

Polyvinylidene Fluoride (PVDF) is a unique thermoplastic with properties which allow it to be used for very aggressive or highly specialised applications. Although expensive compared to other thermoplastics, PVDF offers an economically attractive alternative to many "exotic" materials and/or in process lines where limited working life of other materials necessitates frequent replacement.

PVDF has excellent chemical and physical properties, even at low temperatures, and has considerable resistance to abrasion. It is resistant to most of the inorganic acids and bases, and to aliphatic and aromatic hydrocarbons, organic acids, alcohols and halogenated solvents. It is also non-toxic and can be used for high purity applications.

Safe working temperatures range from -40°C to $+140^{\circ}\text{C}$, with short term use possible at temperatures well above this level.

PVDF systems are assembled using heat fusion welding, either using socket fittings or butt fusion of pipes and/or fittings end to end. Welding equipment is available for sale or hire and is featured in the tools and installation equipment section.

application guide

- Temperature range -40°C to $+140^{\circ}\text{C}$
- High impact strength
- Abrasion resistant
- Non-toxic
- Resistant to a wide range of acids, alkalis, salts and organic solvents
- Lightweight
- Suitable for high purity applications
- Non-flammable and self extinguishing
- Welding equipment required

standards and approvals

BS EN ISO 10931:2005

section guide

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about: pvdf

Polyvinylidene fluoride (PVDF) is a thermoplastic that is distinguished from other fluorinated polymers by its ease of processing, good welding characteristics, and good heat formability. PVDF also has high mechanical strength, excellent chemical resistance, and high operating temperature capabilities. It has the widest range of applications of any of the thermoplastics used for rigid piping systems.

The excellent chemical resistance of PVDF means that it is extensively used in the chemical industry as a piping system for aggressive liquids, and in the field of tank construction and lining. PVDF is a homopolymer without additives such as stabilisers and processing agents. It also displays excellent flame retardant properties. Consequently, PVDF is listed with many worldwide agencies as suitable for use with foodstuffs, dairy products, hot and cold water in the semi-conductor and pharmaceutical industries, and for other applications in the food and drug sector.

Physiologically non-toxic, the smooth surface finish of PVDF does not encourage the growth of microorganisms. When coupled with its low friction coefficient, these natural anti fouling characteristics make PVDF ideally suited to applications involving ultra-pure liquids.

PVDF also has good resistance to UV and gamma radiation, including ageing resistance. PVDF does not support combustion after removal of a flame, and falls into the class V-0 according to UL94.

PVDF has excellent welding characteristics, and can be joined by either socket fusion welding, butt fusion welding, non-contact Infra-Red (IR) welding or electrofusion welding techniques. In addition, PVDF systems can be joined using flanges, threaded connections and mechanical couplings.

PVDF piping systems are available from IPS in metric dimensions according to DIN 8077/8078 and DIN 16962.



General properties of pvdf

PVDF exhibits thermal stability up to 120°C, (short term 140°C for drainage systems). PVDF also has good impact strength, which rises further as the temperature increases.

Some important advantages of PVDF are:

- Low specific weight of 1.78g/cm³
- Long-term creep resistance very high
- Chemical resistance is excellent
- High resistance to thermal ageing
- Outstanding welding characteristics
- Excellent abrasion resistance
- Smooth internal surfaces
- Excellent resistance against UV ageing
- Wide temperature range (between -40°C to +140°C)

Properties of PVDF (Average values)	
Property	Value
Density	1.78 g/cm ³
Tensile Strength	>50 MPa
Elongation at Break	80%
Notched Impact Strength at 23°C	11 kJ/ m ²
Modulus of Elasticity (Young's Modulus)	2000 MPa
Coefficient of Linear Expansion	0.12 mm/m /°C
Maximum Operating Temperature	140°C
Minimum Operating Temperature	-40°C
Crystalline Melting Temperature	174°C
Surface Resistance	>10 ¹² Ω
Thermal Conductivity	0.13 W/m · K
Flammability	V-0 UL94
Colour	Natural

Characteristics

Chemical resistance

PVDF has an outstanding resistance to inorganic and organic acids, oxidising media, aliphatic and aromatic hydrocarbons, alcohols and halogenated solvents. PVDF is resistant to halogens, in particular bromine (but not fluorine) and to weak bases. It is degraded by fuming sulphuric acid, some strong basic amines, concentrated and hot alkalis as well as alkaline metals.

PVDF swells in high-polar solvents such as acetone and ethyl acetate. It is also slightly soluble in aprotic solvents, for example dimethyl formamide and dimethyl sulphide.

Weathering resistance

Piping systems in PVDF are resistant to UV, and therefore they do not need to be protected against degradation when used outdoors.

Electrical characteristics

PVDF is non-conductive, therefore systems will remain free from electrolytic corrosion. Precautions should be taken to avoid static discharge should any part of a PVDF piping system pass through an area where explosive gases may be present.

Physiological characteristics

PVDF is physiologically non-toxic, and meets the European Directive 90/128/EEC relating to plastic materials in contact with foodstuffs. It is particularly suitable for high purity applications handling hot and cold water in the semi-conductor and pharmaceutical industries, and for applications in the food and drug sector.

Pressure ratings for pvdf systems

Maximum continuous pressure ratings

Pipes, fittings and valves are designed to operate continuously for 50 years at their maximum rated pressure at 20°C as follows, unless otherwise stated.

The pressure ratings for PVDF pipes according to ISO 10931-2 and PVDF fittings according to ISO 10931-3 are defined by the 'nominal pressure' method, **whereby** pipes, fittings and valves are grouped together according to a single nominal pressure rating. The PN rating is the maximum permitted operational pressure in bars calculated at 20°C, for example PN6 indicates a maximum working pressure of 6 bars. According to this method the pressure ratings of PVDF pipes and fittings according to the nominal pressure system is as follows:-

		Size Range	Max. Operating Pressure
Pipe	PN16	20mm to 280mm	16 Bar
	PN10	63mm to 400mm	10 Bar
Fittings			
Socket Fusion	PN20	20mm to 110mm	20 Bar
Spigot Fusion	PN16	20mm to 280mm	16 Bar
	PN10	90mm to 315mm	10 Bar
Threaded	PN12	1/2" to 2"	12 Bar

Standard Dimensional Ratio (SDR)

Standard Dimensional Ratio (SDR) is used to define thermoplastic pipes in a variety of materials including polypropylene, polyethylene, and PVC-U. Taken from ISO 4065, SDR is described as being 'the ratio of the nominal outside diameter of a pipe to its nominal wall thickness'. To calculate the SDR according to ISO 4065 the following equation can be used:

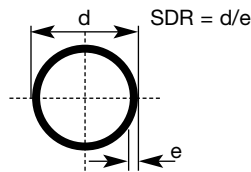
$$SDR = \frac{d}{e}$$

where:

SDR = Value to be calculated

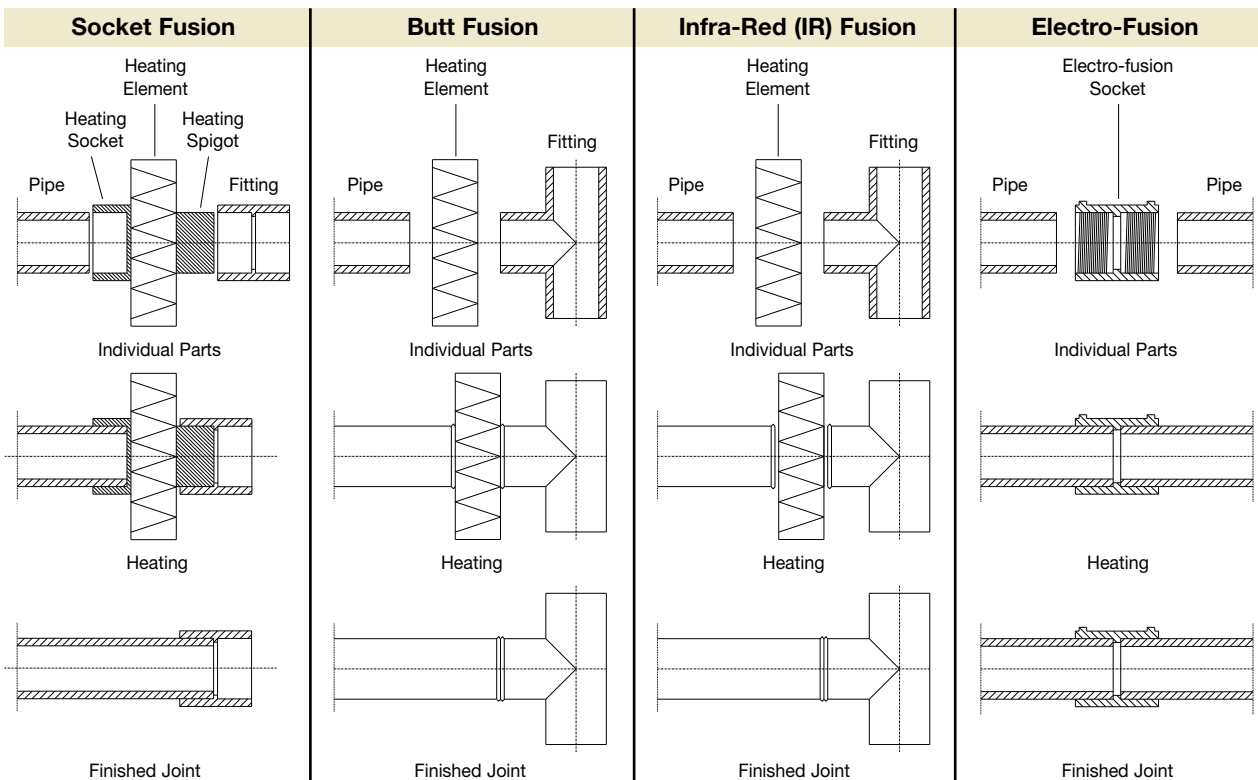
e = Thickness of the pipe wall (mm)

d = Pipe outside diameter (mm)



Joining PVDF Systems

PVDF pipe to pipe and pipe to fitting joints are easy to make, using socket fusion, butt fusion, IR fusion or electrofusion welds. IR fusion is similar in method to butt fusion using non-contact IR heat to melt the pipe ends prior to welding. Non-contact welding produces cleaner, consistent weld characteristics.



