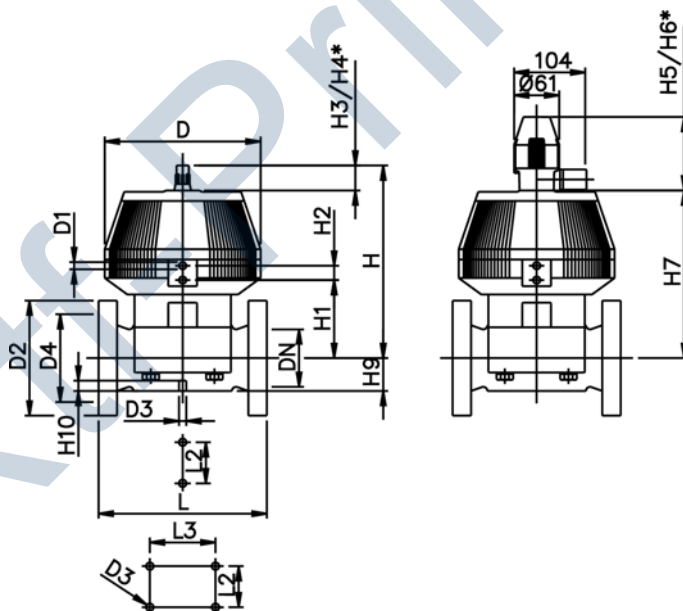
\* With backing flanges PP-V

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
* 2 1/2	65	10	992	<b>199 025 337</b>	12.200
** 3	80	10	1700	<b>199 025 368</b>	17.400
4	100	8	2700	<b>199 025 339</b>	23.400
** 6	150	6	6033	<b>199 025 370</b>	35.000

Inch	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]
* 2 1/2	280	1/4	185	8	145	290	70		344	148	24	46	100	129
** 3	280	1/4	200	12	160	310	120		348	150	24	46	100	129
4	335	1/4	225	12	180	350	120		395	176	24	46	100	129
** 6	335	1/4	285	12	240	480	100	200	455	237	24	46	100	129

Inch	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 2 1/2	195	298	46	15
** 3	195	302	57	15
4	195	349	69	20
** 6	195	409	108	20



PF 3 39 212 045

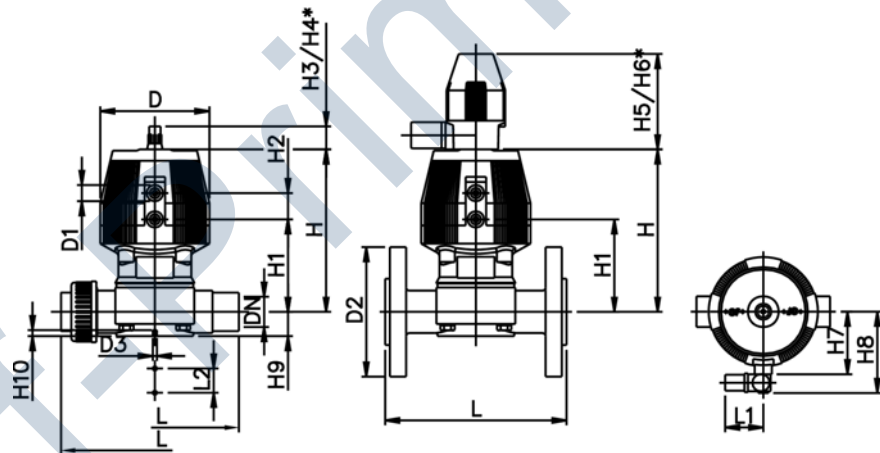


**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function DA (Double acting)**  
**Unions with butt fusion spigots IR metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	199 027 511	0.836
25	20	10	120	199 027 512	0.836
32	25	10	238	199 027 513	1.505
40	32	10	341	199 027 514	2.604
50	40	10	460	199 027 515	4.165
63	50	10	685	199 027 516	4.553

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	196	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	220	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	234	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	258	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	284	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	320	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 046

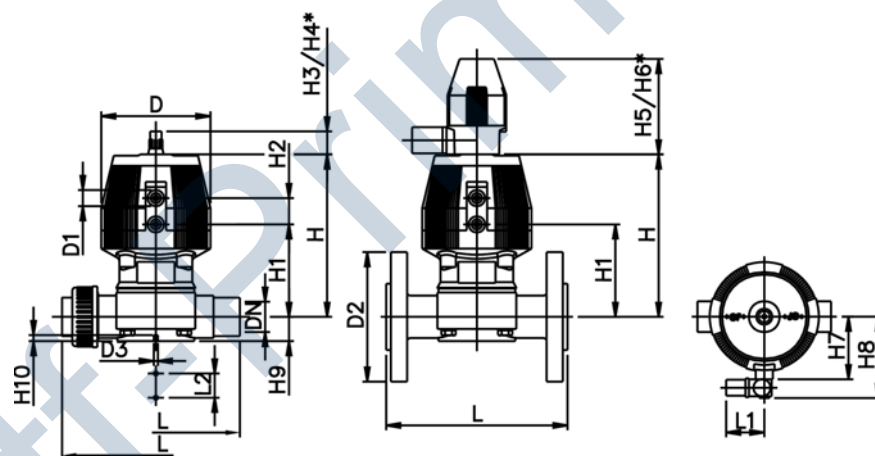


**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function DA (Double acting)**  
**Unions with fusion sockets metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	<b>199 027 341</b>	0.624
25	20	10	120	<b>199 027 342</b>	0.950
32	25	10	238	<b>199 027 343</b>	1.360
40	32	10	341	<b>199 027 344</b>	1.580
50	40	10	460	<b>199 027 345</b>	2.910
63	50	10	685	<b>199 027 346</b>	5.310

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	128	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	150	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	162	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	184	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	210	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	248	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 046

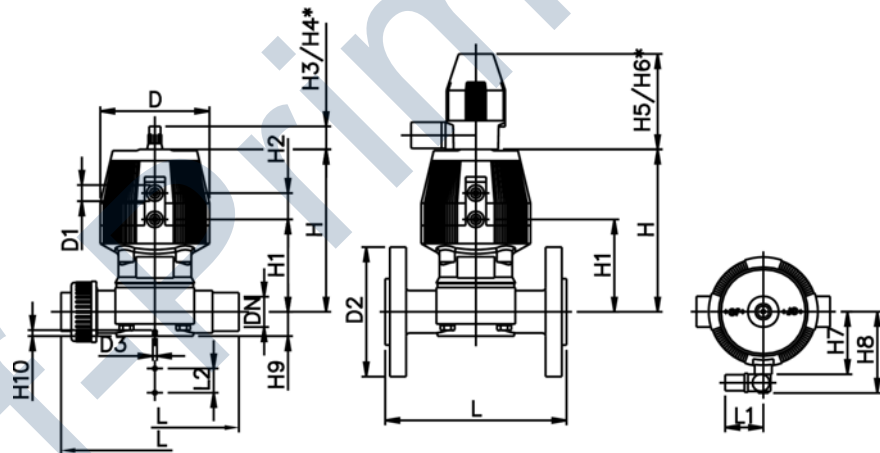


**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function DA (Double acting)**  
**With butt fusion spigots IR metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	199 027 983	0.454
25	20	10	120	199 027 984	0.740
32	25	10	238	199 027 985	1.160
40	32	10	341	199 027 986	1.390
50	40	10	460	199 027 987	2.510
63	50	10	685	199 027 988	5.430

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 046



## SYGEF Standard Diaphragm valve type DIASTAR 025 Function DA (Double acting) With fusion spigots metric

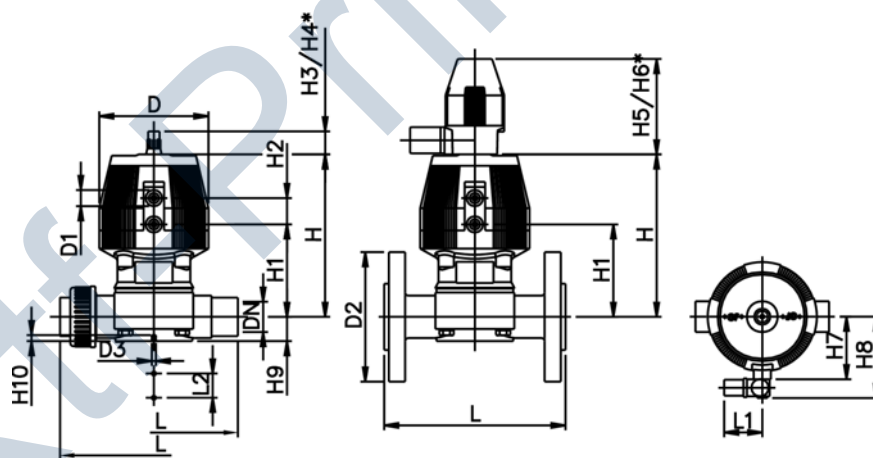
### Model:

- Material: PVDF
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	<b>199 025 341</b>	0.454
25	20	10	120	<b>199 025 342</b>	0.740
32	25	10	238	<b>199 025 343</b>	1.160
40	32	10	341	<b>199 025 344</b>	1.390
50	40	10	460	<b>199 025 345</b>	2.510
63	50	10	685	<b>199 025 346</b>	5.430

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 046



## SYGEF Standard Diaphragm valve type DIASTAR 025 Function DA (Double acting) With backing flanges PP-V metric

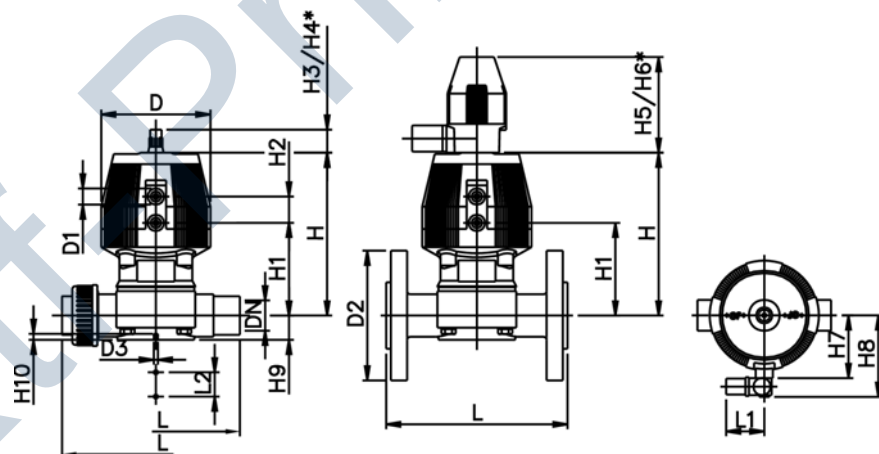
### Model:

- Material: PVDF
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	1/2	10	72	<b>199 025 371</b>	0.824
25	20	3/4	10	120	<b>199 025 372</b>	1.090
32	25	1	10	238	<b>199 025 373</b>	1.610
40	32	1 1/4	10	341	<b>199 025 374</b>	1.950
50	40	1 1/2	10	460	<b>199 025 375</b>	3.010
63	50	2	10	685	<b>199 025 376</b>	5.510

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	68	1/8	95	6	130	60	25	98	59	24	23	44	100	155
25	96	1/8	105	6	150	60	25	127	71	25	23	44	100	155
32	96	1/8	115	6	160	60	25	141	85	25	23	44	100	155
40	120	1/8	140	8	180	60	45	167	97	26	36	64	100	160
50	150	1/4	150	8	200	60	45	198	108	36	36	64	100	170
63	150	1/4	165	8	230	60	45	216	126	36	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	44	76	14	12	8
25	56	88	18	12	10
32	56	88	21	12	12
40	68	100	26	15	14
50	85	117	33	15	18
63	85	117	39	15	22



PF 3 39 212 046



**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function DA (Double acting)**  
**With fixed flanges PVDF metric**

**Model:**

- Material: PVDF
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: on one side

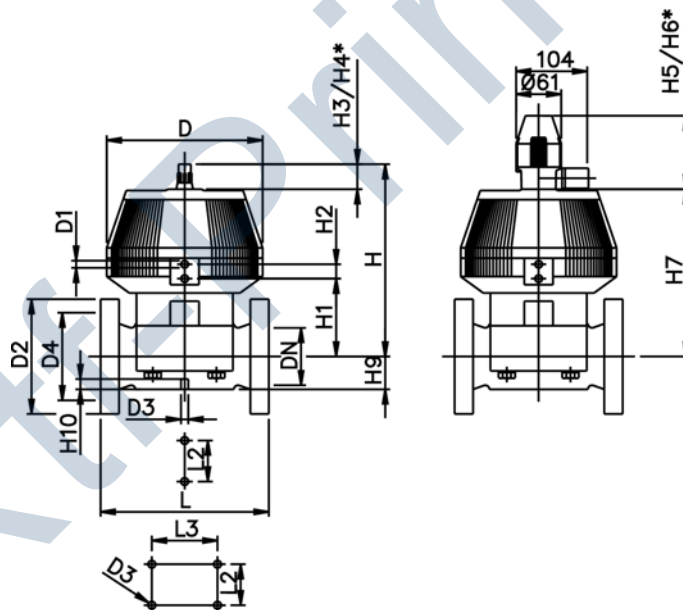
\* With backing flanges PP-V

\*\* 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]	PTFE/EPDM Code	kg
* 75	65	2 ½	10	992	<b>199 025 377</b>	13.600
** 90	80	3	10	1700	<b>199 025 378</b>	17.400
110	100	4	8	2700	<b>199 025 379</b>	24.700
** 160	150	6	6	6033	<b>199 025 380</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



PF 3 39 212 046





## SYGEF Standard Diaphragm valve type DIASTAR 025 Function DA (Double acting) With backing flanges PP-V ANSI

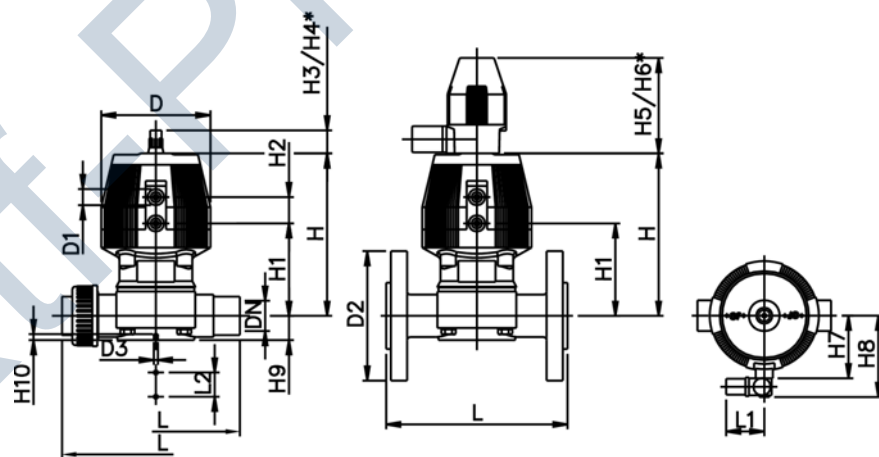
### Model:

- Material: PVDF
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: **both sides**

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
1/2	15	10	72	<b>199 025 621</b>	0.824
3/4	20	10	120	<b>199 025 622</b>	1.090
1	25	10	238	<b>199 025 623</b>	1.610
1 1/4	32	10	341	<b>199 025 624</b>	1.950
1 1/2	40	10	460	<b>199 025 625</b>	3.010
2	50	10	685	<b>199 025 626</b>	5.510

Inch	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
1/2	68	1/8	95	6	130	60	25	98	59	24	23	44	100	155
3/4	96	1/8	105	6	150	60	25	127	71	25	23	44	100	155
1	96	1/8	115	6	160	60	25	141	85	25	23	44	100	155
1 1/4	120	1/8	140	8	180	60	45	167	97	26	36	64	100	160
1 1/2	150	1/4	150	8	200	60	45	198	108	36	36	64	100	170
2	150	1/4	165	8	230	60	45	216	126	36	36	64	100	170

Inch	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
1/2	44	76	14	12	8
3/4	56	88	18	12	10
1	56	88	21	12	12
1 1/4	68	100	26	15	14
1 1/2	85	117	33	15	18
2	85	117	39	15	22



PF 3 39 212 046



**SYGEF Standard**  
**Diaphragm valve type DIASTAR 025**  
**Function DA (Double acting)**  
**With fixed flanges PVDF ANSI**

**Model:**

- Material: PVDF
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: on one side

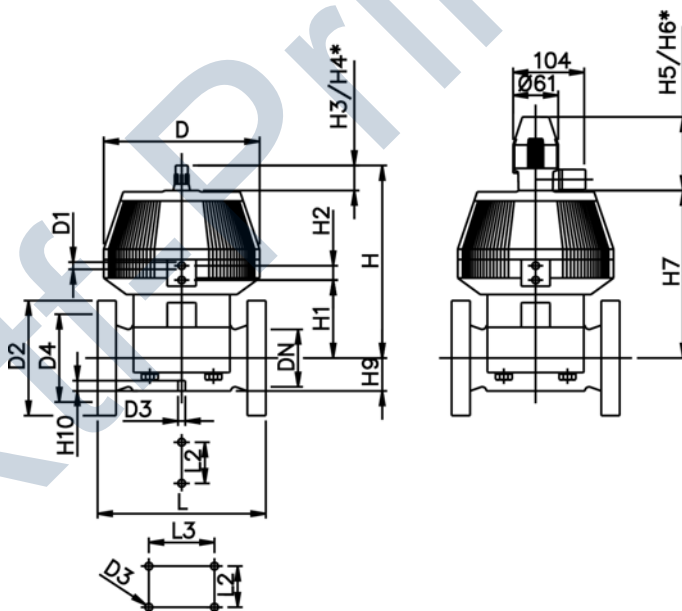
\* With backing flanges PP-V

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
* 2 1/2	65	10	992	<b>199 025 347</b>	13.000
** 3	80	10	1700	<b>199 025 378</b>	17.400
4	100	8	2700	<b>199 025 349</b>	24.100
** 6	150	6	6033	<b>199 025 380</b>	35.000

Inch	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]
* 2 1/2	280	1/4	185	8	145	290	70		344	148	24	46	100	129
** 3	280	1/4	200	12	160	310	120		348	150	24	46	100	129
4	335	1/4	225	12	180	350	120		395	176	24	46	100	129
** 6	335	1/4	285	12	240	480	100	200	455	237	24	46	100	129

Inch	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 2 1/2	195	298	46	15
** 3	195	302	57	15
4	195	349	69	20
** 6	195	409	108	20



PF 3 39 212 046

# Butterfly valves electric

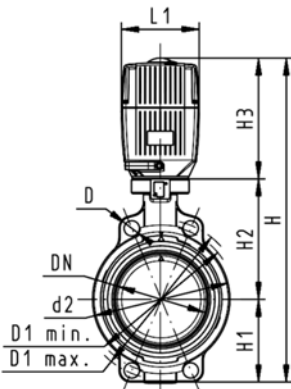
## SYGEF Standard Butterfly valve type 140 100-230V Without manual override



### Model:

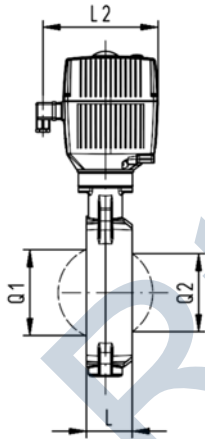
- Material: PVDF
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Model with PTFE seal in DN250 and DN300 available from June 2009



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>199 140 582</b>	4.218
75	65	2 1/2	10	2200	<b>199 140 583</b>	4.330
90	80	3	10	3000	<b>199 140 584</b>	4.510
110	100	4	10	6500	<b>199 140 585</b>	5.162
140	125	5	10	11500	<b>199 140 586</b>	5.757
160	150	6	10	16600	<b>199 140 587</b>	6.977
225	200	8	10	39600	<b>199 140 588</b>	13.638

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



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

PF 3 39 643 039

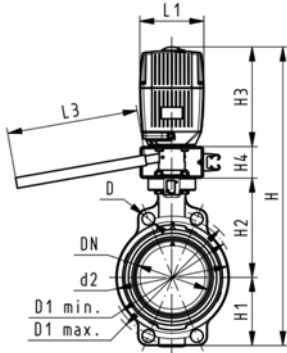


## SYGEF Standard Butterfly valve type 140 100-230V With manual override

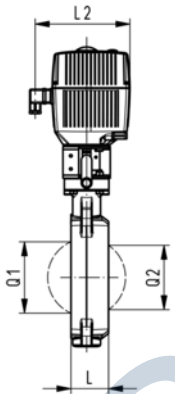
### Model:

- Material: PVDF
- 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 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]	FPM Code	kg
63	50	2	10	1470	<b>199 140 562</b>	5.718
75	65	2 ½	10	2200	<b>199 140 563</b>	5.830
90	80	3	10	3000	<b>199 140 564</b>	6.010
110	100	4	10	6500	<b>199 140 565</b>	6.662
140	125	5	10	11500	<b>199 140 566</b>	7.257
160	150	6	10	16600	<b>199 140 567</b>	8.477
225	200	8	10	39600	<b>199 140 568</b>	15.138



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

PF 3 39 643 039

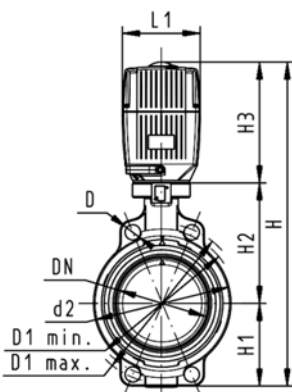


## SYGEF Standard Butterfly valve type 140 24V Without manual override

### Model:

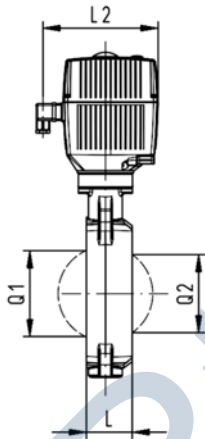
- Material: PVDF
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Model with PTFE seal in DN250 and DN300 available from June 2009



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>199 140 622</b>	4.218
75	65	2 ½	10	2200	<b>199 140 623</b>	4.330
90	80	3	10	3000	<b>199 140 624</b>	4.510
110	100	4	10	6500	<b>199 140 625</b>	5.162
140	125	5	10	11500	<b>199 140 626</b>	5.757
160	150	6	10	16600	<b>199 140 627</b>	6.977
225	200	8	10	39600	<b>199 140 628</b>	13.638

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



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

PF 3 39 643 039

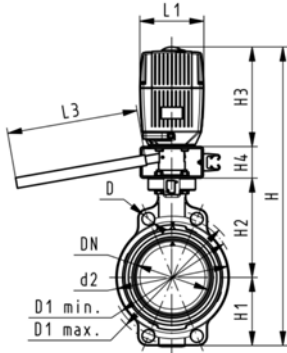


## SYGEF Standard Butterfly valve type 140 24V With manual override

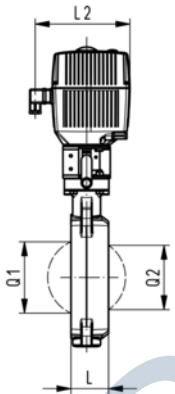
### Model:

- Material: PVDF
- 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]	FPM Code	kg
63	50	2	10	1470	<b>199 140 602</b>	5.718
75	65	2 ½	10	2200	<b>199 140 603</b>	5.830
90	80	3	10	3000	<b>199 140 604</b>	6.010
110	100	4	10	6500	<b>199 140 605</b>	6.662
140	125	5	10	11500	<b>199 140 606</b>	7.257
160	150	6	10	16600	<b>199 140 607</b>	8.477
225	200	8	10	39600	<b>199 140 608</b>	15.138



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

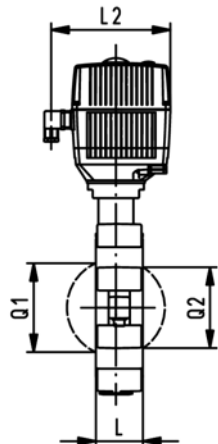
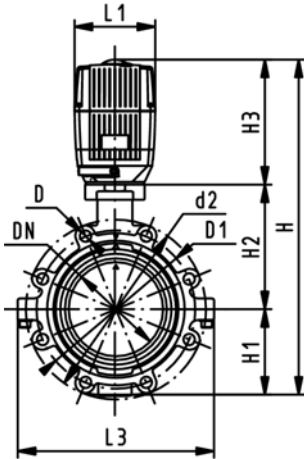
PF 3 39 643 039



## SYGEF Standard Lugstyle butterfly valve type 141 100-230V Without manual override

### Model:

- Material: PVDF
- 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



PF 3 39 643 040

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>199 141 582</b>	6.308
75	65	2 1/2	10	2200	<b>199 141 583</b>	6.671
90	80	3	10	3000	<b>199 141 584</b>	7.728
110	100	4	10	6500	<b>199 141 585</b>	9.260
140	125	5	10	11500	<b>199 141 586</b>	11.241
160	150	6	10	16600	<b>199 141 587</b>	13.460
225	200	8	10	39600	<b>199 141 588</b>	23.614

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

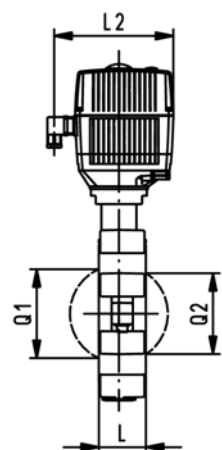
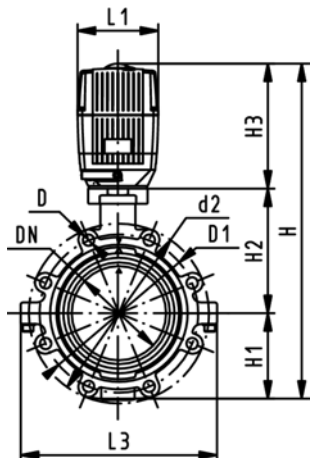




## SYGEF Standard Lugstyle butterfly valve type 141 24V Without manual override

### Model:

- Material: PVDF
- 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]	FPM Code	kg
63	50	2	10	1470	<b>199 141 622</b>	6.308
75	65	2 ½	10	2200	<b>199 141 623</b>	6.671
90	80	3	10	3000	<b>199 141 624</b>	7.728
110	100	4	10	6500	<b>199 141 625</b>	9.260
140	125	5	10	11500	<b>199 141 626</b>	11.241
160	150	6	10	16600	<b>199 141 627</b>	13.460
225	200	8	10	39600	<b>199 141 628</b>	23.614

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

PF 3 39 643 040

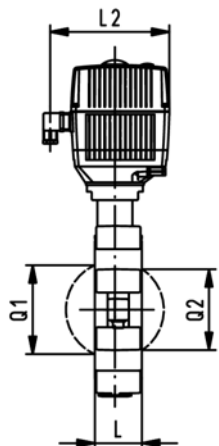
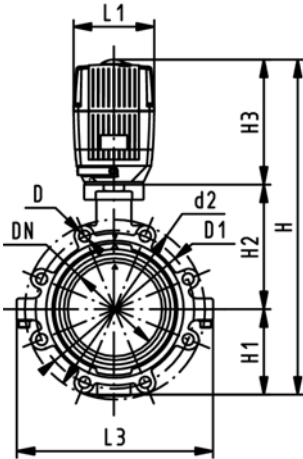




## SYGEF Standard Lugstyle butterfly valve type 142 100-230V ANSI Without manual override

### Model:

- Material: PVDF
- 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



PF 3 39 643 040

Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
2	50	63	10	1470	<b>199 142 582</b>	6.308
2 1/2	65	75	10	2200	<b>199 142 583</b>	6.671
3	80	90	10	3000	<b>199 142 584</b>	7.099
4	100	110	10	6500	<b>199 142 585</b>	9.260
5	125	140	10	11500	<b>199 142 586</b>	11.241
6	150	160	10	16600	<b>199 142 587</b>	13.460
8	200	225	10	39600	<b>199 142 588</b>	23.614

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]	Q1 [mm]
2	EA-31	UNC 5/8	121	150	399	77	134	188	45	122	180	150	40
2 1/2	EA-31	UNC 5/8	140	170	411	83	140	188	46	122	180	160	54
3	EA-31	UNC 5/8	153	177	423	89	146	188	49	122	180	175	67
4	EA-31	UNC 5/8	191	216	459	104	167	188	56	122	180	244	88
5	EA-31	UNC 3/4	216	246	486	117	181	188	64	122	180	272	113
6	EA-31	UNC 3/4	242	273	507	130	189	188	72	122	180	297	139
8	EA-42	UNC 3/4	299	334	576	158	210	208	73	122	180	360	178

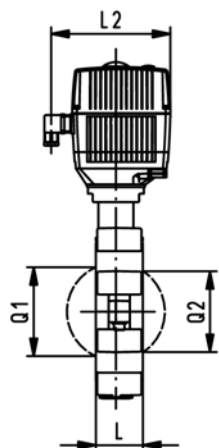
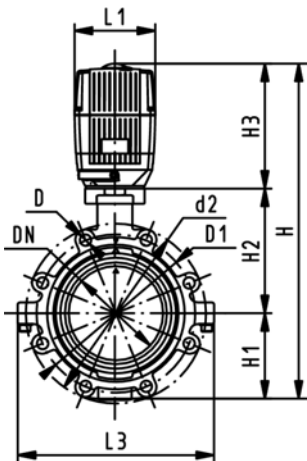
Inch	Q2 [mm]
2	
2 1/2	35
3	50
4	74
5	97
6	123
8	169



## SYGEF Standard Lugstyle butterfly valve type 142 24V ANSI Without manual override

### Model:

- Material: PVDF
- 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



PF 3 39 643 040

Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
2	50	63	10	1470	<b>199 142 622</b>	6.308
2 ½	65	75	10	2200	<b>199 142 623</b>	6.671
3	80	90	10	3000	<b>199 142 624</b>	7.099
4	100	110	10	6500	<b>199 142 625</b>	9.260
5	125	140	10	11500	<b>199 142 626</b>	11.241
6	150	160	10	16600	<b>199 142 627</b>	13.460
8	200	225	10	39600	<b>199 142 628</b>	23.614

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]	Q1 [mm]
2	EA-31	UNC 5/8	121	150	399	77	134	188	45	122	180	150	40
2 ½	EA-31	UNC 5/8	140	170	411	83	140	188	46	122	180	160	54
3	EA-31	UNC 5/8	153	177	423	89	146	188	49	122	180	175	67
4	EA-31	UNC 5/8	191	216	459	104	167	188	56	122	180	244	88
5	EA-31	UNC 3/4	216	246	486	117	181	188	64	122	180	272	113
6	EA-31	UNC 3/4	242	273	507	130	189	188	72	122	180	297	139
8	EA-42	UNC 3/4	299	334	576	158	210	208	73	122	180	360	178

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

# Butterfly valves pneumatic

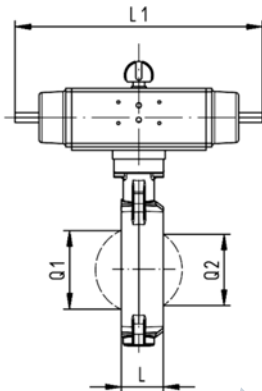
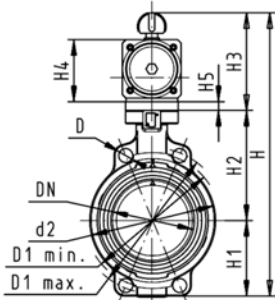
## SYGEF Standard Butterfly valve type 240 FC (Fail safe to close) Without manual override



### Model:

- Material: PVDF
- 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°<

Model with PTFE seal in DN250 and DN300 available from June 2009



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>199 240 462</b>	3.258
75	65	2 1/2	10	2200	<b>199 240 463</b>	3.370
90	80	3	10	3000	<b>199 240 464</b>	3.550
110	100	4	10	6500	<b>199 240 465</b>	5.400
140	125	5	10	11500	<b>199 240 466</b>	6.997
160	150	6	10	16600	<b>199 240 467</b>	10.538
225	200	8	10	39600	<b>199 240 468</b>	15.138

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		56	370
140	PA-45 FC	23	210.0	215.9	187	436	117	181	139	96		64	411
160	PA-50 FC	24	241.3	241.3	215	468	130	189	149	106		72	423
225	PA-55 FC	23	290.0	295.0	267	529	158	210	161	118		73	452

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

PF 3 39 644 039

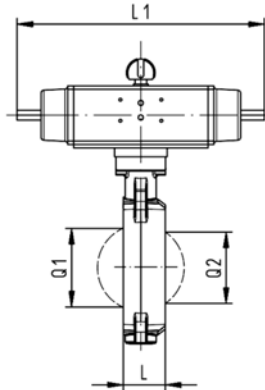
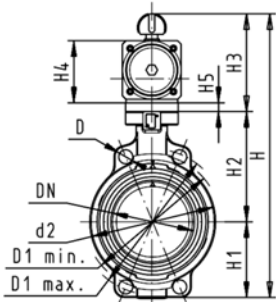


## SYGEF Standard Butterfly valve type 240 FO (Fail safe to open) Without manual override

### Model:

- Material: PVDF
- 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°<

Model with PTFE seal in DN250 and DN300 available from June 2009



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>199 240 482</b>	3.258
75	65	2 ½	10	2200	<b>199 240 483</b>	3.370
90	80	3	10	3000	<b>199 240 484</b>	3.550
110	100	4	10	6500	<b>199 240 485</b>	5.400
140	125	5	10	11500	<b>199 240 486</b>	6.997
160	150	6	10	16600	<b>199 240 487</b>	10.538
225	200	8	10	39600	<b>199 240 488</b>	15.138

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

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

PF 3 39 644 039

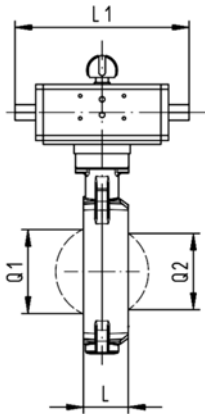
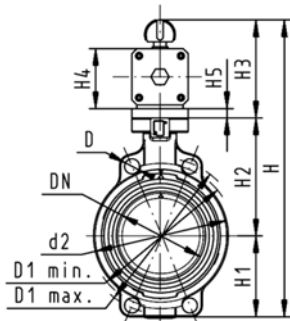


## SYGEF Standard Butterfly valve type 240 DA (Double acting) Without manual override

### Model:

- Material: PVDF
- 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°<

Model with PTFE seal in DN250 and DN300 available from June 2009



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>199 240 502</b>	2.108
75	65	2 ½	10	2200	<b>199 240 503</b>	2.220
90	80	3	10	3000	<b>199 240 504</b>	2.881
110	100	4	10	6500	<b>199 240 505</b>	3.652
140	125	5	10	11500	<b>199 240 506</b>	4.247
160	150	6	10	16600	<b>199 240 507</b>	7.017
225	200	8	10	39600	<b>199 240 508</b>	9.138

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

d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	55	40	
75	55	54	35
90	60	67	50
110	65	88	74
140	72	113	97
160	80	139	123
225	90	178	169

PF 3 39 644 039

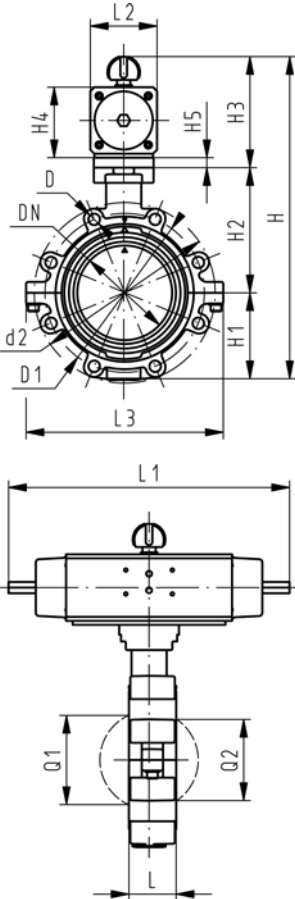


## SYGEF Standard Lugstyle butterfly valve type 241 FC (Fail safe to close) Without manual override

### Model:

- Material: PVDF
- 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°<

Model with PTFE seal in DN50 - DN80 on request



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>199 241 462</b>	5.348
75	65	2 ½	10	2200	<b>199 241 463</b>	5.711
90	80	3	10	3000	<b>199 241 464</b>	6.768
110	100	4	10	6500	<b>199 241 465</b>	9.498
140	125	5	10	11500	<b>199 241 466</b>	12.481
160	150	6	10	16600	<b>199 241 467</b>	17.021
225	200	8	10	39600	<b>199 241 468</b>	25.114

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

PF 3 39 644 040

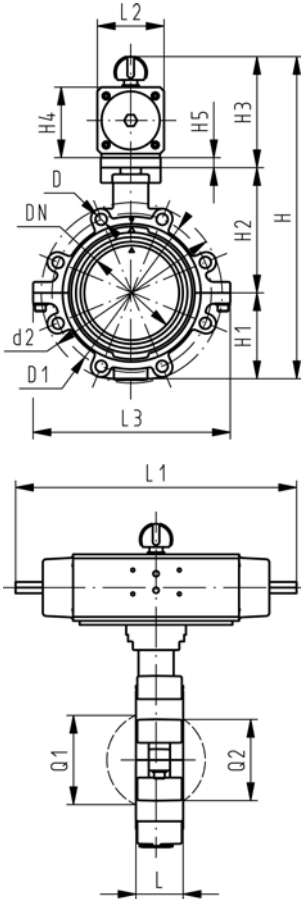


## SYGEF Standard Lugstyle butterfly valve type 241 FO (Fail safe to open) Without manual override

### Model:

- Material: PVDF
- 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°<

Model with PTFE seal in DN50 - DN80 on request



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>199 241 482</b>	5.348
75	65	2 1/2	10	2200	<b>199 241 483</b>	5.711
90	80	3	10	3000	<b>199 241 484</b>	6.768
110	100	4	10	6500	<b>199 241 485</b>	9.498
140	125	5	10	11500	<b>199 241 486</b>	12.481
160	150	6	10	16600	<b>199 241 487</b>	17.021
225	200	8	10	39600	<b>199 241 488</b>	25.114

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

PF 3 39 644 040



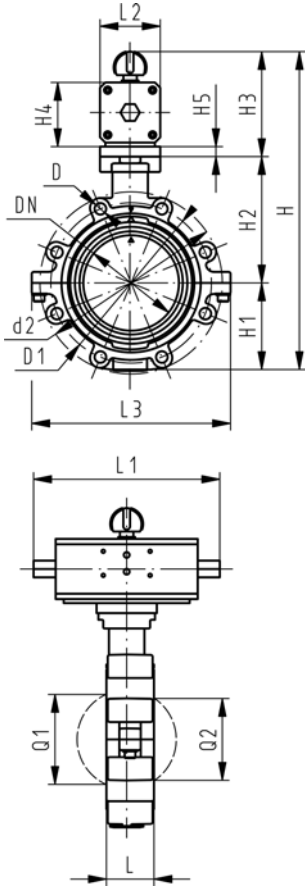


## SYGEF Standard Lugstyle butterfly valve type 241 DA (Double acting) Without manual override

### Model:

- Material: PVDF
- 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°<

Model with PTFE seal in DN50 - DN80 on request



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
63	50	2	10	1470	<b>199 241 502</b>	4.198
75	65	2 ½	10	2200	<b>199 241 503</b>	4.561
90	80	3	10	3000	<b>199 241 504</b>	6.099
110	100	4	10	6500	<b>199 241 505</b>	7.750
140	125	5	10	11500	<b>199 241 506</b>	9.731
160	150	6	10	16600	<b>199 241 507</b>	13.500
225	200	8	10	39600	<b>199 241 508</b>	19.114

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]	L3 [mm]
63	PA-35 DA	M16	125	150	318	77	134	107	60	15	45	177	55	150
75	PA-35 DA	M16	145	170	330	83	140	107	60	15	46	177	55	160
90	PA-40 DA	M16	160	184	348	89	146	113	66	15	49	190	60	205
110	PA-45 DA	M16	180	216	373	104	167	102	71	15	56	235	65	244
140	PA-45 DA	M16	210	246	409	117	181	111	78	15	64	235	72	272
160	PA-55 DA	M20	240	273	448	130	189	129	86	15	72	279	80	297
225	PA-55 DA	M20	295	334	507	158	210	139	96	15	73	279	90	360

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

PF 3 39 644 040



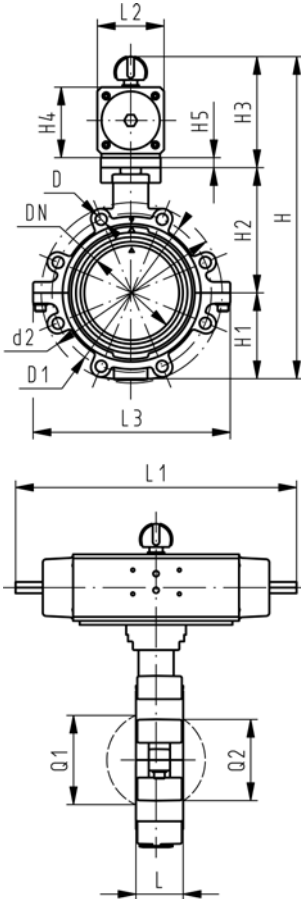


## SYGEF Standard Lugstyle butterfly valve type 242 ANSI FC (Fail safe to close) Without manual override

### Model:

- Material: PVDF
- 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°<

Model with PTFE seal in DN50 - DN80 on request



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
2	50	63	10	1470	<b>199 242 462</b>	5.348
2 ½	65	75	10	2200	<b>199 242 463</b>	5.711
3	80	90	10	3000	<b>199 242 464</b>	6.139
4	100	110	10	6500	<b>199 242 465</b>	9.498
5	125	140	10	11500	<b>199 242 466</b>	12.481
6	150	160	10	16600	<b>199 242 467</b>	17.021
8	200	225	10	39600	<b>199 242 468</b>	25.114

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	15	56	370	80
5	PA-45 FC	UNC 3/4	216	246	437	117	181	139	96	15	64	411	90
6	PA-50 FC	UNC 3/4	242	273	468	130	189	149	106	15	72	423	100
8	PA-55 FC	UNC 3/4	299	334	529	158	210	161	118	15	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

PF 3 39 644 040

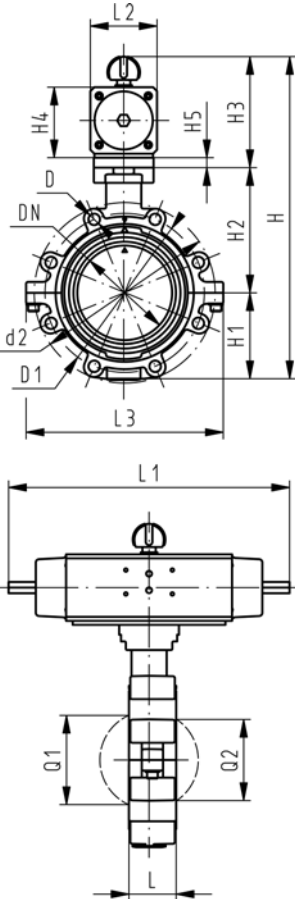


## SYGEF Standard Lugstyle butterfly valve type 242 ANSI FO (Fail safe to open) Without manual override

### Model:

- Material: PVDF
- 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°<

Model with PTFE seal in DN50 - DN80 on request



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
2	50	63	10	1470	<b>199 242 482</b>	5.348
2 ½	65	75	10	2200	<b>199 242 483</b>	5.711
3	80	90	10	3000	<b>199 242 484</b>	6.139
4	100	110	10	6500	<b>199 242 485</b>	9.498
5	125	140	10	11500	<b>199 242 486</b>	12.481
6	150	160	10	16600	<b>199 242 487</b>	17.021
8	200	225	10	39600	<b>199 242 488</b>	25.114

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 ½	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 ½	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169

PF 3 39 644 040

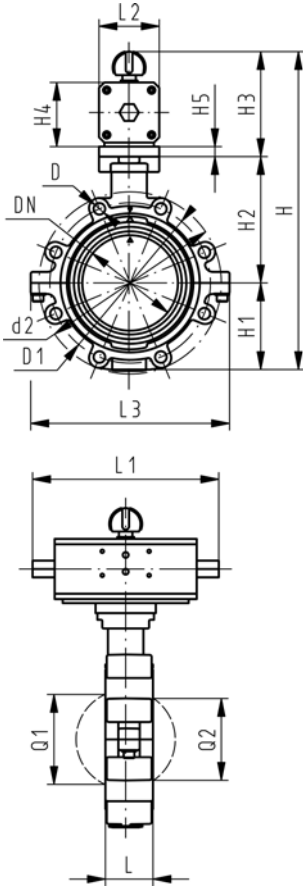


# SYGEF Standard Lugstyle butterfly valve type 242 ANSI DA (Double acting) Without manual override

### Model:

- Material: PVDF
- 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°<

Model with PTFE seal in DN50 - DN80 on request



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
2	50	63	10	1470	<b>199 242 502</b>	4.198
2 ½	65	75	10	2200	<b>199 242 503</b>	4.561
3	80	90	10	3000	<b>199 242 504</b>	5.470
4	100	110	10	6500	<b>199 242 505</b>	7.750
5	125	140	10	11500	<b>199 242 506</b>	9.731
6	150	160	10	16600	<b>199 242 507</b>	13.500
8	200	225	10	39600	<b>199 242 508</b>	19.114

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

PF 3 39 644 040

# Solenoid valves

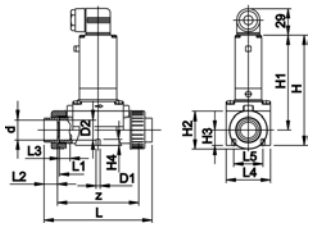
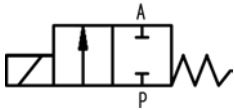
## SYGEF Standard

### Solenoid valve type 165

Nominal voltage 230V 50 Hz

Function A straight-through valve 2/2 ways

With fusion sockets metric



#### Model:

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

d [mm]	DN [mm]	PN [bar]	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
20	15	0.5 - 6.0	83	199 165 412	199 165 402	0.700
25	20	0.5 - 6.0	100	199 165 413	199 165 403	0.700
32	25	0.5 - 6.0	233	199 165 414	199 165 404	1.200
40	32	0.5 - 6.0	500	199 165 415	199 165 405	1.300
50	40	0.5 - 6.0	500	199 165 416	199 165 406	2.200
63	50	0.5 - 6.0	600	199 165 417	199 165 407	2.200

d [mm]	D2 [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
20		120	147	109	16		63	40	148	122	53	22	8
25	25	120	151	109	18	18	62	40	148	122	53	22	8
32		150	185	139	20		85	45	175	137	76	31	15
40	40	150	189	139	22	23	85	45	175	137	76	31	15
50		200	245	189	25		115	45	212	160	105	42	15
63	63	200	253	189	29	33	115	45	212	160	105	42	15

PF 3 39 215 112

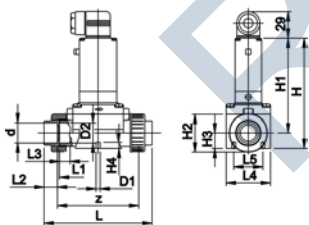
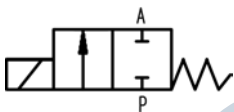
## SYGEF Standard

### Solenoid valve type 165

Nominal voltage 115V 50 Hz

Function A straight-through valve 2/2 ways

With fusion sockets metric



#### Model:

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

d [mm]	DN [mm]	PN [bar]	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
20	15	0.5 - 6.0	83	199 165 442	199 165 432	0.700
25	20	0.5 - 6.0	100	199 165 443	199 165 433	0.700
32	25	0.5 - 6.0	233	199 165 444	199 165 434	1.200
40	32	0.5 - 6.0	267	199 165 445	199 165 435	1.200
50	40	0.5 - 6.0	500	199 165 446	199 165 436	2.200
63	50	0.5 - 6.0	600	199 165 447	199 165 437	2.200

d [mm]	D2 [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
20		120	147	109	16		63	40	148	122	53	22	8
25	25	120	151	109	18	18	62	40	148	122	53	22	8
32		150	185	139	20		85	45	175	137	76	31	15
40	40	150	189	139	22	23	85	45	175	137	76	31	15
50		200	245	189	25		115	45	212	160	105	42	15
63	63	200	253	189	29	33	115	45	212	160	105	42	15

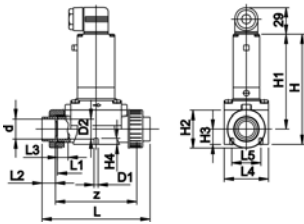
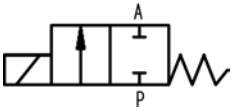
PF 3 39 215 112



**SYGEF Standard**  
**Solenoid valve type 165**  
**Nominal voltage 24V DC**  
**Function A straight-through valve 2/2 ways**  
**With fusion sockets metric**

**Model:**

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65



d [mm]	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	0.5 - 6.0	83	199 165 422	199 165 452	0.700
25	20	0.5 - 6.0	100	199 165 423	199 165 453	0.700
32	25	0.5 - 6.0	233	199 165 424	199 165 454	1.300
40	32	0.5 - 6.0	267	199 165 425	199 165 455	1.200
50	40	0.5 - 6.0	500	199 165 426	199 165 456	2.200
63	50	0.5 - 6.0	600	199 165 427	199 165 457	2.200

d [mm]	D2 [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
20		120	147	109	16		63	40	148	122	53	22	8
25	25	120	151	109	18	18	62	40	148	122	53	22	8
32		150	185	139	20		85	45	175	137	76	31	15
40	40	150	189	139	22	23	85	45	175	137	76	31	15
50		200	245	189	25		115	45	212	160	105	42	15
63	63	200	253	189	29	33	115	45	212	160	105	42	15

PF 3 39 215 112

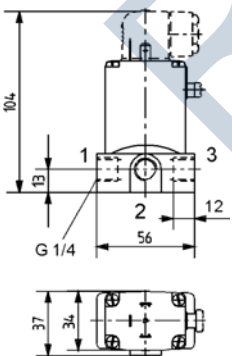
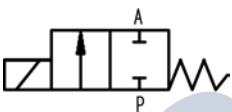


**SYGEF Standard**  
**Solenoid valve type 166**  
**Function A straight-through valve 2/2 ways**  
**Nominal voltage 24V DC**  
**With G 1/4 line connection**



**Model:**

- Material: PVDF
- 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]	FPM Code	kg
3	1/4	A	0.0 - 8.0	4	199 166 505	0.400
4	1/4	A	0.0 - 4.0	5	199 166 506	0.400
5	1/4	A	0.0 - 3.0	6	199 166 507	0.400

PF 3 39 215 281

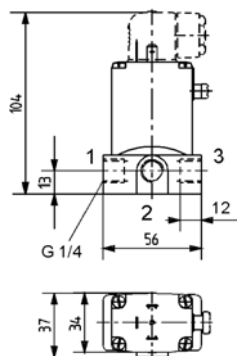
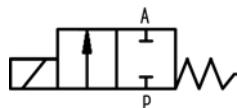


**SYGEF Standard  
Solenoid valve type 166  
Function A straight-through valve 2/2  
ways  
Nominal voltage 230V 50Hz ±10%  
With G 1/4 line connection**



**Model:**

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65



PF 3 39 215 281

DN [mm]	D1_G [inch]	Function	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3	1/4	A	0.0 - 10.0		4 <b>199 166 515</b>	0.400
4	1/4	A	0.0 - 5.0		5 <b>199 166 516</b>	0.400
5	1/4	A	0.0 - 4.5		6 <b>199 166 517</b>	0.400

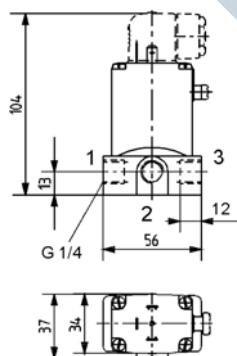
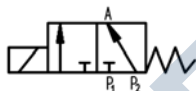


**SYGEF Standard  
Solenoid valve type 166  
Function E mixing valve 3/2 ways  
Nominal voltage 24V DC  
With G 1/4 line connection**



**Model:**

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65



PF 3 39 215 281

DN [mm]	D1_G [inch]	Function	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
4	1/4	E	0.0 - 2.0		5 <b>199 166 656</b>	0.400

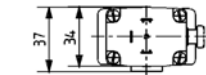
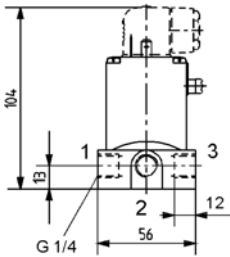
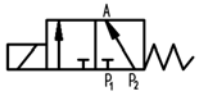


**SYGEF Standard  
Solenoid valve type 166  
Function E mixing valve 3/2 ways  
Nominal voltage 230V 50Hz ±10%  
With G 1/4 line connection**



**Model:**

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65



PF 3 39 215 281

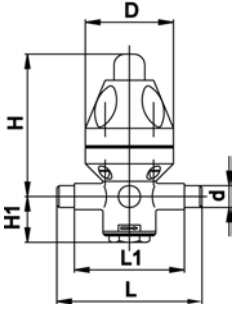
DN [mm]	D1_G [inch]	Function	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
4	1/4	E	0.0 - 3.0	5	199 166 666	0.400

Rtf-Prime.ru

# Process control valves

## SYGEF Standard Pressure reducing valve type V782 With fusion spigots metric

Model:  
• Material: PVDF

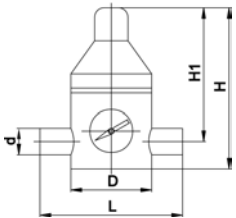


PF 3 58 458 002

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]
16	10	0.5 - 10	199 041 084	1.300	83	134	102	138	48
20	15	0.5 - 10	199 041 085	1.300	83	134	102	138	48
25	20	0.5 - 10	199 041 086	1.700	113	154	110	205	65
32	25	0.5 - 10	199 041 087	1.700	113	154	110	205	65
40	32	0.5 - 10	199 041 088	4.840	165	224	162	248	95
50	40	0.5 - 10	199 041 089	4.840	165	224	162	248	95

## SYGEF Standard Pressure reducing valve type V82 With fusion spigots metric

Model:  
• Material: PVDF



PF 3 58 458 002

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
16	10	0.5 - 10	199 041 052	0.790	70	134	130	100
20	15	0.5 - 10	199 041 053	0.790	70	134	130	100
25	20	0.5 - 10	199 041 054	1.620	100	174	170	130
32	25	0.5 - 10	199 041 055	1.620	100	174	170	130
40	32	0.5 - 10	199 041 056	3.150	130	224	230	175
50	40	0.5 - 10	199 041 057	3.150	130	224	230	175
63	50	0.5 - 10	199 041 058	5.700	155	244	285	210
75	65	0.5 - 6	199 041 059	11.600	190	284	350	250

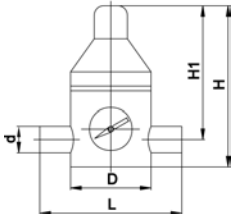




## SYGEF Standard Pressure reducing valve type V182 With fusion spigots metric

Model:

- Material: PVDF



PF 3 58 458 002

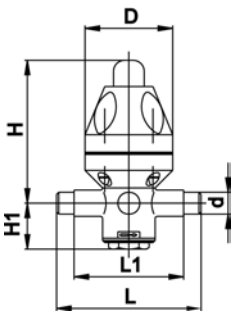
d [mm]	DN [mm]	Pressure range [bar]	FPM Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
16	10	0.5 - 10	<b>199 041 661</b>	0.790	70	134	130	100
20	15	0.5 - 10	<b>199 041 662</b>	0.790	70	134	130	100
25	20	0.5 - 10	<b>199 041 663</b>	1.620	100	174	170	130
32	25	0.5 - 10	<b>199 041 664</b>	1.620	100	174	170	130
40	32	0.5 - 10	<b>199 041 665</b>	3.150	130	224	230	175
50	40	0.5 - 10	<b>199 041 666</b>	3.150	130	224	230	175



## SYGEF Standard Pressure retaining valve type V786 With fusion spigots metric

Model:

- Material: PVDF



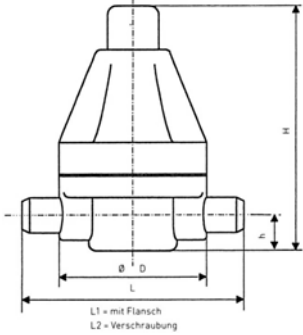
PF 3 58 458 002

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]
16	10	0.5 - 10	<b>199 041 114</b>	0.620	83	134	102	138	38
20	15	0.5 - 10	<b>199 041 115</b>	0.620	83	134	102	158	38
25	20	0.5 - 10	<b>199 041 116</b>	1.700	113	154	110	205	55
32	25	0.5 - 10	<b>199 041 117</b>	1.700	113	154	110	205	55
40	32	0.5 - 4	<b>199 041 118</b>	4.840	165	224	162	248	85
50	40	0.5 - 4	<b>199 041 119</b>	4.840	165	224	162	248	85



## SYGEF Standard Pressure retaining valve type V186 With fusion spigots metric

Model:  
• Material: PVDF



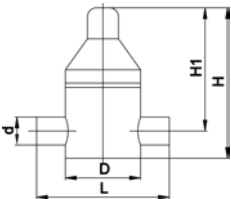
PF 3 58 458 002

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
16	10	0.5 - 10	199 041 323	0.600	83	134	137	20
20	15	0.5 - 10	199 041 324	0.600	83	134	137	20
25	20	0.5 - 10	199 041 325	0.600	83	134	137	20
32	25	0.5 - 10	199 041 326	1.600	112	174	199	27
40	32	0.5 - 10	199 041 327	1.600	112	174	199	27
50	40	0.5 - 10	199 041 328	8.000	165	224	290	43
63	50	0.5 - 10	199 041 329	8.200	165	244	290	43



## SYGEF Standard Pressure retaining valve type V86 With fusion spigots metric

Model:  
• Material: PVDF



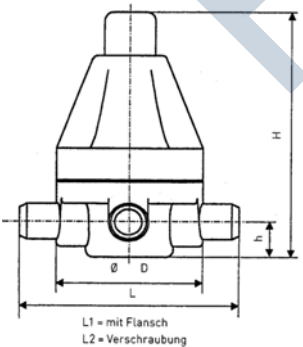
PF 3 58 458 002

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
75	65	1.0 - 6	199 041 892	7.730	180	284	275	230



## SYGEF Standard Pressure relief valve type V185 With fusion spigots metric

Model:  
• Material: PVDF



PF 3 58 458 002

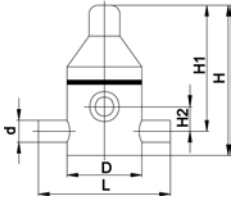
d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
16	10	0.5 - 10	199 041 344	0.700	83	134	137	20
20	15	0.5 - 10	199 041 345	0.700	83	134	137	20
25	20	0.5 - 10	199 041 346	0.700	83	134	137	20
32	25	0.5 - 10	199 041 347	1.700	112	174	199	27
40	32	0.5 - 10	199 041 348	1.700	112	174	199	27
50	40	0.5 - 10	199 041 349	8.100	165	224	290	43
63	50	0.5 - 10	199 041 350	8.300	165	244	290	43



## SYGEF Standard Pressure relief valve type V85 With fusion spigots metric

Model:

- Material: PVDF



PF 3 58 458 002

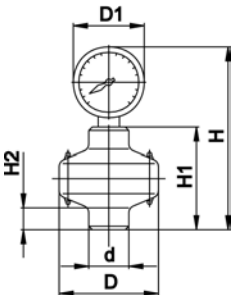
d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]	H2 [mm]
75	65	1.0 - 6	199 041 898	13.000	180	284	295	250	70



## SYGEF Standard Gauge guard type Z700 With manometer 0-10 bar

Model:

- Material: PVDF



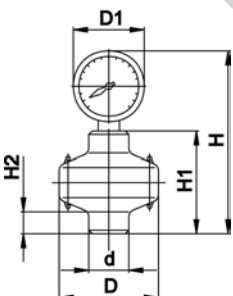
PF 3 58 458 001

d [mm]	G [inch]	PTFE Code	kg	D [mm]	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]
25	1/4	199 041 004	0.320	72	63	129	71	15
32	1/2	199 041 005	0.670	100	100	210	90	22



## SYGEF Standard Gauge guard type Z700 With manometer 0-6 bar

d [mm]	G [inch]	PTFE Code	kg	D [mm]	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]
25	1/4	199 041 296	0.320	72	63	129	71	15
32	1/2	199 041 297	0.670	100	100	210	90	22



PF 3 58 458 001

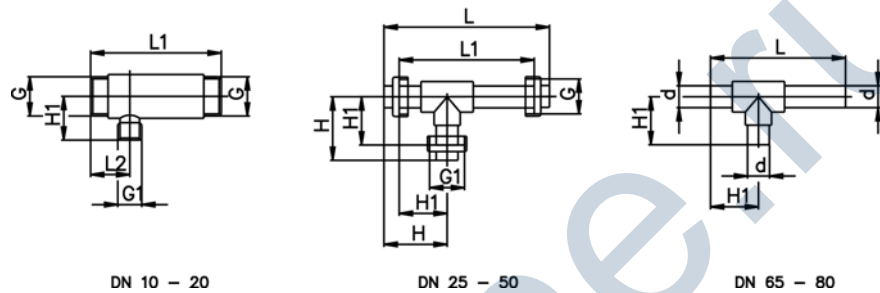


## SYGEF Standard Water jet suction pump type P20

### Model:

- Material: PVDF
- DN 10-20: BSP parallel female thread
- DN 25-50: Fusion socket metric
- DN 65-80: Fusion spigot metric

d [mm]	DN [mm]	PN	FPM Code	kg	G [inch]	G1 [inch]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]
16	10	10	<b>199 041 138</b>	0.160	R 3/4	R 3/4		110	40		35
20	15	10	<b>199 041 139</b>	0.300	R 1	R 3/4		110	40		35
25	20	10	<b>199 041 140</b>	0.480	R 1 1/4	R 3/4		145	45		45
32	25	10	<b>199 041 141</b>	0.690	R 1 1/2	R 1 1/2	245	195		96	71
40	32	10	<b>199 041 142</b>	1.100	R 2	R 2	297	239		116	87
50	40	10	<b>199 041 143</b>	1.880	R 2 1/4	R 2 1/4	369	301		139	105
63	50	10	<b>199 041 144</b>	3.340	R 2 3/4	R 2 3/4	433	351		169	128
75	65	10	<b>199 041 145</b>	3.340	-	-	388				115
90	80	10	<b>199 041 146</b>	5.500	-	-	465				149



PF 3 58 458 004

DN 10 - 20

DN 25 - 50

DN 65 - 80

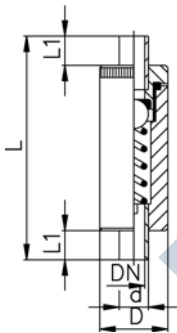


## SYGEF Standard Ventilating valve type V95 With fusion spigots metric

### Model:

- Material: PVDF

d [mm]	DN [mm]	FPM Code	kg	D [mm]	L [mm]	L1 [mm]
16	10	<b>199 041 283</b>	0.090	35	114	14
20	15	<b>199 041 284</b>	0.130	40	124	16
25	20	<b>199 041 285</b>	0.180	45	144	19
32	25	<b>199 041 286</b>	0.280	55	154	22
40	32	<b>199 041 287</b>	0.550	70	174	26
50	40	<b>199 041 288</b>	0.700	80	194	31
63	50	<b>199 041 289</b>	1.280	95	224	38
75	65	<b>199 041 290</b>	1.900	115	284	44
90	80	<b>199 041 291</b>	3.230	150	300	51



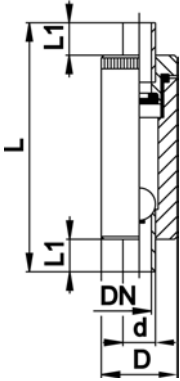
PF 3 58 458 003



## SYGEF Standard Ventilating and bleed valve type V91 With fusion spigots metric

Model:

- Material: PVDF



PF 3 58 458 003

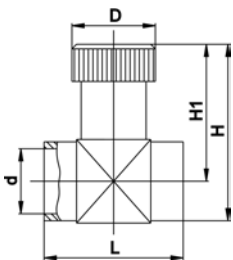
d [mm]	DN [mm]	FPM Code	kg	D [mm]	L [mm]	L1 [mm]
16	10	<b>199 041 256</b>	0.090	35	114	14
20	15	<b>199 041 257</b>	0.130	40	124	16
25	20	<b>199 041 258</b>	0.180	45	144	19
32	25	<b>199 041 259</b>	0.270	55	154	22
40	32	<b>199 041 260</b>	0.520	70	174	26
50	40	<b>199 041 261</b>	0.660	80	194	31
63	50	<b>199 041 262</b>	1.210	95	224	38
75	65	<b>199 041 263</b>	3.420	115	284	44
90	80	<b>199 041 264</b>	3.420	150	300	51



## SYGEF Standard Throttle valve type V251 With fusion sockets metric

Model:

- Material: PVDF



PF 3 58 458 003

d [mm]	DN [mm]	PN	FPM Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
16	10	10	<b>199 041 231</b>	0.150	29	47	57	45
20	15	10	<b>199 041 232</b>	0.104	35	55	66	51
25	20	10	<b>199 041 233</b>	0.143	40	66	80	63
32	25	10	<b>199 041 234</b>	0.135	47	80	96	75
40	32	10	<b>199 041 235</b>	0.400	56	100	111	86
50	40	10	<b>199 041 236</b>	0.923	70	120	133	101
63	50	10	<b>199 041 237</b>	1.300	88	146	158	118

# SYGEF® Plus

## Butterfly Valve Type 365 Lug-Style - Bareshaft



### Model:

- Metal lugged body with epoxy-coating
- PFA coated disc with PTFE liner
- HP produced & double-bagged
- Bareshaft to ISO5211
- Lugged body to ANSI B16.5 #150 or ISO/EN 1092 PN16
- Pneumatic actuated version available, see separate page

d (mm)	DN (mm)	Inch	PN	Kv value L/min (ΔP=1BAR)	Lugged ANSI B16.5 #150 Code	Lugged ISO/EN 1092 Code	KG	Torque Nm	ISO5211 (square shaft)
63	50	2	16	3199	<b>160 365 423</b>	<b>160 365 551</b>	4.7	30	F07/11mm
75	65	2½	16	3199	<b>160 365 424</b>	<b>160 365 552</b>	6	30	F07/11mm
90	80	3	16	6497	<b>160 365 425</b>	<b>160 365 553</b>	6.5	40	F07/11mm
110	100	4	16	9696	<b>160 365 426</b>	<b>160 365 554</b>	8.5	50	F07/14mm
140	125	5	16	16808	<b>160 365 427</b>	<b>160 365 555</b>	10.6	60	F07/14mm
160	150	6	16	24762	<b>160 365 428</b>	<b>160 365 556</b>	13.9	110	F07/17mm
225	200	8	10	50523	<b>160 365 429</b>	<b>160 365 557</b>	17.9	180	F10/17mm
280	250	10	10	74713	<b>160 365 430</b>	<b>160 365 558</b>	27.2	250	F10/22mm
315	300	12	10	119438	<b>160 365 431</b>	<b>160 365 559</b>	35.9	350	F10/22mm

## Handlever for Butterfly Valve Type 365



d	DN	Inch	Code
63-90	50-80	2-3	<b>161 486 065</b>
110-140	100-125	4-5	<b>161 486 066</b>
160	150	6	<b>161 486 067</b>











## Gearbox for Butterfly Valve Type 365



d	DN	Inch	Code
63-90	50-80	2-3	<b>198 806 690</b>
110-140	100-125	4-5	<b>198 806 691</b>
160-225	150-200	6-8	<b>198 806 692</b>
280-315	250-300	10-12	<b>198 806 693</b>

- Order bareshaft valve and handlever/gearbox as separate items

# SYGEF Plus

		Page
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# SYGEF® Plus – Product Specification

<b>Material</b>	High Purity Polyvinylidene fluoride (PVDF HP) Virgin material, translucent Density ~1.78g/cm <sup>3</sup> (ISO 1183 / ASTM D792) Surface tension 30–35mJ/m <sup>2</sup> Linear expansion coefficient 0.12–0.18mm/mK (DIN 53752) E-module (tensile strength) 2100N/mm <sup>2</sup> (EN ISO 527/ASTM D790) Thermal conductivity 0.19W/mK (DIN 52612) Surface resistivity 5x10 <sup>14</sup> Ωcm (IEC 60093)
<b>Dimension</b>	d20 (½")–d315 (12") in accordance to ISO 10931
<b>Pressure rating</b>	Pipes/fittings: PN 16 (d20–d225), PN 10 (d90–d315) Valves: separate specification
<b>Temperature rating</b>	from –20°C to 140°C (-4°F–284°F)
<b>Production<sup>(1)</sup></b>	Fittings/diaphragm valves: injection moulded Pipes: extruded Produced under clean room ISO 14644-1 Class 7 (U.S. Fed. Std. 209E Class 10'000) conditions. Subsequent assembling, quality inspection and cleaning is carried out using 18MΩ pure water under clean room ISO 14644-1 Class 5-6 (U.S. Fed. Std. 209E Class 100-1000) conditions.
<b>Surface finish</b>	Inner surface ≤ d225 Ra ≤ 0.2µm (9µin) / > d225 Ra ≤ 0.3µm (12µin) for injection moulded and extruded components
<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</b> (ISO 10931)	Inclusions Visual inspection Surface finish Dimension tolerance Pressure testing Periodic leachout per SEMI F40/F57
<b>Approvals/conformance</b>	ASME BPE FDA CFR 21 177.2510 USP 25 class VI (physiological non-toxic) SEMI F57
<b>Welding technology</b>	BCF® Plus, bead and crevice free fusion, size d20 (½")–d110 (4") IR® Plus, infrared fusion (DVS 2207-6), size d20 (½")–d315 (12")
<b>Documentation<sup>(1)</sup></b>	Certificate of Conformance with FDA, USP EN 10204 2.2 EN 10204 3.1b
<b>Packing<sup>(2)</sup></b>	Pipes capped and each component double bagged in an specified inner bag and an outer bag under clean room ISO 14644-1 Class 6 (U.S. Fed. Std. 209E Class 1000) conditions.
<b>Labeling</b>	Brand Name Product Description Code Number Material Dimension CE-labeling
<b>Main applications</b>	Uses include delivery of ultrapure water in the semiconductor/electronic industry, pharmaceutical grade water (WFI/PW) and analytical DI water to highest purity requirements. A wide range of sanitisation methods is suitable such as Ozone, hot water or steam.

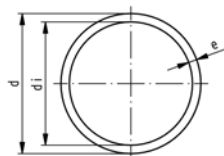
<sup>(1)</sup> on request

<sup>(2)</sup> Excluding pressure regulating valves. Products are cleaned and double bagged after production assuring controlled process and highest product standards.



# Pipes

75 48 12



## SYGEF Plus, Pipe, PN 16

### Model:

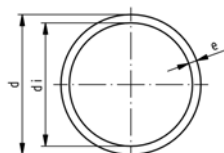
- Material: PVDF-HP
- Length: Lengths of 5 m

\* on request

d [mm]	PN	Code	e [mm]	di [mm]
16	16	175 481 202	1.9	12.2
20	16	175 481 203	1.9	16.2
25	16	175 481 204	1.9	21.2
32	16	175 481 205	2.4	27.2
40	16	175 481 206	2.4	35.2
50	16	175 481 207	3.0	44.0
63	16	175 481 208	3.0	57.0
75	16	175 481 209	3.6	67.8
90	16	175 481 210	4.3	81.4
110	16	175 481 211	5.3	99.4
* 125	16	175 481 212	6.0	113.0
160	16	175 481 214	7.7	144.6
140	16	175 481 213	6.7	126.6
200	16	175 481 216	9.6	180.8
225	16	175 481 217	10.8	202.6

PF 2 37 202 001

75 48 16



## SYGEF Plus, Pipe, PN 10

### Model:

- Material: PVDF-HP
- Length: Lengths of 5 m

\* on request

d [mm]	PN	Code	e [mm]	di [mm]
90	10	175 481 665	2.8	84.4
110	10	175 481 666	3.4	103.2
* 125	10	175 481 667	3.9	117.2
140	10	175 481 673	4.3	131.4
160	10	175 481 668	4.9	150.2
200	10	175 481 669	6.2	187.6
225	10	175 481 670	6.9	211.2
250	10	175 481 671	7.7	234.6
280	10	175 481 656	8.6	262.8
315	10	175 481 674	9.7	295.6

PF 2 37 202 002

# Fittings for Butt Fusion

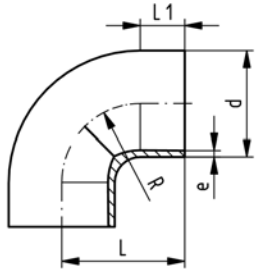
35 01 87

## SYGEF Plus, Bend 90°, PN 16



**Model:**

- Material: PVDF-HP
- \* model with compact design and optimized flow values



d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]	R [mm]
* 20	16	BCF, IR	735 018 731	0.015	1.9	38	23	15
* 25	16	BCF, IR	735 018 732	0.021	1.9	42	23	19
* 32	16	BCF, IR	735 018 733	0.035	2.4	46	22	24
* 40	16	BCF, IR	735 018 734	0.050	2.4	51	21	30
* 50	16	BCF, IR	735 018 735	0.087	3.0	58	21	37
* 63	16	BCF, IR	735 018 736	0.128	3.0	66	21	45
75	16	BCF, IR	735 018 737	0.243	3.6	75	23	62
90	16	BCF, IR	735 018 738	0.385	4.3	90	23	77
110	16	BCF, IR	735 018 739	0.643	5.3	110	23	98
140	16	IR	735 018 741	1.423	6.7	140	33	121
160	16	IR	735 018 742	2.052	7.7	160	33	141
200	16	IR	735 018 744	3.798	9.6	200	33	181
225	16	IR	735 018 745	5.274	10.8	220	33	200

PF 2 37 249 006

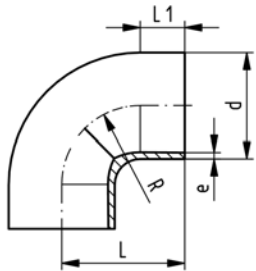
35 01 85

## SYGEF Plus, Bend 90°, PN 10

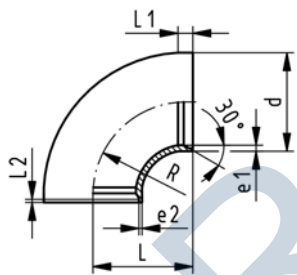


**Model:**

- Material: PVDF-HP



d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]	e1 [mm]	L2 [mm]
90	10	BCF, IR	735 018 538	0.294	2.8	90	23		
110	10	BCF, IR	735 018 539	0.578	3.4	110	23		
125	10	IR	735 018 540	0.670	3.9	125	28		
140	10	IR	735 018 541	0.970	4.3	140	33		
160	10	IR	735 018 542	1.440	4.7	160	33		
200	10	IR	735 018 544	2.730	6.2	200	33		
225	10	IR	735 018 545	3.900	6.9	220	33		
250	10	IR	735 018 546	8.040	7.7	254	48		
* 280	10	IR	735 018 547	5.998	8.6	283	48	17.2	10
* 315	10	IR	735 018 548	8.520	9.7	321	48	19.3	10

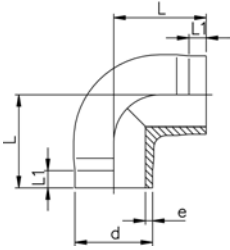


PF 2 37 249 002

35 10 86

**SYGEF Plus, Elbow 90°, PN 16****Model:**

- Material: PVDF-HP



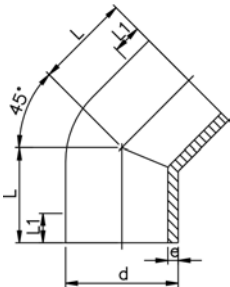
PF 2 37 249 007

d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]
20	16	BCF, IR	<b>735 108 631</b>	0.017	1.9	38	25
25	16	BCF, IR	<b>735 108 632</b>	0.023	1.9	42	26
32	16	BCF, IR	<b>735 108 633</b>	0.040	2.4	46	26
40	16	BCF, IR	<b>735 108 634</b>	0.060	2.4	51	28
50	16	BCF, IR	<b>735 108 635</b>	0.105	3.0	58	28
63	16	BCF, IR	<b>735 108 636</b>	0.180	3.0	66	28

35 15 86

**SYGEF Plus, Elbow 45°, PN 16****Model:**

- Material: PVDF-HP



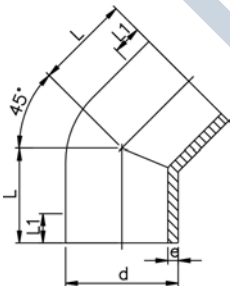
PF 2 37 249 008

d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]
20	16	BCF, IR	<b>735 158 631</b>	0.014	1.9	32	25
25	16	BCF, IR	<b>735 158 632</b>	0.019	1.9	34	26
32	16	BCF, IR	<b>735 158 633</b>	0.033	2.4	36	26
40	16	BCF, IR	<b>735 158 634</b>	0.048	2.4	39	28
50	16	BCF, IR	<b>735 158 635</b>	0.079	3.0	42	30
63	16	BCF, IR	<b>735 158 636</b>	0.116	3.0	47	31
75	16	BCF, IR	<b>735 158 637</b>	0.160	3.6	49	32
90	16	BCF, IR	<b>735 158 638</b>	0.260	4.3	57	37
110	16	BCF, IR	<b>735 158 639</b>	0.480	5.3	70	46
140	16	IR	<b>735 158 641</b>	1.000	6.7	88	57
160	16	IR	<b>735 158 642</b>	2.300	7.7	100	62
200	16	IR	<b>735 158 644</b>	2.800	9.6	124	77
225	16	IR	<b>735 158 645</b>	4.000	10.8	140	88

35 15 85

**SYGEF Plus, Elbow 45°, PN 10****Model:**

- Material: PVDF-HP



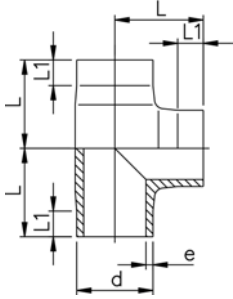
PF 2 37 249 003

d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]
90	10	BCF, IR	<b>735 158 538</b>	0.181	2.8	57	37
110	10	BCF, IR	<b>735 158 539</b>	0.330	3.4	70	46
125	10	IR	<b>735 158 540</b>	0.490	3.9	79	51
140	10	IR	<b>735 158 541</b>	0.680	4.3	88	57
160	10	IR	<b>735 158 542</b>	0.990	4.9	100	62
200	10	IR	<b>735 158 544</b>	1.940	6.2	124	77
225	10	IR	<b>735 158 545</b>	2.780	6.9	140	88

35 20 86

**SYGEF Plus, T 90° equal, PN 16****Model:**

- Material: PVDF-HP



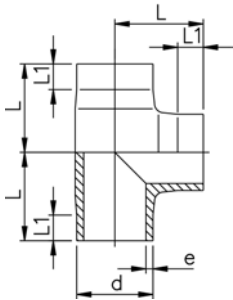
PF 2 37 249 001

d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]
20	16	BCF, IR	<b>735 208 631</b>	0.023	1.9	38	25
25	16	BCF, IR	<b>735 208 632</b>	0.032	1.9	42	27
32	16	BCF, IR	<b>735 208 633</b>	0.056	2.4	46	27
40	16	BCF, IR	<b>735 208 634</b>	0.083	2.4	51	28
50	16	BCF, IR	<b>735 208 635</b>	0.140	3.0	58	28
63	16	BCF, IR	<b>735 208 636</b>	0.231	3.0	66	28
75	16	BCF, IR	<b>735 208 637</b>	0.370	3.6	75	32
90	16	BCF, IR	<b>735 208 638</b>	0.660	4.3	90	39
110	16	BCF, IR	<b>735 208 639</b>	1.210	5.3	110	48
140	16	IR	<b>735 208 641</b>	2.600	6.7	140	62
160	16	IR	<b>735 208 642</b>	5.200	7.7	160	71
200	16	IR	<b>735 208 644</b>	6.725	9.6	200	80
225	16	IR	<b>735 208 645</b>	9.010	10.8	220	86

35 20 85

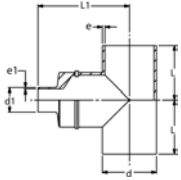
**SYGEF Plus, T 90° equal, PN 10****Model:**

- Material: PVDF-HP



PF 2 37 249 009

d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	L1 [mm]
90	10	BCF, IR	<b>735 208 538</b>	0.397	2.8	90	39
110	10	BCF, IR	<b>735 208 539</b>	0.714	3.4	110	48
125	10	IR	<b>735 208 540</b>	1.280	3.9	125	56
140	10	IR	<b>735 208 541</b>	1.780	4.3	140	62
160	10	IR	<b>735 208 542</b>	2.570	4.9	160	71
200	10	IR	<b>735 208 544</b>	4.297	6.2	200	80
225	10	IR	<b>735 208 545</b>	6.800	6.9	220	86
250	10	IR	<b>735 208 546</b>	9.281	7.7	223	61
280	10	IR	<b>735 208 547</b>	13.608	8.6	256	74
315	10	IR	<b>735 208 548</b>	18.128	9.7	274	74

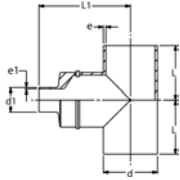


## Fabricated Reducing Tee (25-110mm), PN 16, PVDF-HP

IR Plus/BCF Plus Fusion

\*\*Uses Molded Reducer

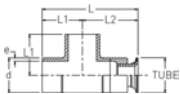
d [mm]	d1 [mm]	PN	Code	e1 [mm]	e2 [mm]	L [mm]	L1 [mm]
** 25	20	16	<b>735 992 450</b>	1.9	1.9	42	87
** 32	20	16	<b>735 992 451</b>	2.4	1.9	46	91
** 32	25	16	<b>735 992 452</b>	2.4	2.4	46	91
40	20	16	<b>735 992 453</b>	2.4	1.9	51	98
40	25	16	<b>735 992 454</b>	2.4	2.4	51	99
40	32	16	<b>735 992 455</b>	2.4	2.4	51	99
50	20	16	<b>735 992 456</b>	3.0	1.9	58	103
50	25	16	<b>735 992 457</b>	3.0	2.4	58	106
50	32	16	<b>735 992 458</b>	3.0	2.4	58	106
50	40	16	<b>735 992 459</b>	3.0	2.4	58	108
63	20	16	<b>735 992 460</b>	3.0	1.9	66	111
63	25	16	<b>735 992 461</b>	3.0	2.4	66	112
63	32	16	<b>735 992 462</b>	3.0	2.4	66	114
63	40	16	<b>735 992 463</b>	3.0	2.4	66	116
63	50	16	<b>735 992 464</b>	3.0	3.0	66	116
75	20	16	<b>735 992 465</b>	3.6	1.9	75	123
75	25	16	<b>735 992 466</b>	3.6	2.4	75	124
75	32	16	<b>735 992 467</b>	3.6	2.4	75	125
75	40	16	<b>735 992 468</b>	3.6	2.4	75	127
75	50	16	<b>735 992 469</b>	3.6	3.0	75	128
75	63	16	<b>735 992 470</b>	3.6	3.0	75	125
90	20	16	<b>735 992 471</b>	4.3	1.9	90	148
90	25	16	<b>735 992 472</b>	4.3	2.4	90	149
90	32	16	<b>735 992 473</b>	4.3	2.4	90	150
90	40	16	<b>735 992 474</b>	4.3	2.4	90	152
90	50	16	<b>735 992 475</b>	4.3	3.0	90	153
90	63	16	<b>735 992 476</b>	4.3	3.0	90	150
90	75	16	<b>735 992 477</b>	4.3	3.6	90	145
110	20	16	<b>735 992 478</b>	5.3	1.9	110	168
110	25	16	<b>735 992 479</b>	5.3	2.4	110	169
110	32	16	<b>735 992 480</b>	5.3	2.4	110	170
110	40	16	<b>735 992 481</b>	5.3	2.4	110	172
110	50	16	<b>735 992 482</b>	5.3	3.0	110	173
110	63	16	<b>735 992 483</b>	5.3	3.0	110	170
110	75	16	<b>735 992 484</b>	5.3	3.6	110	165
110	90	16	<b>735 992 485</b>	5.3	4.3	110	165