Welding equipment is available for sale or hire - see Tools and Installation Equipment. Detailed installation instructions, as well as free training, is available on request.

SDR33/S-16/PN10

Size	Wall (mm)	kg/m	Code	Price/m
20	-	-	-	-
25	-	-	-	-
32	-	-	-	-
40	-	-	-	-
50	-	-	-	-
63	2.5	0.93	30 705 0063 33	79.36
75	2.5	1.11	30 705 0075 33	94.71
90	2.8	1.48	30 705 0090 33	126.26
110	3.4	2.20	30 705 0110 33	188.06
125	3.9	2.84	30 705 0125 33	242.63
140	4.3	3.52	30 705 0140 33	300.89
160	4.9	4.54	30 705 0160 33	422.55
180	5.5	5.74	30 705 0180 33	534.65
200	6.2	7.19	30 705 0200 33	669.59
225	6.9	8.95	30 705 0225 33	833.30
250	7.7	11.10	30 705 0250 33	1032.40
280	8.6	13.90	30 705 0280 33	1290.51
315	9.7	17.60	30 705 0315 33	1632.68
355	10.8	22.00	30 705 0355 33	2047.12
400	12.2	28.00	30 705 0400 33	2607.57

SDR21/S-10/PN16

Wall (mm)	kg/m	Code	Price/m
1.9	0.21	30 705 0020 21	17.99
1.9	0.27	30 705 0025 21	23.00
2.4	0.44	30 705 0032 21	37.62
2.4	0.55	30 705 0040 21	47.07
3.0	0.85	30 705 0050 21	72.72
3.0	1.09	30 705 0063 21	93.06
3.6	1.55	30 705 0075 21	132.30
4.3	2.22	30 705 0090 21	189.54
5.3	3.32	30 705 0110 21	283.17
6.0	4.24	30 705 0125 21	362.09
6.7	5.31	30 705 0140 21	452.77
7.7	6.96	30 705 0160 21	647.47
8.6	8.74	30 705 0180 21	814.14
9.6	10.83	30 705 0200 21	999.96
10.8	13.67	30 705 0225 21	1272.81
11.9	16.73	30 705 0250 21	1557.46
13.4	21.11	30 705 0280 21	1985.17
-	-	-	-
-	-	-	-
-	-	-	-



Standard length 5m

Please note that a transportation surcharge may be applied on pipe diameters 250mm or larger - please enquire for details

Pipework Support

PVDF pipework requires more support than for metallic systems. As working temperature increases, the distance between the supports is reduced

PN10 Pipe Size	Support Centres/m			
	20°C	60°C	100°C	140°C
16	0.85	0.75	0.65	0.55
20	0.95	0.80	0.70	0.60
25	1.00	0.90	0.80	0.70
32	1.10	0.95	0.85	0.75
40	1.25	1.10	0.95	0.80
50	1.40	1.20	1.10	0.95
63	1.50	1.30	1.15	1.00
75	1.65	1.40	1.25	1.10
90	1.80	1.55	1.35	1.20
110	2.00	1.75	1.55	1.30

Temperature De-Rating Factors

Pressure ratings for PVDF pipework systems are always quoted at 20°C. As working temperature increases, the maximum working pressure decreases by the factor indicated.

For short term operating temperatures not listed, please enquire.

Working Temperature (°C)	Pressure De-Rating Factor
20	1.00
30	0.90
40	0.82
50	0.74
60	0.66
70	0.56
80	0.51
90	0.44
100	0.39
110	0.34
120	0.29
130	0.24
140	0.19



PVDF for Ultra Pure Liquids

High purity PVDF pipes and fittings are also available for ultrapure applications. See separate section.

HPF Electrofusion Socket



Size	Code	Price
20	35 073 0020 21	11.98
25	35 073 0025 21	12.88
32	35 073 0032 21	13.79
40	35 073 0040 21	15.04
50	35 073 0050 21	16.08
63	35 073 0063 21	20.65



HPF 400 Electrofusion Welding Equipment - available for sale or hire.

AutoCad Software

AGRU CAD software is developed to run under AutoCad R12-DOS, R13-Windows, R14-Windows and Windows 2000

It is specifically produced to design plastic piping systems.

There are several unique features:-

- Drawing on centre lines (products centred automatically)
- Parts list generation
- Prefab parts list (pipe cutting lengths are shown)
- Automatic calculation of expansion loops

AGRU CAD contains the full AGRU range in PP, PVDF and ECTFE.



Pipe Availability

We typically hold over

120 miles of pipe

in stock for immediate despatch



socket fusion fittings

mm sizes

Tee 90°



Size	Code	Price
16	30 056 0016 07	7.39
20	30 056 0020 07	8.72
25	30 056 0025 07	10.56
32	30 056 0032 07	15.49
40	30 056 0040 07	24.04
50	30 056 0050 07	36.28
63	30 056 0063 07	57.22
75	30 056 0075 07	107.96
90	30 056 0090 07	165.93
110	30 056 0110 07	221.23

Cap



Size	Code	Price
16	30 054 0016 07	5.31
20	30 054 0020 07	5.97
25	30 054 0025 07	7.01
32	30 054 0032 07	8.34
40	30 054 0040 07	14.39
50	30 054 0050 07	18.17
63	30 054 0063 07	27.29
75	30 054 0075 07	29.94
90	30 054 0090 07	39.39
110	30 054 0110 07	56.78

Elbow 90°



16	30 051 0016 07	4.00
20	30 051 0020 07	5.08
25	30 051 0025 07	6.57
32	30 051 0032 07	12.68
40	30 051 0040 07	20.04
50	30 051 0050 07	29.94
63	30 051 0063 07	50.60
75	30 051 0075 07	97.04
90	30 051 0090 07	122.14
110	30 051 0110 07	216.08

Reducer

Spigot x Socket



25/16	30 057 2516 07	5.61
25/20	30 057 2520 07	6.27
32/20	30 057 3220 07	8.55
32/25	30 057 3225 07	8.55
40/20	30 057 4020 07	9.68
40/25	30 057 4025 07	9.89
40/32	30 057 4032 07	11.35
50/20	30 057 5020 07	11.80
50/25	30 057 5025 07	11.80
50/32	30 057 5032 07	12.02
50/40	30 057 5040 07	12.25
63/25	30 057 6325 07	17.56
63/32	30 057 6332 07	17.56
63/40	30 057 6340 07	17.69
63/50	30 057 6350 07	18.17
75/63	30 057 7563 07	37.17
90/63	30 057 9063 07	40.41
90/75	30 057 9075 07	40.58
110/63	30 057 1163 07	57.82
110/90	30 057 1190 07	58.56

Elbow 45°



16	30 050 0016 07	5.08
20	30 050 0020 07	6.20
25	30 050 0025 07	8.34
32	30 050 0032 07	9.89
40	30 050 0040 07	16.65
50	30 050 0050 07	19.46
63	30 050 0063 07	32.30
75	30 050 0075 07	74.19
90	30 050 0090 07	111.21
110	30 050 0110 07	199.12

Socket



16	30 053 0016 07	3.18
20	30 053 0020 07	3.61
25	30 053 0025 07	4.49
32	30 053 0032 07	5.90
40	30 053 0040 07	8.72
50	30 053 0050 07	25.07
63	30 053 0063 07	35.85
75	30 053 0075 07	37.17
90	30 053 0090 07	58.86
110	30 053 0110 07	102.95

Female Adaptor

BSP or NPT female threaded



20 x 1/2	30 034 2020 07	8.48
25 x 3/4	30 034 2525 07	11.35
32 x 1	30 034 3232 07	14.75
40 x 1 1/4	30 034 4040 07	20.50
50 x 1 1/2	30 034 5050 07	27.72
63 x 2	30 034 6363 07	27.87

Code shown is for BSP
Code for NPT on request

Union

FPM O-Rings



20	30 024 1120 07	20.95
25	30 024 1125 07	26.56
32	30 024 1132 07	32.62
40	30 024 1140 07	45.42
50	30 024 1150 07	63.28
63	30 024 1163 07	94.38

Maximum Pressure PN10.