## Fabricated Reducing Tee (160-315mm), PN 10, PVDF-HP

IR Plus Fusion

d [mm]	d1 [mm]	PN	Code	e [mm]	e1 [mm]	L [mm]	L1 [mm]
160	63	10	735 992 486	4.9	3.0	160	250
160	75	10	735 992 487	4.9	3.6	160	225
160	90	10	735 992 488	4.9	4.3	160	225
160	110	10	735 992 489	4.9	5.3	160	225
200	63	10	735 992 490	6.2	3.0	200	280
200	75	10	735 992 491	6.2	3.6	200	275
200	90	10	735 992 492	6.2	4.3	200	275
200	110	10	735 992 493	6.2	5.3	200	275
200	160	10	735 992 494	6.2	4.9	200	285
225	63	10	735 992 495	6.9	3.0	220	310
225	75	10	735 992 496	6.9	3.6	220	305
225	90	10	735 992 497	6.9	4.3	220	305
225	110	10	735 992 498	6.9	5.3	220	305
225	160	10	735 992 499	6.9	4.9	220	315
225	200	10	735 992 500	6.9	6.2	220	303
250	63	10	735 992 501	7.7	3.0	223	313
250	75	10	735 992 502	7.7	3.6	223	308
250	90	10	735 992 503	7.7	4.3	223	309
250	110	10	735 992 504	7.7	5.3	223	311
250	160	10	735 992 505	7.7	4.9	223	310
250	200	10	735 992 506	7.7	6.2	223	312
250	225	10	735 992 507	7.7	6.9	223	294
315	63	10	735 992 508	9.7	3.0	274	364
315	75	10	735 992 509	9.7	3.6	274	359
315	90	10	735 992 510	9.7	4.3	274	360
315	110	10	735 992 511	9.7	5.3	274	362
315	160	10	735 992 512	9.7	4.9	274	361
315	200	10	735 992 513	9.7	6.2	274	363
315	225	10	735 992 514	9.7	6.9	274	363
315	250	10	735 992 515	9.7	7.7	274	367

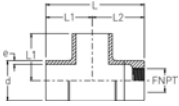


## Analytical Sanitary Sensor, PN 16, PVDF-HP

IR Plus/BCF Plus Fusion

d [mm]	Tube Size [inch]	PN	Code	SP	kg	e [mm]	L [mm]	L1 [mm]	L2 [mm]
50	3/4	16	735 991 820			3.0	150	58	92
50	1	16	735 991 821			3.0	150	58	92
50	1 1/2	16	735 991 822			3.0	150	58	92
63	3/4	16	735 991 823			3.0	166	66	100
63	1	16	735 991 824			3.0	166	66	100
63	1 1/2	16	735 991 825	0	0.075	3.0	166	66	100
75	3/4	16	735 991 826	0	0.075	3.6	180	75	105
75	1	16	735 991 827	0	0.075	3.6	180	75	105
75	1 1/2	16	735 991 828			3.6	180	75	105
90	3/4	16	735 991 829			4.3	203	90	113
90	1	16	735 991 830			4.3	203	90	113
90	1 1/2	16	735 991 831			4.3	203	90	113
110	3/4	16	735 991 832			5.3	234	110	124
110	1	16	735 991 833			5.3	234	110	124
110	1 1/2	16	735 991 834			5.3	234	110	124

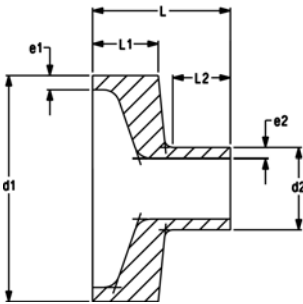
PF 2 35 440 001



## Analytical Threaded Sensor, PN 16, PVDF-HP

IR Plus/BCF Plus Fusion

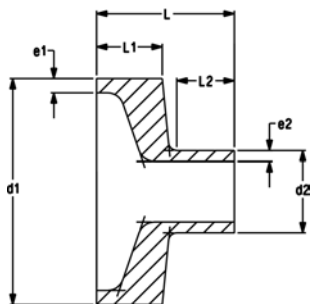
d [mm]	FNPT [inch]	PN	Code	e [mm]	L [mm]	L1 [mm]	L2 [mm]
50	¼	16	<b>735 991 840</b>	3.0	135	58	77
50	½	16	<b>735 991 841</b>	3.0	135	58	77
50	¾	16	<b>735 991 842</b>	3.0	135	58	77
50	1	16	<b>735 991 843</b>	3.0	135	58	77
63	¼	16	<b>735 991 844</b>	3.0	151	66	85
63	½	16	<b>735 991 845</b>	3.0	151	66	85
63	¾	16	<b>735 991 846</b>	3.0	151	66	85
63	1	16	<b>735 991 847</b>	3.0	151	66	85
75	¼	16	<b>735 991 848</b>	3.6	165	75	90
75	½	16	<b>735 991 849</b>	3.6	165	75	90
75	¾	16	<b>735 991 850</b>	3.6	165	75	90
75	1	16	<b>735 991 851</b>	3.6	165	75	90
90	¼	16	<b>735 991 852</b>	4.3	188	90	98
90	½	16	<b>735 991 853</b>	4.3	188	90	98
90	¾	16	<b>735 991 854</b>	4.3	188	90	98
90	1	16	<b>735 991 855</b>	4.3	188	90	98
110	¼	16	<b>735 991 856</b>	5.3	219	110	109
110	½	16	<b>735 991 857</b>	5.3	219	110	109
110	¾	16	<b>735 991 858</b>	5.3	219	110	109
110	1	16	<b>735 991 859</b>	5.3	219	110	109



## Flush Style Reducer (40-110mm), PN 16, PVDF-HP

IR Plus Fusion

d1 [mm]	d2 [mm]	PN	Code	e1 [mm]	e2 [mm]	L [mm]	L1 [mm]	L2 [mm]
40	20	16	<b>735 909 604</b>	2.4	1.9	52	24	25
40	25	16	<b>735 909 605</b>	2.4	1.9	53	24	26
40	32	16	<b>735 909 606</b>	2.4	2.4	53	23	26
50	20	16	<b>735 909 607</b>	3.0	1.9	50	22	25
50	25	16	<b>735 909 608</b>	3.0	1.9	53	24	26
50	32	16	<b>735 909 609</b>	3.0	2.4	53	23	26
50	40	16	<b>735 909 610</b>	3.0	2.4	55	23	28
63	20	16	<b>735 909 611</b>	3.0	1.9	50	22	25
63	25	16	<b>735 909 612</b>	3.0	1.9	51	22	26
63	32	16	<b>735 909 613</b>	3.0	2.4	53	23	26
63	40	16	<b>735 909 614</b>	3.0	2.4	55	23	28
63	50	16	<b>735 909 615</b>	3.0	3.0	55	22	28
75	20	16	<b>735 909 616</b>	3.6	1.9	53	22	25
75	25	16	<b>735 909 617</b>	3.6	1.9	54	22	26
75	32	16	<b>735 909 618</b>	3.6	2.4	55	22	26
75	40	16	<b>735 909 619</b>	3.6	2.4	57	22	28
75	50	16	<b>735 909 620</b>	3.6	3.0	58	22	28
75	63	16	<b>735 909 621</b>	3.6	3.0	55	22	28
90	20	16	<b>735 909 622</b>	4.3	1.9	63	32	25
90	25	16	<b>735 909 623</b>	4.3	1.9	64	32	26
90	32	16	<b>735 909 624</b>	4.3	2.4	65	32	26
90	40	16	<b>735 909 625</b>	4.3	2.4	67	32	28
90	50	16	<b>735 909 626</b>	4.3	3.0	68	32	28
90	63	16	<b>735 909 627</b>	4.3	3.0	65	32	28
90	75	16	<b>735 909 628</b>	4.3	3.6	60	32	23
110	20	16	<b>735 909 629</b>	5.3	1.9	63	32	25
110	25	16	<b>735 909 630</b>	5.3	1.9	64	32	26
110	32	16	<b>735 909 631</b>	5.3	2.4	65	32	26
110	40	16	<b>735 909 632</b>	5.3	2.4	67	32	28
110	50	16	<b>735 909 633</b>	5.3	3.0	68	32	28
110	63	16	<b>735 909 634</b>	5.3	3.0	65	32	28
110	75	16	<b>735 909 635</b>	5.3	3.6	60	32	23
110	90	16	<b>735 909 636</b>	5.3	4.3	60	31	23

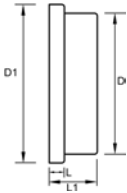


## Flush Style Reducer (160-315mm)

IR Plus Fusion

d1 [mm]	d2 [mm]	PN	Code	e1 [mm]	e2 [mm]	L [mm]	L1 [mm]	L2 [mm]
160	63	10	<b>735 909 656</b>	4.9	3.0	95	62	28
160	75	10	<b>735 909 657</b>	4.9	3.6	70	42	23
160	90	10	<b>735 909 658</b>	4.9	4.3	70	41	23
160	110	10	<b>735 909 659</b>	4.9	5.3	70	39	23
200	63	10	<b>735 909 662</b>	6.2	3.0	85	52	28
200	75	10	<b>735 909 663</b>	6.2	3.6	80	52	23
200	90	10	<b>735 909 664</b>	6.2	4.3	80	51	23
200	110	10	<b>735 909 665</b>	6.2	5.3	80	49	23
200	160	10	<b>735 909 668</b>	6.2	4.9	90	45	33
225	63	10	<b>735 909 669</b>	6.9	3.0	95	62	28
225	75	10	<b>735 909 670</b>	6.9	3.6	90	62	23
225	90	10	<b>735 909 671</b>	6.9	4.3	90	61	23
225	110	10	<b>735 909 672</b>	6.9	5.3	90	59	23
225	160	10	<b>735 909 675</b>	6.9	4.9	100	55	33
225	200	10	<b>735 909 676</b>	6.9	6.2	88	41	33
250	63	10	<b>735 909 677</b>	7.7	3.0	98	60	28
250	75	10	<b>735 909 678</b>	7.7	3.6	93	60	23
250	90	10	<b>735 909 679</b>	7.7	4.3	94	60	23
250	110	10	<b>735 909 680</b>	7.7	5.3	96	60	23
250	160	10	<b>735 909 683</b>	7.7	4.9	95	50	33
250	200	10	<b>735 909 684</b>	7.7	6.2	97	50	33
250	225	10	<b>735 909 685</b>	7.7	6.9	79	30	33
315	63	10	<b>735 909 696</b>	9.7	3.0	98	45	28
315	75	10	<b>735 909 697</b>	9.7	3.6	93	45	23
315	90	10	<b>735 909 698</b>	9.7	4.3	94	45	23
315	110	10	<b>735 909 699</b>	9.7	5.3	96	45	23
315	160	10	<b>735 909 702</b>	9.7	4.9	95	45	33
315	200	10	<b>735 909 703</b>	9.7	6.2	97	45	33
315	225	10	<b>735 909 704</b>	9.7	6.9	97	45	33
315	250	10	<b>735 909 705</b>	9.7	7.7	101	41	48

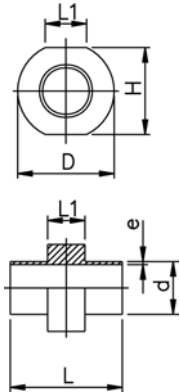




## Blanking Union End

d [mm]	PN	Code	SP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]
20	10	<b>175 482 101</b>	0	0.007	28	30	5	13
25	10	<b>175 482 102</b>	0	0.015	36	38	6	15
32	10	<b>175 482 103</b>	0	0.025	36	38	6	16
40	10	<b>175 482 104</b>	0	0.043	42	45	6	17
50	10	<b>175 482 105</b>	0	0.060	59	63	7	20
63	10	<b>175 482 106</b>	0	0.110	74	78	8	22

PF 2 65 434 001

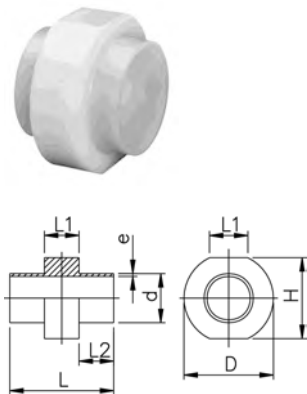


## Instrument Installation Fitting, PN 16, PVDF-HP

IR Plus/BCF Plus Fusion

d [mm]	PN	Code	SP	kg	e [mm]	L [mm]	D [mm]	H [mm]	L1 [mm]
20	16	<b>735 918 606</b>	0	0.001	1.9	140	71	58	40
25	16	<b>735 918 607</b>			1.9	140	75	63	40
32	16	<b>735 918 608</b>			2.4	140	81	70	40
40	16	<b>735 918 609</b>			2.4	140	88	78	40
50	16	<b>735 918 610</b>			3.0	140	97	88	40

PF 2 37 425 002



## Instrument Installation Fitting, PN 16, PVDF-HP

d [mm]	PN	Code	D [mm]	e [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]
63	16	<b>155 918 611</b>	109	3.0	101	140	40	50
75	16	<b>155 918 612</b>	120	3.6	113	140	40	50
90	16	<b>155 918 613</b>	134	4.3	128	140	40	50
110	16	<b>155 918 614</b>	153	5.3	148	140	40	50

35 91 85

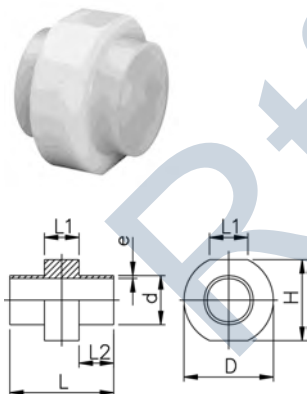
## SYGEF Plus, Instrument Installation Fitting, PN 10

**Model:**

- Material: PVDF-HP
- Suitable for hole diameters from 1/8" - 3/4"
- Machined version

**Note:**

- Hole needs to be milled, HAND HELD DRILLING MUST NOT BE DONE



d [mm]	PN	FM	Code	kg	D [mm]	e [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]
160	10	IR	<b>735 918 567</b>	1.151	194	4.9	190	110	40	32
200	10	IR	<b>735 918 569</b>	1.486	231	6.2	228	110	40	32
225	10	IR	<b>735 918 570</b>	3.151	254	7.0	251	110	40	32

PF 2 37 425 002

35 91 88

## SYGEF Plus, Instrument Installation Fitting, PN 16

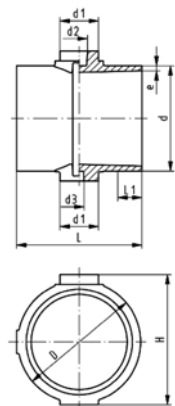


**Model:**

- Material: PVDF-HP
- Suitable for hole diameters from 1/4" - 3/4"
- Injection-moulded version

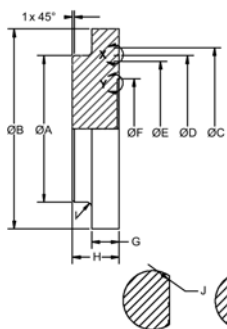
**Note:**

- Hole needs to be milled, HAND HELD DRILLING MUST NOT BE DONE



PF 2 37 425 002

d [mm]	PN	FM	Code	kg	D [mm]	e [mm]	d1 [mm]	d2 [mm]	d3 [mm]	H [mm]	L [mm]	L1 [mm]
63	16	BCF, IR	<b>735 918 811</b>	0.235	85	3.0	40	17	10	89	120	25
75	16	BCF, IR	<b>735 918 812</b>	0.326	96	3.6	40	17	10	101	130	25
90	16	BCF, IR	<b>735 918 813</b>	0.418	110	4.3	40	17	10	116	130	25
110	16	BCF, IR	<b>735 918 814</b>	0.561	127	5.3	40	17	10	136	130	25



### Blind Flange

- \* 40% Restock Charge

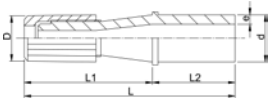
Size [mm]	PN	Code	SP	kg
20	16	<b>735 991 362</b>	0	0.021
25	16	<b>735 991 363</b>	0	0.031
32	16	<b>735 991 364</b>	0	0.047
40	16	<b>735 991 365</b>	0	0.085
50	16	<b>735 991 366</b>	0	0.125
63	16	<b>735 991 367</b>	0	0.195
75	16	<b>735 991 368</b>	0	0.294
90	16	<b>735 991 369</b>	0	0.436
110	16	<b>735 991 370</b>	0	0.661
160	10	<b>735 991 372</b>	0	1.607
200/225	10	<b>735 991 373</b>	0	3.549

Size [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	Rad I [mm]	Rad J [mm]
20	25	43	28	22		16	6	17	1.0	0.4
25	32	54	35	29		20	7	17	1.5	0.4
32	40	63	43	36		26	7	17	1.5	0.4
40	49	73	54	57		33	8	21	2.0	0.4
50	60	79	64	56		41	8	21	2.0	0.4
63	75	99	83	75	69	51	9	21	2.5	0.4
75	89	119	99	91	83	61	10	21	2.5	0.4
90	105	133	115	106	97	74	11	23	3.0	0.4
110	125	158	138	128	118	90	12	24	3.0	0.5
160	175	200	191	181	171	131	17	30	4.0	1.0
200/225	232	268	250	240	230	164	20	30	4.0	1.0

PF 2 37 423 002



## SYGEF Plus Flare Transition Fitting, PN 10



### Model:

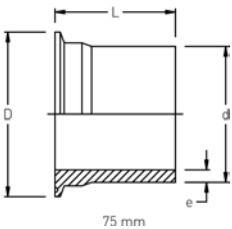
- Material: PVDF-HP
- Welding dimension: PN16

### Note:

- Products will be replaced with new versions in 1st quarter 2009

d [mm]	tube size [inch]	PN	FM	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	3/8	10	BCF, IR	<b>735 991 430</b>	0.017	19	1.9	74	43	31
20	1/2	10	BCF, IR	<b>735 991 431</b>	0.020	22	1.9	77	46	31
20	3/4	10	BCF, IR	<b>735 991 432</b>	0.025	25	1.9	79	48	31
20	1	10	BCF, IR	<b>735 991 433</b>	0.017	34	1.9	83	52	31
25	3/8	10	BCF, IR	<b>735 991 435</b>	0.020	19	1.9	74	43	31
25	1/2	10	BCF, IR	<b>735 991 436</b>	0.022	22	1.9	77	46	31
25	3/4	10	BCF, IR	<b>735 991 437</b>	0.027	25	1.9	79	48	31
25	1	10	BCF, IR	<b>735 991 438</b>	0.045	34	1.9	83	52	31
25	1 1/2	10	BCF, IR	<b>735 991 439</b>	0.100	37	1.9	84	58	31
32	3/4	10	BCF, IR	<b>735 991 442</b>	0.034	25	2.4	79	48	31
32	1	10	BCF, IR	<b>735 991 443</b>	0.050	34	2.4	83	52	31
32	1 1/2	10	BCF, IR	<b>735 991 444</b>	0.035	37	2.4	89	58	31

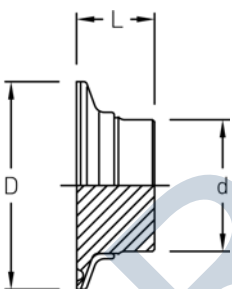
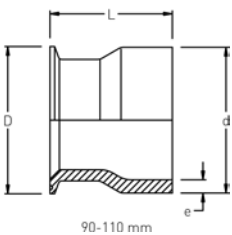
PF 2 65 434 002



## Large Sanitary Adapter, PN 10, PVDF-HP

\*\*Does not use a sanitary backing ring

d [mm]	Tube (3A) [inch]	PN	Code	e [mm]	D [mm]	L [mm]
75	3	10	<b>735 598 370</b>	3.6	91	67
90	3	10	<b>735 598 371</b>	4.3	91	76
110	4	10	<b>735 598 372</b>	5.3	119	76



## Sanitary Blank, PN 16/PN 10, PVDF-HP

\*\*Does not use a sanitary backing ring

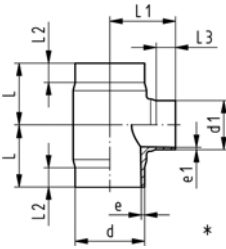
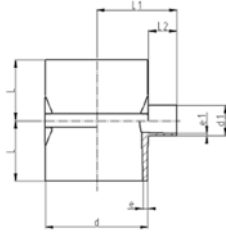
Tube (3A)	PN	Code	D [mm]	d [mm]	L [mm]
3/4	16	<b>735 992 390</b>	25	20	13
1 & 1/2	16	<b>735 992 391</b>	51	32	19
2	16	<b>735 992 392</b>	64	50	19
2 1/2	16	<b>735 992 393</b>	78	63	19
3	10	<b>735 992 394</b>	91	75	19
4	10	<b>735 992 395</b>	117	103	25

## 35 20 89 / 35 20 86 SYGEF Plus, T 90° reduced, PN 16



**Model:**

- Material: PVDF-HP



PF 2 37 425 001

d - d1 [mm]	PN	FM	Code	kg	e [mm]	e1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
63 - 20	16	BCF, IR	<b>735 208 956</b>	0.213	3.0	1.9	60	67	25	35
63 - 25	16	BCF, IR	<b>735 208 957</b>	0.214	3.0	1.9	60	66	25	34
63 - 32	16	BCF, IR	<b>735 208 958</b>	0.220	3.0	2.4	60	67	25	25
63 - 40	16	BCF, IR	<b>735 208 959</b>	0.217	3.0	2.4	60	66	25	26
75 - 20	16	BCF, IR	<b>735 208 961</b>	0.306	3.6	1.9	65	69	25	31
75 - 25	16	BCF, IR	<b>735 208 962</b>	0.308	3.6	1.9	65	72	25	34
75 - 32	16	BCF, IR	<b>735 208 963</b>	0.308	3.6	2.4	65	69	25	31
75 - 40	16	BCF, IR	<b>735 208 964</b>	0.312	3.6	2.4	65	72	25	26
75 - 50	16	BCF, IR	<b>735 208 965</b>	0.309	3.6	3.0	65	69	25	26
90 - 20	16	BCF, IR	<b>735 208 967</b>	0.403	4.3	1.9	65	76	25	31
90 - 25	16	BCF, IR	<b>735 208 968</b>	0.405	4.3	1.9	65	79	25	34
90 - 32	16	BCF, IR	<b>735 208 969</b>	0.405	4.3	2.4	65	76	25	31
90 - 40	16	BCF, IR	<b>735 208 970</b>	0.409	4.3	2.4	65	79	25	26
90 - 50	16	BCF, IR	<b>735 208 971</b>	0.406	4.3	3.0	65	76	25	26
* 90 - 63	16	BCF, IR	<b>735 208 972</b>	0.540	4.3	3.0	80	85	25	25
110 - 20	16	BCF, IR	<b>735 208 974</b>	0.568	5.3	1.9	65	86	25	31
110 - 25	16	BCF, IR	<b>735 208 975</b>	0.570	5.3	1.9	65	89	25	34
110 - 32	16	BCF, IR	<b>735 208 976</b>	0.570	5.3	2.4	65	86	25	31
110 - 40	16	BCF, IR	<b>735 208 977</b>	0.572	5.3	2.4	65	89	25	26
110 - 50	16	BCF, IR	<b>735 208 978</b>	0.568	5.3	3.0	65	86	25	26
* 110 - 63	16	BCF, IR	<b>735 208 979</b>	0.848	5.3	3.0	90	95	30	25
* 110 - 75	16	BCF, IR	<b>735 208 980</b>	0.856	5.3	3.0	90	95	30	25
* 110 - 90	16	BCF, IR	<b>735 208 981</b>	0.866	5.3	4.3	90	95	30	25
* 160 - 90	16	IR	<b>735 208 687</b>	3.200	7.7	4.3	155	130	60	25
* 160 - 110	16	IR	<b>735 208 686</b>	3.300	7.7	5.3	155	130	60	25
* 225 - 90	16	IR	<b>735 208 695</b>	6.000	10.8	4.3	155	160	60	25
* 225 - 110	16	IR	<b>735 208 694</b>	6.100	10.8	5.3	155	160	60	25

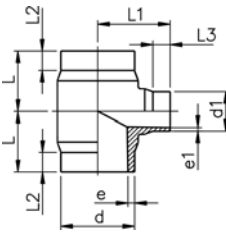
## 35 20 85

## SYGEF Plus, T 90° reduced, PN 10



**Model:**

- Material: PVDF-HP



PF 2 37 425 001

d - d1 [mm]	PN [bar]	FM	Code	kg	e [mm]	e1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
160 - 90	10 / 16	IR	<b>735 208 587</b>	2.300	4.9	4.3	155	130	60	25
160 - 110	10 / 16	IR	<b>735 208 586</b>	2.300	4.9	5.3	155	130	60	25
225 - 90	10 / 16	IR	<b>735 208 595</b>	4.400	6.9	4.3	155	160	60	25
225 - 110	10 / 16	IR	<b>735 208 594</b>	4.400	6.9	5.3	155	160	60	25

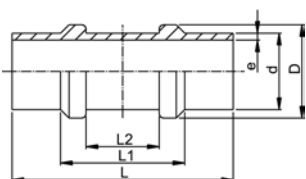
## 35 91 86

## SYGEF Plus, Fixpoint Fitting, PN 16



**Model:**

- Material: PVDF-HP



PF 2 37 249 012

d [mm]	PN	FM	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	16	BCF, IR	<b>735 918 656</b>	0.027	28	1.9	100	53	32
25	16	BCF, IR	<b>735 918 657</b>	0.036	33	1.9	100	53	32
32	16	BCF, IR	<b>735 918 658</b>	0.054	40	2.4	100	53	32
40	16	BCF, IR	<b>735 918 659</b>	0.067	48	2.4	100	53	32
50	16	BCF, IR	<b>735 918 660</b>	0.100	58	3.0	100	53	32
63	16	BCF, IR	<b>735 918 661</b>	0.131	71	3.0	105	53	32
75	16	BCF, IR	<b>735 918 662</b>	0.252	87	3.6	125	70	40
90	16	BCF, IR	<b>735 918 663</b>	0.353	105	4.3	125	70	40
110	16	BCF, IR	<b>735 918 664</b>	0.516	127	5.3	125	70	40

35 91 88

**SYGEF Plus, Instrument Installation Fitting, PN 16**

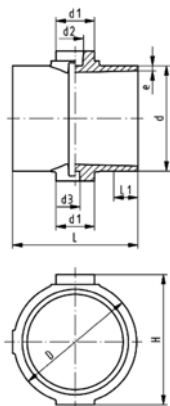


**Model:**

- Material: PVDF-HP
- Suitable for hole diameters from 1/4" - 3/4"
- Injection-moulded version

**Note:**

- Hole needs to be milled, HAND HELD DRILLING MUST NOT BE DONE



PF 2 37 425 002

d [mm]	PN	FM	Code	kg	D [mm]	e [mm]	d1 [mm]	d2 [mm]	d3 [mm]	H [mm]	L [mm]	L1 [mm]
63	16	BCF, IR	<b>735 918 811</b>	0.235	85	3.0	40	17	10	89	120	25
75	16	BCF, IR	<b>735 918 812</b>	0.326	96	3.6	40	17	10	101	130	25
90	16	BCF, IR	<b>735 918 813</b>	0.418	110	4.3	40	17	10	116	130	25
110	16	BCF, IR	<b>735 918 814</b>	0.561	127	5.3	40	17	10	136	130	25

35 91 86

**SYGEF Plus, Instrument Installation Fitting, PN 16**



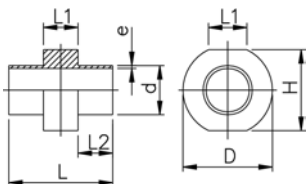
**Model:**

- Material: PVDF-HP
- Suitable for hole diameters from 1/8" - 3/4"
- Machined version

**Note:**

- Hole needs to be milled, HAND HELD DRILLING MUST NOT BE DONE

\* no stock item



PF 2 37 425 002

d [mm]	PN	FM	Code	kg	D [mm]	e [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]
* 63	16	BCF, IR	<b>735 918 611</b>	0.495	105	3.0	97	100	40	27
* 75	16	BCF, IR	<b>735 918 612</b>	0.554	115	3.6	108	90	40	22
* 90	16	BCF, IR	<b>735 918 613</b>	0.649	128	4.3	121	90	40	22
* 110	16	BCF, IR	<b>735 918 614</b>	0.778	145	5.3	139	90	40	22
* 125	16	IR	<b>735 918 615</b>	1.007	162	6.0	157	100	40	27
* 140	16	IR	<b>735 918 616</b>	1.185	176	6.7	171	110	40	32
* 160	16	IR	<b>735 918 617</b>	1.405	194	7.7	190	110	40	32
* 200	16	IR	<b>735 918 619</b>	1.871	231	9.6	228	110	40	32
* 225	16	IR	<b>735 918 620</b>	2.284	254	10.8	251	110	40	32

35 91 85

**SYGEF Plus, Instrument Installation Fitting, PN 10**

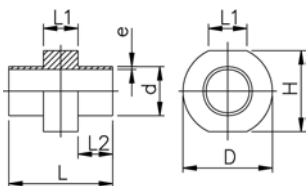


**Model:**

- Material: PVDF-HP
- Suitable for hole diameters from 1/8" - 3/4"
- Machined version

**Note:**

- Hole needs to be milled, HAND HELD DRILLING MUST NOT BE DONE



PF 2 37 425 002

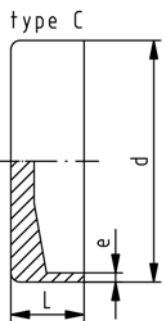
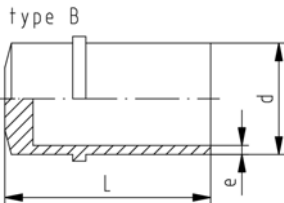
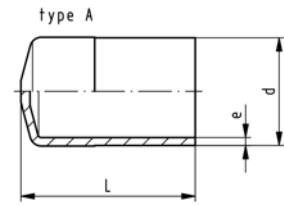
d [mm]	PN	FM	Code	kg	D [mm]	e [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]
125	10	IR	<b>735 918 565</b>	0.858	162	3.9	157	100	40	27
140	10	IR	<b>735 918 566</b>	1.003	176	4.4	171	110	40	32
160	10	IR	<b>735 918 567</b>	1.151	194	4.9	190	110	40	32
200	10	IR	<b>735 918 569</b>	1.486	231	6.2	228	110	40	32
225	10	IR	<b>735 918 570</b>	3.151	254	7.0	251	110	40	32



## SYGEF Plus, Cap

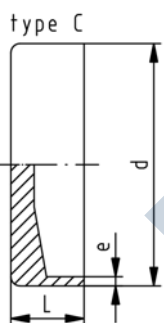
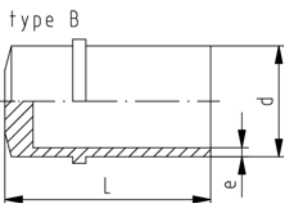
Model:

- Material: PVDF-HP



PF 2 37 249 017

d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	Type
20	16	BCF, IR	<b>735 968 106</b>	0.009	1.9	47	A
25	16	BCF, IR	<b>735 968 107</b>	0.012	1.9	47	A
32	16	BCF, IR	<b>735 968 108</b>	0.022	2.4	52	A



PF 2 65 460 002

## SYGEF Plus, Cap

Model:

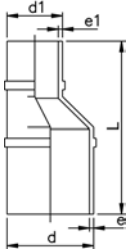
- Material: PVDF-HP

d [mm]	PN	FM	Code	kg	e [mm]	L [mm]	Type
20	16	BCF, IR	<b>735 991 651</b>	0.020	1.9	47	B
25	16	BCF, IR	<b>735 991 652</b>	0.028	1.9	48	B
32	16	BCF, IR	<b>735 991 653</b>	0.050	2.4	52	B
40	16	BCF, IR	<b>735 991 654</b>	0.068	2.4	59	B
50	16	BCF, IR	<b>735 991 655</b>	0.107	3.0	64	B
63	16	BCF, IR	<b>735 991 656</b>	0.165	3.0	69	B
75	16	IR	<b>735 991 657</b>	0.283	3.6	40	C
90	16	IR	<b>735 991 658</b>	0.509	4.3	40	C
110	16	IR	<b>735 991 659</b>	0.812	5.3	40	C
160	10	IR	<b>735 991 661</b>	1.046	4.9	50	C
200	10	IR	<b>735 991 662</b>	1.637	6.2	50	C
225	10	IR	<b>735 991 663</b>	2.072	6.9	50	C

## SYGEF Plus, Reducing Bush eccentric, PN 16

Model:

- Material: PVDF-HP



PF 2 65 433 003

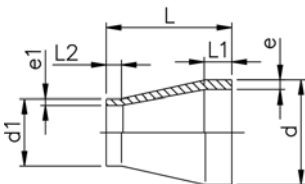
d - d1 [mm]	FM	Code	kg	e [mm]	e1 [mm]	L [mm]	
25 - 20	BCF, IR	<b>735 938 737</b>	0.022	1.9	1.9	80	
32 - 20	BCF, IR	<b>735 938 742</b>	0.027	2.4	1.9	80	
32 - 25	BCF, IR	<b>735 938 741</b>	0.030	2.4	1.9	80	
40 - 20	BCF, IR	<b>735 938 748</b>	0.041	2.4	1.9	100	
40 - 25	BCF, IR	<b>735 938 747</b>	0.044	2.4	1.9	100	
40 - 32	BCF, IR	<b>735 938 746</b>	0.051	2.4	2.4	100	
50 - 32	BCF, IR	<b>735 938 753</b>	0.069	3.0	2.4	100	
50 - 40	BCF, IR	<b>735 938 752</b>	0.073	3.0	2.4	100	
63 - 32	BCF, IR	<b>735 938 760</b>	0.085	3.0	2.4	100	
63 - 40	BCF, IR	<b>735 938 759</b>	0.087	3.0	2.4	100	
63 - 50	BCF, IR	<b>735 938 758</b>	0.101	3.0	3.0	100	

35 90 86

## SYGEF Plus, Reducer, PN 16

Model:

- Material: PVDF-HP



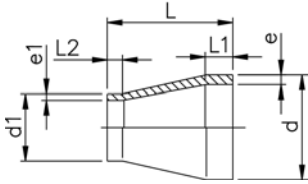
PF 2 37 249 011

d - d1 [mm]	PN	FM	Code	kg	e [mm]	e1 [mm]	L [mm]	L1 [mm]	L2 [mm]	
25 - 20	16	BCF, IR	<b>735 908 600</b>	0.012	1.9	1.9	50	22	22	
32 - 20	16	BCF, IR	<b>735 908 602</b>	0.017	2.4	1.9	50	22	22	
32 - 25	16	BCF, IR	<b>735 908 601</b>	0.018	2.4	1.9	50	22	22	
40 - 20	16	BCF, IR	<b>735 908 605</b>	0.024	2.4	1.9	58	22	24	
40 - 25	16	BCF, IR	<b>735 908 604</b>	0.025	2.4	1.9	55	22	24	
40 - 32	16	BCF, IR	<b>735 908 603</b>	0.029	2.4	2.4	55	22	24	
50 - 25	16	BCF, IR	<b>735 908 608</b>	0.031	3.0	1.9	60	22	25	
50 - 32	16	BCF, IR	<b>735 908 607</b>	0.038	3.0	2.4	60	22	25	
50 - 40	16	BCF, IR	<b>735 908 606</b>	0.040	3.0	2.4	60	22	25	
63 - 32	16	BCF, IR	<b>735 908 611</b>	0.050	3.0	2.4	65	22	25	
63 - 40	16	BCF, IR	<b>735 908 610</b>	0.052	3.0	2.4	65	22	25	
63 - 50	16	BCF, IR	<b>735 908 609</b>	0.060	3.0	3.0	65	22	25	
75 - 40	16	BCF, IR	<b>735 908 614</b>	0.069	3.6	2.4	68	24	25	
75 - 50	16	BCF, IR	<b>735 908 613</b>	0.078	3.6	3.0	65	24	25	
75 - 63	16	BCF, IR	<b>735 908 612</b>	0.080	3.6	3.0	65	24	25	
90 - 63	16	BCF, IR	<b>735 908 616</b>	0.120	4.3	3.0	75	25	30	
90 - 75	16	BCF, IR	<b>735 908 615</b>	0.130	4.3	3.6	75	25	35	
110 - 63	16	BCF, IR	<b>735 908 619</b>	0.225	5.3	3.0	90	30	30	
110 - 75	16	BCF, IR	<b>735 908 618</b>	0.220	5.3	3.6	90	30	35	
110 - 90	16	BCF, IR	<b>735 908 617</b>	0.230	5.3	4.3	90	30	35	
140 - 110	16	IR	<b>735 908 621</b>	0.450	6.7	5.3	110	40	40	
160 - 110	16	IR	<b>735 908 623</b>	1.000	7.7	5.3	120	40	40	
160 - 140	16	IR	<b>735 908 622</b>	0.660	7.7	6.7	120	40	40	
200 - 160	16	IR	<b>735 908 624</b>	1.340	9.6	7.7	145	40	35	
225 - 110	16	IR	<b>735 908 625</b>	1.540	10.8	5.3	160	55	40	
225 - 160	16	IR	<b>735 908 626</b>	1.730	10.8	7.7	160	55	28	
225 - 200	16	IR	<b>735 908 627</b>	1.980	10.8	9.6	160	55	50	

35 90 85

**SYGEF Plus, Reducer, PN 10****Model:**

- Material: PVDF-HP



d - d1 [mm]	PN [bar]	FM	Code	kg	e [mm]	e1 [mm]	L [mm]	L1 [mm]	L2 [mm]
90 - 63	10 / 16	BCF, IR	<b>735 908 511</b>	0.102	2.8	3.0	75	25	30
110 - 63	10 / 16	BCF, IR	<b>735 908 513</b>	0.164	3.4	3.0	90	30	30
110 - 90	10 / 10	BCF, IR	<b>735 908 515</b>	0.167	3.4	2.8	90	30	35
125 - 110	10 / 16	IR	<b>735 908 500</b>	0.270	3.9	5.3	100	35	40
140 - 110	10 / 16	IR	<b>735 908 502</b>	0.385	4.3	5.3	110	40	40
140 - 125	10 / 10	IR	<b>735 908 501</b>	0.340	4.3	3.9	110	40	40
160 - 110	10 / 10	IR	<b>735 908 521</b>	0.449	4.9	3.4	120	40	40
160 - 110	10 / 16	IR	<b>735 908 504</b>	0.425	4.9	5.3	120	40	40
160 - 140	10 / 10	IR	<b>735 908 503</b>	0.460	4.9	4.3	120	40	40
200 - 160	10 / 10	IR	<b>735 908 505</b>	0.830	6.2	4.9	145	50	40
225 - 110	10 / 10	IR	<b>735 908 526</b>	1.120	6.9	3.4	160	55	35
225 - 110	10 / 16	IR	<b>735 908 506</b>	0.940	6.9	5.3	160	55	35
225 - 160	10 / 10	IR	<b>735 908 507</b>	1.140	6.9	4.9	160	55	40
225 - 200	10 / 10	IR	<b>735 908 508</b>	1.200	6.9	6.2	160	55	50
250 - 225	10 / 10	IR	<b>735 908 531</b>	1.871	7.7	6.9	182	60	55
280 - 225	10 / 10	IR	<b>735 908 532</b>	2.518	8.6	6.9	206	70	55
315 - 225	10 / 10	IR	<b>735 908 533</b>	3.456	9.7	6.9	231	80	55

PF 2 37 249 005



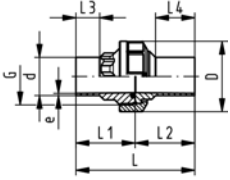
# Unions for Butt Fusion

## SYGEF Plus, Union (FPM white), PN 16



### Model:

- Material: PVDF-HP
- FDA compliant
- d75, d90 and d110 with buttress shaped thread
- Please see installation instruction