Male Adaptor

BSP or NPT male threaded



20 x 3/4	30 035 2025 07	7.88
25 x 1	30 035 2532 07	12.02
32 x 1 1/4	30 035 3240 07	14.61
40 x 1 1/2	30 035 4050 07	22.27
50 x 2	30 035 5063 07	28.47

Code shown is for BSP
Code for NPT on request

Stub Flange

DIN, ANSI or JIS standards



Size	Code	Price
16	30 052 0016 07	3.33
20	30 052 0020 07	3.61
25	30 052 0025 07	4.21
32	30 052 0032 07	4.49
40	30 052 0040 07	7.24
50	30 052 0050 07	8.55
63	30 052 0063 07	12.45
75	30 052 0075 07	35.99
90	30 052 0090 07	48.68
110	30 052 0110 07	67.83

Code shown is for DIN.
Other codes on request.

Blind Flange

Machined - Non Pressure
Drilled to BS4504 PN10



20	30 334 0020 00	80.09
25	30 334 0025 00	84.52
32	30 334 0032 00	89.66
40	30 334 0040 00	116.21
50	30 334 0050 00	125.81
63	30 334 0063 00	139.98
75	30 334 0075 00	157.81
90	30 334 0090 00	196.16
110	30 334 0110 00	221.97

Also available drilled to JIS standards. Please enquire for details.

Gasket

EPDM



20	861-_-005	0.50
25	861-_-007	0.58
32	861-_-010	0.64
40	861-_-012	0.80
50	861-_-015	0.96
63	861-_-020	1.65
75	861-_-025	2.02
90	861-_-030	2.17
110	861-_-040	3.16

Complete code when ordering
Insert 'I' for NP10/16; 'A' for ANSI 150;
'E' for Table D/E

Gasket

FPM



20	862-_-005	2.34
25	862-_-007	3.48
32	862-_-010	4.59
40	862-_-012	7.36
50	862-_-015	8.05
63	862-_-020	10.60
75	862-_-025	15.34
90	862-_-030	20.01
110	862-_-040	34.14

Complete code when ordering
Insert 'I' for NP10/16; 'A' for ANSI 150;
'E' for Table D/E

Backing Ring Table D/E

Galvanised mild steel



20	860-005-11E	5.71
25	860-007-11E	6.47
32	860-010-11E	6.79
40	860-012-11E	7.00
50	860-015-11E	8.59
63	860-020-11E	12.18
75	860-025-11E	18.20
90	860-030-11E	18.50
110 D	860-040-11D	23.91
110 E	860-040-11E	23.91

Backing Ring NP10/16

Galvanised mild steel



20	860-005-11NP	6.47
25	860-007-11NP	6.85
32	860-010-11NP	8.13
40	860-012-11NP	8.64
50	860-015-11NP	9.48
63	860-020-11NP	13.39
75	860-025-11NP	18.33
90	860-030-11NP	21.20
110	860-040-11NP	27.11

Backing Ring ANSI 150

Galvanised mild steel



20	860-005-11A	6.47
25	860-007-11A	6.85
32	860-010-11A	8.13
40	860-012-11A	8.64
50	860-015-11A	9.48
63	860-020-11A	13.39
75	860-025-11A	18.33
90	860-030-11A	21.20
110	860-040-11A	27.11

Backing Ring NP10

Polypropylene with steel core



20	11 014 0020 11	6.79
25	11 014 0025 11	7.46
32	11 014 0032 11	9.55
40	11 014 0040 11	12.11
50	11 014 0050 11	14.14
63	11 014 0063 11	16.40
75	11 014 0075 11	18.20
90	11 014 0090 11	21.50
110	11 014 0110 11	25.57

Backing Ring ANSI 150

Polypropylene with steel core



20	11 013 0020 11	6.79
25	11 013 0025 11	7.46
32	11 013 0032 11	9.55
40	11 013 0040 11	12.11
50	11 013 0050 11	14.14
63	11 013 0063 11	16.40
75	11 013 0075 11	18.20
90	11 013 0090 11	21.50
110	11 013 0110 11	25.57



Pressure Ratings

PVDF socket fusion fittings are suitable for use at pressures up to 20 bar at 20°C except where shown. Threaded fittings are de-rated to 12 bar.

Instrumentation Fitting

Supplied unthreaded



Size	Code	Price
32		
63		
90		
110		
125		
140		
160		

PN10

Code	Price
30 030 1090 33	173.31
30 030 1110 33	217.54
30 030 1125 33	318.57
30 030 1140 33	383.48
30 030 1160 33	462.38

PN16

Code	Price
30 030 1032 21	76.55
30 030 1063 21	133.49
30 030 1090 21	180.69
30 030 1110 21	225.66
30 030 1125 21	344.40
30 030 1140 21	396.01
30 030 1160 21	481.55

Concentric Reducer

Elongated



Size	Code	Price
25 x 20		
32 x 20		
32 x 25		
40 x 20		
40 x 25		
40 x 32		
50 x 20		
50 x 25		
50 x 32		
50 x 40		
63 x 25		
63 x 32		
63 x 40		
63 x 50		
75 x 50		
75 x 63		
90 x 50		
90 x 63		
90 x 75		
110 x 63		
110 x 90		
140 x 63		
140 x 110		
160 x 110		
160 x 140		
225 x 160		
250 x 160		
250 x 225		
315 x 160		
315 x 250		

PN10

Code	Price
30 067 1190 33	59.44
30 067 1411 33	97.21
30 067 1611 33	132.74
30 067 1614 33	176.26
30 067 2216 33	429.94
30 067 2516 33	461.64
30 067 2522 33	494.09
30 067 3116 33	514.79
30 067 3125 33	603.44

PN16

Code	Price
30 067 2520 21	6.78
30 067 3220 21	9.01
30 067 3225 21	9.01
30 067 4020 21	11.35
30 067 4025 21	11.35
30 067 4032 21	12.09
30 067 5020 21	12.68
30 067 5025 21	13.28
30 067 5032 21	13.28
30 067 5040 21	13.28
30 067 6325 21	19.32
30 067 6332 21	19.32
30 067 6340 21	19.32
30 067 6350 21	19.32
30 067 7550 21	37.45
30 067 7563 21	37.45
30 067 9050 21	48.54
30 067 9063 21	48.54
30 067 9075 21	48.97
30 067 1163 21	58.56
30 067 1190 21	59.44
30 067 1463 21	97.21
30 067 1411 21	97.21
30 067 1611 21	132.74
30 067 1614 21	176.26
30 067 2216 21	429.94
30 067 2516 21	461.64
30 067 2522 21	494.09

Cap

Elongated
*Short style - machined



Size	Code	Price
20		
25		
32		
40		
50		
63		
75		
90		
110		
125*		
140*		
160*		
200*		
225*		

PN10

Code	Price
30 064 0090 33	33.49
30 064 0110 33	43.51
30 302 0125 33	118.26
30 302 0140 33	147.37
30 302 0160 33	169.61
30 302 0200 33	230.82
30 302 0225 33	280.96

PN16

Code	Price
30 064 0020 21	7.16
30 064 0025 21	8.19
30 064 0032 21	9.21
30 064 0040 21	17.11
30 064 0050 21	20.80
30 064 0063 21	33.19
30 064 0075 21	41.01
30 064 0090 21	43.82
30 064 0110 21	62.99
30 302 0125 21	129.20
30 302 0140 21	157.81
30 302 0160 21	185.84
30 302 0200 21	264.75
30 302 0225 21	297.17



fusion spigot fittings

Bend 90°



Size	Code	Price
125		
140		
160		
180		
200		
225		
250		
280		
315		

PN10

Code	Price
30 001 0125 33	254.43
30 001 0140 33	287.60
30 001 0160 33	333.33
30 001 0180 33	395.27
30 001 0200 33	466.80
30 001 0225 33	553.08
30 001 0250 33	683.61
30 001 0280 33	896.73
30 001 0315 33	1156.30

PN16

Code	Price
30 001 0125 21	345.86
30 001 0140 21	391.60
30 001 0160 21	452.77
30 001 0180 21	537.59
30 001 0200 21	634.19
30 001 0225 21	752.20
30 001 0250 21	929.17
30 001 0280 21	1398.18

Multi-Bend 90°



20		
25		
32		
40		
50		
63		
75		
90		
110		

PN10

30 068 0090 33	126.23
30 068 0110 33	170.08

PN16

30 068 0020 21	5.15
30 068 0025 21	6.97
30 068 0032 21	13.63
30 068 0040 21	21.42
30 068 0050 21	32.42
30 068 0063 21	54.60
30 068 0075 21	92.97
30 068 0090 21	154.88
30 068 0110 21	232.28

Elbow 45°



20		
25		
32		
40		
50		
63		
90		
110		
125		
140		
160		

PN10

30 060 0090 33	111.06
30 060 0110 33	144.24
30 060 0140 33	331.84
30 060 0160 33	373.90

PN16

30 060 0020 21	6.73
30 060 0025 21	7.44
30 060 0032 21	10.90
30 060 0040 21	17.41
30 060 0050 21	22.87
30 060 0063 21	36.14
30 060 0090 21	129.65
30 060 0110 21	186.58
30 060 0140 21	388.65
30 060 0160 21	435.82

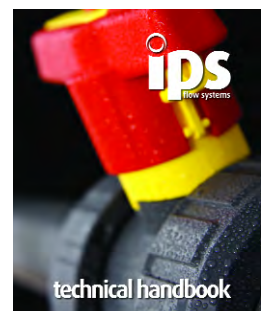
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Union

FPM Seals



20		
25		
32		
40		
50		
63		

PN16

30 024 0020 21	23.17
30 024 0025 21	29.79
30 024 0032 21	36.73
30 024 0040 21	51.18
30 024 0050 21	71.26
30 024 0063 21	106.47

Restrained Fitting

Provides anchor point in pipe runs



32		
63		
90		
110		
125		
140		
160		

PN10

30 028 0090 33	102.51	
30 028 0110 33	151.91	
30 028 0125 33	228.61	
30 028 0140 33	269.90	
30 028 0160 33	348.06	

PN16

30 028 0032 21	21.09
30 028 0063 21	44.25
30 028 0090 21	108.71
30 028 0110 21	161.50
30 028 0125 21	238.19
30 028 0140 21	283.17
30 028 0160 21	364.27

Requires a correctly sized retaining clip. See below.

Retaining Clip

For restrained fitting



32	14 348 0032 00	3.31
63*	14 049 0063 00	8.96
90*	14 049 0090 00	10.76
110*	14 049 0110 00	11.59
125*	14 049 0125 00	12.77
140*	14 049 0140 00	21.50
160*	14 049 0160 00	23.45

*Complete with stainless steel clamp



Male Adaptor

BSP or NPT male thread



Size	Code	Price
20 x 1/2		
25 x 3/4		
32 x 1		
40 x 1 1/4		
50 x 1 1/2		
63 x 2		

PN10 - BSP

Code	Price
30 033 2020 21	7.67
30 033 2525 21	8.85
30 033 3232 21	13.58
30 033 4040 21	16.51
30 033 5050 21	25.07
30 033 6363 21	32.01

PN10 - NPT

Code	Price
30 033 2021 21	7.67
30 033 2526 21	8.85
30 033 3233 21	13.58
30 033 4041 21	16.51
30 033 5051 21	25.07
30 033 6364 21	32.01

Female Adaptor

BSP or NPT male thread



Size	Code	Price
20 x 1/2		
25 x 3/4		
32 x 1		
40 x 1 1/4		
50 x 1 1/2		
63 x 2		

PN10 - BSP

Code	Price
30 032 2020 21	8.85
30 032 2525 21	10.34
30 032 3232 21	15.35
30 032 4040 21	17.99
30 032 5050 21	28.18
30 032 6363 21	34.50

PN10 - NPT

Code	Price
30 032 2021 21	8.85
30 032 2526 21	10.34
30 032 3233 21	15.35
30 032 4041 21	17.99
30 032 5051 21	28.18
30 032 6364 21	34.50

fusion spigot flanges

Stub Flange



Also available to ANSI and JIS Standards. Please enquire for details.

Size	Code	Price
20		
25		
32		
40		
50		
63		
75		
90		
110		
125		
140		
160		
180		
200		
225		
250		
280		
315		

PN10

Code	Price
30 012 0090 33	51.62
30 012 0110 33	73.01
30 012 0125 33	109.59
30 012 0140 33	173.31
30 012 0160 33	224.93
30 012 0180 33	285.40
30 012 0200 33	379.79
30 012 0225 33	405.59
30 012 0250 33	485.98
30 012 0280 33	601.02
30 012 0315 33	723.44

PN16

Code	Price
30 012 0020 21	4.06
30 012 0025 21	4.72
30 012 0032 21	5.08
30 012 0040 21	8.19
30 012 0050 21	9.68
30 012 0063 21	14.02
30 012 0075 21	40.58
30 012 0090 21	54.86
30 012 0110 21	76.55
30 012 0125 21	138.72
30 012 0140 21	235.25
30 012 0160 21	303.84
30 012 0180 21	387.98
30 012 0200 21	516.21
30 012 0225 21	550.88
30 012 0250 21	734.50
30 012 0280 21	966.04

Blind Flange

Machined-Non Pressure



Also available to ANSI and JIS Standards. Please enquire for details.

20		
25		
32		
40		
50		
63		
75		
90		
110		
125		
140		
160		
180		
200		
225		

PN10

30 334 0020 00	80.09
30 334 0025 00	84.52
30 334 0032 00	89.66
30 334 0040 00	116.21
30 334 0050 00	125.81
30 334 0063 00	139.98
30 334 0075 00	157.81
30 334 0090 00	196.16
30 334 0110 00	221.97
30 334 0125 00	221.97
30 334 0140 00	274.33
30 334 0160 00	325.94
30 334 0180 00	325.94
30 334 0200 00	447.64
30 334 0225 00	469.02

Stub Gasket



EPDM

Size	Code	Price
20	861--005	0.50
25	861--007	0.58
32	861--010	0.64
40	861--012	0.80
50	861--015	0.96
63	861--020	1.65
75	861--075	2.02
90	861--031	2.17
110	861--041	3.16
125	861--040	3.16
140	861--051	4.07
160	861--061	4.66
180	861--180	9.25
200	861--080	9.25
225	861--082	9.25
250	861--100	11.34
280	861--101	11.34
315	861--121	12.86

FPM

Code	Price
862--005	2.34
862--007	3.48
862--010	4.59
862--012	7.36
862--015	8.05
862--020	10.60
862--075	14.73
862--031	20.01
862--041	34.13
862--040	34.13
862--051	56.98
862--061	56.98
862--180	68.24
862--080	68.24
862--082	68.24
862--100	92.89
862--101	92.89
862--121	96.97

Complete code when ordering
Insert 'ISO' for NP10/16; 'A' for ANSI 150; 'E' for Table D/E

Backing Ring

Polypropylene with steel core



NP 10

Size	Code	Price
20	14 014 0020 11*	6.79
25	14 014 0025 11*	7.46
32	14 014 0032 11*	9.55
40	14 014 0040 11*	12.11
50	14 014 0050 11*	14.14
63	14 014 0063 11*	16.40
75	14 014 0075 11*	18.20
90	14 014 0090 11*	21.50
110	14 014 0110 11*	25.57
125	14 014 0125 11*	25.57
140	14 014 0140 11*	39.38
160	14 014 0160 11*	45.09
180	14 014 0180 11*	45.09
200	14 014 0200 11*	64.20
225	14 014 0225 11*	64.20
250	14 014 0250 11*	102.52
280	14 014 0280 11*	102.52
315	14 014 0315 11*	128.83

NP 10

Code	Price
11 014 0020 11	6.79
11 014 0025 11	7.46
11 014 0032 11	9.55
11 014 0040 11	12.11
11 014 0050 11	14.14
11 014 0063 11	16.40
11 014 0075 11	18.20
11 014 0090 11	21.50
11 014 0110 11	25.57
11 014 0125 11	25.57
11 014 0140 11	39.38
11 014 0160 11	45.09
11 014 0180 11	45.09
11 014 0200 11	64.20
11 014 0225 11	64.20
11 014 0250 11	102.52
11 014 0280 11	102.52
11 014 0315 11	128.83

ANSI 150

Code	Price
11 013 0020 11	6.79
11 013 0025 11	7.46
11 013 0032 11	9.55
11 013 0040 11	12.11
11 013 0050 11	14.14
11 013 0063 11	16.40
11 013 0075 11	18.20
11 013 0090 11	21.50
11 013 0110 11	25.57
11 013 0160 11	45.09
11 013 0200 11	64.20
14 013 0250 11	102.52
14 013 0315 11	128.83

*Black

Backing Ring

Galvanised Mild Steel



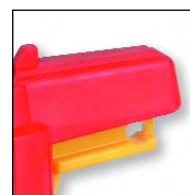
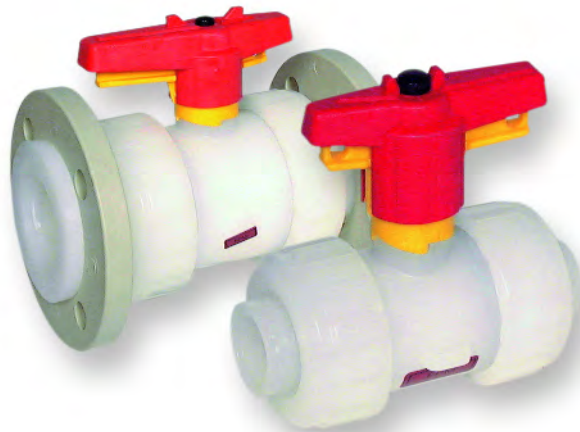
NP10