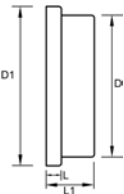


d [mm]	PN	FM	Code	kg
20	16	BCF, IR	<b>735 528 626</b>	0.081
25	16	BCF, IR	<b>735 528 627</b>	0.123
32	16	BCF, IR	<b>735 528 628</b>	0.167
40	16	BCF, IR	<b>735 528 629</b>	0.269
50	16	BCF, IR	<b>735 528 630</b>	0.370
63	16	BCF, IR	<b>735 528 631</b>	0.592
75	16	BCF, IR	<b>735 528 637</b>	0.740
90	16	BCF, IR	<b>735 528 638</b>	0.730
110	16	BCF, IR	<b>735 528 639</b>	1.020

d [mm]	G [inch]	e [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]
20	1	1.9	43	106	53	53	25	37
25	1 1/4	1.9	53	112	56	56	25	38
32	1 1/2	2.4	60	118	59	59	25	40
40	2	2.4	74	124	62	62	25	41
50	2 1/4	3.0	82	130	65	65	25	43
63	2 3/4	3.0	100	136	68	68	25	44
75	S 107.5 x 3.6	3.6	133	132	66	66	24	34
90	S 107.5 x 3.6	4.3	133	130	65	65	24	48
110	S 127.5 x 3.6	5.3	155	130	65	65	25	45

PF 2 37 230 001

## Blanking Union End



d [mm]	PN	Code	SP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]
20	10	<b>175 482 101</b>	0	0.007	28	30	5	13
25	10	<b>175 482 102</b>	0	0.015	36	38	6	15
32	10	<b>175 482 103</b>	0	0.025	36	38	6	16
50	10	<b>175 482 105</b>	0	0.060	59	63	7	20
63	10	<b>175 482 106</b>	0	0.110	74	78	8	22

PF 2 65 434 001

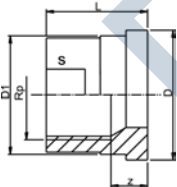
24 60 06

## Union End, Stainless Steel Rp



### Model:

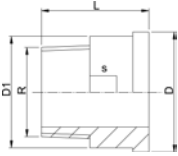
- Material: Stainless Steel 1.4404 (316L)
- Parallel female thread Rp



Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	s [mm]
3/8	16	<b>724 600 655</b>	0	0.030	9	24	22	19	19
1/2	16	<b>724 600 656</b>	0	0.060	11	30	28	24	24
3/4	16	<b>724 600 657</b>	0	0.100	11	39	36	26	29
1	16	<b>724 600 658</b>	0	0.140	12	45	42	29	36
1 1/4	16	<b>724 600 659</b>	0	0.230	14	57	53	33	45
1 1/2	16	<b>724 600 660</b>	0	0.320	15	63	59	34	54
2	16	<b>724 600 661</b>	0	0.450	15	78	74	39	63

PF 2 30 153 999

24 60 07



PF 2 30 153 999

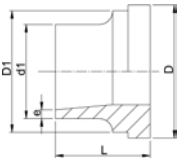
## Union End, Stainless Steel R

**Model:**

- Material: Stainless Steel 1.4404 (316L)
- Taper male thread R

R [inch]	PN	Code	SP	kg	D [mm]	D1 [mm]	L [mm]	s [mm]
3/8	16	<b>724 600 705</b>	0	0.050	24	22	30	19
1/2	16	<b>724 600 706</b>	0	0.090	30	28	34	24
3/4	16	<b>724 600 707</b>	0	0.120	39	36	36	32
1	16	<b>724 600 708</b>	0	0.190	45	42	40	37
1 1/4	16	<b>724 600 709</b>	0	0.350	57	53	46	48
1 1/2	16	<b>724 600 710</b>	0	0.400	63	59	48	54
2	16	<b>724 600 711</b>	0	0.660	78	74	55	69

24 60 55



PF 2 30 153 999

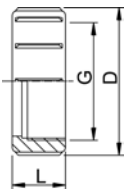
## Union End, Stainless Steel Welding End

**Model:**

- Material: Stainless Steel 1.4404 (316L)

d [mm]	d1 [mm]	PN	Code	SP	kg	D [mm]	D1 [mm]	L [mm]	e [mm]
16	17	16	<b>724 605 505</b>	0	0.030	24	22	18	1.6
20	21	16	<b>724 605 506</b>	0	0.050	30	28	22	2.0
25	26	16	<b>724 605 507</b>	0	0.080	39	36	23	2.0
32	33	16	<b>724 605 508</b>	0	0.110	45	42	26	2.0
40	42	16	<b>724 605 509</b>	0	0.190	57	53	26	2.0
50	48	16	<b>724 605 510</b>	0	0.220	63	59	28	2.0
63	60	16	<b>724 605 511</b>	0	0.370	78	74	32	2.6

35 69 04



PF 2 35 191 999

## SYGEF Standard, Union nut, PN 16

**Model:**

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

**Note:**

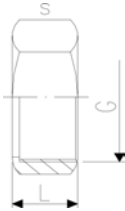
- For the dimensions d75-110 please see instructions for the installation

Socket Fusion d [mm]	Butt Fusion d [mm]	PN	Code	kg	D [mm]	G [inch]	L [mm]
16	16	16	<b>735 690 405</b>	0.013	35	3/4	21
20	20	16	<b>735 690 406</b>	0.023	43	1	22
25	25	16	<b>735 690 407</b>	0.047	53	1 1/4	24
32	32	16	<b>735 690 408</b>	0.048	60	1 1/2	26
40	40	16	<b>735 690 409</b>	0.097	74	2	29
50	50	16	<b>735 690 410</b>	0.146	82	2 1/4	33
63	63	16	<b>735 690 411</b>	0.145	100	2 3/4	35
	75 - 90	16	<b>735 690 422</b>	0.290	133	S 107,5x3,6	40
	110	16	<b>735 690 423</b>	0.420	155	S 127,5x3,6	42

24 69 01

## Union nut stainless steel 1.4404 (316L)

\* Octagon union nut



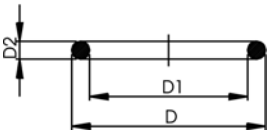
PF 2 30 153 999

d [mm]	PN	Code	SP	kg	L [mm]	G [mm]	s [mm]
16	16	<b>724 690 105</b>	0	0.060	19	<sup>76</sup> / <sub>102</sub>	32
20	16	<b>724 690 106</b>	0	0.110	21	25	41
25	16	<b>724 690 107</b>	0	0.100	23	25 <sup>25</sup> / <sub>102</sub>	46
32	16	<b>724 690 108</b>	0	0.170	24	25 <sup>29</sup> / <sub>51</sub>	55
* 40	16	<b>724 690 109</b>	0	0.240	27	51	68
* 50	16	<b>724 690 110</b>	0	0.300	31	51 <sup>25</sup> / <sub>102</sub>	74
* 63	16	<b>724 690 111</b>	0	0.390	35	51 <sup>76</sup> / <sub>102</sub>	88

49 41 10

## O-Ring, FPM white

• For SYGEF® Plus Union and diaphragm valve SYGEF® Plus type 314

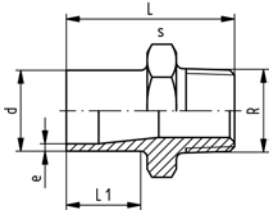


PF 2 65 434 999

d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]
20	16	<b>749 411 005</b>	0.002	20.8	15.5	2.6
25	16	<b>749 411 006</b>	0.002	27.3	20.2	3.5
32	16	<b>749 411 120</b>	0.002	33.6	26.6	3.5
40	16	<b>749 411 062</b>	0.003	41.6	34.5	3.5
50	16	<b>749 411 172</b>	0.003	51.1	44.0	3.5
63	16	<b>749 411 054</b>	0.005	63.0	55.0	4.0
75	16	<b>749 411 013</b>	0.010	79.9	69.2	5.3
90	16	<b>749 411 014</b>	0.012	92.6	81.9	5.3
110	16	<b>749 411 015</b>	0.015	111.7	101.0	5.3

# Transition Fittings and Sanitary Adaptors

35 91 07



PF 2 65 434 005

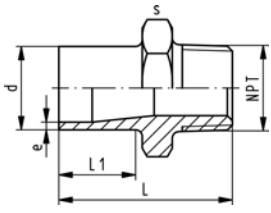
## SYGEF Plus, Adaptor Nipple, male thread R, PN 16

### Model:

- With taper male thread
- Material: PVDF-HP
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVDF
- Avoid stresses when installing and large changes in temperature

d [mm]	R [inch]	PN	FM	Code	kg	e [mm]	L [mm]	s [mm]	L1 [mm]
20	1/2	16	BCF, IR	<b>735 910 706</b>	0.020	1.9	53	32	28
25	3/4	16	BCF, IR	<b>735 910 707</b>	0.021	1.9	55	36	28
32	1	16	BCF, IR	<b>735 910 708</b>	0.034	2.4	57	46	28
40	1 1/4	16	BCF, IR	<b>735 910 709</b>	0.058	2.4	60	55	28
50	1 1/2	16	BCF, IR	<b>735 910 710</b>	0.087	3.0	63	65	28
63	2	16	BCF, IR	<b>735 910 711</b>	0.118	3.0	69	75	29

35 91 43



PF 2 65 460 002

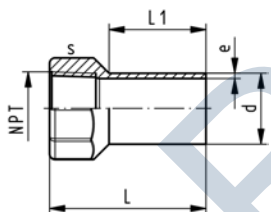
## SYGEF Plus, Adaptor Nipple, male thread NPT, PN 16

### Model:

- Material: PVDF-HP
- With taper male thread
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVDF
- Avoid stresses when installing and large changes in temperature

d [mm]	NPT [inch]	PN	FM	Code	kg	e [mm]	L [mm]	s [mm]	L1 [mm]
20	1/2	16	BCF, IR	<b>735 914 306</b>	0.016	1.9	53	32	28
25	3/4	16	BCF, IR	<b>735 914 307</b>	0.021	1.9	55	36	28
32	1	16	BCF, IR	<b>735 914 308</b>	0.035	2.4	57	46	28
40	1 1/4	16	BCF, IR	<b>735 914 309</b>	0.057	2.4	60	55	28
50	1 1/2	16	BCF, IR	<b>735 914 310</b>	0.085	3.0	63	65	28
63	2	16	BCF, IR	<b>735 914 311</b>	0.119	3.0	69	75	29

35 91 07



PF 2 37 423 012

## SYGEF Plus Adaptor Socket, female thread NPT, PN 10



### Model:

- Material: PVDF-HP
- Welding dimension: PN16
- With butt fusion spigot and taper female thread NPT
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVDF
- Avoid stresses when installing and large changes in temperature

d [mm]	NPT [inch]	PN	FM	Code	e [mm]	L [mm]	s [mm]	L1 [mm]
20	1/2	10	BCF, IR	<b>735 914 486</b>	1.9	58	30	37
25	3/4	10	BCF, IR	<b>735 914 487</b>	1.9	63	36	40
32	1	10	BCF, IR	<b>735 914 488</b>	2.4	71	46	44
40	1 1/4	10	BCF, IR	<b>735 914 489</b>	2.4	79	55	49
50	1 1/2	10	BCF, IR	<b>735 914 490</b>	3.0	84	60	55
63	2	10	BCF, IR	<b>735 914 491</b>	3.0	97	75	63

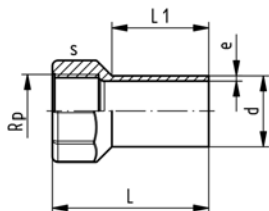
35 91 07



## SYGEF Plus Adaptor Socket, female thread Rp, PN 10

**Model:**

- Material: PVDF-HP
- Welding dimension: PN16
- With butt fusion spigot and parallel female thread Rp
- Connection to plastic threads only
- Avoid stresses when installing and large changes in temperature
- Do not use thread sealing pastes that are harmful to PVDF



d [mm]	Rp [inch]	PN	FM	Code	e [mm]	L [mm]	s [mm]	L1 [mm]
20	1/2	10	BCF, IR	<b>735 910 486</b>	1.9	58	30	37
25	3/4	10	BCF, IR	<b>735 910 487</b>	1.9	63	36	40
32	1	10	BCF, IR	<b>735 910 488</b>	2.4	71	46	44
40	1 1/4	10	BCF, IR	<b>735 910 489</b>	2.4	79	55	49
50	1 1/2	10	BCF, IR	<b>735 910 490</b>	3.0	84	60	55
63	2	10	BCF, IR	<b>735 910 491</b>	3.0	97	75	63

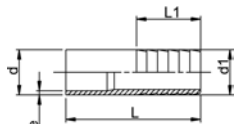
PF 2 37 423 011



## SYGEF Plus, Hose Adapters

**Model:**

- Material: PVDF-HP
- With butt fusion spigot and parallel hose connection.



d - d1 [mm]	PN	e [mm]	L [mm]	L1 [mm]	FM	Code	kg
20 - 20	16	1.9	64	27	BCF, IR	<b>735 968 731</b>	0.015
25 - 25	16	1.9	75	36	BCF, IR	<b>735 968 732</b>	0.024
32 - 32	16	2.4	82	36	BCF, IR	<b>735 968 733</b>	0.042
40 - 40	16	2.4	84	42	BCF, IR	<b>735 968 734</b>	0.063
50 - 50	16	3.0	90	48	BCF, IR	<b>735 968 735</b>	0.150
63 - 60	16	3.0	100	50	BCF, IR	<b>735 968 736</b>	0.001

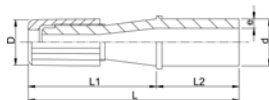
PF 2 37 423 006



## SYGEF Plus Flare Transition Fitting, PN 10

**Model:**

- Material: PVDF-HP
- Welding dimension: PN16

**Note:**

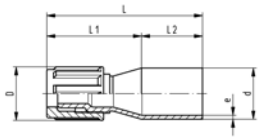
- Products will be replaced with new versions in 1st quarter 2009

d [mm]	tube size [inch]	PN	FM	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	1/4	10	BCF, IR	<b>735 991 430</b>	0.017	19	1.9	74	43	31
20	3/8	10	BCF, IR	<b>735 991 431</b>	0.020	22	1.9	77	46	31
20	1/2	10	BCF, IR	<b>735 991 432</b>	0.025	25	1.9	79	48	31
20	3/4	10	BCF, IR	<b>735 991 433</b>	0.017	34	1.9	83	52	31
25	1/4	10	BCF, IR	<b>735 991 435</b>	0.020	19	1.9	74	43	31
25	3/8	10	BCF, IR	<b>735 991 436</b>	0.022	22	1.9	77	46	31
25	1/2	10	BCF, IR	<b>735 991 437</b>	0.027	25	1.9	79	48	31
25	3/4	10	BCF, IR	<b>735 991 438</b>	0.045	34	1.9	83	52	31
25	1	10	BCF, IR	<b>735 991 439</b>	0.100	37	1.9	84	58	31
32	1/2	10	BCF, IR	<b>735 991 442</b>	0.034	25	2.4	79	48	31
32	3/4	10	BCF, IR	<b>735 991 443</b>	0.050	34	2.4	83	52	31
32	1	10	BCF, IR	<b>735 991 444</b>	0.035	37	2.4	89	58	31

PF 2 65 434 002



## SYGEF Plus, Flare Transition Fitting, PN 10



### Model:

- Material: PVDF-HP
- Welding dimension: PN16

### Note:

- available as of first quarter 2009

d [mm]	tube size [inch]	PN	FM	Code	e [mm]	L [mm]	L1 [mm]	L2 [mm]	D [mm]
20	3/8	10	BCF, IR	<b>735 598 430</b>	1.9	75	45	30	21
20	1/2	10	BCF, IR	<b>735 598 431</b>	1.9	76	46	30	23
20	3/4	10	BCF, IR	<b>735 598 432</b>	1.9	77	47	30	26
20	1	10	BCF, IR	<b>735 598 433</b>	1.9	78	48	30	34
25	3/8	10	BCF, IR	<b>735 598 435</b>	1.9	75	45	30	21
25	1/2	10	BCF, IR	<b>735 598 436</b>	1.9	76	46	30	23
25	3/4	10	BCF, IR	<b>735 598 437</b>	1.9	77	47	30	26
25	1	10	BCF, IR	<b>735 598 438</b>	1.9	78	48	30	34
25	1 1/4	10	BCF, IR	<b>735 598 439</b>	1.9	87	57	30	46
32	3/8	10	BCF, IR	<b>735 598 442</b>	2.4	77	47	30	26
32	1/2	10	BCF, IR	<b>735 598 443</b>	2.4	78	48	30	34
32	3/4	10	BCF, IR	<b>735 598 444</b>	2.4	87	57	30	46

Rttf-Prime!u

# Sanitary Adaptors



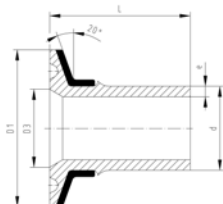
## SYGEF Plus Sanitary Adaptor, with stainless reinforcement, PN 16 ferrule ISO 1127



### Model:

- Material: PVDF-HP

\* Model without chamfer



d [mm]	DN [mm]	PN	FM	Code	kg	e [mm]	D1 [mm]	D3 [mm]	L [mm]
20	15	16	BCF, IR	<b>735 598 006</b>	0.032	1.9	50.5	18.1	50
25	20	16	BCF, IR	<b>735 598 008</b>	0.042	1.9	50.5	23.4	55
25	25	16	BCF, IR	<b>735 598 009</b>	0.041	1.9	50.5	29.7	55
32	25	16	BCF, IR	<b>735 598 010</b>	0.045	2.4	50.5	29.6	57
40	32	16	BCF, IR	<b>735 598 014</b>	0.073	2.4	64.0	38.4	67
* 50	40	16	BCF, IR	<b>735 598 016</b>	0.083	3.0	64.0	44.3	68
* 63	50	16	BCF, IR	<b>735 598 018</b>	0.107	3.0	77.5	56.3	71

PF 2 65 456 001



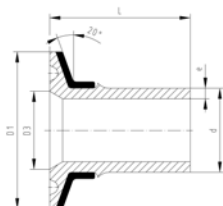
## SYGEF Plus Sanitary Adaptor, with stainless reinforcement, PN 16 ferrule DIN 32676



### Model:

- Material: PVDF-HP

\* Model without chamfer



d [mm]	DN [mm]	PN	FM	Code	kg	e [mm]	D1 [mm]	D3 [mm]	L [mm]
* 20	15	16	BCF, IR	<b>735 598 056</b>	0.020	1.9	34.0	16.0	50
20	20	16	BCF, IR	<b>735 598 057</b>	0.020	1.9	34.0	20.0	50
25	25	16	BCF, IR	<b>735 598 059</b>	0.042	1.9	50.5	26.0	55
32	32	16	BCF, IR	<b>735 598 062</b>	0.045	2.4	50.5	31.7	57
40	40	16	BCF, IR	<b>735 598 065</b>	0.047	2.4	50.5	38.0	67
50	50	16	BCF, IR	<b>735 598 067</b>	0.081	3.0	64.0	50.0	68

PF 2 65 456 001



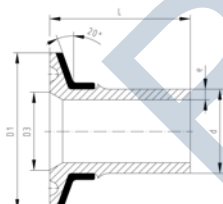
## SYGEF Plus Sanitary Adaptor, with stainless reinforcement, PN 16 ferrule BS 4825 (inch)



### Model:

- Material: PVDF-HP

\* Model without chamfer



d [mm]	Inch	PN	FM	Code	kg	e [mm]	D1 [mm]	D3 [mm]	L [mm]
20	3/4	16	BCF, IR	<b>735 598 157</b>	0.040	1.9	50.5	22.1	50
* 25	1	16	BCF, IR	<b>735 598 159</b>	0.042	1.9	50.5	22.4	55
32	1 1/2	16	BCF, IR	<b>735 598 163</b>	0.044	2.4	50.5	34.9	57
40	1 1/2	16	BCF, IR	<b>735 598 165</b>	0.047	2.4	50.5	35.5	67
50	2	16	BCF, IR	<b>735 598 167</b>	0.082	3.0	64.0	47.7	68
63	2 1/2	16	BCF, IR	<b>735 598 169</b>	0.107	3.0	77.5	59.9	71

PF 2 65 456 001





## SYGEF Plus Sanitary Adaptor, with stainless reinforcement, PN 16 ferrule 3A Standard

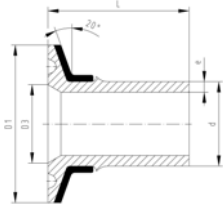


**Model:**

- Material: PVDF-HP

<sup>1</sup> Model without stainless reinforcement

\* Model without chamfer

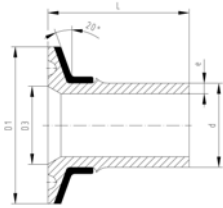


d [mm]	Inch	PN	FM	Code	kg	e [mm]	D1 [mm]	D3 [mm]	L [mm]
<sup>1</sup> * 20	3/4	16	BCF, IR	<b>735 598 207</b>	0.011	1.9	25.0	16.2	50
* 25	1	16	BCF, IR	<b>735 598 209</b>	0.042	1.9	50.5	22.4	55
32	1 1/2	16	BCF, IR	<b>735 598 213</b>	0.044	2.4	50.5	34.9	57
40	1 1/2	16	BCF, IR	<b>735 598 215</b>	0.047	2.4	50.5	35.5	67
50	2	16	BCF, IR	<b>735 598 217</b>	0.082	3.0	64.0	47.7	68
63	2 1/2	16	BCF, IR	<b>735 598 219</b>	0.107	3.0	77.5	59.9	71

PF 2 65 456 001



## SYGEF Plus Sanitary Adaptor, with stainless reinforcement, PN 16 DIN 3017

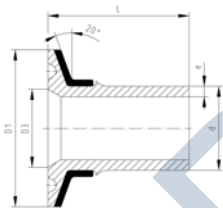


d [mm]	DN [mm]	PN	FM	Code	kg	e [mm]	D1 [mm]	D3 [mm]	L [mm]
25	25	16	BCF, IR	<b>735 598 259</b>	0.042	1.9	50.5	22.4	55
32	32	16	BCF, IR	<b>735 598 262</b>	0.042	2.4	50.5	31.7	57
40	40	16	BCF, IR	<b>735 598 265</b>	0.047	2.4	50.5	35.5	67
50	50	16	BCF, IR	<b>735 598 267</b>	0.081	3.0	64.0	48.6	68
63	65	16	BCF, IR	<b>735 598 269</b>	0.107	3.0	77.5	59.9	71

PF 2 65 456 001



## SYGEF Plus Sanitary Adaptor, with stainless reinforcement, PN 16 ISO 2852



d [mm]	DN [mm]	PN	FM	Code	kg	e [mm]	D1 [mm]	D3 [mm]	L [mm]
25	25	16	BCF, IR	<b>735 598 309</b>	0.042	1.9	50.5	22.4	55
32	32	16	BCF, IR	<b>735 598 312</b>	0.045	2.4	50.5	31.7	57
40	40	16	BCF, IR	<b>735 598 315</b>	0.047	2.4	50.5	35.5	67
50	50	16	BCF, IR	<b>735 598 317</b>	0.081	3.0	64.0	48.6	68
63	65	16	BCF, IR	<b>735 598 319</b>	0.107	3.0	77.5	59.9	71

PF 2 65 456 001





**SYGEF Plus**  
**Sanitary Adaptor, with stainless**  
**reinforcement, PN 16**  
**ASME BPE**

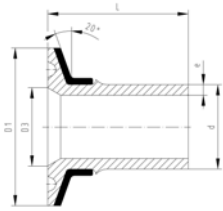


**Model:**

- Material: PVDF-HP

<sup>1</sup> Model without stainless reinforcement

\* Model without chamfer



d [mm]	Inch	PN	FM	Code	kg	e [mm]	D1 [mm]	D3 [mm]	L [mm]
<sup>1*</sup> 20	3/4	16	BCF, IR	<b>735 598 357</b>	0.011	1.9	25.0	16.2	49
25	1	16	BCF, IR	<b>735 598 359</b>	0.042	1.9	50.5	22.4	55
32	1 1/2	16	BCF, IR	<b>735 598 362</b>	0.044	2.4	50.5	34.9	57
40	1 1/2	16	BCF, IR	<b>735 598 365</b>	0.047	2.4	50.5	35.5	57
50	2	16	BCF, IR	<b>735 598 367</b>	0.082	3.0	64.0	47.7	68
63	2 1/2	16	BCF, IR	<b>735 598 369</b>	0.107	3.0	77.5	59.9	71

PF 2 65 456 001



**SYGEF Plus**  
**Sanitary Adaptor, with stainless**  
**reinforcement, PN 16**  
**JIS G3447**



d [mm]	DN	PN	FM	Code	kg	e [mm]	D1 [mm]	D3 [mm]	L [mm]
20	15 A	16	BCF, IR	<b>735 598 406</b>	0.020	1.9	34.0	17.5	49
25	1 S	16	BCF, IR	<b>735 598 408</b>	0.042	1.9	50.5	23.4	55
32	1 1/4 S	16	BCF, IR	<b>735 598 410</b>	0.045	2.4	50.5	29.6	57
40	1 1/2 S	16	BCF, IR	<b>735 598 414</b>	0.047	2.4	50.5	35.2	67
50	2 S	16	BCF, IR	<b>735 598 416</b>	0.082	3.0	64.0	47.7	68
63	2 1/2 S	16	BCF, IR	<b>735 598 418</b>	0.107	3.0	77.5	59.9	71

PF 2 65 456 001



**SYGEF Plus**  
**Sanitary Adaptor, with stainless**  
**reinforcement, PN 16**  
**ferrule for Membrane Manometer**



d [mm]	DN [mm]	PN	FM	Code	kg	e [mm]	D1 [mm]	D3 [mm]	L [mm]
20	15	16	BCF, IR	<b>735 598 506</b>	0.038	1.9	50.5	34.1	49
25	20	16	BCF, IR	<b>735 598 508</b>	0.041	1.9	50.5	34.1	55
32	25	16	BCF, IR	<b>735 598 510</b>	0.045	2.4	50.5	34.1	57

PF 2 65 456 001



## SYGEF Plus Sanitary Adaptor, with stainless reinforcement, PN 16 for PVDF-PVDF connection

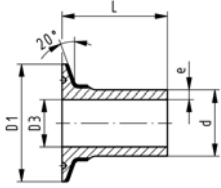


### Model:

- Material: PVDF-HP
- without chamfer for complete evacuation even in horizontal installation

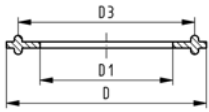
### Note:

- to be connected with standard clamp - please see dimension D1



d [mm]	PN	FM	Code	kg	e [mm]	D1 [mm]	D3 [mm]	L [mm]
20	16	BCF, IR	<b>735 598 806</b>	0.041	1.9	50.5	16.7	49
25	16	BCF, IR	<b>735 598 807</b>	0.044	1.9	50.5	19.9	55
32	16	BCF, IR	<b>735 598 808</b>	0.049	2.4	50.5	25.6	57
40	16	BCF, IR	<b>735 598 809</b>	0.079	2.4	64.0	33.4	67
50	16	BCF, IR	<b>735 598 810</b>	0.090	3.0	64.0	42.2	68
63	16	BCF, IR	<b>735 598 811</b>	0.118	3.0	77.5	55.1	71

PF 2 65 456 001



## Gasket PTFE



### Model:

- Special gaskets for Sanitary Adaptors PVDF-PVDF connection only

d [mm]	Code	kg	D [mm]	D1 [mm]	D3 [mm]
20	<b>743 400 806</b>	0.010	50.5	16.9	43.5
25	<b>743 400 807</b>	0.010	50.5	20.1	43.5
32	<b>743 400 808</b>	0.010	50.5	25.8	43.5
40	<b>743 400 809</b>	0.015	64.0	33.6	56.5
50	<b>743 400 810</b>	0.015	64.0	42.5	56.5
63	<b>743 400 811</b>	0.017	77.5	55.4	70.5

PF 2 65 456 003

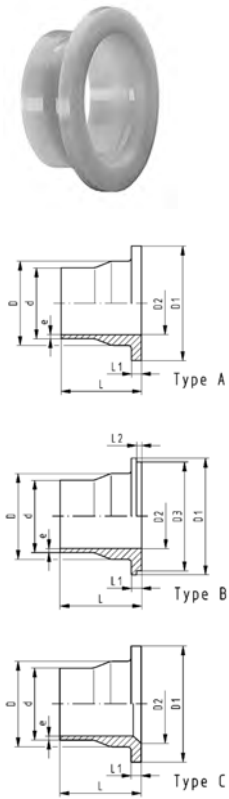
# Flange Adaptors, Flanges and Gaskets

35 79 88

## SYGEF Plus, Flange Adaptor, jointing face serrated, PN 16

Model:

- Material: PVDF-HP



d [mm]	DN [mm]	PN	FM	Code	kg
20	15	16	BCF, IR	735 798 831	0.029
25	20	16	BCF, IR	735 798 832	0.044
32	25	16	BCF, IR	735 798 833	0.066
40	32	16	BCF, IR	735 798 834	0.093
50	40	16	BCF, IR	735 798 835	0.129
63	50	16	BCF, IR	735 798 836	0.187
75	65	16	BCF, IR	735 798 837	0.298
90	80	16	BCF, IR	735 798 838	0.377
110	100	16	BCF, IR	735 798 839	0.540
140	125	16	IR	735 798 841	0.847
160	150	16	IR	735 798 842	1.200
200	200	16	IR	735 798 844	1.900
225	200	16	IR	735 798 845	2.000

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]	Type
20	26	45	15		1.9	54	6		A
25	32	58	20	54	1.9	56	7	4	B
32	40	68	26	63	2.4	58	7	4	B
40	49	78	34	73	2.4	68	8	4	B
50	60	88	42	82	3.0	69	8	4	B
63	75	102	56		3.0	72	9		A
75	89	122	66		3.6	80	10		A
90	105	138	78	133	4.3	81	12	4	B
110	125	158	100		5.3	81	13		C
140	155	188	127		6.7	90	16		C
160	175	212	151		7.7	93	17		C
200	232	268	207		9.6	102	22		C
225	235	268	207		10.8	102	22		C

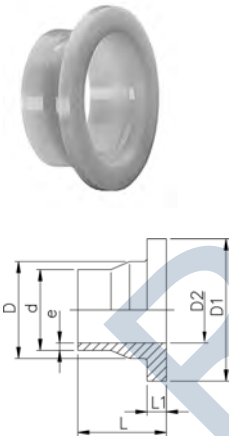
PF 2 37 249 010

35 79 88

## SYGEF Plus, Flange Adaptor ANSI, jointing face serrated, PN 16

Model:

- Material: PVDF-HP
- Other dimensions identical with metric version



d [mm]	PN	FM	Code	kg	D [mm]	D1 [mm]	D2 [mm]	e [mm]	L [mm]	L1 [mm]
25	16	BCF, IR	735 798 882	0.043	32	54	20	1.9	56	7
32	16	BCF, IR	735 798 883	0.063	40	63	26	2.4	58	7
40	16	BCF, IR	735 798 884	0.089	49	73	34	2.4	68	8

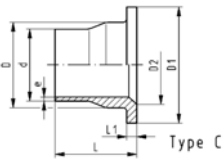
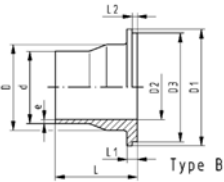
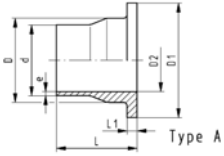
PF 2 37 249 010

35 79 88 / 35 79 85 **SYGEF Plus,**  
**Flange Adaptor, jointing face serrated, PN 10**



**Model:**

- Material: PVDF-HP



d [mm]	DN [mm]	PN	FM	Code	kg
90	80	10	BCF, IR	<b>735 798 888</b>	0.350
110	100	10	BCF, IR	<b>735 798 889</b>	0.456
125	100	10	IR	<b>735 798 590</b>	0.453
140	125	10	IR	<b>735 798 891</b>	0.710
160	150	10	IR	<b>735 798 892</b>	1.000
200	200	10	IR	<b>735 798 894</b>	1.744
225	200	10	IR	<b>735 798 895</b>	1.600
250	250	10	IR	<b>735 798 596</b>	2.673
280	250	10	IR	<b>735 798 597</b>	2.777
315	300	10	IR	<b>735 798 598</b>	3.436

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]	Type
90	105	138	78	133	2.8	81	12	4	B
110	125	158	100		3.4	81	13		A
125	132	158	114		3.9	82	14		A
140	155	188	127		4.3	90	16		A
160	175	212	151		4.9	93	17		C
200	232	268	207		6.2	102	22		C
225	235	268	207		6.9	102	22		A
250	285	320	250		7.7	120	22		C
280	291	320	250		8.6	120	22		A
315	335	370	300		9.7	120	22		C

PF 2 37 249 004

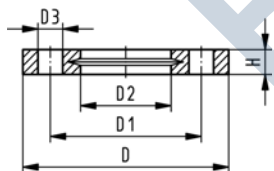
27 70 04  
 27 70 05

**Backing Flanges, PP-V  
 for Butt Fusion Systems metric**

**Model:**

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

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



d [mm]	Inch	DN [mm]	PN	Code	SP	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	A L	SC
120		15	16	<b>727 700 406</b>	56	0.080	95	65	28	14	16	4	M12
125		20	16	<b>727 700 407</b>	38	0.100	105	75	34	14	17	4	M12
132		25	16	<b>727 700 408</b>	80	0.140	115	85	42	14	18	4	M12
140		32	16	<b>727 700 409</b>	40	0.220	140	100	51	18	20	4	M16
150		40	16	<b>727 700 410</b>	30	0.210	150	110	62	18	22	4	M16
163		50	16	<b>727 700 411</b>	25	0.380	165	125	78	18	24	4	M16
175		65	16	<b>727 700 412</b>	19	0.480	185	145	92	18	26	4	M16
90		80	16	<b>727 700 513</b>	15	0.520	200	160	108	18	27	8	M16
110		100	16	<b>727 700 514</b>	13	0.680	220	180	128	18	28	8	M16
160	6	150	16	<b>727 700 517</b>	0	1.200	285	241	178	22	32	8	M20
200	8	200	16	<b>727 700 519</b>	0	1.400	340	295	235	22	34	8	M20
225	9	200	16	<b>727 700 520</b>	0	1.400	340	295	238	22	34	8	M20
180		150	16	<b>727 700 518</b>	0	1.200	285	240	188	22	32	8	M20
250		250	16	<b>727 700 521</b>	0	1.700	395	350	288	22	38	12	M20
280		250	16	<b>727 700 522</b>	0	1.700	395	350	294	22	38	12	M20
315		300	16	<b>727 700 523</b>	0	2.400	445	400	338	22	42	12	M20

PF 2 34 238 030

27 70 02  
27 70 03

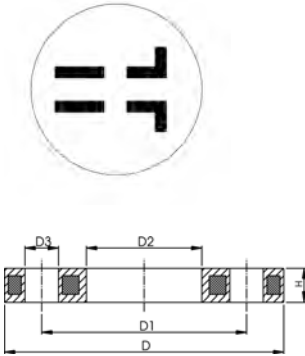
## Backing Flange, PP/Steel for Butt Fusion Systems metric



### 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]	A L	SC
20	15	16	<b>727 700 206</b>	0.220	95	65	28	14	12	4	M12
25	20	16	<b>727 700 207</b>	0.260	105	75	34	14	12	4	M12
32	25	16	<b>727 700 208</b>	0.430	115	85	42	14	16	4	M12
40	32	16	<b>727 700 209</b>	0.650	140	100	51	18	20	4	M16
50	40	16	<b>727 700 210</b>	0.820	150	110	62	18	20	4	M16
63	50	16	<b>727 700 211</b>	0.940	165	125	78	18	20	4	M16
75	65	16	<b>727 700 212</b>	1.300	185	145	92	18	20	4	M16
90	80	16	<b>727 700 313</b>	1.400	200	160	108	18	20	8	M16
110	100	16	<b>727 700 314</b>	1.580	220	180	128	18	20	8	M16
160	150	16	<b>727 700 317</b>	3.890	285	240	178	22	24	8	M20
140	125	16	<b>727 700 316</b>	2.360	250	210	158	18	24	8	M16
180	150	16	<b>727 700 318</b>	3.410	285	240	188	22	24	8	M20
200	200	16	<b>727 700 319</b>	5.180	340	295	235	22	27	8	M20
225	200	16	<b>727 700 320</b>	5.150	340	295	238	22	27	8	M20
250	250	16	<b>727 700 321</b>	6.680	395	350	288	22	30	12	M20
280	250	16	<b>727 700 322</b>	6.580	395	350	294	22	30	12	M20
315	300	16	<b>727 700 323</b>	8.420	445	400	338	22	34	12	M20

PF 2 34 238 022

27 70 14  
27 70 15

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

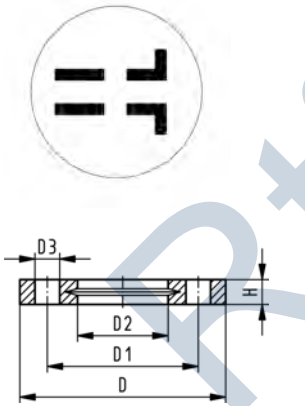


### Model:

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

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

AL: number of holes



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

PF 2 34 238 032

27 70 12

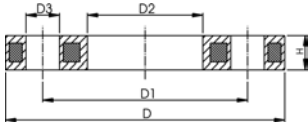


## Backing Flange, PP/Steel for Butt Fusion Systems Inch/ANSI

### Model:

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

AL: number of holes



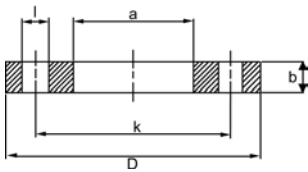
PF 2 34 238 023

DN [mm]	d [mm]	PN	Code	SP	kg	D1 [mm]	D2 [mm]	D3 [mm]	D [mm]	H [mm]	A L
15	20	16	<b>727 701 206</b>	72	0.210	60	28	16	95	12	4
20	25	16	<b>727 701 207</b>	45	0.250	70	34	16	105	12	4
25	32	16	<b>727 701 208</b>	34	0.420	79	42	16	115	16	4
32	40	16	<b>727 701 209</b>	20	0.670	89	51	16	140	16	4
40	50	16	<b>727 701 210</b>	17	0.860	98	62	16	150	18	4
50	63	16	<b>727 701 211</b>	15	0.930	121	78	19	165	18	4
65	75	16	<b>727 701 212</b>	11	1.340	140	92	19	185	18	4
80	90	16	<b>727 701 313</b>	9	1.550	152	108	19	200	20	4
100	110	16	<b>727 701 314</b>	13	1.840	190	128	19	229	20	8
200	200	16	<b>727 701 319</b>	0	5.180	298	235	22	340	27	8
200	225	16	<b>727 701 320</b>	0	5.150	298	238	22	340	27	8

## Backing Flange PVDF-Steel ANSI Flange Ring blue coated steel

Material: PVDF blue coated steel

Bolt holes drilled in accordance with ANSI B16.5, Class 150 pattern



PF 2 34 238 007

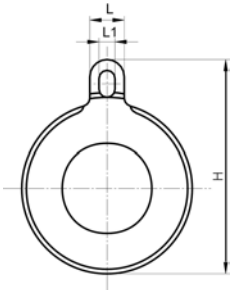
d [mm]	Inch	part number Code	SP	kg	Weight [lb]	D [mm]	a [mm]	k [mm]	b [mm]	l [mm]	Bolt Holes
20	½	<b>155 701 806</b>			0.50	89	28	60	7	16	4
25	¾	<b>155 701 807</b>			0.75	98	34	70	7	16	4
32	1	<b>155 701 808</b>			0.75	108	42	79	7	16	4
40	1 ¼	<b>155 701 809</b>			1.13	117	51	89	8	16	4
50	1 ½	<b>155 701 810</b>			1.31	127	62	98	8	16	4
63	2	<b>155 701 811</b>			2.13	152	78	121	10	19	4
75	2 ½	<b>155 701 812</b>	0	1.340	2.94	178	92	140	10	19	4
90	3	<b>155 701 813</b>			3.19	190	110	152	10	19	4
110	4	<b>155 703 814</b>			4.56	229	133	190	10	19	8
160	6	<b>155 701 917</b>			7.34	279	179	241	13	22	8
200	8	<b>155 701 919</b>	5	0.001	13.12	343	236	298	16	22	8
225	9	<b>155 701 920</b>			12.64	343	239	298	16	22	8
250	10	<b>155 701 921</b>			16.76	406	288	362	22	22	12
315	12	<b>155 701 923</b>			23.00	483	338	432	25	25	12



## SYGEF Plus Gasket

### Model:

- For Use with Steel Flange Rings
- \* Non-Returnable/Non-Cancelable



PF 2 37 344 001

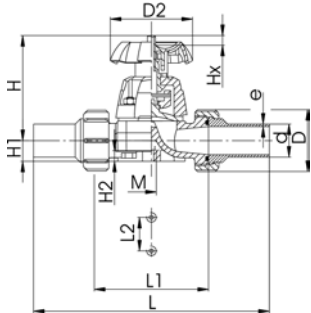
d [mm]	Pipe Size [inch]	Code	SP	kg	H [mm]	L [mm]	L1 [mm]
25	3/4	<b>731 400 753</b>	1	0.035	76	20	13
32	1	<b>731 400 755</b>	1	0.040	91	25	16
40	1 1/4	<b>731 400 757</b>	1	0.030	101	25	16
50	1 1/2	<b>731 400 759</b>	1	0.055	110	25	16
63	2	<b>731 400 760</b>	1	0.080	128	25	16
75	2 1/2	<b>731 400 761</b>	1	0.100	148	25	16
90	3	<b>731 400 763</b>	1	0.110	161	25	16
110	4	<b>731 400 764</b>	1	0.165	189	25	16
160	6	<b>731 400 667</b>	1	0.200	244	30	20
200/225	8/9	<b>731 400 670</b>	1	0.305	300	30	20
250	10	<b>731 400 671</b>	0	0.001	360	35	22