Size	Code	Price
20	860-005-12NP	6.47
25	860-007-12NP	6.85
32	860-010-12NP	8.13
40	860-012-12NP	8.64
50	860-015-12NP	9.48
63	860-020-11NP	13.39
75	860-025-11NP	18.33
90	860-030-11NP	21.20
110	860-040-11NP	27.11
125	860-125-11NP	37.75
140	860-050-12NP	37.75
160	860-060-14NP	43.04
180	860-180-11NP	49.61
200	860-080-11N	59.39
225	860-225-12N	59.39
250	860-100-13N	84.04
280	860-280-11N	84.04
315	860-120-15N	114.24
355	860-140-12N	318.60
400	860-160-12N	391.06

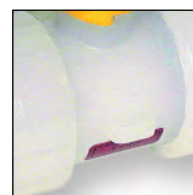
ANSI 150

Code	Price
860-005-12A	6.47
860-007-12A	6.85
860-010-12A	8.13
860-012-12A	8.64
860-015-12A	9.48
860-020-11A	13.39
860-025-11A	18.33
860-030-11A	21.20
860-040-11A	27.11
860-125-11A	37.75
860-050-12A	37.75
860-060-14A	43.04
860-180-11A	49.61
860-080-11A	59.39
860-225-12A	59.39
860-100-13A	84.04
860-280-11A	84.04
860-120-15A	114.24
860-140-12A	318.60
860-160-12A	391.06

Praher S4 Ball Valve



Lockable Handle



Tagging Point



Valve Bracket



Actuation

Materials

Body - PVDF
Ball Seat - PTFE
Seals - FPM

Sizes

3/8" - 4"/16mm - 110mm

Pressure Rating

3/8"/16mm to 2.1/2"/75mm - 16 bar
3"/90mm - 10 bar
4"/110mm - 6 bar

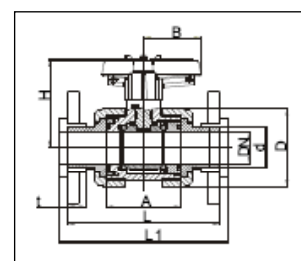
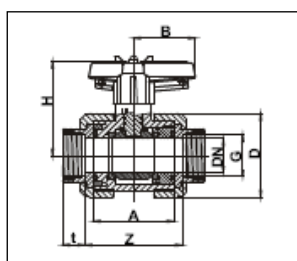
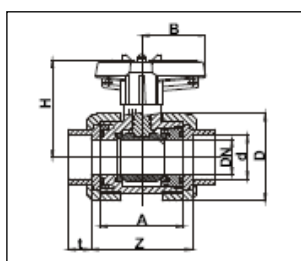
Connections

MM fusion sockets
MM fusion spigots
BSP female thread
Flanged PN10

Features

- Lockable Handle (Lock not supplied)
- True Union design for easy maintenance
- Full bore design
- Tagging point included
- Matched Valve bracket for panel mounting and retrofit actuation.
- Pneumatically and Electrically actuated versions available
- Silicone free on request

Valve Dimensions



d	16	20	25	32	40	50	63	75	90	110
DN	10	15	20	25	32	40	50	65	80	80
G	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3	4
L	114.0	124.0	144.0	154.0	174.0	194.0	224.0	284.0	300.0	340.0
L1	120.0	130.0	150.0	160.0	180.0	200.0	230.0	290.0	310.0	350.0
A	62.0	62.0	69.0	73.0	83.0	94.0	108.0	133.0	160.0	160.0
Z	70.0	67.0	79.0	83.0	95.0	114.0	134.0	147.0	211.0	167.0
t	14.5	16.0	17.0	19.5	22.0	25.0	29.0	34.5	38.5	44.0
D	51.8	51.8	61.5	68.5	83.5	98.0	118.0	151.0	183.0	183.0
H	71.5	71.5	77.0	80.5	98.5	106.5	115.5	142.0	160.0	160.0
B	40.0	40.0	51.5	51.5	64.0	73.0	85.0	110.0	132.0	132.0
PN	16	16	16	16	16	16	16	16	10	6
Weight	0.25	0.25	0.38	0.49	0.81	1.22	1.91	3.82	6.43	6.43

Dimensions in mm

**PRAHER
VALVES**

Praher Type S4 Ball Valve

Description: In-line double union ball valve with lockable handle
Mounting: In any position
Maximum Fluid Pressure at 20°C: Sizes 16mm to 75mm - 16bar;
 Sizes 90mm - 10 bar; 110mm - 6 bar
Fluid Temperature Range: 0°C - 140°C
Construction:
Body: PVDF
Seals: FPM
Seats: PTFE
End Connections: Fusion sockets, fusion spigots,
 BSP Female Threaded, Flanged BS4504 EN1072 PN10
Option: Silicon-free



MM Fusion Sockets

FPM Seals PTFE Seats	16	12.1449	81.71
	20	12.1450	83.03
	25	12.1448	107.07
	32	12.1451	136.88
	40	12.1452	181.42
	50	12.1453	257.37
	63	12.1454	356.17
	75	12.1455	609.12
	90	12.1456	809.71
	110	12.2032	1199.07

MM Fusion Spigots

FPM Seals PTFE Seats	16	12.2259	81.71
	20	12.1491	83.03
	25	12.1492	107.07
	32	12.1493	136.88
	40	12.1494	181.42
	50	12.1495	257.37
	63	12.1496	356.17
	75	12.1497	609.12
	90	12.1498	809.71
	110	12.2012	1199.07

BSP Female Threaded

FPM Seals PTFE Seats	3/8	12.2093	87.48
	1/2	12.1482	88.94
	3/4	12.1483	114.75
	1	12.1484	145.28
	1 1/4	12.1485	191.00
	1 1/2	12.1486	270.64
	2	12.1487	374.62
	2 1/2	12.1488	684.34
	3	12.2349	1052.05

Flanged BS4504 PN10/16

FPM Seals PTFE Seats	1/2	12.2025	160.76
	3/4	12.2026	230.06
	1	12.2027	283.17
	1 1/4	12.2502	360.61
	1 1/2	12.2503	499.99
	2	12.2504	668.12
	2 1/2	12.2505	1126.80
	3	12.2506	1584.01

Praher Valve Bracket for Type S4 Ball Valves

- For actuator or control panel mounting
- Can be used to provide fixed point mounting to support

16	17.0279	29.49
20	17.0279	29.49
25	17.0280	31.58
32	17.0281	33.51
40	17.0228	35.74
50	17.0230	37.51
63	17.0232	39.76
75	17.0275	55.55
90	17.0282	62.10
110	17.0282	62.10



Valve shown with bracket

Praher Type S4 T & L-Port Ball Valve

Description: In-line horizontal T-port or L-port ball valve with lockable handle and union ends

Mounting: In any position

Maximum Fluid Pressure at 20°C: 16 bar

Fluid Temperature Range: 0°C - 140°C

Construction:

Body: PVDF

Seals: FPM

Seats: PTFE

End Connections: Fusion sockets or fusion spigots



T-Port Ball Valve

MM Fusion Sockets

	16	124918	200.58
FPM Seals	20	124922	214.60
PTFE Seats	25	125030	265.47
	32	124926	333.33
	40	125032	403.40
	50	124930	499.99
	63	124934	699.09

MM Fusion Spigots

	16	124920	200.58
FPM Seals	20	124924	214.60
PTFE Seats	25	125034	265.47
	32	124928	333.33
	40	125036	403.40
	50	124932	499.99
	63	124936	699.09

L-Port Ball Valve

MM Fusion Sockets

	16	124919	200.58
FPM Seals	20	124923	214.60
PTFE Seats	25	125031	265.47
	32	124927	333.33
	40	125033	403.40
	50	124931	499.99
	63	124935	699.09

MM Fusion Spigots

	16	124921	200.58
FPM Seals	20	124925	214.60
PTFE Seats	25	125035	265.47
	32	124929	333.33
	40	125037	403.40
	50	124933	499.99
	63	124937	699.09

Praher Type S4 Ball Valve with Actuator Adaptor Kit

FPM Seals

	16	122.433	159.49
	20	122.434	160.79
	25	122.435	191.41
	32	122.436	228.41
	40	122.437	293.49
	50	122.438	449.18
	63	122.439	595.92
	75	122.440	829.44
	90	122.441	1078.27
	110	122.442	1544.03

Prices on request for alternative end connections



Praher Laboratory/Sampling Ball Valve

Description: In-line ball valve for laboratory or sampling use

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Fluid Temperature Range: 0°C - 120°C

Construction:

Body: PVDF

Seals: FPM

Seats: PTFE

End Connections: 1/4" R or NPT Threaded; Hose Connection included



Valve with R/NPT Adaptor and Plug

R Male x Female	1/4	12.2459	26.10
NPT Male x Female	1/4	12.2460	27.72

Hose Nozzle

BSP Male	1/4	141.145	11.96
NPT Male	1/4	140.205	11.96

ASV Stubbe Gauge Guard

Description: Pressure gauge connector with isolating diaphragm

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Fluid Temperature Range: 0°C-120°C

Construction:

Body: PVDF

Diaphragm: PTFE (EPDM backed)

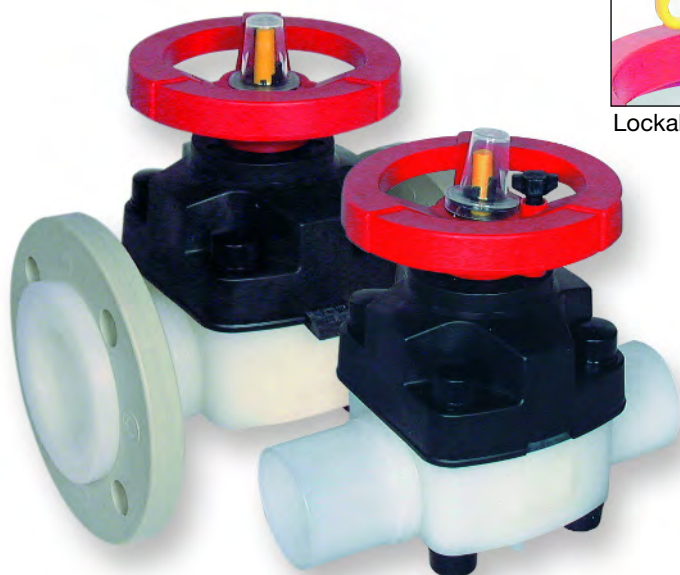
End Connections: Fusion Spigots, NPT Female Threaded



Please note: gauge not included.

25x1/4x1/4"	135535	115.56
32x1/2x1/2"	135538	115.56
1/4x1/4"	135541	121.00
1/2x1/2"	135544	121.00

Praher T4 Diaphragm Valve



Lockable Handle



Visual Position Indicator



Optional Valve Support Plates

General

Sealing material: EPDM / EPDM-PTFE / FPM

Body material: PVDF

Dimensions: DN 15/d 20 - DN125/d140

Operating Pressure

DN 15 / 1/2" - DN 125 / 5" 10 bar

Connections

PVDF union sockets 20mm-63mm

PVDF fusion spigots 20mm-110mm

Flanged PN10 20mm-140mm

Technical Specification

For example:

TYPE PRAHER, DIN 2403

PVDF Diaphragm valve T4 DN 15 d20

PVDF mm fusion spigot

Sealing material EPDM-PTFE

Safety gear wheel

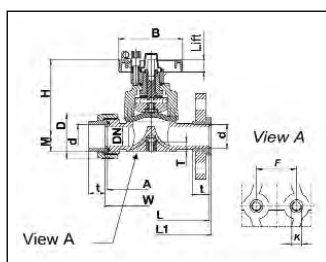
Max. Operating pressure 10 bar

Features

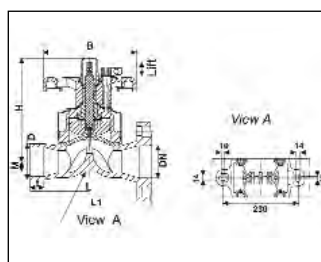
- Safety gear wheel
- Corrosion Resistant
- Maintenance free operation over a long working life
- Suitable for aggressive and dirty media
- Radial installation or removal
- Easy replacement of the diaphragms

Valve Dimensions

DN 15 - DN 50



DN 65 - DN 80



d	20	25	32	40	50	63	75	90	110	140
DN	15	20	25	32	40	50	65	80	100	125
G	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"
M	16.5	16.5	20.1	31.5	31.5	38.6	25.0	25.0	25.0	25.0
H	100.0	100.0	107.0	144.0	144.0	170.0	260.0	260.0	330.0	330.0
B	86.0	86.0	86.0	136.0	136.0	136.0	234.0	234.0	234.0	234.0
F	24.5	24.5	24.5	43.5	43.5	43.5	-	-	-	-
Lift	9.0	9.0	11.0	22.0	22.0	28.0	35.0	35.0	45.0	45.0
K	M6	M6	M6	M8	M8	M8	-	-	-	-
L	124.0	144.0	154.0	174.0	194.0	224.0	284.0	300.0	340.0	-
L1	130.0	150.0	160.0	180.0	200.0	230.0	-	310.0	350.0	400.0
T	12.0	12.0	12.0	15.0	15.0	15.0	-	-	-	-
t	28.5	36.0	36.0	38.5	46.0	46.0	37.0	37.0	50.0	-
PN	10	10	10	10	10	10	10	10	10	10

Dimensions in mm

Praher Type T4 Diaphragm Valve

Description: In-line diaphragm valve with position indicator

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Fluid Temperature Range: 0°C - 120°C

Construction:

Body: PVDF

Diaphragm: PTFE (EPDM backed), FPM or EPDM

End Connections: Union Sockets, Fusion Spigots, Flanged (on request)

Option: Silicon-free



MM Fusion Spigots

PTFE Diaphragm	Size	Code	Price
	20	12.2798	179.19
	25	12.2799	191.73
	32	12.2800	222.71
	40	12.2801	331.12
	50	12.2802	363.56
	63	12.2803	474.17
	75	12.0184	1023.56
	90	12.0185	1296.41
	110	12.0917	1564.84

Flanged BS4504 PN10

PTFE Diaphragm	Size	Code	Price
	1/2/20	12.0261	204.29
	3/4/25	12.0265	205.01
	1/32	12.0270	245.57
	1 1/4/40	12.0271	370.95
	1 1/2/50	12.0272	403.40
	2/63	12.0273	496.29
	2 1/2/75	12.0274	895.24
	3/90	12.0275	1536.81
	4/110	12.0921	1616.46
	5/140	12.0922	4201.91

MM Union Sockets

PTFE Diaphragm	Size	Code	Price
	20	12.5074	216.80
	25	12.5075	224.18
	32	12.5076	256.63
	40	12.5077	399.69
	50	12.5078	442.48
	63	12.5079	600.27

Spare PTFE Diaphragm	Size	Code	Price
	20	05.0473	44.06
	25	05.0473	44.06
	32	05.0474	49.43
	40	05.0475	61.35
	50	05.0475	61.35
	63	05.0476	69.41
	75	12.0918	338.05
	90	12.0918	338.05
	110	12.0919	387.19
	140	12.0919	387.19

Also available with EPDM or FPM diaphragms.
Please enquire for details.

Diaphragm Valve Mounting Plate

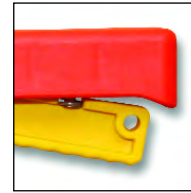
- Ensures clearance of union nut from mounting surface
- Complete with two fixing screws

Valve Size	Thickness (mm)	Code	Price
20	16.0	14.0103	5.51
25	23.0	14.0102	5.51
32	23.0	14.0102	5.51
40	18.5	14.0123	8.96
50	23.5	14.0109	8.96
63	23.5	14.0109	8.96



manual valves

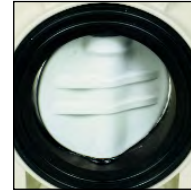
Praher K4 Butterfly Valve



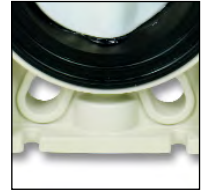
Locking Handle



Universal Drilling



PP-GF Body
PVDF disc



Support Lugs in
Base

Materials

Body - PP-GF
Disc - PVDF
Seals - FPM

Sizes

2 1/2"/75mm - 8"/225mm

Pressure Rating

PN10

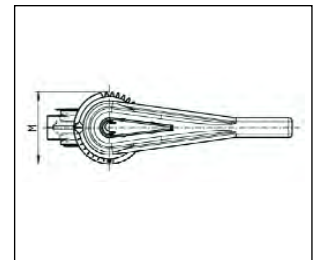
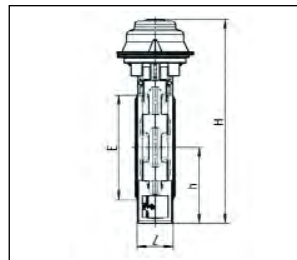
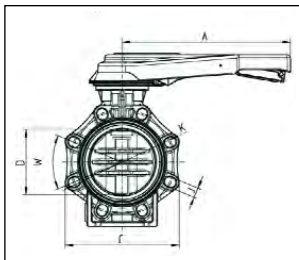
Connections

Between flanges, universally drilled

Features

- Only Body Seal and Disc in contact with media
- Double sealed shaft
- Valve support lugs in base
- Direct actuator mounting
- Low torque operation
- Multi-position Lockable Handle
- Manual or Gear operation
- All sizes PN10 rated
- Universal drilling - can be used with DIN, ANSI, BS and JIS flanges