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# Diaphragm valves

## SYGEF Plus Diaphragm valve type 314 With butt fusion spigots



### Model:

- Material: PVDF-HP
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)
- For easy installation and removal
- Short overall length
- Welding dimension: PN16
- Also suitable for IR welding

### Option:

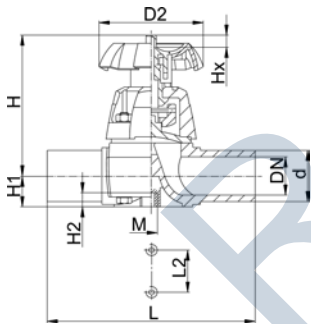
- Handwheel with built-in locking mechanism (standard version is nonlockable)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	<b>175 314 562</b>	0.500
25	20	10	137	<b>175 314 563</b>	0.725
32	25	10	207	<b>175 314 564</b>	1.000
40	32	10	354	<b>175 314 565</b>	1.600
50	40	10	517	<b>175 314 566</b>	2.092
63	50	10	713	<b>175 314 567</b>	3.619

d [mm]	D [mm]	D2 [mm]	e [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	M
20	45	80	1.9	90	14	12	196	90	25	M6
25	55	80	1.9	101	18	12	220	108	25	M6
32	62	94	2.4	117	22	12	234	116	25	M6
40	75	117	2.4	127	26	15	258	134	45	M8
50	84	117	3.0	139	32	15	284	154	45	M8
63	101	152	3.0	172	39	15	320	184	45	M8

PF 2 65 435 006

## SYGEF Plus Diaphragm valve type 315 With butt fusion ends metric



### Model:

- Material: PVDF-HP
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)
- Welding dimension: PN16

### Option:

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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE with EPDM supp. diaphragm Code	kg	D2 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L2 [mm]	M
20	15	10	72	<b>175 315 562</b>	0.360	80	90	14	12	124	25	M6
25	20	10	137	<b>175 315 563</b>	0.560	80	102	18	12	144	25	M6
32	25	10	207	<b>175 315 564</b>	0.804	94	119	21	12	154	25	M6
40	32	10	354	<b>175 315 565</b>	1.025	117	126	26	15	174	45	M8
50	40	10	517	<b>175 315 566</b>	1.480	117	139	33	15	194	45	M8
63	50	10	713	<b>175 315 567</b>	2.581	152	172	39	15	224	45	M8
75	65	10	992	<b>175 315 368</b>	4.343	152	210	46	15	214	70	M8

PF 2 37 206 004





## SYGEF Plus Diaphragm valve type 317 With flanges metric

### Model:

- Material: PVDF-HP
- DN 15-65 with backing flange
- DN 80-150 with fixed flange
- Overall length according to EN 558
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)

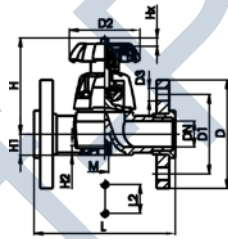
### Option:

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

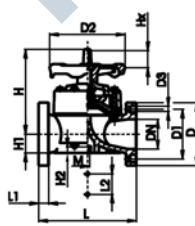
\* DN80 and DN150 fixed flanges metric and Inch ANSI B16.5

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	PTFE/EPDM Code	kg
20	15	1/2	10	72	175 317 447	0.580
25	20	3/4	10	137	175 317 448	0.858
32	25	1	10	207	175 317 449	1.205
40	32	1 1/4	10	354	175 317 450	2.270
50	40	1 1/2	10	517	175 317 451	2.260
63	50	2	10	713	175 317 452	3.700
75	65	2 1/2	10	992	175 317 453	5.700
* 90	80	3	10	1700	175 317 054	10.700
110	100	4	10	2700	175 317 055	14.890
* 160	150	6	7	6033	175 317 057	31.000

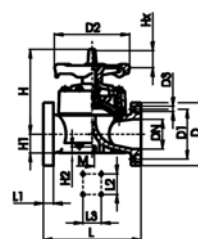
d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	M	A L
20	95	65	80	14	90	14	12	130		25		M6	4
25	105	75	80	14	102	18	12	150		25		M6	4
32	115	85	94	14	119	21	12	160		25		M6	4
40	140	100	117	18	126	26	15	180		45		M8	4
50	150	110	117	18	139	33	15	200		45		M8	4
63	165	125	152	18	172	39	15	230		45		M8	4
75	185	145	152	18	201	46	15	290		70		M8	4
* 90	200	152	270	18	265	57	23	310	35	120		M12	8
110	225	180	270	18	302	68	23	350	35	120		M12	8
* 160	285	240	400	22	437	108	23	480	26	100	200	M12	8



DN 15-65



DN 80-100



DN 150

PF 2 37 206 002



## SYGEF Plus Diaphragm valve type 317 Flanged version ANSI

### Model:

- Material: PVDF-HP
- DN 15-65 with backing flange
- DN 80-150 with fixed flange
- Overall length according to EN 558
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)

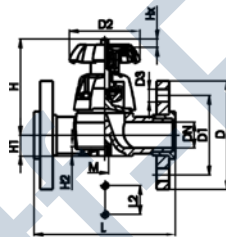
### Option:

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

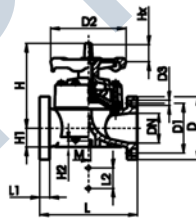
\* DN80 and DN150 fixed flanges metric and Inch ANSI B16.5

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE with EPDM supp. Diaphragm Code	kg
20	15	½	10	72	<b>175 317 562</b>	0.760
25	20	¾	10	137	<b>175 317 563</b>	1.210
32	25	1	10	207	<b>175 317 564</b>	1.620
40	32	1 ¼	10	354	<b>175 317 565</b>	2.270
50	40	1 ½	10	517	<b>175 317 566</b>	2.810
63	50	2	10	713	<b>175 317 567</b>	4.230
75	65	2 ½	10	992	<b>175 317 568</b>	5.700
* 90	80	3	10	1700	<b>175 317 054</b>	10.700
110	100	4	10	2700	<b>175 317 355</b>	14.950

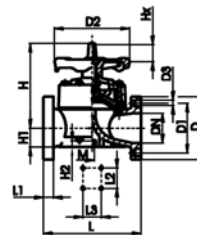
d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	M	A L
20	95	61	80	14	90	14	12	130		25	M6	4
25	105	70	80	14	93	18	12	150		25	M6	4
32	115	80	94	14	119	21	12	160		25	M6	4
40	140	89	117	18	126	26	15	180		45	M8	4
50	150	99	117	18	139	33	15	200		45	M8	4
63	165	121	152	18	172	39	15	230		45	M8	4
75	185	140	152	18	201	46	15	290		70	M8	4
* 90	200	152	270	18	265	57	23	310	35	120	M12	8
110	225	191	270	18	302	68	23	350	35	120	M12	8



DN 15-65



DN 80-100



DN 150

PF 2 37 206 002



# SYGEF Plus

## Diaphragm valve type 319

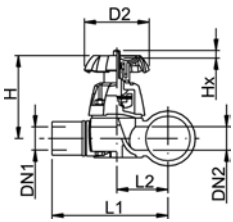
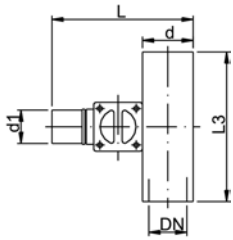
### With butt fusion spigots

#### Model:

- Material: PVDF-HP
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)
- Welding dimension: PN16
- Also suitable for IR welding

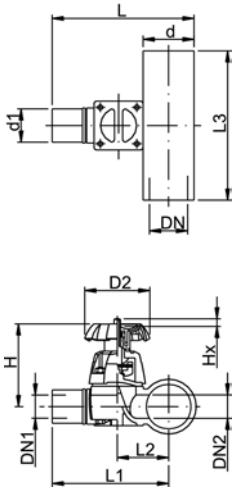
#### Option:

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



d [mm]	d1 [mm]	DN [mm]	DN1 [mm]	DN2 [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	20	15	15	15	10	47	<b>175 319 301</b>	0.366
25	20	20	15	20	10	69	<b>175 319 303</b>	0.548
25	25	20	20	20	10	91	<b>175 319 304</b>	0.548
32	20	25	15	25	10	86	<b>175 319 307</b>	0.759
32	25	25	20	25	10	126	<b>175 319 308</b>	0.756
32	32	25	25	25	10	156	<b>175 319 309</b>	0.754
40	20	32	15	25	10	84	<b>175 319 312</b>	0.449
40	25	32	20	25	10	124	<b>175 319 313</b>	0.810
40	32	32	25	25	10	161	<b>175 319 314</b>	0.810
40	40	32	32	32	10	250	<b>175 319 315</b>	1.210
50	20	40	15	25	10	82	<b>175 319 318</b>	0.873
50	25	40	20	25	10	124	<b>175 319 319</b>	0.934
50	32	40	25	25	10	159	<b>175 319 320</b>	0.868
50	40	40	32	40	10	312	<b>175 319 321</b>	1.685
50	50	40	40	40	10	356	<b>175 319 322</b>	1.680
63	20	50	15	25	10	81	<b>175 319 325</b>	0.937
63	25	50	20	25	10	115	<b>175 319 326</b>	0.934
63	32	50	25	25	10	156	<b>175 319 327</b>	0.932
63	40	50	32	50	10	383	<b>175 319 328</b>	2.635
63	50	50	40	50	10	487	<b>175 319 329</b>	2.610
63	63	50	50	50	10	544	<b>175 319 330</b>	2.615
75	40	65	32	32	10	256	<b>175 319 336</b>	1.320
75	50	65	40	50	10	497	<b>175 319 337</b>	2.710
75	63	65	50	50	10	546	<b>175 319 338</b>	2.710
90	20	80	15	25	10	88	<b>175 319 341</b>	1.178
90	25	80	20	25	10	133	<b>175 319 342</b>	1.176
90	32	80	25	25	10	162	<b>175 319 343</b>	1.172
90	50	80	40	50	10	504	<b>175 319 345</b>	2.968
90	63	80	50	50	10	530	<b>175 319 346</b>	2.968
110	20	100	15	25	10	89	<b>175 319 351</b>	1.288
110	25	100	20	25	10	123	<b>175 319 352</b>	1.286
110	32	100	25	25	10	159	<b>175 319 353</b>	1.283
110	50	100	40	50	10	503	<b>175 319 355</b>	3.258
110	63	100	50	50	10	543	<b>175 319 356</b>	3.250

d [mm]	Lift = Hx [mm]	D2 [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
20	8	80	87	106	96	30	140
25	11	80	101	121	108	36	150
25	11	80	101	121	108	36	150
32	13	94	119	137	120	43	160
32	13	94	119	137	120	43	160
32	13	94	119	137	120	43	160
40	12	94	116	149	128	51	180
40	12	94	116	149	128	51	180
40	12	94	116	149	128	51	180
40	16	117	127	174	153	56	190
50	8	94	116	159	134	57	180
50	13	94	119	159	134	57	180
50	13	94	119	159	134	57	180
50	19	117	139	195	169	66	200
50	19	117	139	195	169	66	200
63	13	94	116	175	144	67	180
63	13	94	116	175	144	67	180
63	13	94	119	175	144	67	180
63	27	152	172	223	192	80	220
63	28	152	172	225	192	80	220



d [mm]	Lift = Hx [mm]	D2 [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
63	27	152	172	223	192	80	220
75	16	117	126	203	166	78	190
75	27	152	172	236	198	86	220
75	27	152	172	236	198	86	220
90	13	94	119	204	159	82	160
90	13	94	119	204	159	82	160
90	13	94	119	204	159	82	160
90	28	152	172	252	207	95	220
90	28	152	172	252	207	95	220
110	13	94	116	226	171	94	160
110	13	94	116	226	171	94	160
110	13	94	116	226	171	94	160
110	28	152	172	274	219	107	220
110	28	152	172	274	219	107	220

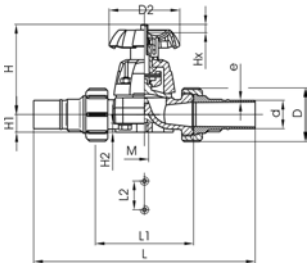
PF 2 65 435 002



## SYGEF Plus Diaphragm valve type 314 HTR With butt fusion spigots

### Model:

- Material: PVDF-HP
- High Temperature Resistant (HTR)
- With additional sealing element FPM white (FDA compliant)
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)
- For easy installation and removal
- Short overall length
- Welding dimension: PN16
- Red handwheel
- Also suitable for IR welding



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM FPM SEALING ELEMENT Code	kg
20	15	10	72	<b>175 314 602</b>	0.500
25	20	10	137	<b>175 314 603</b>	0.725
32	25	10	207	<b>175 314 604</b>	1.000
40	32	10	354	<b>175 314 605</b>	1.600
50	40	10	517	<b>175 314 606</b>	2.092
63	50	10	713	<b>175 314 607</b>	3.619

d [mm]	D [mm]	D2 [mm]	e [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	M
20	45	80	1.9	90	14	12	196	90	25	M6
25	55	80	1.9	101	18	12	220	108	25	M6
32	62	94	2.4	117	22	12	234	116	25	M6
40	75	117	2.4	127	26	15	258	134	45	M8
50	84	117	3.0	139	32	15	284	154	45	M8
63	101	152	3.0	172	39	15	320	184	45	M8

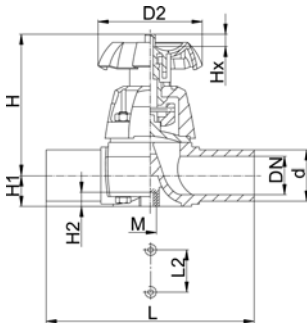
PF 2 65 435 006



## SYGEF Plus Diaphragm valve type 315 HTR With butt fusion ends metric

### Model:

- Material: PVDF-HP
- High Temperature Resistant (HTR)
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)
- With additional sealing element FPM white (FDA compliant)
- Welding dimension: PN16
- Further versions: with backing diaphragm FPM on request
- Red handwheel



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM FPM SEALING ELEMENT Code	kg	D2 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L2 [mm]	M
20	15	10	72	175 315 602	0.360	80	90	14	12	124	25	M6
25	20	10	137	175 315 603	0.560	80	102	18	12	144	25	M6
32	25	10	207	175 315 604	0.804	94	119	21	12	154	25	M6
40	32	10	354	175 315 605	1.025	117	126	26	15	174	45	M8
50	40	10	517	175 315 606	1.480	117	139	33	15	194	45	M8
63	50	10	713	175 315 607	2.581	152	172	39	15	224	45	M8

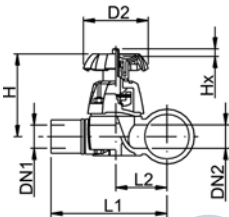
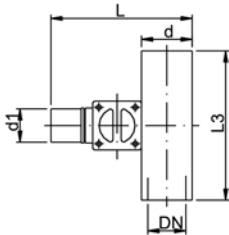
PF 2 37 206 004



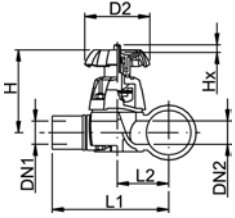
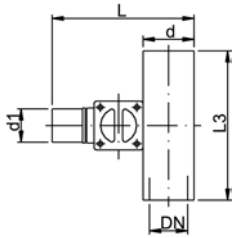
## SYGEF® Plus Diaphragm valve type 319 HTR With butt fusion spigots

### Model:

- Material: PVDF-HP
- High Temperature Resistant (HTR)
- Diaphragm PTFE with EPDM backing diaphragm (FDA compliant)
- Suitable for butt and BCF® fusion
- Welding dimension: PN16
- With additional sealing element FPM white (FDA compliant)
- Red handwheel
- Also suitable for IR welding



d [mm]	d1 [mm]	DN [mm]	DN1 [mm]	DN2 [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	WITH PTFE/EPDM FPM SEALING ELEMENT Code	kg
20	20	15	15	15	10	47	175 319 601	0.366
25	20	20	15	20	10	69	175 319 603	0.546
25	25	20	20	20	10	91	175 319 604	0.548
32	20	25	15	25	10	86	175 319 607	0.759
32	25	25	20	25	10	126	175 319 608	0.756
32	32	25	25	25	10	156	175 319 609	0.754
40	20	32	15	25	10	84	175 319 612	0.449
40	25	32	20	25	10	124	175 319 613	0.810
40	32	32	25	25	10	161	175 319 614	0.810
40	40	32	32	32	10	250	175 319 615	1.210
50	20	40	15	25	10	82	175 319 618	0.873
50	25	40	20	25	10	124	175 319 619	0.872
50	32	40	25	25	10	159	175 319 620	0.868
50	40	40	32	40	10	312	175 319 621	1.685
50	50	40	40	40	10	356	175 319 622	1.680
63	20	50	15	25	10	81	175 319 625	0.937
63	25	50	20	25	10	115	175 319 626	0.934
63	32	50	25	25	10	156	175 319 627	0.932
63	40	50	32	50	10	383	175 319 628	2.635
63	50	50	40	50	10	487	175 319 629	2.610
63	63	50	50	50	10	544	175 319 630	2.615
75	40	65	32	32	10	256	175 319 636	1.320
75	50	65	40	50	10	497	175 319 637	2.710
75	63	65	50	50	10	546	175 319 638	2.710
90	20	80	15	25	10	88	175 319 641	1.178
90	25	80	20	25	10	133	175 319 642	1.176

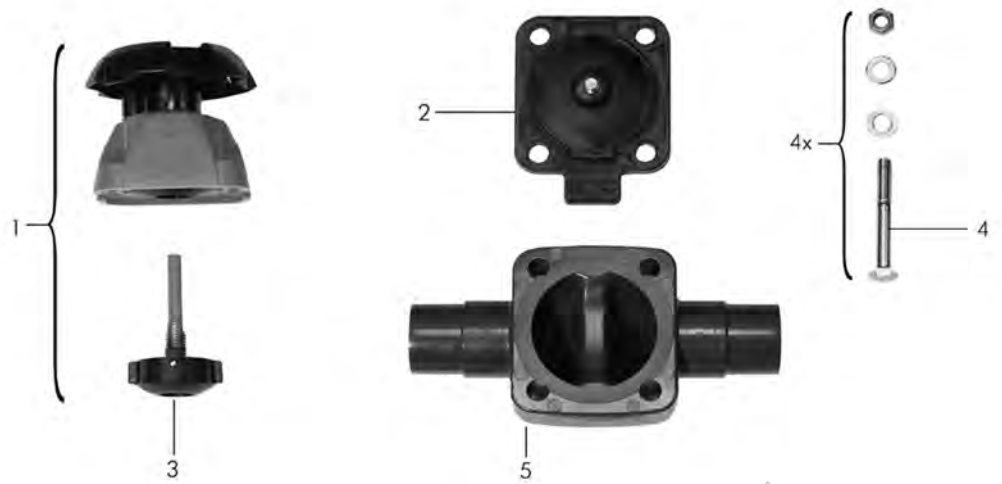


d [mm]	d1 [mm]	DN [mm]	DN1 [mm]	DN2 [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	WITH PTFE/EPDM FPM SEALING ELEMENT Code	kg
90	32	80	25	25	10	162	<b>175 319 643</b>	1.172
90	50	80	40	50	10	504	<b>175 319 645</b>	2.968
90	63	80	50	50	10	530	<b>175 319 646</b>	2.968
110	20	100	15	25	10	89	<b>175 319 651</b>	1.288
110	25	100	20	25	10	123	<b>175 319 652</b>	1.286
110	32	100	25	25	10	159	<b>175 319 653</b>	1.283
110	50	100	40	50	10	503	<b>175 319 655</b>	3.258
110	63	100	50	50	10	543	<b>175 319 656</b>	3.250

d [mm]	Lift = Hx [mm]	D2 [mm]	H [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
20	8	80	87	106	96	30	140
25	11	80	101	121	108	36	150
25	11	80	101	121	108	36	150
32	13	94	119	137	120	43	160
32	13	94	119	137	120	43	160
32	13	94	119	137	120	43	160
40	12	94	116	149	128	51	180
40	12	94	116	149	128	51	180
40	12	94	116	149	128	51	180
40	16	117	127	174	153	56	190
50	8	94	116	159	134	57	180
50	13	94	119	159	134	57	180
50	13	94	119	159	134	57	180
50	19	117	139	195	169	66	200
50	19	117	139	195	169	66	200
63	13	94	116	175	144	67	180
63	13	94	116	175	144	67	180
63	13	94	119	175	144	67	180
63	27	152	172	223	192	80	220
63	28	152	172	225	192	80	220
63	27	152	172	223	192	80	220
75	16	117	126	203	166	78	190
75	27	152	172	236	198	86	220
75	27	152	172	236	198	86	220
90	13	94	119	204	159	82	160
90	13	94	119	204	159	82	160
90	13	94	119	204	159	82	160
90	28	152	172	252	207	95	220
90	28	152	172	252	207	95	220
110	13	94	116	226	171	94	160
110	13	94	116	226	171	94	160
110	13	94	116	226	171	94	160
110	28	152	172	274	219	107	220
110	28	152	172	274	219	107	220

PF 2 65 435 002

## Spare parts diaphragm valve type 315



PF 2 34 236 999

### Diaphragm (2)

d [mm]	DN [mm]	PTFE/EPDM SYGEF PLUS HP Code	kg
20	15	<b>161 484 452</b>	0.025



PF 2 34 236 999

### Valve body metric (5)

d [mm]	DN [mm]	PVDF-HP butt fusion spigot IR Code	kg
20	15	<b>175 481 850</b>	0.093
25	20	<b>175 481 851</b>	0.158
32	25	<b>175 481 852</b>	0.238
40	32	<b>175 481 853</b>	0.410
50	40	<b>175 481 854</b>	0.635
63	50	<b>175 481 855</b>	1.047



## Spare parts diaphragm valve type 319



### Diaphragm (2)

d [mm]	PTFE/EPDM SYGEF PLUS Code	kg
20-20	161 484 452	0.025
25-20	161 484 453	0.035
25-25	161 484 453	0.035
32-20	161 484 454	0.060
32-25	161 484 454	0.060
32-32	161 484 454	0.060
40-20	161 484 454	0.060
40-25	161 484 454	0.060
40-32	161 484 454	0.060
40-40	161 484 455	0.083
50-20	161 484 454	0.060
50-25	161 484 454	0.060
50-32	161 484 454	0.060
50-40	161 484 456	0.106
50-50	161 484 456	0.106
63-40	161 484 457	0.150
63-50	161 484 457	0.150
63-63	161 484 457	0.150
75-40	161 484 455	0.083
75-50	161 484 457	0.150
75-63	161 484 457	0.150

PF 2 34 236 999

### Valve body with butt fusion spigot (5)



d [mm]	PVDF-HP Code	kg
20-20	175 481 128	0.102
25-20	175 481 130	0.170
25-25	175 481 131	0.169
32-20	175 481 085	0.273
32-25	175 481 086	0.270
32-32	175 481 087	0.268
40-20	175 481 134	0.344
40-25	175 481 135	0.345
40-32	175 481 136	0.345
40-40	175 481 137	0.475
50-20	175 481 091	0.385
50-25	175 481 092	0.384
50-32	175 481 093	0.380
50-40	175 481 142	0.708
50-50	175 481 143	0.705



<b>d</b> [mm]	<b>PVDF-HP</b> <b>Code</b>	<b>kg</b>
63-20	<b>175 481 095</b>	0.449
63-25	<b>175 481 096</b>	0.445
63-32	<b>175 481 097</b>	0.444
63-40	<b>175 481 150</b>	1.115
63-50	<b>175 481 151</b>	1.090
63-63	<b>175 481 152</b>	1.095
75-40	<b>175 481 103</b>	0.750
75-50	<b>175 481 160</b>	1.242
75-63	<b>175 481 161</b>	1.250
90-20	<b>175 481 106</b>	0.614
90-25	<b>175 481 107</b>	0.227
90-32	<b>175 481 108</b>	0.605
90-50	<b>175 481 110</b>	1.366
90-63	<b>175 481 111</b>	1.366
110-20	<b>175 481 113</b>	0.800
110-25	<b>175 481 114</b>	0.798
110-32	<b>175 481 115</b>	0.795
110-50	<b>175 481 117</b>	1.658
110-63	<b>175 481 118</b>	1.648

PF 2 34 236 999

Rtf-Prime.ru

# SYGEF® Plus

## Butterfly Valve Type 365 Lug-Style - Bareshaft



### Model:

- Metal lugged body with epoxy-coating
- PFA coated disc with PTFE liner
- HP produced & double-bagged
- Bareshaft to ISO5211
- Lugged body to ANSI B16.5 #150 or ISO/EN 1092 PN16
- Pneumatic actuated version available, see separate page

d (mm)	DN (mm)	Inch	PN	Kv value L/min (ΔP=1BAR)	Lugged ANSI B16.5 #150 Code	Lugged ISO/EN 1092 Code	KG	Torque Nm	ISO5211 (square shaft)
63	50	2	16	3199	<b>160 365 423</b>	<b>160 365 551</b>	4.7	30	F07/11mm
75	65	2½	16	3199	<b>160 365 424</b>	<b>160 365 552</b>	6	30	F07/11mm
90	80	3	16	6497	<b>160 365 425</b>	<b>160 365 553</b>	6.5	40	F07/11mm
110	100	4	16	9696	<b>160 365 426</b>	<b>160 365 554</b>	8.5	50	F07/14mm
140	125	5	16	16808	<b>160 365 427</b>	<b>160 365 555</b>	10.6	60	F07/14mm
160	150	6	16	24762	<b>160 365 428</b>	<b>160 365 556</b>	13.9	110	F07/17mm
225	200	8	10	50523	<b>160 365 429</b>	<b>160 365 557</b>	17.9	180	F10/17mm
280	250	10	10	74713	<b>160 365 430</b>	<b>160 365 558</b>	27.2	250	F10/22mm
315	300	12	10	119438	<b>160 365 431</b>	<b>160 365 559</b>	35.9	350	F10/22mm

## Handlever for Butterfly Valve Type 365



d	DN	Inch	Code
63-90	50-80	2-3	<b>161 486 065</b>
110-140	100-125	4-5	<b>161 486 066</b>
160	150	6	<b>161 486 067</b>

## Gearbox for Butterfly Valve Type 365



d	DN	Inch	Code
63-90	50-80	2-3	<b>198 806 690</b>
110-140	100-125	4-5	<b>198 806 691</b>
160-225	150-200	6-8	<b>198 806 692</b>
280-315	250-300	10-12	<b>198 806 693</b>

- Order bareshaft valve and handlever/gearbox as separate items

# Diaphragm valves pneumatic

## SYGEF Plus

### Diaphragm valve type DIASTAR 028

#### Function FC (Fail safe to close)

#### With butt fusion spigots IR metric



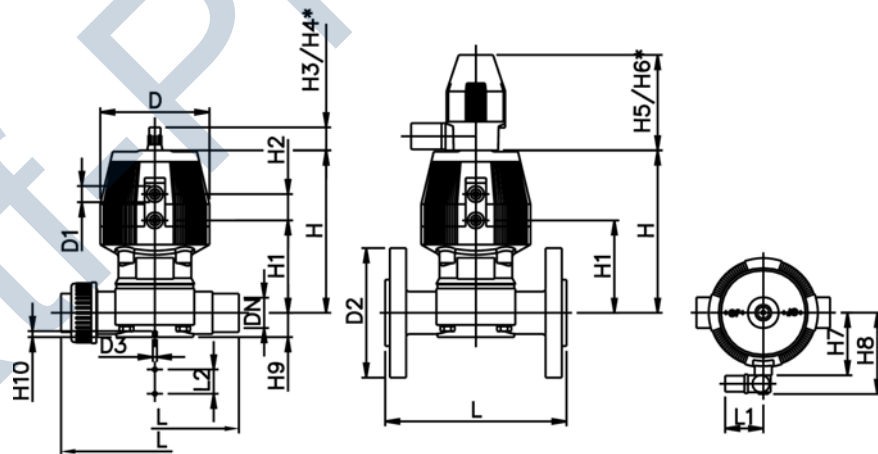
#### Model:

- Material: PVDF-HP
- With position indicator / Working pressure: **one side**

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	PTFE/EPDM Code	kg
20	15	5	72	<b>199 028 971</b>	0.520
25	20	7	120	<b>199 028 972</b>	0.950
32	25	7	238	<b>199 028 973</b>	1.370
40	32	7	341	<b>199 028 974</b>	1.810
50	40	7	460	<b>199 028 975</b>	3.350
63	50	7	685	<b>199 028 976</b>	6.270

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 148



**SYGEF Plus**  
**Diaphragm valve type DIASTAR 028**  
**Function FC (Fail safe to close)**  
**Unions with fusion spigots metric**

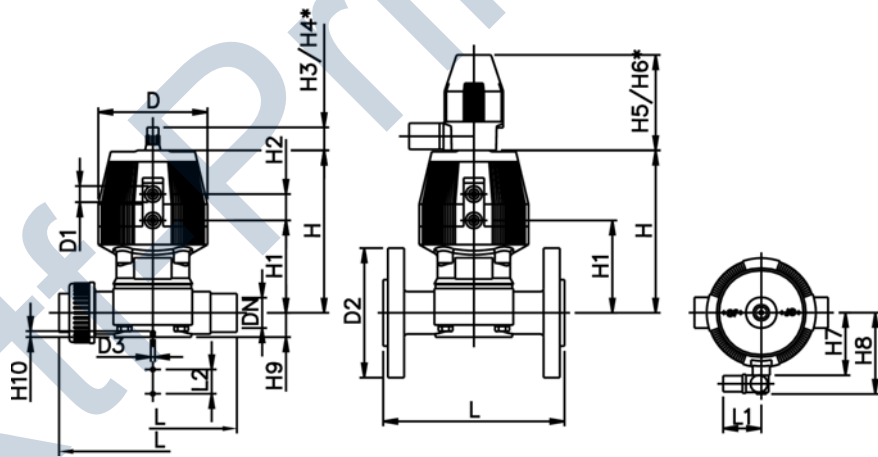
**Model:**

- Material: PVDF-HP
- With position indicator / Working pressure: **one side**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	5	72	<b>199 028 391</b>	0.839
25	20	7	120	<b>199 028 392</b>	0.950
32	25	7	238	<b>199 028 393</b>	1.370
40	32	7	341	<b>199 028 394</b>	2.370
50	40	7	460	<b>199 028 395</b>	3.850
63	50	7	685	<b>199 028 396</b>	6.270

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	196	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	220	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	234	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	258	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	284	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	320	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 148



**SYGEF Plus**  
**Diaphragm valve type DIASTAR 028**  
**Function FC (Fail safe to close)**  
**With backing flanges PP-V metric**

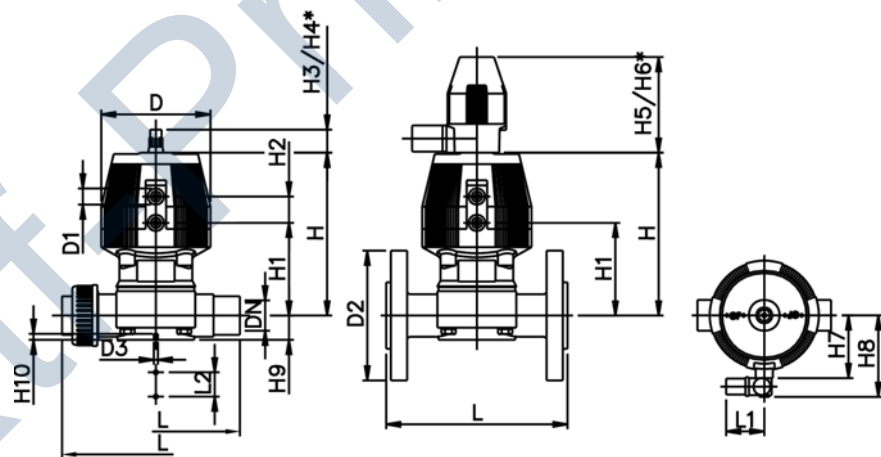
**Model:**

- Material: PVDF-HP
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	1/2	5	72	<b>199 028 441</b>	0.890
25	20	3/4	7	120	<b>199 028 442</b>	1.300
32	25	1	7	238	<b>199 028 443</b>	1.820
40	32	1 1/4	7	341	<b>199 028 444</b>	2.370
50	40	1 1/2	7	460	<b>199 028 445</b>	3.850
63	50	2	7	685	<b>199 028 446</b>	6.350

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	68	1/8	6	95	130	60	25	98	59	24	23	44	100	155
25	96	1/8	6	105	150	60	25	127	71	25	23	44	100	155
32	96	1/8	6	115	160	60	25	141	85	25	23	44	100	155
40	120	1/8	8	140	180	60	45	167	97	26	36	64	100	160
50	150	1/4	8	150	200	60	45	198	108	36	36	64	100	170
63	150	1/4	8	165	230	60	45	216	126	36	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	44	76	14	12	8
25	56	88	18	12	10
32	56	88	21	12	12
40	68	100	26	15	14
50	85	117	33	15	18
63	85	117	39	15	22



PF 3 39 212 148



**SYGEF Plus**  
**Diaphragm valve type DIASTAR 028**  
**Function FC (Fail safe to close)**  
**With backing flanges PP-V ANSI**

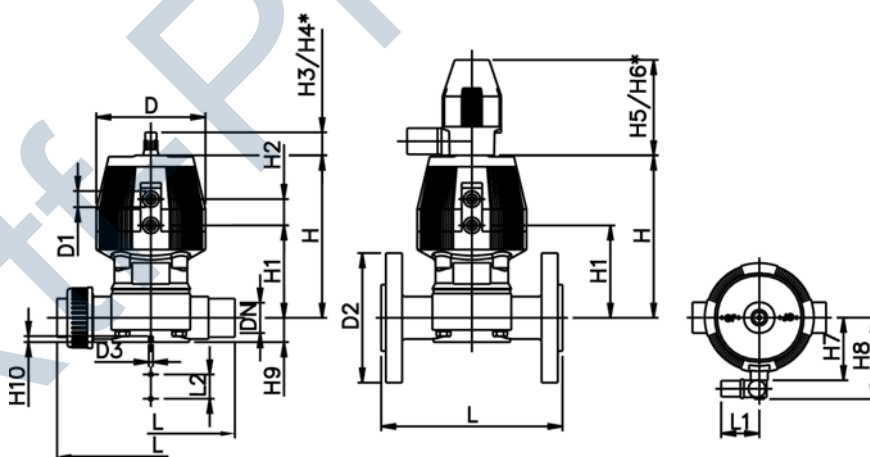
**Model:**

- Material: PVDF-HP
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: **one side**

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code
1/2	15	5	72	<b>199 028 581</b>
3/4	20	7	120	<b>199 028 582</b>
1	25	7	238	<b>199 028 583</b>
1 1/4	32	7	341	<b>199 028 584</b>
1 1/2	40	7	460	<b>199 028 585</b>
2	50	7	685	<b>199 028 586</b>

Inch	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
1/2	68	1/8	6	95	130	60	25	98	59	24	23	44	100	155
3/4	96	1/8	6	105	150	60	25	127	71	25	23	44	100	155
1	96	1/8	6	115	160	60	25	141	85	25	23	44	100	155
1 1/4	120	1/8	8	140	180	60	45	167	97	26	36	64	100	160
1 1/2	150	1/4	8	150	200	60	45	198	108	36	36	64	100	170
2	150	1/4	8	165	230	60	45	216	126	36	36	64	100	170

Inch	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
1/2	44	76	14	12	8
3/4	56	88	18	12	10
1	56	88	21	12	12
1 1/4	68	100	26	15	14
1 1/2	85	117	33	15	18
2	85	117	39	15	22



PF 3 39 212 148



## SYGEF Plus

### Diaphragm valve type DIASTAR 025

### Function FC (Fail safe to close)

### With butt fusion spigots IR metric

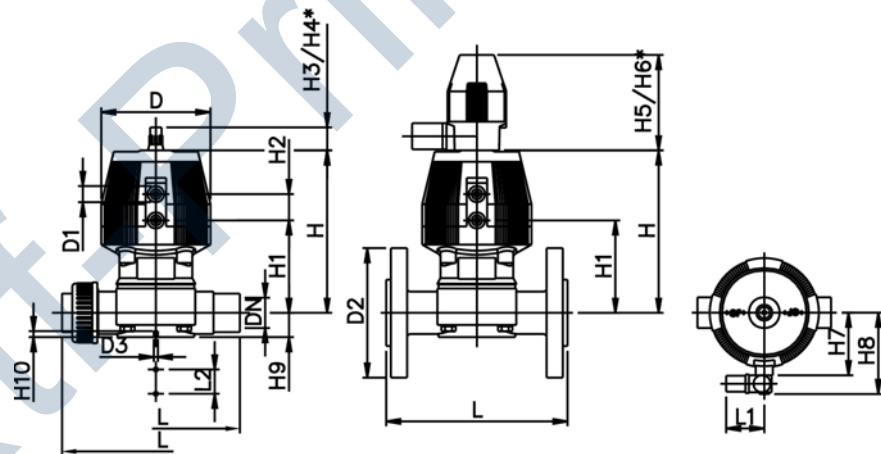
#### Model:

- Material: PVDF-HP
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	199 025 971	0.839
25	20	10	120	199 025 972	0.936
32	25	10	238	199 025 973	1.705
40	32	10	341	199 025 974	2.904
50	40	10	460	199 025 975	4.665
63	50	10	685	199 025 976	5.353

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	96	1/8	6	124	60	25	125	69	25	23	44	100	155	56
25	96	1/8	6	144	60	25	127	71	25	23	44	100	155	56
32	120	1/8	6	154	60	25	163	93	26	36	64	100	155	68
40	150	1/4	8	174	60	45	196	106	36	36	64	100	160	85
50	180	1/4	8	194	60	45	227	119	37	36	64	100	170	101
63	180	1/4	8	224	60	45	241	133	37	36	64	100	170	101

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	86	14	12	8
25	88	18	12	10
32	100	21	12	12
40	117	26	15	14
50	133	33	15	18
63	133	39	15	22



PF 3 39 212 118



**SYGEF Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function FC (Fail safe to close)**  
**Unions with fusion spigots metric**

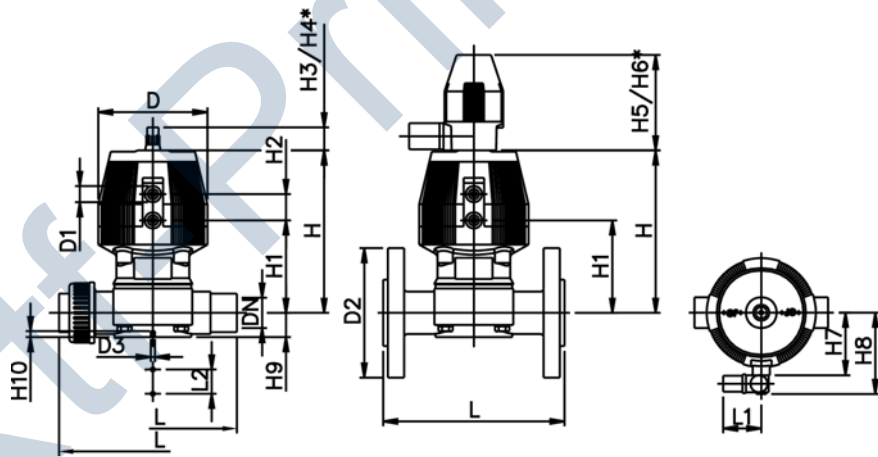
**Model:**

- Material: PVDF-HP
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	<b>199 029 501</b>	0.839
25	20	10	120	<b>199 029 502</b>	0.936
32	25	10	238	<b>199 029 503</b>	1.705
40	32	10	341	<b>199 029 504</b>	2.370
50	40	10	460	<b>199 029 505</b>	2.510
63	50	10	685	<b>199 029 506</b>	5.353

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	96	3/8	6	196	60	25	125	69	25	23	44	100	155	56
25	96	3/8	6	220	60	25	127	71	25	23	44	100	155	56
32	120	1/2	6	234	60	25	163	93	26	36	64	100	155	68
40	150	1/2	8	258	60	45	196	106	36	36	64	100	160	85
50	180	1/2	8	284	60	45	227	119	37	36	64	100	170	101
63	180	1/2	8	320	60	45	241	133	37	36	64	100	170	101

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	86	14	12	8
25	88	18	12	10
32	100	21	12	12
40	117	26	15	14
50	133	33	15	18
63	133	39	15	22



PF 3 39 212 118





## SYGEF Plus Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With backing flanges PP-V metric

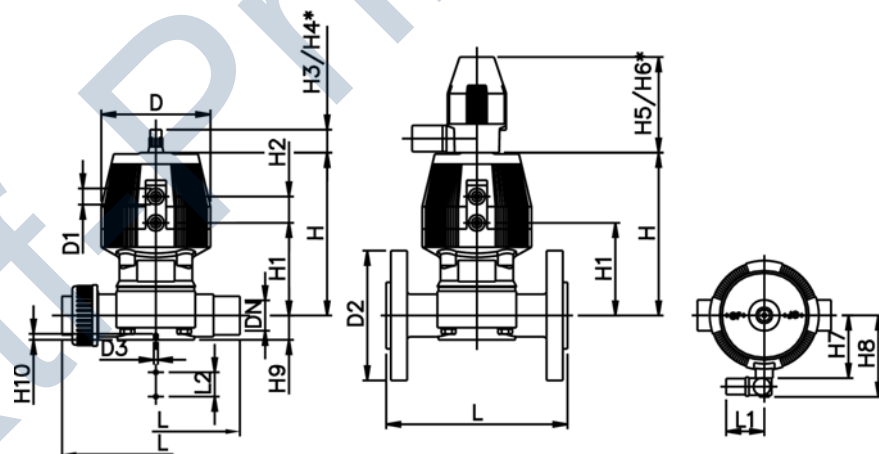
### Model:

- Material: PVDF-HP
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	1/2	10	72	<b>199 025 441</b>	0.274
25	20	3/4	10	120	<b>199 025 442</b>	0.936
32	25	1	10	238	<b>199 025 443</b>	1.705
40	32	1 1/4	10	341	<b>199 025 444</b>	2.904
50	40	1 1/2	10	460	<b>199 025 445</b>	4.665
63	50	2	10	685	<b>199 025 446</b>	5.353

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	96	1/8	6	95	130	60	25	125	69	25	23	44	100	155
25	96	1/8	6	105	150	60	25	127	71	25	23	44	100	155
32	120	1/8	6	115	160	60	25	163	93	26	36	64	100	155
40	150	1/4	8	140	180	60	45	196	106	36	36	64	100	160
50	180	1/4	8	150	200	60	45	227	119	37	36	64	100	170
63	180	1/4	8	165	230	60	45	241	133	37	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	56	86	14	12	8
25	56	88	18	12	10
32	68	100	21	12	12
40	85	117	26	15	14
50	101	133	33	15	18
63	101	133	39	15	22



PF 3 39 212 118



**SYGEF Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function FC (Fail safe to close)**  
**With fixed flanges PVDF metric**

**Model:**

- Material: PVDF-HP
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **both sides**

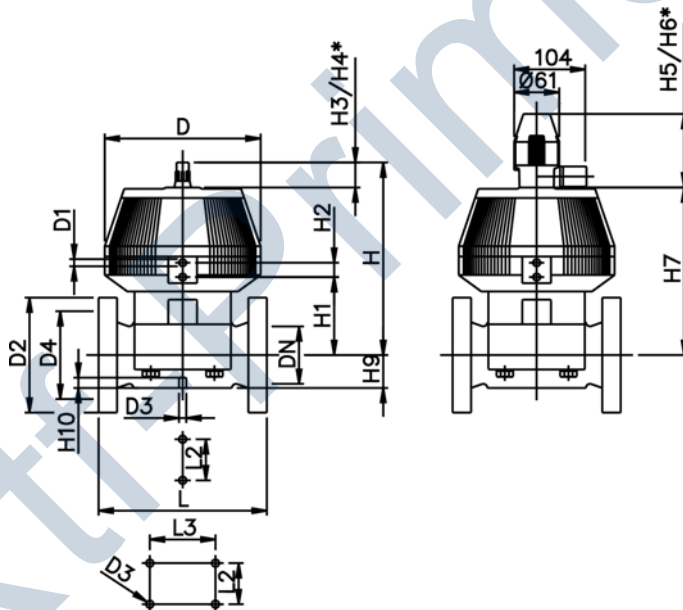
\* With backing flanges PP-V

\*\* 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]	PTFE/EPDM Code	kg
* 75	65	2 ½	10	992	<b>199 025 447</b>	13.600
** 90	80	3	10	1700	<b>199 025 448</b>	17.400
110	100	4	8	2700	<b>199 025 449</b>	24.700

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	D4 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
* 75	280	¼	8	185	145	290	70	344	148	24	46	100	129	195
** 90	280	¼	12	200	160	310	120	348	150	24	46	100	129	195
110	335	¼	12	225	180	350	120	395	176	24	46	100	129	195

d [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 75	298	46	15
** 90	302	57	15
110	349	69	20



PF 3 39 212 118



# SYGEF Plus

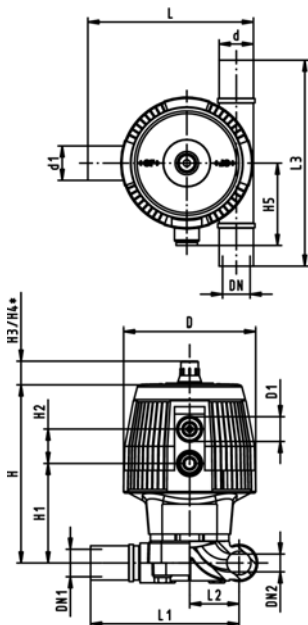
## Diaphragm valve type DIASTAR 025

### Function FC (Fail safe to close)

### ZERO STATIC with butt fusion spigots metric

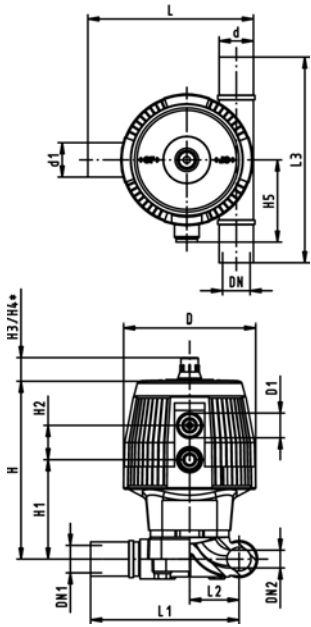
**Model:**

- Material: PVDF-HP
- With position indicator / Working pressure: **both sides**
- With position indicator
- DN2: for coordination of accessoires



d [mm]	d1 [mm]	DN [mm]	DN1 [mm]	DN2 [mm]	PN	kv-value (Δp=1 bar) [l/min]	PTFE Code	kg
20	20	15	15	15	10	47	199 029 341	1.564
25	20	20	15	20	10	69	199 029 342	1.097
25	25	20	20	20	10	91	199 029 343	1.096
32	20	25	15	25	10	86	199 029 344	2.701
32	25	25	20	25	10	126	199 029 345	2.698
32	32	25	25	25	10	156	199 029 346	2.696
40	20	32	15	25	10	84	199 029 347	2.772
40	25	32	20	25	10	124	199 029 348	2.773
40	32	32	25	25	10	161	199 029 349	2.773
40	40	32	32	32	10	250	199 029 350	3.093
50	20	40	15	25	10	82	199 029 351	2.813
50	25	40	20	25	10	124	199 029 352	2.812
50	32	40	25	25	10	159	199 029 353	2.808
50	40	40	32	40	10	312	199 029 354	5.107
50	50	40	40	40	10	356	199 029 355	5.104
63	20	50	15	25	10	81	199 029 356	2.877
63	25	50	20	25	10	115	199 029 357	2.873
63	32	50	25	25	10	156	199 029 358	2.872
63	40	50	32	50	10	383	199 029 359	6.073
63	50	50	40	50	10	487	199 029 360	6.071
63	63	50	50	50	10	544	199 029 361	6.070
75	40	65	32	32	10	256	199 029 362	3.368
75	50	65	40	50	10	497	199 029 363	6.223
75	63	65	50	50	10	546	199 029 364	6.231
90	20	80	15	25	10	88	199 029 365	3.042
90	25	80	20	25	10	133	199 029 366	2.655
90	32	80	25	25	10	162	199 029 367	3.033
90	50	80	40	50	10	504	199 029 368	6.347
90	63	80	50	50	10	530	199 029 369	6.347
110	20	100	15	25	10	89	199 029 370	3.228
110	25	100	20	25	10	123	199 029 371	3.226
110	32	100	25	25	10	159	199 029 372	3.223
110	50	100	40	50	10	503	199 029 373	6.639
110	63	100	50	50	10	543	199 029 374	6.624

d [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	D [mm]	D1 [inch]	Lift = Hx [mm]
20	106	96	30	140	128	69	25	23	44	56	96	1/8	8
25	121	108	36	150	130	71	25	23	44	56	96	1/8	10
25	121	108	36	150	130	71	25	23	44	56	96	1/8	10
32	137	120	43	160	166	93	26	36	64	68	120	1/8	12
32	137	120	43	160	166	93	26	36	64	68	120	1/8	12
32	137	120	43	160	166	93	26	36	64	68	120	1/8	12
40	149	128	51	180	166	93	26	36	64	68	120	1/8	12
40	149	128	51	180	166	93	26	36	64	68	120	1/8	12
40	149	128	51	180	166	93	26	36	64	68	120	1/8	12
40	174	153	56	190	201	106	36	36	64	85	150	1/8	14
50	159	134	57	180	166	93	26	36	64	68	120	1/8	12
50	159	134	57	180	166	93	26	36	64	68	120	1/8	12
50	159	134	57	180	166	93	26	36	64	68	120	1/8	12
50	195	169	66	200	233	119	37	36	64	101	180	1/4	18
50	195	169	66	200	233	119	37	36	64	101	180	1/4	18
63	175	144	67	180	166	93	26	36	64	68	120	1/8	12
63	175	144	67	180	166	93	26	36	64	68	120	1/8	12
63	175	144	67	180	166	93	26	36	64	68	120	1/8	12
63	223	192	80	220	247	133	37	36	64	101	180	1/4	22
63	223	192	80	220	247	133	37	36	64	101	180	1/4	22
63	223	192	80	220	247	133	37	36	64	101	180	1/4	22



d [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	D [mm]	D1 [inch]	Lift = Hx [mm]
75	203	166	78	190	201	106	36	36	64	85	150	1/8	14
75	236	198	86	220	247	133	37	36	64	101	180	1/4	22
75	236	198	86	220	247	133	37	36	64	101	180	1/4	22
90	204	159	82	160	166	93	26	36	64	68	120	1/8	12
90	204	159	82	160	166	93	26	36	64	68	120	1/8	12
90	204	159	82	160	166	93	26	36	64	68	120	1/8	12
90	252	207	95	220	247	133	37	36	64	101	180	1/4	22
90	252	207	95	220	247	133	37	36	64	101	180	1/4	22
110	226	171	94	160	166	93	26	36	64	68	120	1/8	12
110	226	171	94	160	166	93	26	36	64	68	120	1/8	12
110	226	171	94	160	166	93	26	36	64	68	120	1/8	12
110	274	219	107	220	247	133	37	36	64	101	180	1/4	22
110	274	219	107	220	247	133	37	36	64	101	180	1/4	22

PF 3 39 212 118

Rtf-Prime.ru



## SYGEF Plus Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With backing flanges PP-V ANSI

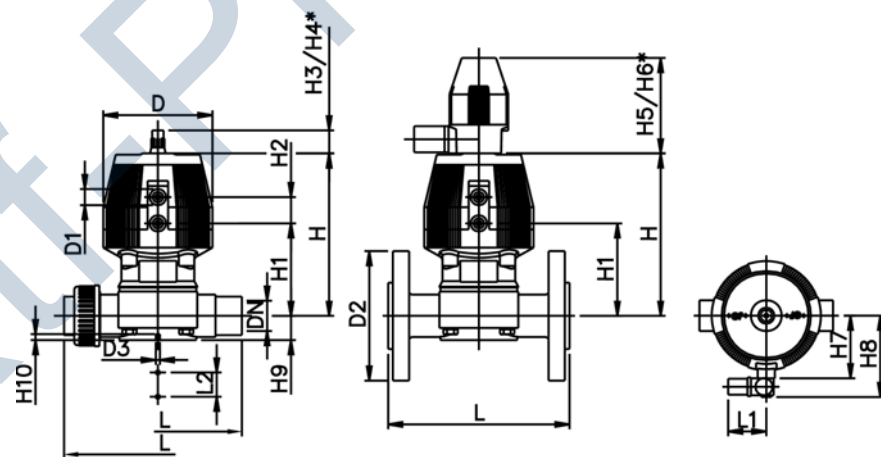
### Model:

- Material: PVDF-HP
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: **both sides**

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
1/2	15	10	72	<b>199 027 581</b>	0.274
3/4	20	10	120	<b>199 027 582</b>	
1	25	10	238	<b>199 027 583</b>	1.705
1 1/4	32	10	341	<b>199 027 584</b>	2.904
1 1/2	40	10	460	<b>199 027 585</b>	
2	50	10	685	<b>199 027 586</b>	

Inch	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
1/2	96	3/8	6	95	130	60	25	125	69	25	23	44	100	155
3/4	96	3/8	6	105	150	60	25	127	71	25	23	44	100	155
1	120	3/8	6	115	160	60	25	163	93	26	36	64	100	155
1 1/4	150	1/4	8	140	180	60	45	196	106	36	36	64	100	160
1 1/2	180	1/4	8	150	200	60	45	227	119	37	36	64	100	170
2	180	1/4	8	165	230	60	45	241	133	37	36	64	100	170

Inch	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
1/2	56	86	14	12	8
3/4	56	88	18	12	10
1	68	100	21	12	12
1 1/4	85	117	26	15	14
1 1/2	101	133	33	15	18
2	101	133	39	15	22



PF 3 39 212 118



## SYGEF Plus Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With fixed flanges PVDF ANSI

### Model:

- Material: PVDF-HP
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: **both sides**

\* With backing flanges PP-V

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

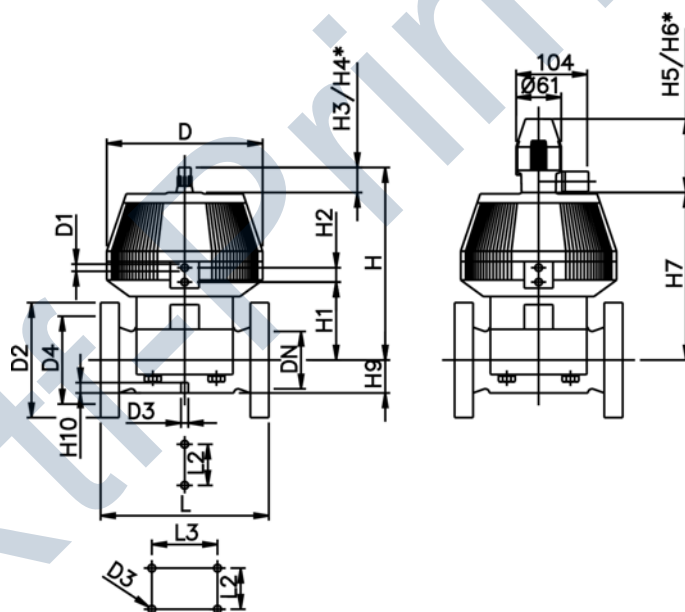
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
* 2 1/2	65	10	992	<b>199 025 387</b>	14.200
** 3	80	10	1700	<b>199 025 448</b>	17.400
4	100	8	2700	<b>199 025 389</b>	26.500

Inch	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	D4 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
* 2 1/2	280	1/4	8	185	145	290	70	344	148	24	46	100	129	195
** 3	280	1/4	12	200	160	310	120	348	150	24	46	100	129	195
4	335	1/4	12	225	180	350	120	395	176	24	46	100	129	195

Inch	H7 [mm]	H9 [mm]	H10 [mm]
* 2 1/2	298	46	15
** 3	302	57	15
4	349	69	20



PF 3 39 212 118



## SYGEF Plus

### Diaphragm valve type DIASTAR 025

### Function FO (Fail safe to open)

### With butt fusion spigots IR metric

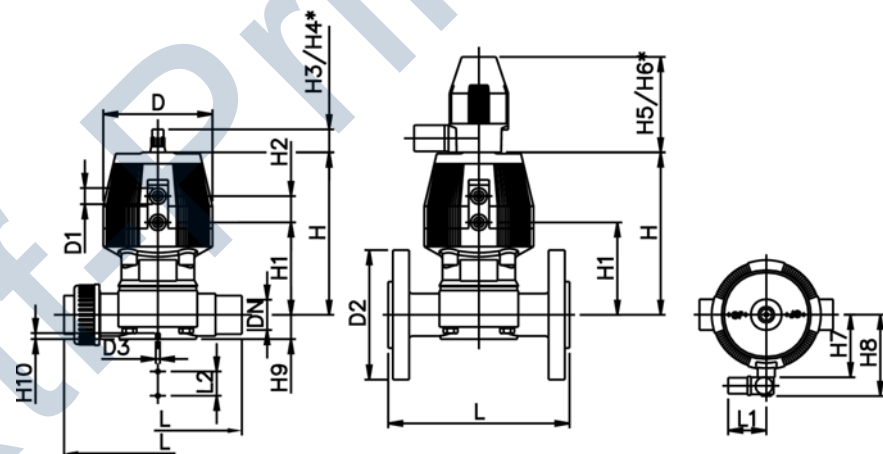
#### Model:

- Material: PVDF-HP
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	199 025 977	0.454
25	20	10	120	199 025 978	0.740
32	25	10	238	199 025 979	1.160
40	32	10	341	199 025 980	1.390
50	40	10	460	199 025 981	2.510
63	50	10	685	199 025 982	5.430

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 119

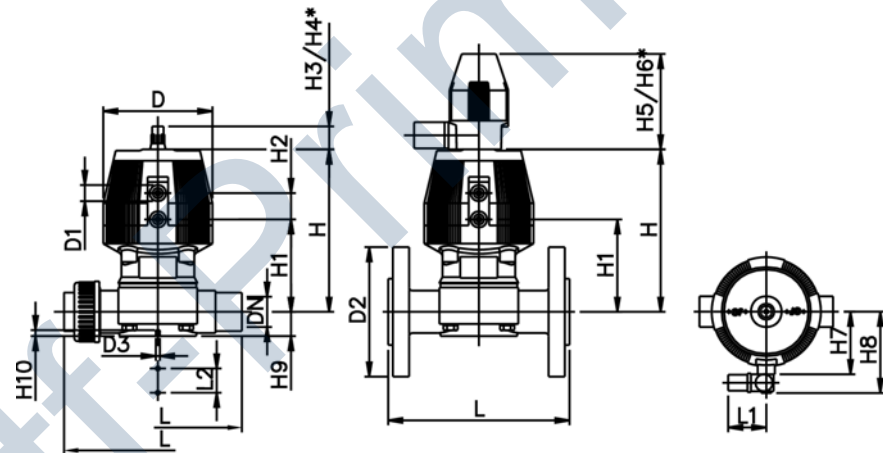


**SYGEF Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function FO (Fail safe to open)**  
**Unions with fusion spigots metric**

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	<b>199 029 511</b>	0.839
25	20	10	120	<b>199 029 512</b>	0.936
32	25	10	238	<b>199 029 513</b>	1.705
40	32	10	341	<b>199 029 514</b>	2.370
50	40	10	460	<b>199 029 515</b>	2.510
63	50	10	685	<b>199 029 516</b>	5.430

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	196	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	220	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	234	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	258	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	284	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	320	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 119





## SYGEF Plus Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With backing flanges PP-V metric

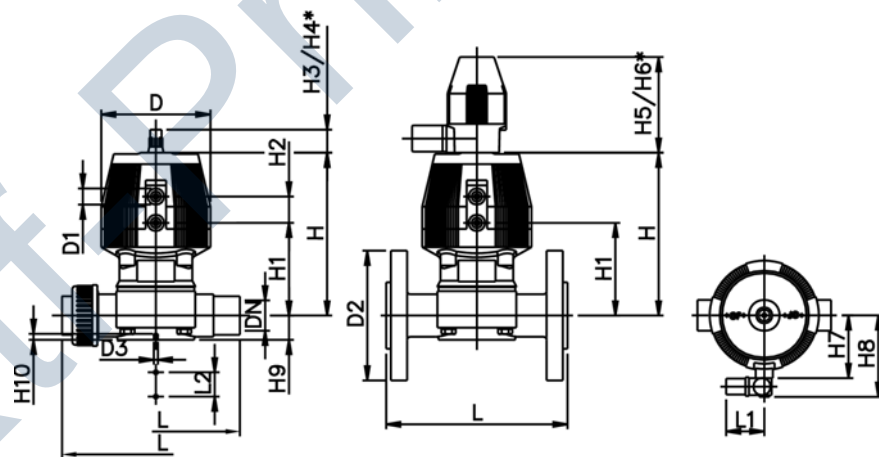
### Model:

- Material: PVDF-HP
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	1/2	10	72	<b>199 025 451</b>	0.824
25	20	3/4	10	120	<b>199 025 452</b>	1.090
32	25	1	10	238	<b>199 025 453</b>	1.610
40	32	1 1/4	10	341	<b>199 025 454</b>	1.950
50	40	1 1/2	10	460	<b>199 025 455</b>	3.010
63	50	2	10	685	<b>199 025 456</b>	5.510

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	68	1/8	6	95	130	60	25	98	59	24	23	44	100	155
25	96	1/8	6	105	150	60	25	127	71	25	23	44	100	155
32	96	1/8	6	115	160	60	25	141	85	25	23	44	100	155
40	120	1/8	8	140	180	60	45	167	97	26	36	64	100	160
50	150	1/4	8	150	200	60	45	198	108	36	36	64	100	170
63	150	1/4	8	165	230	60	45	216	126	36	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	44	76	14	12	8
25	56	88	18	12	10
32	56	88	21	12	12
40	68	100	26	15	14
50	85	117	33	15	18
63	85	117	39	15	22



PF 3 39 212 119



## SYGEF Plus

### Diaphragm valve type DIASTAR 025

#### Function FO (Fail safe to open)

#### With fixed flanges PVDF metric

#### Model:

- Material: PVDF-HP
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: on one side

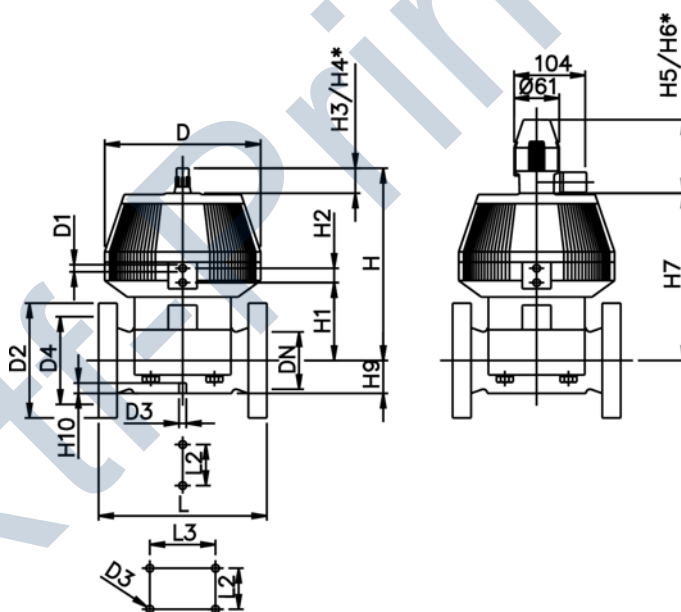
\* With backing flanges PP-V

\*\* 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]	PTFE/EPDM Code	kg
* 75	65	2 ½	10	992	<b>199 025 457</b>	13.600
** 90	80	3	10	1700	<b>199 025 458</b>	17.400
110	100	4	8	2700	<b>199 025 459</b>	24.700
** 160	150	6	6	6033	<b>199 025 460</b>	35.000

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	D4 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
* 75	280	¼	8	185	145	290	70		344	148	24	46	100	129
** 90	280	¼	12	200	160	310	120		348	150	24	46	100	129
110	335	¼	12	225	180	350	120		395	176	24	46	100	129
** 160	335	¼	12	285	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



PF 3 39 212 119



## SYGEF Plus Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With backing flanges PP-V ANSI

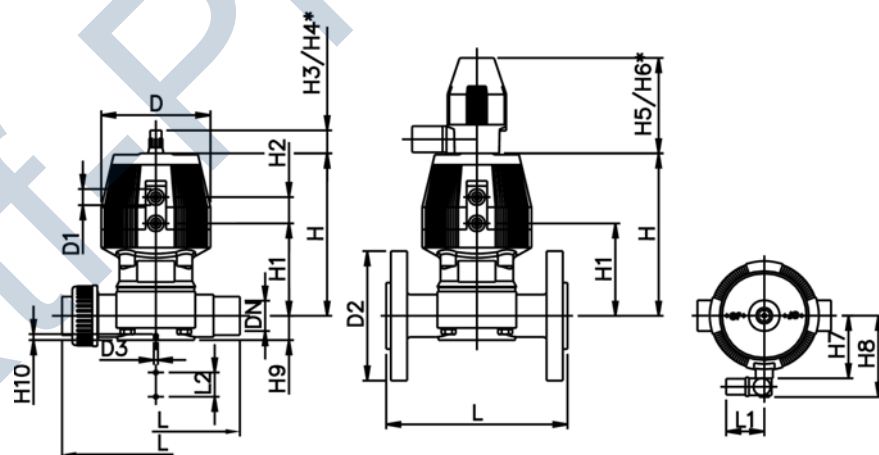
### Model:

- Material: PVDF-HP
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: **both sides**

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code
1/2	15	10	72	<b>199 027 591</b>
3/4	20	10	120	<b>199 027 592</b>
1	25	10	238	<b>199 027 593</b>
1 1/4	32	10	341	<b>199 027 594</b>
1 1/2	40	10	460	<b>199 027 595</b>
2	50	10	685	<b>199 027 596</b>

Inch	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
1/2	68	1/8	6	95	130	60	25	98	59	24	23	44	100	155
3/4	96	1/8	6	105	150	60	25	127	71	25	23	44	100	155
1	96	1/8	6	115	160	60	25	141	85	25	23	44	100	155
1 1/4	120	1/8	8	140	180	60	45	167	97	26	36	64	100	160
1 1/2	150	1/4	8	150	200	60	45	198	108	36	36	64	100	170
2	150	1/4	8	165	230	60	45	216	126	36	36	64	100	170

Inch	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
1/2	44	76	14	12	8
3/4	56	88	18	12	10
1	56	88	21	12	12
1 1/4	68	100	26	15	14
1 1/2	85	117	33	15	18
2	85	117	39	15	22



PF 3 39 212 119



**SYGEF Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function FO (Fail safe to open)**  
**With fixed flanges PVDF ANSI**

**Model:**

- Material: PVDF-HP
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: on one side

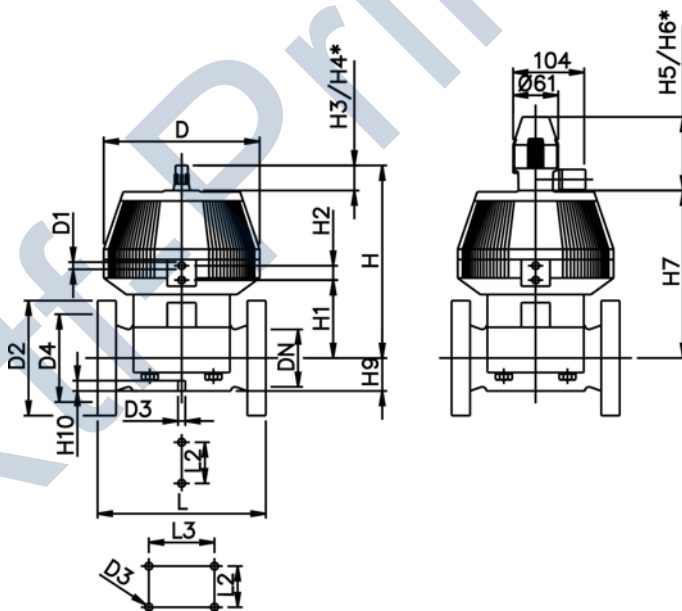
\* With backing flanges PP-V

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
* 2 1/2	65	10	992	<b>199 025 397</b>	12.200
** 3	80	10	1700	<b>199 025 458</b>	17.400
4	100	8	2700	<b>199 025 399</b>	23.400
** 6	150	6	6033	<b>199 025 460</b>	35.000

Inch	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	D4 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
* 2 1/2	280	1/4	8	185	145	290	70		344	148	24	46	100	129
** 3	280	1/4	12	200	160	310	120		348	150	24	46	100	129
4	335	1/4	12	225	180	350	120		395	176	24	46	100	129
** 6	335	1/4	12	285	240	480	100	200	455	237	24	46	100	129

Inch	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 2 1/2	195	298	46	15
** 3	195	302	57	15
4	195	349	69	20
** 6	195	409	108	20



PF 3 39 212 119



## SYGEF Plus Diaphragm valve type DIASTAR 025 Function DA (Double acting) With butt fusion spigots IR metric

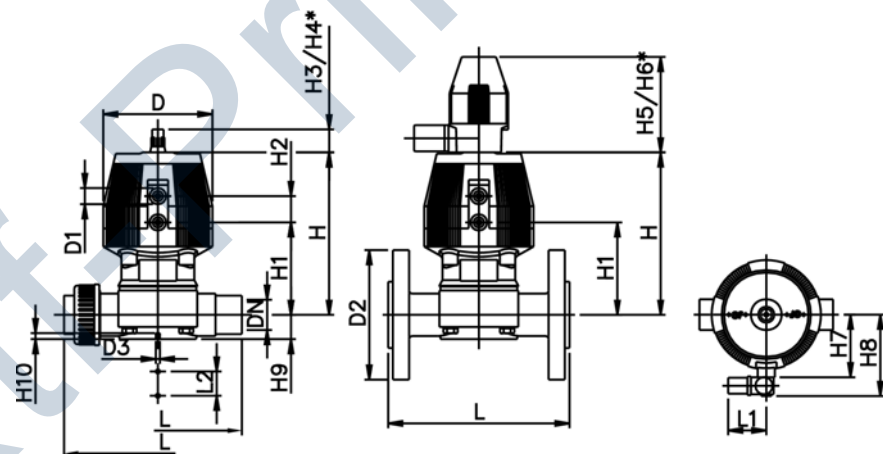
### Model:

- Material: PVDF-HP
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	199 025 983	0.454
25	20	10	120	199 025 984	0.740
32	25	10	238	199 025 985	1.160
40	32	10	341	199 025 986	1.390
50	40	10	460	199 025 987	2.510
63	50	10	685	199 025 988	5.430

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 059

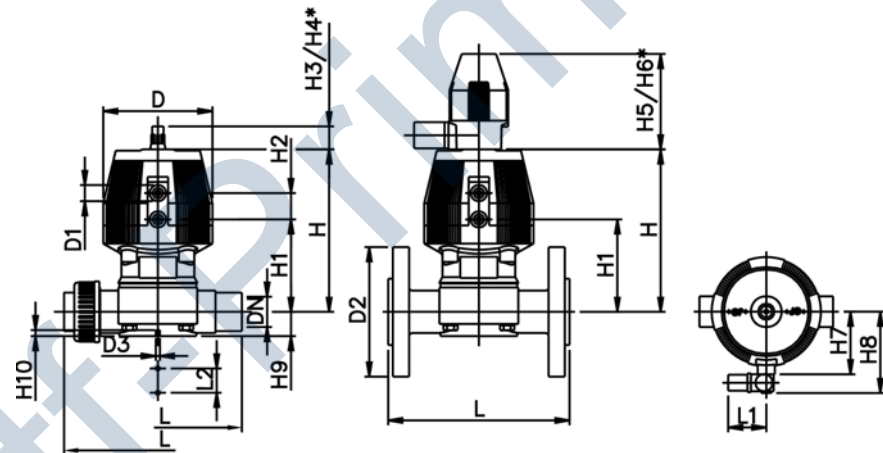


**SYGEF Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function DA (Double acting)**  
**Unions with fusion spigots metric**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	10	72	<b>199 029 521</b>	0.839
25	20	10	120	<b>199 029 522</b>	0.740
32	25	10	238	<b>199 029 523</b>	1.705
40	32	10	341	<b>199 029 524</b>	2.370
50	40	10	460	<b>199 029 525</b>	2.510
63	50	10	685	<b>199 029 526</b>	5.430

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	196	60	25	98	59	24	23	44	100	155	44
25	96	1/8	6	220	60	25	127	71	25	23	44	100	155	56
32	96	1/8	6	234	60	25	141	85	25	23	44	100	155	56
40	120	1/8	8	258	60	45	167	97	26	36	64	100	160	68
50	150	1/4	8	284	60	45	198	108	36	36	64	100	170	85
63	150	1/4	8	320	60	45	216	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22



PF 3 39 212 059



## SYGEF Plus Diaphragm valve type DIASTAR 025 Function DA (Double acting) With backing flanges PP-V metric

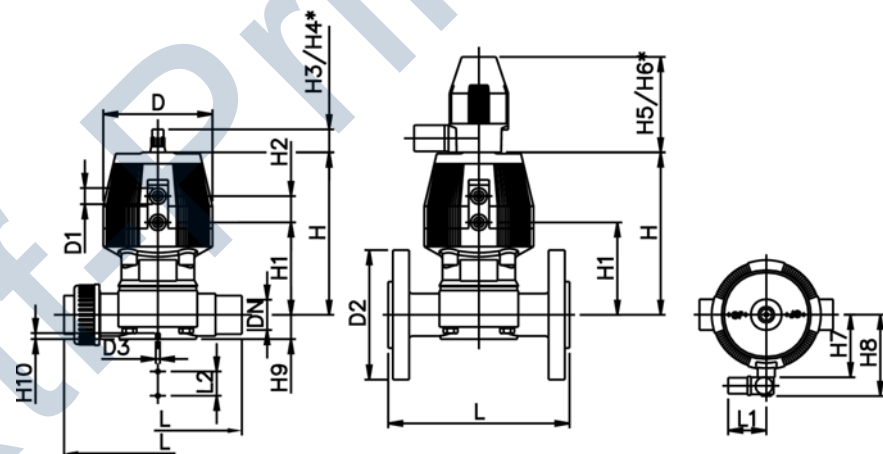
### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
20	15	1/2	10	72	<b>199 025 461</b>	0.824
25	20	3/4	10	120	<b>199 025 462</b>	1.090
32	25	1	10	238	<b>199 025 463</b>	1.610
40	32	1 1/4	10	341	<b>199 025 464</b>	1.950
50	40	1 1/2	10	460	<b>199 025 465</b>	3.010
63	50	2	10	685	<b>199 025 466</b>	5.510

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	68	1/8	6	95	130	60	25	98	59	24	23	44	100	155
25	96	1/8	6	105	150	60	25	127	71	25	23	44	100	155
32	96	1/8	6	115	160	60	25	141	85	25	23	44	100	155
40	120	1/8	8	140	180	60	45	167	97	26	36	64	100	160
50	150	1/4	8	150	200	60	45	198	108	36	36	64	100	170
63	150	1/4	8	165	230	60	45	216	126	36	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	44	76	14	12	8
25	56	88	18	12	10
32	56	88	21	12	12
40	68	100	26	15	14
50	85	117	33	15	18
63	85	117	39	15	22



PF 3 39 212 059



# SYGEF Plus

## Diaphragm valve type DIASTAR 025

### Function DA (Double acting)

### With fixed flanges PVDF metric

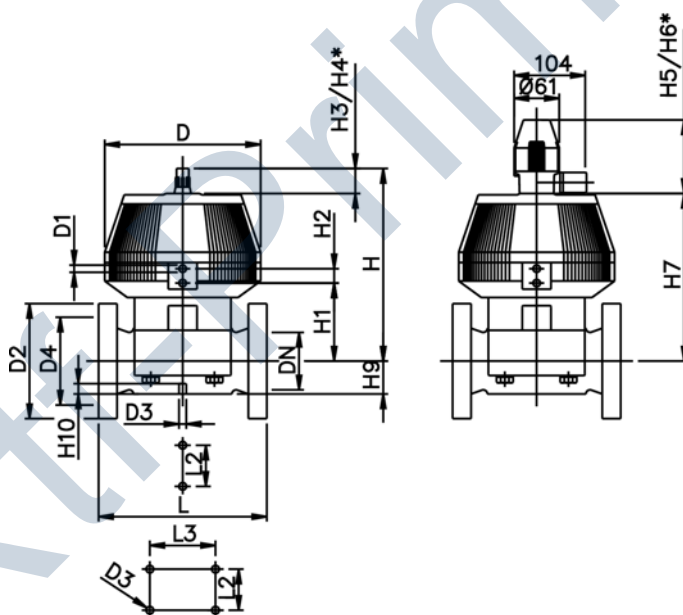
#### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: on 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]	PTFE/EPDM Code	kg
* 75	65	2 ½	10	992	<b>199 025 467</b>	13.600
** 90	80	3	10	1700	<b>199 025 468</b>	17.400
110	100	4	8	2700	<b>199 025 469</b>	24.700
** 160	150	6	6	6033	<b>199 025 470</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	125
** 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

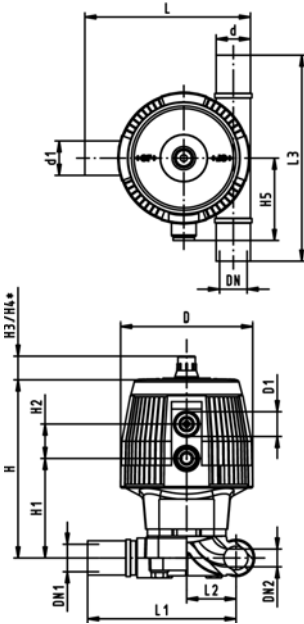


PF 3 39 212 059



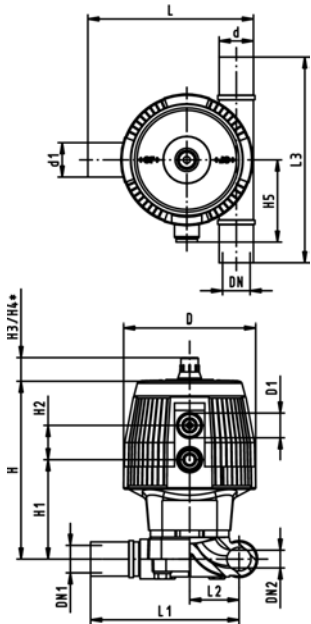


**SYGEF Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function DA (Double acting)**  
**ZERO STATIC with butt fusion spigots metric**



d [mm]	d1 [mm]	DN [mm]	DN1 [mm]	DN2 [mm]	PN	kv-value (Δp=1 bar) [l/min]	PTFE/EPDM Code	kg
20	20	15	15	15	10	47	<b>199 028 067</b>	0.000
25	20	20	15	20	10	69	<b>199 028 068</b>	0.000
25	25	20	20	20	10	91	<b>199 028 069</b>	0.000
32	20	25	15	25	10	86	<b>199 028 070</b>	2.701
32	25	25	20	25	10	126	<b>199 028 077</b>	0.000
32	32	25	25	25	10	156	<b>199 028 078</b>	2.696
40	20	32	15	25	10	84	<b>199 028 079</b>	4.900
40	25	32	20	25	10	124	<b>199 028 177</b>	0.000
40	32	32	25	25	10	161	<b>199 028 178</b>	2.773
40	40	32	32	32	10	250	<b>199 028 179</b>	0.900
50	20	40	15	25	10	82	<b>199 028 080</b>	2.813
50	25	40	20	25	10	124	<b>199 028 087</b>	2.812
50	32	40	25	25	10	159	<b>199 028 088</b>	0.000
50	40	40	32	40	10	312	<b>199 028 157</b>	3.350
50	50	40	40	40	10	356	<b>199 028 158</b>	0.000
63	20	50	15	25	10	81	<b>199 028 089</b>	0.000
63	25	50	20	25	10	115	<b>199 028 090</b>	4.900
63	32	50	25	25	10	156	<b>199 028 097</b>	0.000
63	40	50	32	50	10	383	<b>199 028 138</b>	4.900
63	50	50	40	50	10	487	<b>199 028 137</b>	0.000
63	63	50	50	50	10	544	<b>199 028 139</b>	0.000
75	40	65	32	32	10	256	<b>199 028 098</b>	0.000
75	50	65	40	50	10	497	<b>199 028 159</b>	0.000
75	63	65	50	50	10	546	<b>199 028 160</b>	0.000
90	20	80	15	25	10	88	<b>199 028 099</b>	0.000
90	25	80	20	25	10	133	<b>199 028 100</b>	0.000
90	32	80	25	25	10	162	<b>199 028 107</b>	0.000
90	50	80	40	50	10	504	<b>199 028 108</b>	0.000
90	63	80	50	50	10	530	<b>199 028 109</b>	0.000
110	20	100	15	25	10	89	<b>199 028 110</b>	0.000
110	25	100	20	25	10	123	<b>199 028 117</b>	0.000
110	32	100	25	25	10	159	<b>199 028 118</b>	0.000
110	50	100	40	50	10	503	<b>199 028 119</b>	0.000
110	63	100	50	50	10	543	<b>199 028 120</b>	0.000

d [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	D [mm]	D1 [inch]	Lift = Hx [mm]
20	106	96	30	140	99	59	24	23	44	44	68	1/8	8
25	121	108	36	150	130	71	25	23	44	56	96	1/8	10
25	121	108	36	150	130	71	25	23	44	56	96	1/8	10
32	137	120	43	160	143	85	25	23	44	56	96	1/8	12
32	137	120	43	160	143	85	25	23	44	56	96	1/8	12
32	137	120	43	160	143	85	25	23	44	56	96	1/8	12
40	149	128	51	180	143	85	25	23	44	56	96	1/8	12
40	149	128	51	180	143	85	25	23	44	56	96	1/8	12
40	149	128	51	180	143	85	25	23	44	56	96	1/8	12
40	174	153	56	190	170	97	26	36	64	68	120	1/8	14
50	159	134	57	180	143	85	25	23	44	56	96	1/8	12
50	159	134	57	180	143	85	25	23	44	56	96	1/8	12
50	159	134	57	180	143	85	25	23	44	56	96	1/8	12
50	195	169	66	200	203	108	36	36	64	85	150	1/4	18
50	195	169	66	200	203	108	36	36	64	85	150	1/4	18
63	175	144	67	180	143	85	25	23	44	56	96	1/8	12
63	175	144	67	180	143	85	25	23	44	56	96	1/8	12
63	175	144	67	180	143	85	25	23	44	56	96	1/8	12
63	223	192	80	220	220	126	36	36	64	85	150	1/4	22
63	225	192	80	220	220	126	36	36	64	85	150	1/4	22
63	223	192	80	220	220	126	36	36	64	85	150	1/4	22
75	203	166	78	190	170	97	26	36	64	68	120	1/8	14
75	236	198	86	220	220	126	36	36	64	85	150	1/4	22
75	236	198	86	220	220	126	36	36	64	85	150	1/4	22
90	204	159	82	160	143	85	25	23	44	56	96	1/8	12
90	204	159	82	160	143	85	25	23	44	56	96	1/8	12
90	204	159	82	160	143	85	25	23	44	56	96	1/8	12
90	252	207	95	220	220	126	36	36	64	85	150	1/4	22



d [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	D [mm]	D1 [inch]	Lift = Hx [mm]
90	252	207	95	220	220	126	36	36	64	85	150	1/4	22
110	226	171	94	160	143	85	25	23	44	56	96	1/8	12
110	226	171	94	160	143	85	25	23	44	56	96	1/8	12
110	226	171	94	160	143	85	25	23	44	56	96	1/8	12
110	274	219	107	220	220	126	36	36	64	85	150	1/4	22
110	274	219	107	220	220	126	36	36	64	85	150	1/4	22