Valve Dimensions



Size	2 1/2"/75	3"/90	4"/110	6"/160	8"/225
A	230	230	300	386	386
D	65	80	100	150	200
C	133	176	206	261	314
W	90°	45°	45°	45°	45°
J	19	19	19	23	23
K	127-145	146-160	175-190.5	234.5-241.3	290-298.5
H	285	292	322	396	458
h	100	100	115	147.5	175
E	98	116	146	196	251
M	114	114	114	150	150
Z	46	49	56	70	71
PN	10 bar	10 bar	10 bar	10 bar	10 bar

Dimensions in mm

Praher Type K4 Butterfly Valve

Description: Lug style butterfly valve with universal drilling for mounting between flanges. (DIN, ANSI & BS)

Construction:

Body: PP-GF

Disc: PVDF

Seals: FPM

Pressure rating: PN10

Size: 2¹/₂"/75mm - 8"/225mm



Lever Operated

FPM Seals

2 ¹ / ₂ "/75	12.5880	452.07
3"/90	12.5881	554.63
4"/110	12.5882	611.89
5"/140	12.8460	793.04
6"/160	12.5883	896.24
8"/225	12.5884	1216.31



Gear Operated

FPM Seals

2 ¹ / ₂ "/75	12.6030	663.20
3"/90	12.6031	765.55
4"/110	12.6032	812.70
5"/140	12.8765	on application
6"/160	12.6033	1102.06
8"/225	12.6034	1422.14

manual valves

Praher K4 Check Valve



Visual Position Indicator



Universal Drilling



85° Max Opening

Features

- Excellent Flow Rates
- Wide opening (85%)
- Low pressure drop
- Visual open-closed indicator
- Spring return
- All sizes PN10 rated
- Universal drilling - can be used with DIN, ANSI, BS and JIS flanges

Materials

Body - PVDF
Disc - PVDF
Seals - FPM

Sizes

2 1/2"/75mm - 10"/250mm

Pressure Rating

PN10

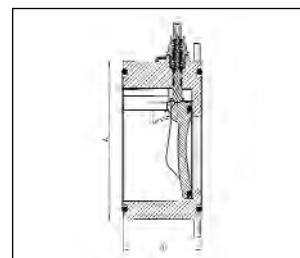
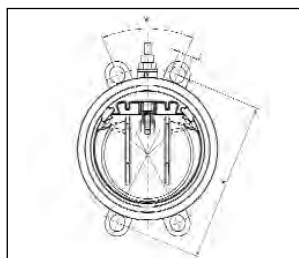
Connections

Between flanges, universally drilled

Tightening torque for flange connections

DN	65	80	100	150	200	250	300
Nm	15	18	20	40	55	60	65

Valve Dimensions



DN	A	B	C	K	W
65	115	63	20	139-145	90°
80	128	71	20	150-160	45°
100	155	80	20	175-191	45°
150	212	106	24	234-242	45°
200	264	140	24	290-299	45°
250	325	140	27	350-362	30°

Dimensions in mm

Praher Type K4 Check Valve

Description: Lug style check valve with universal drilling for mounting between flanges. (DIN, ANSI & BS)

Construction:

Body: PVDF

Seals: FPM

Pressure rating: PN10

Size: 2 1/2"/75mm - 10"/250mm

NEW



FPM Seals	2 1/2"/75	12.5853	495.15
	3"/90	12.5854A	576.42
	4"/110	12.5855A	690.99
	6"/160	12.5856	996.99
	8"/225	12.5857	1973.77
	10"/250	12.5858	3312.81

Kv Value Table		
Pressure Lost	1 bar	0.001 bar
DN 80	2958 l/min	94 l/min
DN 100	5633 l/min	178 l/min
DN 150	12466 l/min	394 l/min
DN 200	21166 l/min	699 l/min

Pressure loss based on maximum opening of 85%

Praher Type S4 Check (Non-Return) Valve

Description: In-line spring weighted cone check valve

Mounting: In any position

Maximum Fluid Pressure at 20°C: Sizes 16mm to 75mm - 16 bar;
 Sizes 90mm to 110mm - 10 bar

Fluid Temperature Range: 0°C - 120°C

Construction:

Body: PVDF

Seals: FPM

Spring: Stainless steel sleeved in PTFE

End Connections: Fusion sockets, fusion spigots or BSP Female Threaded



MM Fusion Sockets

FPM Seals

16	12.1658	121.39
20	12.1659	122.87
25	12.1660	154.86
32	12.1661	182.15
40	12.1662	266.23
50	12.1663	342.17
63	12.1664	460.16
75	12.1665	666.62
90	12.1666	877.53
110	12.2350	1225.62

MM Fusion Spigots

FPM Seals

16	12.1676	121.39
20	12.1677	122.87
25	12.1678	154.86
32	12.1679	182.15
40	12.1680	266.23
50	12.1681	342.17
63	12.1682	460.16
75	12.1683	666.62
90	12.1684	877.53
110	12.2351	1225.62

BSP Female Threaded

FPM Seals

3/8	12.1667	127.00
1/2	12.1668	128.47
3/4	12.1669	162.24
1	12.1670	190.26
1 1/4	12.1671	275.80
1 1/2	12.1672	355.44
2	12.1673	477.86
2 1/2	12.1674	669.01
3	12.1675	888.63

Need advice?

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 Call our freephone:

0800 975 79 71

Or from outside of the UK:
 +44 191 521 3111



Praher Type S4 Wafer Check Valve

Description: Wafer style flap check valve

Mounting: In any position, between flanges to BS4504 EN1072 PN10.

Optional spring return for mounting in horizontal position or for pulsating flow.

Maximum Fluid Pressure at 20°C: 10 bar

Fluid Temperature Range: 0°C - 120°C

Construction:

Body: PVDF

Seals: FPM

Spring (optional): Stainless Steel or hastelloy

End Connections: Flange mounted (flanges not included)



No Spring Return

FPM Seals			
	1 1/4"/40	07.0194	174.04
	1 1/2"/50	07.0204	178.46
	2"/63	07.0044	192.48
	2 1/2"/75	07.0054	222.71
	3"/90	07.0064	267.69
	4"/110	07.0074	368.71
	5"/140	07.0084	497.02
	6"/160	07.0094	700.56
	8"/225	07.0104	1669.55
	10"/280	07.0114	1873.09

Stainless Steel Spring Return

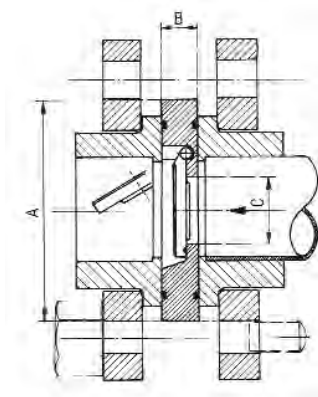
FPM Seals			
	1 1/4"/40	07.0195	242.63
	1 1/2"/50	07.0202	243.29
	2"/63	07.0045	263.28
	2 1/2"/75	07.0055	297.17
	3"/90	07.0065	349.54
	4"/110	07.0075	455.00
	5"/140	07.0085	617.25
	6"/160	07.0095	763.99
	8"/225	07.0105	1710.84
	10"/280	07.0115	1935.03

Hastelloy Spring Return

FPM Seals			
	1 1/4"/40		
	1 1/2"/50		
	2"/63		
	2 1/2"/75		
	3"/90		
	4"/110		
	5"/140		
	6"/160		
	8"/225		
	10"/280		

on application

DIMENSIONS (mm)



D	DN	A	B	C
63	50	109	18	32
75	65	129	20	40
90	80	144	20	52
110	100	164	23	70
140	125	195	23	92
160	150	220	26	112
225	200	275	35	150
280	250	330	40	190

Praher Type S4 Electrically Actuated Ball Valve

Description: In-line ball valve with electric operation

Mounting: In any position

Maximum Fluid Pressure at 20°C: Sizes up to 63mm - 10 bar;
75mm - 6 bar; 90mm - 5 bar; 110mm - 4 bar

Fluid Temperature Range: 0°C - 120°C

Construction:

Body: PVDF

Seals: FPM

Seats: PTFE

End Connections: Fusion sockets, fusion spigots, BSP Female Threaded or flanged BS4504 PN10

Actuation:

Housing Material: Plastic with epoxy coated aluminium base

Voltages: 240v AC; 110v AC; 24v AC; 110v DC; 24v DC; 12v DC

Frequency Range: 50/60 Hz

Protection: IP65

Manual Override: Optional **Position Indicator:** Included

Contacts: Open, closed. Additional contacts optional.