PF 3 39 212 059

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## SYGEF Plus Diaphragm valve type DIASTAR 025 Function DA (Double acting) With backing flanges PP-V ANSI

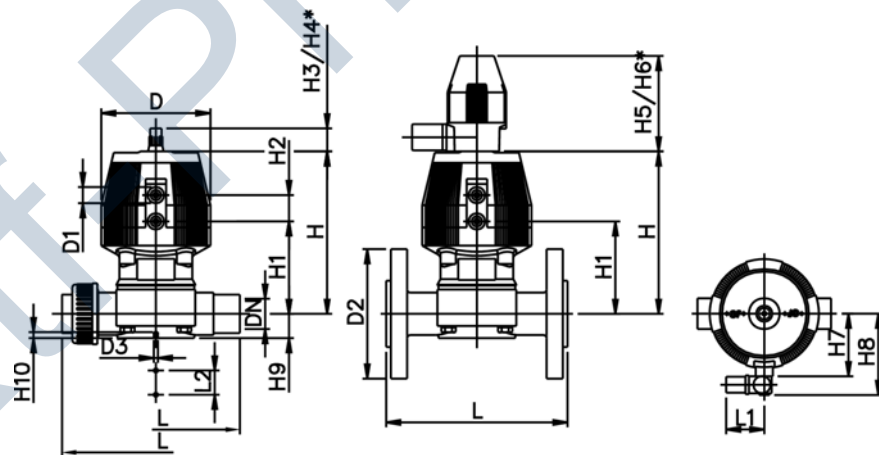
### Model:

- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: **both sides**

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code
1/2	15	10	72	<b>199 027 601</b>
3/4	20	10	120	<b>199 027 602</b>
1	25	10	238	<b>199 027 603</b>
1 1/4	32	10	341	<b>199 027 604</b>
1 1/2	40	10	460	<b>199 027 605</b>
2	50	10	685	<b>199 027 606</b>

Inch	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
1/2	68	1/8	6	95	130	60	25	98	59	24	23	44	100	155
3/4	96	1/8	6	105	150	60	25	127	71	25	23	44	100	155
1	96	1/8	6	115	160	60	25	141	85	25	23	44	100	155
1 1/4	120	1/8	8	140	180	60	45	167	97	26	36	64	100	160
1 1/2	150	1/4	8	150	200	60	45	198	108	36	36	64	100	170
2	150	1/4	8	165	230	60	45	216	126	36	36	64	100	170

Inch	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
1/2	44	76	14	12	8
3/4	56	88	18	12	10
1	56	88	21	12	12
1 1/4	68	100	26	15	14
1 1/2	85	117	33	15	18
2	85	117	39	15	22



PF 3 39 212 059



## SYGEF Plus Diaphragm valve type DIASTAR 025 Function DA (Double acting) With fixed flanges PVDF ANSI

### Model:

- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- With position indicator / Working pressure: on one side

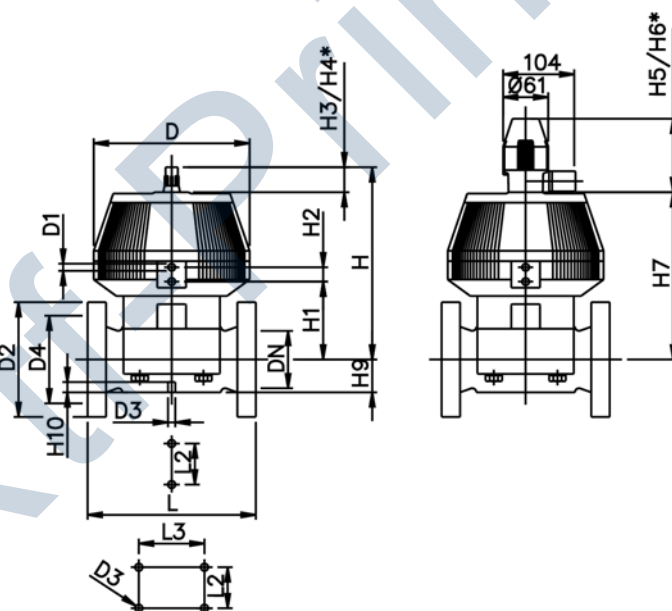
\* With backing flanges PP-V

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PTFE/EPDM Code	kg
* 2 1/2	65	10	992	<b>199 025 407</b>	13.600
** 3	80	10	1700	<b>199 025 468</b>	17.400
4	100	8	2700	<b>199 025 409</b>	24.100
** 6	150	6	6033	<b>199 025 470</b>	35.000

Inch	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]
* 2 1/2	280	1/4	185	8	145	290	70		344	148	24	46	100	125
** 3	280	1/4	200	12	160	310	120		348	150	24	46	100	129
4	335	1/4	225	12	180	350	120		395	176	24	46	100	129
** 6	335	1/4	285	12	240	480	100	200	455	237	24	46	100	129

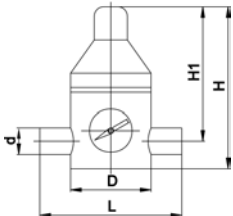
Inch	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 2 1/2	195	298	46	15
** 3	195	302	57	15
4	195	349	69	20
** 6	195	409	108	20



PF 3 39 212 059

# Process control valves

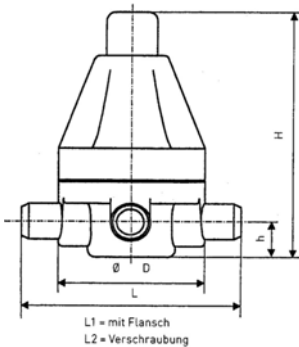
## SYGEF Plus Pressure reducing valve type V82 With fusion spigots BCF



PF 3 58 458 012

**Model:**  
• Material: PVDF-HP

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
20	15	0.5 - 10	<b>199 041 184</b>	0.790	70	150	130	100
25	20	0.5 - 10	<b>199 041 185</b>	1.619	100	190	180	134
32	25	0.5 - 10	<b>199 041 186</b>	1.620	100	190	180	134
40	32	0.5 - 10	<b>199 041 187</b>	5.320	130	240	230	175
50	40	0.5 - 10	<b>199 041 188</b>	5.320	130	240	230	175
63	50	0.5 - 10	<b>199 041 189</b>	9.330	150	260	285	210



PF 3 58 458 012

## SYGEF Plus Pressure relief valve type V185 With butt fusion spigots metric IR

**Model:**  
• Material: PVDF-HP

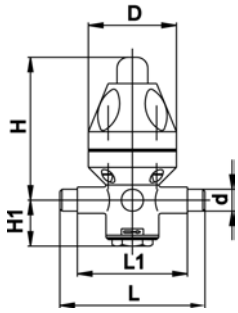
d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
20	15	0.5 - 10	<b>199 041 520</b>	0.600	83	158	137	20
25	20	0.5 - 10	<b>199 041 521</b>	0.700	83	158	137	20
32	25	0.5 - 10	<b>199 041 522</b>	1.700	112	198	199	27
40	32	0.5 - 10	<b>199 041 523</b>	1.700	165	202	199	43
50	40	0.5 - 10	<b>199 041 524</b>	8.000	165	256	290	43
63	50	0.5 - 10	<b>199 041 525</b>	8.200	165	256	290	43



**SYGEF Plus**  
**Pressure reducing valve type V782**  
**With fusion spigots BCF**

**Model:**

- Material: PVDF-HP



PF 3 58 458 012

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]
20	15	0.5 - 10	<b>199 041 192</b>	1.300	83	182	102	195	48
25	20	0.5 - 10	<b>199 041 193</b>	1.300	112	190	110	210	65
32	25	0.5 - 10	<b>199 041 194</b>	1.300	112	190	110	210	65
40	32	0.5 - 10	<b>199 041 195</b>	4.840	165	262	162	260	95
50	40	0.5 - 10	<b>199 041 196</b>	4.840	165	262	162	260	95

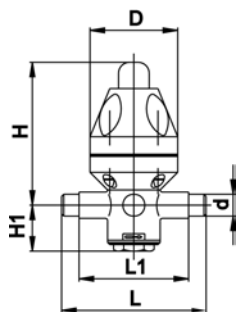
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## SYGEF Plus Pressure retaining valve type V786 With fusion spigots BCF

Model:

- Material: PVDF-HP



PF 3 58 458 012

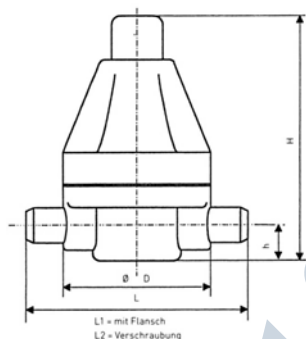
d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]
20	15	0.5 - 10	<b>199 041 198</b>	0.620	83	172	102	145	38
25	20	0.5 - 10	<b>199 041 199</b>	1.700	112	190	110	210	55
32	25	0.5 - 10	<b>199 041 200</b>	1.700	112	190	110	210	55
40	32	0.5 - 4	<b>199 041 201</b>	4.840	165	262	162	260	85
50	40	0.5 - 4	<b>199 041 202</b>	4.840	165	262	162	260	85



## SYGEF Plus Pressure retaining valve type V186 With butt fusion spigots BCF IR

Model:

- Material: PVDF-HP

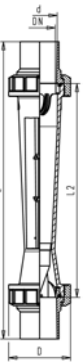


PF 3 58 458 012

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
20	15	0.5 - 10	<b>199 041 395</b>	0.600	83	158	137	20
25	20	0.5 - 10	<b>199 041 396</b>	0.600	83	158	137	20
32	25	0.5 - 10	<b>199 041 397</b>	1.600	112	198	199	27
40	32	0.5 - 10	<b>199 041 398</b>	1.600	112	202	199	43
50	40	0.5 - 10	<b>199 041 399</b>	8.000	165	256	290	43
63	50	0.5 - 10	<b>199 041 400</b>	8.200	165	256	290	43

# Variable area flow meters

**Special version PVDF-HP  
Float in PTFE without magnet  
With fusion spigots BCF/IR**



PF 3 48 227 002



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>	0.249
SK 71	32	25	90 - 295	0.4-1.3	<b>198 807 210</b>	0.249
SK 73	32	25	136 - 795	0.6-3.5	<b>198 807 202</b>	0.300
SK 20	50	40	568 - 2273	2.5-10.0	<b>198 807 203</b>	1.150
SK 21	50	40	909 - 4091	4.0-18.0	<b>198 807 204</b>	1.150
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 1/2
SK 21	83	466		335	1 1/2
SK 30	103	472		335	2
SK 31	103	472		335	2
SK 40	122	495		335	2 1/2
SK 41	122	495		335	2 1/2

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## SYGEF Exhaust

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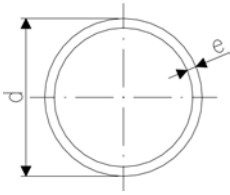
# SYGEF® Exhaust – Product Specification

<b>Material</b>	Polyvinylidene fluoride (PVDF)
Colour	translucent
Density	~1.78 g/cm <sup>3</sup> (ISO 1183 / ASTM D 792)
Surface tension	30–35 mJ/m <sup>2</sup>
Linear expansion coefficient	0.12–0.18 mm/mK (DIN 53752)
E-module (tensile strength)	2100 N/mm <sup>2</sup> (ISO 527 / ASTM D 790)
Thermal conductivity	0.19 W/mK (DIN 52612)
Surface resistivity	5 x 10 <sup>14</sup> Ωcm (IEC 60093)
<b>Dimension</b>	d 75 (2½")–d 400 (16")
<b>Pressure Rating</b>	Maximum negative pressure: -ΔP <sub>max</sub> = 1500 Pa (0.015 bar, 6" water column)
<b>Temperature Rating</b>	PVDF: -20°C to 140°C [-4°F-284°F], System: ΔT= 30°C
<b>Production</b>	Fittings: injection moulded, segment welded Pipes: extruded
<b>Marking</b>	All components are embossed with a permanent identification during the production process to ensure full traceability. Lot No Material Dimension
<b>Testing and Inspection</b>	Inclusions Visual inspection Dimension tolerance
<b>Approvals/Conformance</b>	FM-4910 listing: <a href="http://www.fmglobal.com">www.fmglobal.com</a>
<b>Welding Technology</b>	Hot Gas Back Welding, Rod diameter 4 mm Recommended tool: duratherm SC Recommended Manufacturer: <a href="http://www.wegenerwelding.com">www.wegenerwelding.com</a>
<b>Documentation<sup>(1)</sup></b>	EN 10204 2.2 EN 10204 3.1b
<b>Packing</b>	Fitting: multiple components bagged in specified bag Pipe: capped and single bagged in specified bag
<b>Labeling</b>	Brand Name Product Description Code Number Material Dimension CE-Labeling
<b>Main Applications</b>	Safe conveying of critical exhaust gases and fumes within state-of-the-art manufacturing plants. Due to its excellent chemical resistance it is widely used within the Microelectronics and Chemical Industry.

<sup>(1)</sup> on request

# Pipe

## SYGEF Exhaust, Pipe



PF 2 35 784 001

### Model:

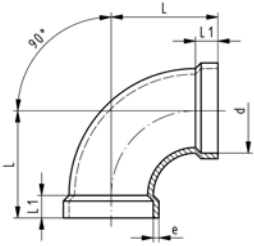
- Material: PVDF
- Length: Lengths of 5 m

d [mm]	Code	e [mm]	di [mm]	
75	<b>175 483 459</b>	3.0	69.0	
110	<b>175 483 461</b>	3.0	104.0	
160	<b>175 483 464</b>	3.0	154.0	
200	<b>175 483 466</b>	3.0	194.0	
250	<b>175 483 468</b>	3.0	244.0	
315	<b>175 483 470</b>	4.0	307.0	
400	<b>175 483 472</b>	5.0	390.0	

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# Fittings

## SYGEF Exhaust, Bend 90°



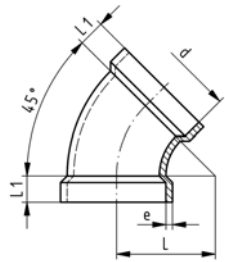
### Model:

- Material: PVDF
- for conventional hot gas back welding according to DVS 2207 part 3

d [mm]	Code	kg	e [mm]	L [mm]	L1 [mm]
75	<b>735 550 112</b>	0.220	3.0	115	40
110	<b>735 550 114</b>	0.520	3.0	150	40
160	<b>735 550 117</b>	1.060	3.0	200	40
200	<b>735 550 119</b>	1.600	3.0	240	40
250	<b>735 550 121</b>	3.030	3.5	290	40
315	<b>735 550 123</b>	4.000	4.0	365	50
400	<b>735 550 125</b>	7.400	4.5	450	50

PF 2 35 784 002

## SYGEF Exhaust, Bend 45°



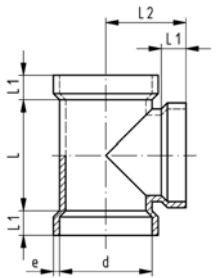
### Model:

- Material: PVDF
- for conventional hot gas back welding according to DVS 2207 part 3

d [mm]	Code	kg	e [mm]	L [mm]	L1 [mm]
75	<b>735 550 212</b>	0.200	3.0	75	40
110	<b>735 550 214</b>	0.370	3.0	110	40
160	<b>735 550 217</b>	0.700	3.0	160	40
200	<b>735 550 219</b>	1.000	3.0	200	40
250	<b>735 550 221</b>	1.770	3.5	250	40
315	<b>735 550 223</b>	2.520	4.0	315	50
400	<b>735 550 225</b>	4.520	4.5	400	50

PF 2 35 784 002

## SYGEF Exhaust, T 90° equal



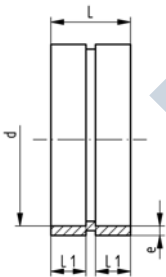
### Model:

- Material: PVDF
- for conventional hot gas back welding according to DVS 2207 part 3

d [mm]	Code	kg	e [mm]	L [mm]	L1 [mm]	L2 [mm]
75	<b>735 550 312</b>	0.320	3.0	105	40	92.5
110	<b>735 550 314</b>	0.520	3.0	140	40	110.0
160	<b>735 550 317</b>	0.880	3.0	190	40	135.0
200	<b>735 550 319</b>	1.300	3.0	230	40	155.0
250	<b>735 550 321</b>	2.310	3.0	290	40	180.0
315	<b>735 550 323</b>	4.370	4.0	370	50	222.5
400	<b>735 550 325</b>	7.600	5.0	440	50	265.0

PF 2 35 784 002

## SYGEF Exhaust, Socket equal

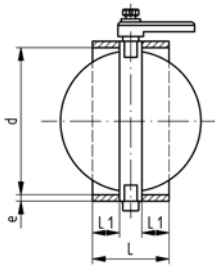


### Model:

- Material: PVDF
- for conventional hot gas back welding according to DVS 2207 part 3

d [mm]	Code	kg	e [mm]	L [mm]	L1 [mm]
75	<b>735 550 512</b>	0.180	3.0	120	40
110	<b>735 550 514</b>	0.230	3.0	110	40
160	<b>735 550 517</b>	0.340	3.0	110	40
200	<b>735 550 519</b>	0.450	3.0	110	40
250	<b>735 550 521</b>	0.660	3.5	110	40
315	<b>735 550 523</b>	1.120	4.0	140	50
400	<b>735 550 525</b>	1.630	4.5	140	50

PF 2 35 784 002



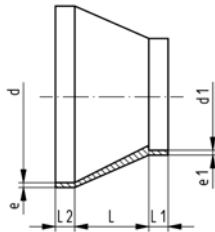
## SYGEF Exhaust, Damper

### Model:

- Material: PVDF
- for conventional hot gas back welding according to DVS 2207 part 3

d [mm]	Code	kg	e [mm]	L [mm]	L1 [mm]
75	<b>735 550 412</b>	0.400	3.0	160	40
110	<b>735 550 414</b>	0.510	3.0	150	40
160	<b>735 550 417</b>	0.760	3.0	150	40
200	<b>735 550 419</b>	0.990	3.5	150	40
250	<b>735 550 421</b>	1.420	3.5	150	40
315	<b>735 550 423</b>	2.270	4.0	180	50
400	<b>735 550 425</b>	3.280	4.5	180	50

PF 2 35 784 002



## SYGEF Exhaust, Reducer

### Model:

- Material: PVDF
- for conventional hot gas back welding according to DVS 2207 part 3

d - d1 [mm]	Code	kg	L [mm]	L1 [mm]	L2 [mm]
110 - 75	<b>735 550 814</b>	0.280	80	40	40
160 - 110	<b>735 550 817</b>	0.600	140	40	40
200 - 160	<b>735 550 819</b>	0.760	120	40	40
250 - 200	<b>735 550 821</b>	1.140	140	40	40
315 - 250	<b>735 550 823</b>	1.570	100	40	50
400 - 315	<b>735 550 825</b>	2.350	120	50	50

PF 2 35 784 002



## Welding Rod

### Model:

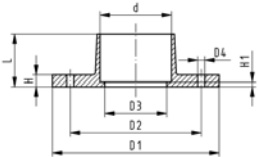
- Colour: natural or coloured
- Extruded
- Minimum quantity to be ordered : 1kg

Dimension [mm]	Cross-section	Length	Code	Weight
3	O	1 m	<b>175 480 323</b>	1 kg = 80 m
3	O	coiled	<b>175 480 318</b>	1 kg = 80 m
3x5	O	1 m	<b>175 480 322</b>	1 kg = 50 m
4	O	1 m	<b>175 480 324</b>	1 kg = 45 m
4	O	coiled	<b>175 480 319</b>	1 kg = 45 m
3	O Color	coiled	<b>175 480 320</b>	1 kg = 80 m
4	O Color	coiled	<b>175 480 321</b>	1 kg = 45 m

PF 2 35 186 008

# Flanges and Gaskets

## SYGEF Exhaust, Fix Flange



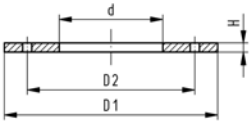
### Model:

- Material: PVDF
- for conventional hot gas back welding according to DVS 2207 part 3

d [mm]	Code	kg	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	A L	H [mm]	H1 [mm]
75	<b>735 550 612</b>	0.160	29	140	110	69	10	8	8	3
110	<b>735 550 614</b>	0.200	30	170	150	104	10	8	8	3
160	<b>735 550 617</b>	0.310	30	230	200	154	10	8	8	3
200	<b>735 550 619</b>	0.380	30	270	240	194	10	8	8	3
250	<b>735 550 621</b>	0.440	30	320	290	244	10	12	8	3
315	<b>735 550 623</b>	0.780	30	395	350	307	10	12	10	3
400	<b>735 550 625</b>	0.940	30	475	445	390	10	16	10	3

PF 2 35 784 002

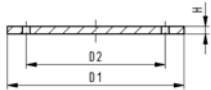
## FPM Gasket (Exhaust)



d [mm]	Code	kg	D1 [mm]	D2 [mm]	H [mm]
75	<b>749 400 112</b>	0.060	140	110	3
110	<b>749 400 114</b>	0.080	170	150	3
160	<b>749 400 117</b>	0.130	230	200	3
200	<b>749 400 119</b>	0.160	270	240	3
250	<b>749 400 121</b>	0.180	320	290	3
315	<b>749 400 123</b>	0.210	395	350	3
400	<b>749 400 125</b>	0.310	475	445	3

PF 2 35 784 002

## SYGEF Exhaust, Blind Flange














### Model:

- Material: PVDF
- for conventional hot gas back welding according to DVS 2207 part 3

d [mm]	Code	kg	D1 [mm]	D2 [mm]	A L	H [mm]
75	<b>735 550 712</b>	0.220	140	110	8	8
110	<b>735 550 714</b>	0.320	170	150	8	8
160	<b>735 550 717</b>	0.590	230	200	8	8
200	<b>735 550 719</b>	0.810	270	240	8	8
250	<b>735 550 721</b>	1.120	320	290	12	8
315	<b>735 550 723</b>	1.720	395	350	12	10
400	<b>735 550 725</b>	2.470	475	445	16	10

PF 2 35 784 002

# System-Oriented Fusion Jointing Machines

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# IR-Plus® Product Specifications

<b>Fusion Technology</b>	<p>Non-contact radiant heating          Jointing pressure produced by overlap distance          Software controlled, reproducible and monitored fusion and cooling process          Cooling process determined by fusion zone temperature via infrared sensor (IR225/315-Plus)          Remote fusion unit (IR63-Plus)          Pre-programmed and key-protected fusion parameters          Fusion protocol storage of 1800 fusions with unique fusion numbers          Fusion factor <math>\geq 0.93</math>          Fusion + cooling time typically between 35% and 57% of conventional butt-fusion (DVS 2207-15)          User guidance in 8 languages          Integrated error recognition          Automated maintenance intervals          World-wide welder installation training and certification programme          World-wide weld-bead inspection training and certification programme</p>	
<b>Piping Material</b>	<p>SYGEF® Plus (PVDF HP)          SYGEF® Standard (PVDF Standard)          PROGEF® Plus (PP-H CDB)          PROGEF® Natural (PP Natural)          DEKAPROP / Beta PP (<math>\beta</math>-PP-H)          PE100 / HDPE          PFA Sch40 (on request only)</p>	
<b>Dimension</b>	IR63-Plus	d20 (1/2") – d63 (2")
	IR225-Plus	d63 (2") – d225 (9")
	IR315-Plus	d250 (10") – d315 (12")
<b>Pre-fusion treatment</b>	<p>Cleaning with Tangit KS and lint-free tissue (KO-TON-R)          Facing by integrated facing tool          Airflow around fusion machine maximum 0.2 m/s</p>	
<b>Weld bead</b>	<p>Typically 50% smaller than conventional butt-fusion (DVS 2207-15)</p>	
<b>Post-fusion treatment</b>	<p>Software controlled cooling phase          No additional treatment after cooling phase complete</p>	
<b>Fusion Documentation</b>	<p>Print-out of 2 identical labels for labelling of piping system and/or isometric drawing</p> <ul style="list-style-type: none"> <li>• Date</li> <li>• 2 Joint numbers (1 fixed, 1 user selectable)</li> <li>• Machine number</li> <li>• Process status symbol (OK / NOK)</li> <li>• Welder / supervisor visa</li> </ul> <p>Print-out of fusion protocol via A4 printer</p> <ul style="list-style-type: none"> <li>• Date</li> <li>• Time</li> <li>• Machine number</li> <li>• 2 Joint numbers (1 fixed, 1 user selectable)</li> <li>• Operator</li> <li>• Worksite</li> <li>• Process status (OK / NOK)</li> <li>• Chosen parameter (material, size, series, PN, wall thickness)</li> <li>• Process parameters (overlap and facing distance, temperatures, times)</li> <li>• Confirmation and signature</li> </ul> <p>Electronic record downloadable, write protected stored and administered via WIN WELD software package for PC/MAC</p>	
<b>Testing and Inspection</b>	<p>Sample fusions one per job site and dimension          Weld-bead inspection as per GF control document          Weld-bead inspection as per DVS control document</p>	
<b>Conformances/Standards</b>	<p>DVS 2207-6 (2003)          SEMI F57</p>	
<b>Main applications</b>	<p>Alternative to conventional butt-fusion in applications where purity, weld-strength, traceability and speed of installation are imperative. Typical market segments include Semiconductor/Microelectronics, Chemical Processing and workshop pre-fabrication.</p>	



# IR-63 Plus® and IR-225 Plus® Fusion Jointing Machines



## IR-63 Plus® Fully-Equipped Machine

Fully-equipped fusion jointing machine for welding SYGEF® Standard, SYGEF® Plus, PROGEF® Standard, PROGEF® Natural, PROGEF® Plus, PE 100 in dimensions d 20-63 mm with integrated remote welding unit, 2 USB interfaces, monochrome display with icons and 12 languages.

### Supply:

1-phase AC (50/60 Hz) 230 V L/N/PE

### Delivery includes:

- Machine housing complete (1 pcs.)
- Heater assembly (1 pcs.)
- Remote weld device (1 pcs.)
- Facing tool (1 pcs.)
- Transport box (1 pcs.)
- Pipe stop (1 pcs.)
- Clamping inserts d 20-63 mm (8 pcs. per dimension)
- End caps PE d 20-63 mm (4 pcs. per dimension)
- Power supply cable 230 V (1 pcs.)
- Extension cable for remote weld device (1 pcs.)
- Extension cable for heater (1 pcs.)
- Extension cable for facing tool (1 pcs.)
- Cleaning brush No. 8 (1 pcs.)
- Hexagon key 3 mm (1 pcs.)
- Hexagon key 4 mm (1 pcs.)
- Heater protection shield (1 pcs.)
- Clamping unit extension (8 pcs.)
- Socket wrench (facing blades) (1 pcs.)
- Screw driver, Size 0 (1 pcs.)
- HP-Accessory Tray (1 pcs.)
- Manual (1 pcs.)

d-d [mm]	Code	kg	
20 - 63	<b>790 131 005</b>	52.000	

PF 2 43 412 001

## Clamping inserts

- The clamping inserts are different for each dimension. They are used to clamp and position the pipe components.



d [mm]	Code	kg	Pieces	
20	<b>790 131 038</b>	0.090	1	
25	<b>790 131 039</b>	0.090	1	
32	<b>790 131 040</b>	0.083	1	
40	<b>790 131 041</b>	0.075	1	
50	<b>790 131 042</b>	0.100	1	
63	<b>790 131 043</b>	0.040	1	

PF 2 43 412 002



## IR-225 Plus® Fully-Equipped Machine with HP Working Table (HP = High Purity)

Fully-equipped fusion jointing machine for welding SYGEF® Standard, SYGEF® Plus, PROGEF® Standard, PROGEF® Natural, PROGEF® Plus, PE 100 in dimensions d 63-225 mm, 2 USB interfaces, monochrome display with icons and 12 languages.

### Supply:

1-phase AC (50/60 Hz) 230 V L/N/PE or 3-phase AC (50/60 Hz) 400 V/230 V L1/L2/L3/N/PE

### Delivery includes:

- Machine base (1 pcs.)
- Heater assembly (1 pcs.)
- Facing tool (1 pcs.)
- Working table, HP (1 pcs.)
- Movable clamping units (1 pcs.)
- Clamping inserts d 63-225 mm (8 pcs. per dimension)
- End caps PE d 63-225 mm (4 pcs. per dimension)
- Transportation lock (1 pcs.)
- Pipe stop (1 pcs.)
- Hexagon key 5 mm (1 pcs.)
- Hexagon key 6 mm (1 pcs.)
- Combination ring /open-jaw wrench 13 mm (1 pcs.)
- Cleaning brush (1 pcs.)
- Connecting cable 400 V - 230 V (1 pcs.)
- Ball for lever (1 pcs.)
- Manual (1 pcs.)

d-d [mm]	Code	kg
63 - 225	<b>790 133 009</b>	453.000

PF 2 43 414 001

### Set of facing knives

- A set includes two facing knives. Each facing knife has four blades. The blade may be turned three times before it must be replaced.

d-d [mm]	Code	kg	Pieces
20 - 63	<b>790 131 045</b>	0.016	2

PF 2 43 412 002

### Set of end caps

- A set includes 4 end caps. The end caps are different for each dimension. The ends of the pipe **must** be closed. The caps prevent heat loss due to airflow in the fusion zone and guarantee optimum fusion results of the pipe components.

d [mm]	Code	kg	Pieces
20	<b>790 131 030</b>	0.010	4
25	<b>790 131 031</b>	0.010	4
32	<b>790 131 032</b>	0.015	4
40	<b>790 131 033</b>	0.025	4
50	<b>790 131 034</b>	0.055	4
63	<b>790 131 035</b>	0.035	4

PF 2 43 412 002



## Pipe stop

- The pipe stop defines the allowance when the pipes are clamped into position.

d-d [mm]	Code	kg	Pieces	
20 - 63	<b>790 131 046</b>	0.430	1	

PF 2 43 412 002



## Extension cable for clamping slide

- The extension cable enables the fusion e. g. under the ceiling.

d-d [mm]	Code	kg	Pieces	
20 - 63	<b>790 131 047</b>	0.800	1	

PF 2 43 412 002



## Extension cable for facing tool

- The extension cable enables the fusion e. g. under the ceiling.

d-d [mm]	Code	kg	Pieces	
20 - 63	<b>790 131 048</b>	0.438	1	

PF 2 43 412 002



## Extension cable for heater

- The extension cable enables the fusion e. g. under the ceiling.

d-d [mm]	Code	kg	Pieces	
20 - 63	<b>790 131 049</b>	0.785	1	

PF 2 43 412 002



## Heater protection shield

- Protects the heater from plastic chips during the facing process.

Code	kg	Pieces	
<b>790 131 051</b>	0.205	1	

PF 2 43 412 002

## IR-315 Plus® Fusion Jointing Machine

### IR-315 Plus® Fully-Equipped Machine with HP Working Table (HP = High Purity)



**Model:**

- Fully-equipped fusion jointing machine for welding SYGEF® Standard, SYGEF® Plus in dimensions d 250-315, 2 USB interfaces, monochrome display with icons and 12 languages.
- **Only a rental pool machine**

d-d [mm]		Code	
250 - 315	On request	-	

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# IR-225 Plus® Fusion Jointing Machine and Accessories



## Clamping inserts

- The clamping inserts are different for each dimension. They are used to clamp and position the pipe components.

d [mm]	Code	kg	Pieces
63	790 133 026	0.771	1
75	790 133 027	0.747	1
90	790 133 028	0.716	1
110	790 133 029	0.690	1
125	790 133 030	0.820	1
140	790 133 031	0.827	1
160	790 133 032	0.705	1
180	790 133 463	0.560	1
200	790 133 033	0.418	1
225	790 133 034	0.282	1

PF 2 43 414 002



## Set of end caps

### \*on request

- A set includes 4 end caps. The end caps are different for each dimension. The ends of the pipe **must** be closed. The caps prevent heat loss due to airflow in the fusion zone and guarantee optimum fusion results of the pipe components.

d [mm]	Code	kg	Pieces
63	790 131 035	0.035	4
75	790 133 036	0.095	4
90	790 133 037	0.110	4
110	790 133 038	0.180	4
125	790 133 039	0.170	4
140	790 133 040	0.185	4
160	790 133 041	0.212	4
180	790 133 494	0.090	4
200	790 133 042	0.450	4
225	790 133 043	0.365	4

PF 2 43 414 002



## Movable clamping unit - left

- The movable, external clamping unit ensure high operating convenience. Short pipe pieces can be clamped on both sides.
- Included in the delivery when a new IR-225 Plus® is ordered.
- Previous IR 225 fusion jointing machines can be upgraded.

d-d [mm]	Code	kg	Pieces
63 - 225	790 133 061	10.700	1

PF 2 43 414 002



## Movable clamping unit - right

- The movable, external clamping unit ensure high operating convenience. Short pipe pieces can be clamped on both sides.
- Included in the delivery when a new IR-225 Plus® is ordered.
- Previous IR 225 fusion jointing machines can be upgraded.

d-d [mm]	Code	kg	Pieces
63 - 225	790 133 062	10.200	1

PF 2 43 414 002



## HP-Working table including transportation cover

- Multifunction working table for the IR-225 Plus® fusion jointing machine with two integrated drawer. Especially for the use in clean room environment. The working table is made of steel with a stainless steel table.

Code	kg	Pieces	
790 133 021	220.000	1	

PF 2 43 414 002



## Set of facing knives

- A set includes two facing knives. Each facing knife has four blades. The blade may be turned three times before it must be replaced.

d-d [mm]	Code	kg	Pieces	
63 - 225	790 133 046	0.125	2	

PF 2 43 414 002



## Pipe stop

- The pipe stop defines the allowance when the pipes are clamped into position.

d-d [mm]	Code	kg	Pieces	
63 - 225	790 133 047	0.150	1	

PF 2 43 414 002

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# Accessories for the IR-Plus plastic fusion jointing machines



## Modification Kit

In order to give our existing IR-Plus customers the full benefit of the advantages we offer a modification kit which enables a reconstruction of all existing IR-Plus machines. The following modifications are included:

- 2 USB interfaces
- Monochrome display with icons
- New navigation panel
- operator guidance in 12 languages

The upgrade of the new IR-Plus components will be executed by Georg Fischer service centres in the USA/Tustin, Singapore and CSO Schaffhausen.

PF 2 43 460 903

Type	Code	kg
IR-225 Plus	<b>790 133 124</b>	0.500



## Modification Kit

In order to give our existing IR-Plus customers the full benefit of the advantages we offer a modification kit which enables a reconstruction of all existing IR-Plus machines. The following modifications are included:

- 2 USB interfaces
- Monochrome display with icons
- New navigation panel
- operator guidance in 12 languages

The upgrade of the new IR-Plus components will be executed by Georg Fischer service centres in the USA/Tustin, Singapore and CSO Schaffhausen.

PF 2 43 460 902

Type	Code	kg
IR-63 Plus	<b>790 131 124</b>	5.100



## Clamping inserts

- The clamping inserts are different for each dimension. They are used to clamp and position the pipe components.

PF 2 43 412 002

d [mm]	Code	kg	Pieces
20	<b>790 131 038</b>	0.090	1
25	<b>790 131 039</b>	0.090	1
32	<b>790 131 040</b>	0.083	1
40	<b>790 131 041</b>	0.075	1
50	<b>790 131 042</b>	0.100	1
63	<b>790 131 043</b>	0.040	1



## Clamping inserts

- The clamping inserts are different for each dimension. They are used to clamp and position the pipe components.

d [mm]	Code	kg	Pieces
63	790 133 026	0.771	1
75	790 133 027	0.747	1
90	790 133 028	0.716	1
110	790 133 029	0.690	1
125	790 133 030	0.820	1
140	790 133 031	0.827	1
160	790 133 032	0.705	1
180	790 133 463	0.560	1
200	790 133 033	0.418	1
225	790 133 034	0.282	1

PF 2 43 414 002



## Set of facing knives

- A set includes two facing knives. Each facing knife has four blades. The blade may be turned three times before it must be replaced.

d-d [mm]	Code	kg	Pieces
20 - 63	790 131 045	0.016	2

PF 2 43 412 002



## Set of facing knives

- A set includes two facing knives. Each facing knife has four blades. The blade may be turned three times before it must be replaced.

d-d [mm]	Code	kg	Pieces
63 - 225	790 133 046	0.125	2

PF 2 43 414 002



## Set of end caps \*on request

- A set includes 4 end caps. The end caps are different for each dimension. The ends of the pipe **must** be closed. The caps prevent heat loss due to airflow in the fusion zone and guarantee optimum fusion results of the pipe components.

d [mm]	Code	kg	Pieces
63	790 131 035	0.035	4
75	790 133 036	0.095	4
90	790 133 037	0.110	4
110	790 133 038	0.180	4
125	790 133 039	0.170	4
140	790 133 040	0.185	4
160	790 133 041	0.212	4
180	790 133 494	0.090	4
200	790 133 042	0.450	4
225	790 133 043	0.365	4

PF 2 43 414 002



## Set of end caps

- A set includes 4 end caps. The end caps are different for each dimension. The ends of the pipe **must** be closed. The caps prevent heat loss due to airflow in the fusion zone and guarantee optimum fusion results of the pipe components.

d [mm]	Code	kg	Pieces
63	790 131 035	0.035	4
25	790 131 031	0.010	4
32	790 131 032	0.015	4
40	790 131 033	0.025	4
50	790 131 034	0.055	4

PF 2 43 412 002





## Movable clamping unit - left

- The movable, external clamping unit ensure high operating convenience. Short pipe pieces can be clamped on both sides.
- Included in the delivery when a new IR-225 Plus® is ordered.
- Previous IR 225 fusion jointing machines can be upgraded.

d-d [mm]	Code	kg	Pieces
63 - 225	<b>790 133 061</b>	10.700	1

PF 2 43 414 002



## Movable clamping unit - right

- The movable, external clamping unit ensure high operating convenience. Short pipe pieces can be clamped on both sides.
- Included in the delivery when a new IR-225 Plus® is ordered.
- Previous IR 225 fusion jointing machines can be upgraded.

d-d [mm]	Code	kg	Pieces
63 - 225	<b>790 133 062</b>	10.200	1

PF 2 43 414 002



## Pipe stop

- The pipe stop defines the allowance when the pipes are clamped into position.

d-d [mm]	Code	kg	Pieces
20 - 63	<b>790 131 046</b>	0.430	1

PF 2 43 412 002



## Pipe stop

- The pipe stop defines the allowance when the pipes are clamped into position.

d-d [mm]	Code	kg	Pieces
63 - 225	<b>790 133 047</b>	0.150	1

PF 2 43 414 002



## Extension cable for clamping slide

- The extension cable enables the fusion e. g. under the ceiling.

d-d [mm]	Code	kg	Pieces
20 - 63	<b>790 131 047</b>	0.800	1

PF 2 43 412 002



## Extension cable for facing tool

- The extension cable enables the fusion e. g. under the ceiling.

d-d [mm]	Code	kg	Pieces
20 - 63	<b>790 131 048</b>	0.438	1

PF 2 43 412 002



### Extension cable for heater

- The extension cable enables the fusion e. g. under the ceiling.

d-d [mm]	Code	kg	Pieces
20 - 63	790 131 049	0.785	1

PF 2 43 412 002



### Heater protection shield

- Protects the heater from plastic chips during the facing process.

Code	kg	Pieces
790 131 051	0.205	1

PF 2 43 412 002



### USB memory stick

Code	kg	Description
799 350 622	0.300	Memory stick (for software or languages updates)

PF 2 51 306 005



### USB cable

- PC and printer transmission cable to transfer fusion data directly to PC or to printer

Code	kg	Description
799 350 619	0.300	USB cable (type A/B) for printer and PC connection

PF 2 51 306 005

# BCF<sup>®</sup> Plus Product Specifications

<b>Fusion Technology</b>	<p>Bead and crevice free fusion            Software controlled, reproducible and monitored fusion and cooling process            Remote fusion unit            Pre-programmed and password protected fusion parameters            Fusion protocol storage of 1600 fusions with unique fusion number            Fusion factor → 0.98            User guidance in 8 languages            Integrated error recognition            Automated maintenance intervals            Welder training and certification            Voltage supply 110 V/230 V</p>
<b>Piping material</b>	<p>SYGEF<sup>®</sup> Plus (PVDF HP)            SYGEF<sup>®</sup> Standard (PVDF Standard)            PROGEF<sup>®</sup> Natural (PP Natural)</p>
<b>Dimension</b>	d20 (1/2") – d110 (4")
<b>Pre-fusion treatment</b>	<p>Cleaning with Tangit KS            No inert gas required            No filler material</p>
<b>Surface finish in fusion zone</b>	<p>SYGEF<sup>®</sup> Plus (PVDF HP) Ra ~ 0.25 µm            SYGEF<sup>®</sup> Standard (PVDF Standard) Ra ~ 0.5 µm            PROGEF<sup>®</sup> Natural (PP Natural) Ra ~ 0.8 µm</p>
<b>Post-fusion treatment</b>	<p>No manual welds            No passivation            No pickling</p>
<b>Fusion documentation</b>	<p>Print-out of 2 identical labels for labelling of piping system or isometric drawing</p> <ul style="list-style-type: none"> <li>• Date</li> <li>• Joint number</li> <li>• Work site number</li> <li>• Welder / supervisor visa</li> </ul> <p>Print-out of fusion protocol via A4 printer</p> <ul style="list-style-type: none"> <li>• Date</li> <li>• Time</li> <li>• Machine number</li> <li>• Joint number</li> <li>• Operator</li> <li>• Work site</li> <li>• Process status</li> <li>• Chosen parameter (material, size, pipe series, PN, wall thickness)</li> <li>• Process parameter (temperature, time, pressure)</li> <li>• Confirmation and signature</li> </ul> <p>Electronic record downloadable, write protected stored and administered via WIN.WELD read out software.</p>
<b>Testing and Inspection</b>	<p>Sample fusions one per job site and dimension            Fusion inspection with torch lamp based upon ASME BPE-a-2004.</p>
<b>Conformances / Standards</b>	<p>ASME BPE-a-2004            DVS 2203</p>
<b>Main applications</b>	<p>Uses include delivery of ultrapure water in pharmaceutical, medical and semiconductor grade water to highest purity and cleaning requirements as well a abrasive fluid transport in semiconductor and cosmetics.</p>

# BCF® Plus Plastic Fusion Jointing Machine

## BCF® Plus fully equipped machine d 20 - 63 mm

Fully-equipped machine for bead and crevice free jointing of SYGEF® Standard, SYGEF® Plus, PROGEF® Natural of the dimensions d 20-63 mm with integrated remote welding unit, 2 USB interfaces, monochrome display with icons and 12 languages.



### Supply:

1-phase AC (50/60 Hz) 115 / 230 V L/N/PE

### Delivery includes:

- Machine housing (1 pcs.) incl. remote welding unit (1 pcs.)
- Transport box (1 pcs.)
- HP working table (1 pcs.)
- Heating stations d 20-63 mm (6 pcs.)
- Clamping units small (2 pcs.) with clamping inserts d 20-63 mm (24 pcs.)
- Facing tool small (1 pcs.) with facing inserts d 20-63 mm (6 pcs.)
- Facing tool support (1 pcs.)
- Hose box (1 pcs.) incl. air hose (1 pcs.)
- Supporting tools small d 20-63 mm (2 pcs.)
- BReT (1 pcs.)
- Hose cutter (1 pcs.)
- Air hose reducer (6-4 mm) (1 pcs.), air hose socket (4-4 mm) (1 pcs.)
- Extension cable (1 pcs.)
- Manual (1 pcs.)

d-d [mm]	Code	kg	
20 - 63	<b>790 121 002</b>	153.000	

PF 2 43 654 001



## BCF® Plus fully-equipped machine d 20 -110 mm

Fully-equipped machine for bead and crevice free jointing of SYGEF® Standard, SYGEF® Plus, PROGEF® Natural of the dimensions d 20-110 mm with integrated remote welding unit.

### Supply:

1-phase AC (50/60 Hz) 115 / 230 V L/N/PE

### Delivery includes:

- Machine housing (1 pcs.) incl. remote welding unit (1 pcs.)
- Transport box (1 pcs.)
- HP working table (1 pcs.)
- Heating stations d 20-110 mm (9 pcs.)
- Clamping units small (2 pcs.) with clamping inserts d 20-63 mm (24 pcs.)
- Clamping units big (2 pcs.) with clamping inserts d 75-110 mm (12 pcs.)
- Adapter for clamping unit d 75-110 mm (2 pcs.)
- Facing tool small (1 pcs.) with facing inserts d 20-63 mm (6 pcs.)
- Facing tool big (1 pcs.) with facing inserts d 75-110 mm (3 pcs.)
- Facing tool support (1 pcs.)
- Hose box (1 pcs.) incl. air hose (1 pcs.)
- Supporting tools small d 20-63 mm (2 pcs.)
- Supporting tools big d 75-110 mm (2 pcs.)
- BReT (1 pcs.)
- Hose cutter (1 pcs.)
- Air hose reducer (6-4 mm) (1 pcs.), air hose socket (4-4 mm) (1 pcs.)
- Extension cable (1 pcs.)
- Manual (1 pcs.)

d-d [mm]	Code	kg	
20 - 110	<b>790 121 001</b>	188.000	

PF 2 43 654 001



## BCF® Plus basic machine d 20-63 mm

Fully-equipped machine for bead and crevice free jointing of SYGEF® Standard, SYGEF® Plus, PROGEF® Natural of the dimensions d 20-63 mm with integrated remote welding unit

### Supply:

1-phase AC (50/60 Hz) 115 / 230 V L/N/PE

### Scope of delivery includes:

- Machine housing (1 pcs.) with remote welding unit (1 pcs.)
- Transport box (1 pcs.)
- HP working table (1 pcs.)
- Clamping units small (2 pcs.) with clamping inserts d 20-63 mm (24 pcs.)
- Facing tool small (1 pcs.) with facing inserts d 20-63 mm (6 pcs.)
- Facing tool support (1 pcs.)
- Hose box (1 pcs.) incl. air hose (1 pcs.)
- Supporting tools small (2 pcs.)
- BReT (1 pcs.)
- Hose cutter (1 pcs.)
- Inbus T-screwdriver (1 pcs.)
- Air hose reducer (6-4 mm) (1 pcs.)
- Air hose socket (4-4 mm) (1 pcs.)
- Extension cable (1 pcs.)
- Power supply cable (1 pcs.)
- Manual (1 pcs.)

d-d [mm]	Code	kg
20 - 63	790 121 004	144.000

PF 2 43 654 001



### Hose cutter

d-d [mm]	Code	kg	Pieces
4 - 6	790 122 106	0.030	1

PF 2 43 410 002



## BCF® Plus basic machine d 75-110 mm

Fully-equipped machine for bead and crevice free jointing of SYGEF® Standard, SYGEF® Plus, PROGEF® Natural of the dimensions d 75-110 mm with integrated remote welding unit

### Supply:

1-phase AC (50/60 Hz) 115 / 230 V L/N/PE

### Delivery includes:

- Machine housing (1 pcs.) with remote welding unit (1 pcs.)
- Transport box (1 pcs.)
- HP working table (1 pcs.)
- Clamping units big (2 pcs.) with clamping inserts d 75-110 mm (12 pcs.)
- Adapter for clamping unit d 75-110 mm (2 pcs.)
- Facing tool big (1 pcs.) with facing inserts d 75-110 mm (3 pcs.)
- Facing tool support (1 pcs.)
- Hose box (1 pcs.) incl. air hose (1 pcs.)
- Supporting tools big (2 pcs.)
- BReT (1 pcs.)
- Hose cutter (1 pcs.)
- Inbus T-screwdriver (1 pcs.)
- Air hose reducer (6-4 mm) (1 pcs.)
- Air hose socket (4-4 mm) (1 pcs.)
- Extension cable (1 pcs.)
- Power supply cable (1 pcs.)
- Manual (1 pcs.)

d-d [mm]	Code	kg
75 - 110	790 121 005	155.000

PF 2 43 654 001



## BCF® Plus basic machine d 20 -110 mm

Fully-equipped machine for bead and crevice free jointing of SYGEF® Standard, SYGEF® Plus, PROGEF® Natural of the dimensions d 20-110 mm with integrated remote welding unit

### Supply:

1-phase AC (50/60 Hz) 115/ 230 V L/N/PE

### Delivery includes:

- Machine housing (1 pcs.) with remote welding unit (1 pcs.)
- Transport box (1 pcs.)
- HP working table (1 pcs.)
- Clamping units small (2 pcs.) with clamping inserts d 20-63 mm (24 pcs.)
- Clamping units big (2 pcs.) with clamping inserts d 75-110 mm (12 pcs.)
- Adapter for clamping unit d 75-110 mm (2 pcs.)
- Facing tool small (1 pcs.) with facing inserts d 20-63 mm (6 pcs.)
- Facing tool big (1 pcs.) with facing inserts d 75-110 mm (3 pcs.)
- Facing tool support (1 pcs.)
- Hose box (1 pcs.) incl. air hose (1 pcs.)
- Supporting tools small d 20-63 mm (2 pcs.)
- Supporting tools big d 75-110 mm (2 pcs.)
- BReT (1 pcs.)
- Hose cutter (1 pcs.)
- Inbus T-screwdriver (1 pcs.)
- Air hose reducer (6-4 mm) (1 pcs.)
- Air hose socket (4-4 mm) (1 pcs.)
- Extension cable (1 pcs.)
- Power supply cable (1 pcs.)
- Manual (1 pcs.)

d-d [mm]	Code	kg	
20 - 110	790 121 006	161.000	

PF 2 43 654 001

## Socket for compressed air hose

Code	kg	Pieces	
790 122 104	0.002	1	

PF 2 43 410 002

## BCF® Plus dimension packet d 20-63 mm

- This package is necessary to complete BCF® Plus machines which are only equipped for large dimensions d 75-110 mm.
- **Delivery includes:**
- Clamping units small (2 pcs.) with clamping inserts d 20-63 mm (24 pcs.)
- Facing tool small (1 pcs.) with facing inserts d 20-63 mm (6 pcs.)
- Supporting tools small (2 pcs.)

d-d [mm]	Code	kg	
20 - 63	790 121 023	6.225	

PF 2 43 654 002



## BCF® Plus dimension packet d 75-110 mm

- This package is necessary to complete BCF® Plus machines which are only equipped for small dimensions d 20-63 mm.
- **Delivery includes:**
- Clamping units big (2 pcs.) with clamping inserts d 75-110 mm (12 pcs.)
- Facing tool big (1 pcs.) with facing inserts d 75-110 mm (3 pcs.)
- Supporting tools tall (2 pcs.)
- Adapter for clamping unit d 75-110 mm (2 pcs.)

d-d [mm]	Code	kg	
75 - 110	790 121 022	8.107	

PF 2 43 654 002



## BCF® Plus Bladder

- Only suitable for welding PROGEF® Natural). **Blue bladder head** (except d 75 - 110mm)!

d [mm]	Code	kg	Pieces
20	790 122 091	0.038	1
25	790 122 092	0.044	1
32	790 122 093	0.062	1
40	790 122 094	0.082	1
50	790 122 095	0.131	1
63	790 122 096	0.168	1
75	790 121 047	0.152	1
90	790 121 048	0.204	1
110	790 121 049	0.428	1

PF 2 43 410 002



## BCF® Plus Win Weld

- The PC data transfer software makes it possible to manage and evaluate easily the recorded fusion data as required.
- **incl. Recordcard / USB stick**

	Code	kg	Pieces
WIN 2000/XP	790 121 471	0.080	1
WIN 95/98/Me/NT	790 121 472	0.220	1

PF 2 43 278 001



## BCF® Plus Heating stations

d [mm]	Code	kg	Pieces
20	790 121 111	1.800	1
25	790 121 112	1.820	1
32	790 121 113	1.890	1
40	790 121 114	2.400	1
50	790 121 115	2.400	1
63	790 121 116	2.150	1
75	790 121 117	3.600	1
90	790 121 118	3.600	1
110	790 121 119	3.520	1

PF 2 43 654 002



## BCF® Plus Recordcard

- Fusion data from the BCF® Plus- machine can be stored on an exchangeable protocol card (record card) with a storage capacity of approx. 900 fusion protocols. It allows a paperless documentation.

Code	kg
790 121 473	0.031

PF 2 43 412 002



## BCF® Plus facing tool

- Inclusive crank handle, mounting material and clamping inserts. Suitable for SYGEF® PVDF as well as PROGEF® Natural.

PF 2 43 654 002

d-d [mm]	Code	kg	Pieces
20 - 63	<b>790 121 052</b>	1.400	1
75 - 110	<b>790 121 053</b>	3.000	1



## BCF® Plus clamping inserts for the facing tool

- These dimension-specific parts are inserted into the facing tool, in order to be able to face the end of the pipes smoothly and parallel.

PF 2 43 654 002

d [mm]	Code	kg	Pieces
20	<b>790 121 061</b>	0.160	1
25	<b>790 121 062</b>	0.150	1
32	<b>790 121 063</b>	0.132	1
40	<b>790 121 064</b>	0.125	1
50	<b>790 121 065</b>	0.100	1
63	<b>790 121 066</b>	0.050	1
75	<b>790 121 067</b>	0.300	1
90	<b>790 121 068</b>	0.200	1
110	<b>790 121 069</b>	0.090	1



## BCF® Plus facing tool mounting plate

PF 2 43 654 002

d-d [mm]	Code	kg	Pieces
20 - 110	<b>790 121 055</b>	1.200	1



## BCF® Plus clamping units

- The clamping units are adjustable, so that all types of pipes and fittings can be clamped.

PF 2 43 654 002

d-d [mm]	Code	kg	Pieces
20 - 63	<b>790 121 034</b>	0.001	1
75 - 110	<b>790 121 035</b>	0.900	1



## BCF® Plus adapter for clamping unit d 75-110 mm

PF 2 43 654 002

d-d [mm]	Code	kg	Pieces
75 - 110	<b>790 121 038</b>	0.250	1



## BCF® Plus clamping inserts

PF 2 43 654 002

d [mm]	Code	kg	Pieces
20	<b>790 131 038</b>	0.090	1
25	<b>790 131 039</b>	0.090	1
32	<b>790 131 040</b>	0.083	1
40	<b>790 131 041</b>	0.075	1
50	<b>790 131 042</b>	0.100	1
63	<b>790 131 043</b>	0.040	1
75	<b>790 121 036</b>	0.113	1
90	<b>790 121 037</b>	0.095	1



PF 2 43 460 901

### BCF® Plus hose box

- For the clean and professional storage of the air hose.

Code	kg	Pieces	
790 121 151	1.114	1	



PF 2 43 410 002

### BCF® Plus hose

Code	kg	Length [mm]	
790 122 087	0.131	11	



PF 2 43 654 002

### BCF® Plus supporting tool

d-d [mm]	Code	kg	Pieces	
20 - 63	790 121 072	0.542	1	
75 - 110	790 121 073	0.942	1	



PF 2 43 654 002

### BCF® Plus bladder/ hose remove tool (BReT)

Code	kg	Pieces	
790 121 075	0.079	1	



PF 2 43 460 901

### BCF® Plus extension cable

Code	kg	Length [mm]	
790 122 989	2.039	8	

# Accessories for the BCF®Plus plastic fusion jointing machine



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The following modifications are included:

- 2 USB interfaces
- Monochrome display with icons
- New navigation panel
- operator guidance in 12 languages

The upgrade of the new BCF Plus components will be executed by Georg Fischer service centres in the USA/Tustin, Singapore and CSO Schaffhausen.

PF 2 43 460 901

Type	Code	kg	
BCF Plus	<b>790 121 124</b>	0.500	



PF 2 43 410 002

## Hose cutter

d-d [mm]	Code	kg	Pieces
4 - 6	<b>790 122 106</b>	0.030	1



PF 2 43 460 901

## Reducer for compressed air hose

d-d [mm]	Code	kg	Pieces
6 - 4	<b>790 122 978</b>	0.002	1



PF 2 43 410 002

## Socket for compressed air hose

Code	kg	Pieces
<b>790 122 104</b>	0.002	1



PF 2 43 278 001

## BCF® Plus Win Weld

- The PC data transfer software makes it possible to manage and evaluate easily the recorded fusion data as required.
- **incl. Recordcard / USB stick**

	Code	kg	Pieces
WIN 2000/XP	<b>790 121 471</b>	0.080	1
WIN 95/98/Me/NT	<b>790 121 472</b>	0.220	1



## BCF® Plus Recordcard

- Fusion data from the BCF® Plus- machine can be stored on an exchangeable protocol card (record card) with a storage capacity of approx. 900 fusion protocols. It allows a paperless documentation.

PF 2 43 412 002

Code	kg	
790 121 473	0.031	

Rtf-Prime.ru

# Accessories for the IR-63 Plus®, IR-225 Plus®, IR-315 Plus® and BFC® Plus fusion machines



## Label Printer TLP-2844

- The thermotransfer printer TLP-2844 from Eltron International is, as a result of its compactness and ergonomic design, ideal for use on job sites. Supply includes a thermal printer ribbon, thermal transfer labels and a serial as well as a parallel interface.
- **Remarks:** We suggest, regarding service and warranty matters, to purchase directly from the local Eltron Representative. George Fischer can provide a list of world-wide addresses of the Eltron representatives on request.

Code	kg	Pieces
790 131 027	3.100	1

PF 2 43 412 002



## Thermal Printer Ribbon for TLP-2742 / TLP-2844

- The thermal transfer ribbon is specially suited for printing polyester labels.

Code	kg	Pieces
790 131 029	0.120	1

PF 2 43 412 002



## Thermal Transfer Labels

- The labels are made of white polyester. The printing, as well as the labels themselves, are resistant against:
  - UV resistant
  - Temperatures up to 140 °C (284 °F)
  - Up to 95% humidity
  - Cleaning agents (Isopropylalcohol etc.)
- Two identical labels are printed for each weld. Each roll contains 2500 labels.
- Label size: 38 x 19 mm
- Specification information available on request from George Fischer.

Code	kg	Pieces
790 131 028	0.420	1

PF 2 43 412 002



## Power supply lead

Performance	Code	kg	Pieces
230V	790 122 246	0.307	1
115V	790 122 248	0.188	1

PF 2 43 410 002

## KS Tangit Cleaner

- special cleaner for plastic welding joints of PP, PE, PVDF, PB
- 1 litre container



## Cleaning tissue KO-TON-R

Code	kg
790 122 085	0.004

## SG 110 Socket fusion machine



### For fusion jointing of PP, PE, PB and PVDF pipes and fittings

- Portable heating element - socket fusion machine for use in the workshop and on job sites.
- Dimension d 20 - 110 mm
- **Base machine**
- Compact, sturdy design, distortion-free machine bed
- Handwheel with torque locking mechanism for the slide movement
- **Heater**
- With electronic temperature control
- High temperature accuracy over the entire heating surface
- **Additional standard equipment on the basic model**
- Universal, left and right prismatic clamping devices, complete, for clamping pipe and fittings. Additional set of prismatic clamping devices for outer clamping of pipes available as an option.
- Depth stop
- V-shaped pipe support d 20 - 110 mm
- Back stop
- Machine specific tool set
- Timer to clock fusion times

d-d [mm]	Performance	Code	kg	
20 - 110	230 V/1200 W	<b>790 310 001</b>	65.000	
20 - 110	115 V/1200 W	<b>790 310 003</b>	64.000	

PF 3 25 134 100

# SG 110 Accessories

## Heating spigots and bushes



- For socket fusion systems in PP, PE and PVDF
- Always delivered in pairs (also usable for SG 110, SG 125, not for SG 160)
- Type B

d [mm]	Code	kg
25	<b>799 300 157</b>	0.110
32	<b>799 300 158</b>	0.140
40	<b>799 300 159</b>	0.230
50	<b>799 300 160</b>	0.335
63	<b>799 300 161</b>	0.565
75	<b>799 300 162</b>	0.965
90	<b>799 300 163</b>	1.440
110	<b>799 300 164</b>	2.210

PF 3 25 117 302

## Manual pipe peeling tool



d [mm]	Code	kg
20	<b>799 300 260</b>	0.059
25	<b>799 300 270</b>	0.074
32	<b>799 300 280</b>	0.100
40	<b>799 300 290</b>	0.259
50	<b>799 300 300</b>	0.299
63	<b>799 300 310</b>	0.513
75	<b>799 300 320</b>	0.750
90	<b>799 300 330</b>	1.070
110	<b>799 300 340</b>	1.350

## Chamfering tool

d-d [mm]	Code	kg
40 - 200	<b>790 309 001</b>	1.600
50 - 315	<b>790 309 002</b>	3.170

PF 3 10 590 100



# SG 110 Special accessories

## Universal prismatic clamping device, complete



PF 3 25 134 100

d-d [mm]	Code	kg
20 - 110	<b>790 310 011</b>	3.300

## Backstop, complete



PF 3 25 117 317

d-d [mm]	Code	kg
20 - 110	<b>790 310 012</b>	0.600

## V-shaped pipe support, complete



PF 3 25 117 317

d-d [mm]	Code	kg
20 - 110	<b>790 310 013</b>	0.700

## Heating element



PF 3 25 117 317

d-d [mm]	Performance	description	Code	kg
20 - 110	230 V/1200 W	electronic	<b>790 310 014</b>	2.400
20 - 110	230 V/1200 W	thermostatic	<b>790 310 015</b>	2.400
20 - 110	115 V/1200 W	electronic	<b>790 310 016</b>	2.400
20 - 110	115 V/1200 W	thermostatic	<b>790 310 017</b>	2.400

## Special transport crate



PF 3 25 117 317

Code	kg
<b>790 310 099</b>	45.000

## 1 set face chucks



PF 3 25 117 317

d-d [mm]	Code	kg
20 - 110	<b>790 310 018</b>	1.100

# Preparation Tools and Accessories

## Manual Pipe Peeling Tool for Socket Fusion



PF 2 51 305 001

d [mm]	Code	kg
20	<b>799 300 260</b>	0.059
25	<b>799 300 270</b>	0.074
32	<b>799 300 280</b>	0.100
40	<b>799 300 290</b>	0.259
50	<b>799 300 300</b>	0.299
63	<b>799 300 310</b>	0.513
75	<b>799 300 320</b>	0.750
90	<b>799 300 330</b>	1.070
110	<b>799 300 340</b>	1.350

## KS Tangit Cleaner

- Special cleaning agent for plastic fusion connections with PP, PE, PVDF and PB.



PF 2 28 473 002

Code	kg
<b>799 298 023</b>	0.890

## Cleaning tissue KO-TON-R



Code	kg
<b>790 122 085</b>	0.004

## Standards and Conformances – SYGEF®

### GF SYGEF Plus & SYGEF Standard, and the IR-Plus & BCF-Plus Fusion methods

SYGEF PVDF is compliant with the following international & industry standards:

- FDA CFR 21 § 177.2510
- USP 24, 26 Class VI
- ASME-BPE-PM – 2004 (incl. BCF fusion method)
- SEMI F57
- FM 4910
- UL 94 V-0, UL 723 / ASTM E84 (flame retardant)
- DVS 2205-4
- DVS 2207-6
- DVS 2207-15
- EN ISO 10931

→ Note that some compliances are only applicable to SYGEF-Plus components.

PVDF piping joined with BCF® fusion technology is also included in ISPE Baseline Vol 4, “Water & Steam Systems” technical guide

Production certification through EN2.2 & EN3.1b certificates is available on request.

In the following pages you will find our most commonly requested certificates:

- FDA Compliance of SYGEF Plus & SYGEF Standard
- USP VI Compliance of SYGEF Plus & SYGEF Standard
- FDA Compliance of PTFE Diaphragm from GF Diaphragm Valves
- USP VI Compliance of PTFE Diaphragm from GF Diaphragm Valves
- FDA Compliance of FPM-White o-ring from SYGEF-Plus Unions/Valves
- USP VI Compliance of FPM-White o-ring from SYGEF-Plus Unions/Valves
- FDA Compliance of BCF Fusion Technology
- ASME-BPE-PM Compliance of BCF Fusion Technology

Further certificates for SYGEF PVDF are available on request only, please contact GF.

**+GF+**

**GEORG FISCHER**  
PIPING SYSTEMS

# Certificate of Conformity

We hereby certify that

**+GF+ SYGEF<sup>®</sup> Plus and SYGEF<sup>®</sup> Standard**

are manufactured from PVDF (polyvinylidene fluoride) compound Kynar<sup>®</sup> 720, Kynar<sup>®</sup> 740 and Solef<sup>®</sup> 1008 which comply with the requirements of the American Food and Drug Administration (FDA), Code of Federal Regulations (Food and Drugs), paragraph 21 177.2510.

**Date 15. 06. 2004**

  
**Christian Classen**  
Product Manager PVDF

  
**Katrin Wallheinke**  
Manager Materials Technology

Georg Fischer Ltd,  
Ebnatstrasse 111, P.O. Box,  
CH-8201 Schaffhausen/Switzerland  
Phone +41 (0)52-631 11 11, Fax +41 (0)52-631 28 37  
info@piping.georgfischer.com, www.piping.georgfischer.com

**+GF+**

**GEORG FISCHER**  
PIPING SYSTEMS

# Certificate of Conformity

We hereby certify that

**+GF+ SYGEF<sup>®</sup> Plus and SYGEF<sup>®</sup> Standard (PVDF)**

are manufactured from compound Kynar<sup>®</sup> 740 and Solef<sup>®</sup> 1008 which have been tested and certified by NAMS Northwood Ohio to be in compliance with the criteria of the Class VI United States Pharmacopeia Biological Reactivity Tests, in vivo.

**Date 15. 06. 2004**



**Christian Classen**  
Product Manager PVDF



**Katrin Wallheinke**  
Manager Materials Technology

**+GF+**

**GEORG FISCHER**  
PIPING SYSTEMS

# Certificate of Conformity

We hereby certify that

**+GF+ Diaphragm Valves Type 314, 315, 317, 319**

**equipped with PTFE Diaphragm**

are manufactured from compound PTFE 9900/4562 which comply with the requirements of the American Food and Drug Administration (FDA), Code of Federal Regulations (Food and Drugs), paragraph 177.1550.

**Date 15. 06. 2004**



**Rainer Kech**  
Product Manager  
Diaphragm Valves, Actuators, AS-i



**Michael Hollfeld**  
Project Manager



**+GF+**

**GEORG FISCHER**  
PIPING SYSTEMS

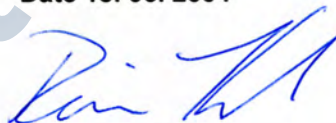
# Certificate of Conformity

We hereby certify that

**+GF+ Diaphragm Valves Type 314, 315, 317, 319**  
equipped with PTFE Diaphragm

are manufactured from compound PTFE 9900/4562  
which has been tested and certified by NAMSA  
Northwood Ohio to be in compliance with the criteria of  
the Class VI United States Pharmacopeia Biological  
Reactivity Tests, in vivo.

**Date 15. 06. 2004**



**Rainer Kech**  
Product Manager  
Diaphragm Valves, Actuators, AS-i



**Michael Hollfeld**  
Project Manager

**+GF+**

**GEORG FISCHER**  
PIPING SYSTEMS

# Certificate of Conformity


We hereby certify that

**+GF+ SYGEF<sup>®</sup> Plus Union O-rings FPM white**

are manufactured from FPM 75 white (fluoro elastomer) which comply with the requirements of the American Food and Drug Administration (FDA), Code of Federal Regulations (Food and Drugs), paragraph 177.2600.

**Date 15. 06. 2004**

  
**Christian Classen**  
Product Manager PVDF

  
**Michael Hollfeld**  
Project Manager



**+GF+**

**GEORG FISCHER**  
PIPING SYSTEMS

# Certificate of Conformity


We hereby certify that

**+GF+ SYGEF<sup>®</sup> Plus Union O-rings FPM white**

are manufactured from FPM 75 white (fluoro elastomer)  
which has been tested and certified by NAMSA  
Northwood Ohio to be in compliance with the criteria of  
the Class VI United States Pharmacopeia Biological  
Reactivity Tests, in vivo.

**Date 15. 06. 2004**

  
**Christian Classen**  
Product Manager PVDF

  
**Michael Hollfeld**  
Project Manager

**+GF+**

**GEORG FISCHER**  
PIPING SYSTEMS

# Certificate of Conformity

We hereby certify that

**+GF+ BCF® Plus Welding Technology**

meets the requirements of the American Food and Drug Administration (FDA), for jointing methods, i.e. that the joints be smooth with no cracks, crevices or pits. Acceptable joint quality can be defined, inspected and documented.



**Felix Meier**  
Product Manager  
Fusion Machines (IR/BCF)



**Jörg Wermelinger**  
Manager PMD VT

## Certificate of Conformance

Quality Assurance

**George Fischer, Inc.**

2882 Dow Avenue  
Tustin, California 92780-7258  
USA

Phone +1 (714) 731-8800

Toll free (800) 854-4090

Fax +1 (714) 731-6201

info@us.piping.georgefischer.com

www.us.piping.georgefischer.com

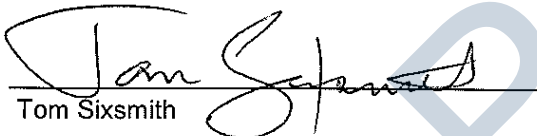
George Fischer Piping confirms that the items listed below conform with the requirements of ASME-BPE 2005, Sections PM-1 through PM5 by means of acceptable material, design and conformance of joint quality documented and verified through inspection.

+GF+ BCF<sup>®</sup>Plus Welding Technology in conjunction with piping systems of:

+GF+ SYGEF<sup>®</sup>Plus (PVDF-HP)

+GF+ SYGEF<sup>®</sup>Standard (PVDF-Standard)

+GF+ PROGEF<sup>®</sup>Natural (PP-Natural)

  
Tom Sixsmith  
VP Custom Products  
BPE Committee Member, Materials and Joining

9-25-06  
Date

  
Dieter Eckstein  
Quality Assurance Manager

9/25/06  
Date

Doc. No. QCF016

Rev. No. 4.0 Rev. Date: 01/05/06







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# General Condition of Supply of Georg Fischer Piping Systems Limited, Schaffhausen

## 1 General

- 1.1 These General Conditions shall apply to all Products supplied by Georg Fischer to the Purchaser. They shall also apply to all future business even when no express reference is made to them.
- 1.2 Any deviating or supplementary conditions especially Purchaser's general conditions of purchase and verbal agreements shall only be applicable if accepted in writing by Georg Fischer.
- 1.3 The written form shall be deemed to be fulfilled by all forms of transmission, evidenced in the form of text, such as telefax, e-mail, etc.

## 2 Tenders

- 2.1 Tenders shall only be binding if they contain a specifically stated period for acceptance.

## 3 Scope of Delivery

- 3.1 Georg Fischer's product range is subject to change.
- 3.2 The confirmation of order shall govern the scope and execution of the contract.

## 4 Data and Documents

- 4.1 Technical documents such as drawings, descriptions, illustrations and data on dimensions, performance and weight as well as the reference to standards are for information purposes only. They are not warranted characteristics and are subject to change.
- 4.2 All technical documents shall remain the exclusive property of Georg Fischer and may only be used for the agreed purposes or as Georg Fischer may consent.

## 5 Confidentiality, Protection of Personal Data

- 5.1 Each party shall keep in strict confidence all commercial or technical information relating to the business of the other party, of which it has gained knowledge in the course of its dealing with the other party. Such information shall neither be disclosed to third parties nor used for other purposes than those for which the information has been supplied.
- 5.2 In the context of the contractual relation with the Purchaser personal data may be processed. The Purchaser agrees to the disclosure of said data to third parties such as foreign subcontractors and suppliers etc.

## 6 Local Laws and Regulations, Export Controls

- 6.1 The Purchaser shall bring to the attention of Georg Fischer all local laws and regulations at the place of destination which bear connection with the execution of the contract and the adherence to relevant safety regulations and approval procedures.
- 6.2 In case of re-exports, Purchaser shall be responsible for compliance with pertinent export control regulations.

## 7 Price

- 7.1 Unless agreed otherwise, the prices shall be deemed quoted net ex works (according to Incoterms of the ICC, latest version) including standard packing. All supplementary costs such as the cost of carriage, insurance, export-, transit- and import duties etc. shall be borne by the Purchaser. The Purchaser shall also bear the costs of all taxes, fees, duties etc. connected with the contract.
- 7.2 If the costs of packing, carriage, insurance, fees and other supplementary costs are included in the tender price or contract price or are referred to specifically in the tender or confirmation of order, Georg Fischer reserve the right to revise their prices accordingly should any change occur in the relevant tariffs.

## 8 Terms of Payment

- 8.1 The Purchaser shall make payment in the manner agreed by the parties without any deductions such as discounts, costs, taxes or dues.
- 8.2 The Purchaser may only withhold or off-set payments due against counter claims which are either expressly acknowledged by Georg Fischer or finally awarded to the Purchaser. In particular, payment shall still be made when unessential items are still out-standing provided that the Products already delivered are not rendered unusable as a result.

## 9 Retention of Title

- 9.1 The Products shall remain the property of Georg Fischer until the Purchaser shall have settled all claims, present and future, which Georg Fischer may have against him.
- 9.2 Should the Purchaser resell Products to which title is reserved, in the ordinary course of business, he shall hereby be deemed to have tacitly assigned to Georg Fischer the proceeds deriving from their sale together with all collateral rights, securities and reservations of title until all claims held by Georg Fischer shall have been settled. Until revoked by Georg Fischer, this assignment shall not preclude Purchaser's right to collect the assigned receivables.
- 9.3 To the extent the value of the Products to which title is reserved together with collateral securities exceeds Georg Fischer's claims against the Purchaser by more than 20%, Georg Fischer shall re-assign the above proceeds to Purchaser at his request.

## 10 Delivery

- 10.1 The term of delivery shall commence as soon as the contract has been entered into, all official formalities such as import and payment permits have been obtained and all essential technical issues have been settled. The term of delivery shall be deemed duly observed when, upon its expiry, the Products are ready for despatch.
- 10.2 Delivery is subject to the following conditions, i.e. the term of delivery shall be reasonably extended:
  - a) if Georg Fischer are not supplied in time with the information necessary for the execution of the contract or if subsequent changes causing delays are made by the Purchaser.
  - b) if Georg Fischer are prevented from performing the contract by force majeure. Force majeure shall equally be deemed to be any unforeseeable event beyond Georg Fischer's control which renders Georg Fischer's performance commercially unpractical or impossible, such as delayed or defective supplies from sub contractors labour disputes, governmental orders or regulations, shortages in materials or energy, serious disturbances in Georg Fischer's works, such as the total or partial destruction of plant and equipment or the breakdown of essential facilities, serious disruptions in transport facilities, e.g. impassable roads.  
Should the effect of force majeure exceed a period of six months, either party may cancel the contract forthwith.  
Georg Fischer shall not be liable for any damage or loss of any kind whatsoever resulting therefrom, any suspension or cancellation being without prejudice to Georg Fischer's right to recover all sums due in respect of consignments delivered and costs incurred to date.
  - c) if the Purchaser is in delay with the fulfilment of his obligations under the contract, in particular, if he does not adhere to the agreed conditions of payment or if he has failed to timely provide the agreed securities.
- 10.3 If for reasons attributable to Georg Fischer the agreed term of delivery or a reasonable extension thereof is exceeded, Georg Fischer shall not be deemed in default until the Purchaser has granted to Georg Fischer in writing a reasonable extension thereof of not less than one month which equally is not met.  
The Purchaser shall then be entitled to the remedies provided at law, it being however understood that, subject to limitations of Art. 16, damage claims shall be limited to max. 10% of the price of the delayed delivery.
- 10.4 Part shipments shall be allowed and Georg Fischer shall be entitled to invoice for such partial deliveries.
- 10.5 If the Purchaser fails to take delivery within a reasonable time of Products notified as ready for despatch, Georg Fischer shall be entitled to store the Products at the Purchaser's expense and risk and to invoice them as delivered. If Purchaser fails to effect payment, Georg Fischer shall be entitled to dispose of the Products.
- 10.6 Should Purchaser cancel an order without justification and should Georg Fischer not insist on the performance of the contract, Georg Fischer shall be entitled to liquidated damages in the amount of 10% of the contract price, Georg Fischer's right to prove and claim higher damages remaining reserved. Purchaser shall be entitled to prove, that Georg Fischer has suffered no or a considerably lower damage.

## 11 Packing

- 11.1 If the Products are provided with additional packing over and above the standard packing, such packing shall be charged additionally.

## 12 Passing of Risk

- 12.1 The risk in the Products shall pass to the Purchaser as soon as they have left Georg Fischer's works (EX WORKS, Incoterms ICC, latest version), even if delivery is made carriage-paid, under similar clauses or including installation or when carriage is organized and managed by Georg Fischer.
- 12.2 If delivery is delayed for reasons beyond Georg Fischer's control, the risk shall pass to the Purchaser when he is notified that the Products are ready for despatch.

## 13 Carriage and Insurance

- 13.1 Unless agreed otherwise, the Purchaser shall bear the cost of carriage.
  - 13.2 The Purchaser shall be responsible for transport insurance against damage of whatever kind. Even when such insurance is arranged by Georg Fischer it shall be deemed taken out by the order of and for the account of the Purchaser and at his risk.
  - 13.3 Special requests regarding carriage and insurance shall be communicated to Georg Fischer in due time. Otherwise carriage shall be arranged by Georg Fischer at their discretion, but without responsibility, by the quickest and cheapest method possible.  
In case of carriage-paid delivery transport arrangements shall be made by Georg Fischer. If the Purchaser specifies particular requirements, any extra costs involved shall be borne by him.
  - 13.4 In the event of damage or loss of the Products during carriage the Purchaser shall mark the delivery documents accordingly and immediately have the damage ascertained by the carrier. Not readily ascertainable damages sustained during carriage shall be notified to the carrier within six days after receipt of the Products.
- ## 14 Inspection, Notification of Defects and Damages
- 14.1 The Products will be subject to normal inspection by Georg Fischer during manufacture. Additional tests required by the Purchaser shall be agreed upon in writing and shall be charged to the Purchaser.
  - 14.2 It shall be a condition of Georg Fischer's obligation under the warranties stated hereinafter that Georg Fischer be notified in writing by the Purchaser of any purported defect immediately upon discovery. Notice concerning weight, numbers or apparent defects is to be given latest within 30 days from receipt of the Products, notice of other defects immediately latest within 7 working days after discovery, in any event within the agreed warranty period.
  - 14.3 Purchaser shall not dispose of allegedly defective Products until all warranty and/or damage claims are finally settled. At its request, defective Products are to be placed at Georg Fischer's disposal.
  - 14.4 At its request, Georg Fischer shall be given the opportunity to inspect the defect and/or damage, prior to commencement of remedial work, either itself or by third party experts.

## 15 Warranty

- 15.1 At the written request of the Purchaser, Georg Fischer undertake to repair or replace at their discretion, as quickly as possible and free of charge all Products supplied which demonstrably suffer from faulty design, materials or workman-ship or from faulty operating or installation instructions.  
In order to protect employees from toxic or radioactive substances which may have been transported through defective parts returned to Georg Fischer's sales organisation, said parts must be accompanied by a Material Safety Disclosure Form. The form may be obtained from Georg Fischer's local sales company or via [www.piping.georgfischer.com](http://www.piping.georgfischer.com).  
Replaced parts shall become property of Georg Fischer.
- 15.2 For Products which are manufactured to specifications, drawings or patterns supplied by the Purchaser, Georg Fischer's warranty shall be restricted to proper materials and workmanship.
- 15.3 The Purchaser shall be entitled to cancel the contract or to demand a reduction in the contract price if also a second attempt to repair or replace the Products has failed.
- 15.4 For Products or essential components manufactured by a third party and supplied by Georg Fischer under this contract, Georg Fischer's warranty is limited to the warranty provided by said third party.
- 15.5 This warranty shall not apply to damage resulting from normal wear and tear, improper storage and maintenance, failure to observe the operating instructions, overstressing or overloading, unsuitable operating media, unsuitable construction work or unsuitable building ground, improper repairs or alterations by the Purchaser or third parties, the use of other than original spare parts and other reasons beyond Georg Fischer's control.
- 15.6 No action or claim may be brought by the Purchaser on account of any alleged breach of warranty or any other obligation of Georg Fischer after the expiration of twelve (12) months from receipt of the Products by the end user or at the latest within eighteen (18) months of the Products being despatched by Georg Fischer.
- 15.7 In case of Products for use in domestic installations or in utilities
  - Georg Fischer will assume the costs of dismantling the defective Product and restoring the damaged object as well as, in case of negligence, all other direct damages caused by the defective Product (damage to property and injury to or death of persons) up to CHF 1 000 000 per occurrence.
  - the statute of limitations for warranty or damage claims - contrary to Section 15.6 - will be 5 years from the date of installation.

## 16 Limitation of Liability

- 16.1 All cases of breach of contract and the relevant consequences as well as all rights and claims on the part of the customer, irrespective of what ground they are based, are exhaustively covered by these general conditions of supply. In particular, any claims not expressly mentioned for damages, reduction of price, termination of or withdrawal from the contract are excluded. In no case whatsoever shall the customer be entitled to claim damages other than compensation for costs of remedying defects in the supplies. This in particular refers, but shall not be limited, to loss of production, loss of use, loss of orders, loss of profit and other direct or indirect or consequential damage. This exclusion of liability, however, does not apply to unlawful intent or gross negligence on the part of Georg Fischer and in case of strict liability under applicable product liability statutes, but does apply to unlawful intent or gross negligence of persons employed or appointed by Georg Fischer to perform any of its obligations.

## 17 Severability

- 17.1 Should any term or clause of these General Conditions in whole or in part be found to be unenforceable or void, all other provisions shall remain in full force and effect and the unenforceable or void provision shall be replaced by a valid provision, which comes closest to the original intention of the unenforceable or invalid provision.

## 18 Place of Performance and Jurisdiction

- 18.1 Place of performance for the Products shall be the Georg Fischer works from which the Products are despatched.
- 18.2 Any civil action based upon any alleged breach of this contract shall be filed and prosecuted exclusively in the courts of Schaffhausen, Switzerland.  
Georg Fischer however reserves the right to file actions in any court having jurisdiction over controversies arising out of or in connection with the present contract.
- 18.3 The contract shall be governed by Swiss law without regard to conflict of law provisions that would require the application of another law.

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Adding Quality to People's Lives

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