MM Fusion Sockets

	16	12 1449 E2AG	599.91
110v AC	20	12 1450 E2AG	601.48
FPM Seals	25	12 1448 E2AG	626.43
PTFE Seats	32	12 1451 E2AG	657.09
	40	12 1452 E2AG	702.23
	50	12 1453 E2AG	778.19
	63	12 1454 E2AG	875.64
	75	12 1455 E2AG	1338.54
	90	12 1456 E2AG	1539.19
	110	12 2032 E2AG	1917.53

MM Fusion Spigots

	16	12 2259 E2AG	599.91
110v AC	20	12 1491 E2AG	601.48
FPM Seals	25	12 1492 E2AG	626.43
PTFE Seats	32	12 1493 E2AG	657.09
	40	12 1494 E2AG	702.23
	50	12 1495 E2AG	778.19
	63	12 1496 E2AG	875.64
	75	12 1497 E2AG	1338.54
	90	12 1498 E2AG	1539.19
	110	12 2012 E2AG	1917.53

Electric Actuated Valve Options		Pneumatic Actuated Valve Options	
Switch Options	Price	Body Material Options	Price
Open/Closed	included	Technopolymer	standard
Open/Closed plus 2 x extra volt free	93.52	Hard anodised aluminium	free option
Actuator Options		Stainless steel	on application
Reversible actuator with manual override	standard	Double pack epoxy coated	on application
Uni-directional actuator without manual override	on application	Switchbox Options (with beacon)	
Customer specification actuator	on application	IP65 Technopolymer 2 x mechanical switches	87.47
EEXD version actuator	on application	IP65 Technopolymer 2 x proximity switches EEXIA	342.15
Power Options		IP67 Polycarbonate 2 x V3 gold plated switches	118.34
110v AC	standard	IP67 Polycarbonate 2 x V3 gold plated switches EEXIA	185.21
240v AC	free option	IP67 Polycarbonate 2 x proximity switches EEXIA	295.84
24v DC	on application	IP67 Aluminium 2 x V3 gold plated switches EEXD	308.70
24v AC	on application	Solenoid Valve Options	
Extra Options		240v AC Solenoid	90.03
Heater and thermostat	on application	110v AC Solenoid	90.03
4 - 20Ma positioner	on application	24v DC Solenoid	90.03
Fail-Safe operation	on application	24v AC Solenoid	90.03



Praher Type S4 Pneumatically Actuated Ball Valve

Description: In-line ball valve with pneumatic operation

Mounting: In any position

Maximum Fluid Pressure at 20°C: Sizes up to 75mm - 16 bar;

Sizes 90mm to 110mm - 10 bar

Fluid Temperature Range: 0°C - 120°C

Construction:

Body: PVDF

Seals: FPM

Seats: PTFE

End Connections: Fusion sockets, fusion spigots or BSP Female Threaded, flanged BS4504 EN1072 PN10

Actuation:

Housing Material: Plastic (optional aluminium)

Air Actuators: Fail-safe close, fail-safe open, double acting

Protection: IP65

Manual Override: Optional **Position Indicator:** Included

Contacts: Optional limit switch box with two mechanical switches

Pilot Valve: Solenoid, not included



MM Fusion Sockets

Fail-safe close	16	12.1449 P1A	336.20
FPM Seals	20	12.1450 P1A	337.78
PTFE Seats	25	12.1448 P1A	362.73
	32	12.1451 P1A	393.41
	40	12.1452 P1A	468.62
	50	12.1453 P1A	543.89
	63	12.1454 P1A	705.11
	75	12.1455 P1A	1010.35
	90	12.1456 P1A	1279.79
	110	12.2033 P1A	1749.84

MM Fusion Spigots

Fail-safe close	16	12.2259 P1A	336.20
FPM Seals	20	12.1491 P1A	337.78
PTFE Seats	25	12.1492 P1A	362.73
	32	12.1493 P1A	393.41
	40	12.1494 P1A	468.62
	50	12.1495 P1A	543.89
	63	12.1496 P1A	705.11
	75	12.1497 P1A	1010.35
	90	12.1498 P1A	1279.79
	110	12.2012 P1A	1749.84

BSP Female Threaded

Fail-safe close	3/8	12.2093 P1A	336.20
FPM Seals	1/2	12.1482 P1A	337.78
PTFE Seats	3/4	12.1483 P1A	362.73
	1	12.1484 P1A	393.41
	1 1/4	12.1485 P1A	468.62
	1 1/2	12.1486 P1A	543.89
	2	12.1487 P1A	705.11

Flanged BS4504 PN10/16

Fail-safe close	1/2	12.2025 P1A	413.18
FPM Seals	3/4	12.2026 P1A	482.25
PTFE Seats	1	12.2027 P1A	535.28
	1 1/4	12.2502 P1A	642.76
	1 1/2	12.2503 P1A	779.61
	2	12.2504 P1A	1008.94
	2 1/2	12.2505 P1A	1513.38
	3	12.2506 P1A	2032.18

MM Fusion Sockets

Double Acting	16	12.1449 P3A	314.72
FPM Seals	20	12.1450 P3A	316.30
PTFE Seats	25	12.1448 P3A	341.24
	32	12.1451 P3A	371.90
	40	12.1452 P3A	417.05
	50	12.1453 P3A	492.30
	63	12.1454 P3A	613.39
	75	12.1455 P3A	915.78
	90	12.1456 P3A	1168.00
	110	12.2032 P3A	1573.58

MM Fusion Spigots

Double Acting	16	12.2259 P3A	314.72
FPM Seals	20	12.1491 P3A	316.30
PTFE Seats	25	12.1492 P3A	341.24
	32	12.1493 P3A	371.90
	40	12.1494 P3A	417.05
	50	12.1495 P3A	492.30
	63	12.1496 P3A	613.39
	75	12.1497 P3A	915.78
	90	12.1498 P3A	1168.00
	110	12.2012 P3A	1573.58

BSP Female Threaded

Double Acting	3/8	12.2093 P3A	314.72
FPM Seals	1/2	12.1482 P3A	316.30
PTFE Seats	3/4	12.1483 P3A	341.24
	1	12.1484 P3A	371.90
	1 1/4	12.1485 P3A	417.05
	1 1/2	12.1486 P3A	492.30
	2	12.1487 P3A	613.39

Flanged BS4504 PN10/16

Double Acting	1/2	12.2025 P3A	391.68
FPM Seals	3/4	12.2026 P3A	460.75
PTFE Seats	1	12.2027 P3A	513.79
	1 1/4	12.2502 P3A	591.18
	1 1/2	12.2503 P3A	728.03
	2	12.2504 P3A	917.19
	2 1/2	12.2505 P3A	1418.80
	3	12.2506 P3A	1920.39

Requires pilot valve - enquire for details.

Also available with fail-safe open actuators. Please enquire for details.

ASV Stubbe Type K210 Electrically Actuated Butterfly Valve

Description: Wafer style butterfly valve with electric actuation

Mounting: In any position, between flanges to BS4504
EN1072 PN10

Maximum Fluid Pressure at 20°C: Sizes 2"/63mm to 5"/140mm - 10 bar; Sizes 6"/160mm to 8"/225mm - 6 bar

Fluid Temperature Range: 0°C - 120°C

Construction:

Body: PVDF

Seals: EPDM or FPM

Shaft: Stainless Steel 304

End Connections: Flange mounted (flanges not included)

Actuation:

Housing Material: Aluminium

Voltages: 230v AC

Frequency Range: 50/60 Hz

Protection: IP65

Manual Override: Included

Position Indicator: Included

Contacts: Open, closed plus two extra free contacts



230v AC FPM Seals			
	2"/63	1283129130	1792.84
	2 1/2"/75	1283139130	1831.54
	3"/90	1283149130	1916.08
	4"/110	1283159130	2333.13
	5"/140	1283169130	2811.79
	6"/160	1283179130	2947.94
	8"/225	1283189230	3496.82

ASV Stubbe Type K210 Pneumatically Actuated Butterfly Valve

Description: Wafer style butterfly valve with pneumatic actuator

Mounting: In any position, between flanges to BS4504
EN1072 PN10

Maximum Fluid Pressure at 20°C: Sizes 2"/63mm to 5"/140mm - 10 bar; Sizes 6"/160mm to 8"/225mm - 6 bar

Fluid Temperature Range: 0°C - 120°C

Construction:

Body: PVDF

Seals: EPDM or FPM

Shaft: Stainless Steel 304

End Connections: Flange mounted (flanges not included)

Actuation:

Housing Material: Aluminium

Air Actuators: Fail-safe close, fail-safe open, double acting

Protection: IP65

Manual Override: Included

Position Indicator: Included

Contacts: Optional limit switch box with two mechanical switches

Pilot Valve: Solenoid, not included



Double Acting FPM Seals			
	2"/63	1283449580	1024.69
	2 1/2"/75	1283459580	1093.48
	3"/90	1283469580	1183.76
	4"/110	1283479580	1497.61
	5"/140	1283489580	2019.28
	6"/160	1283499580	2298.74
	8"/225	1283509580	2995.25

Praher Type T4 Pneumatically Actuated Diaphragm Valve

Description: In-line pneumatically operated diaphragm valve
Mounting: In any position
Maximum Fluid Pressure at 20°C: 10 bar
Fluid Temperature Range: 0°C-120°C
Construction:
Body: PVDF
Diaphragm: PTFE (EPDM backed)
End Connections: Fusion spigots, flanged to BS4504 EN1072 PN10
Actuation:
Housing Material: Glass reinforced Polypropylene
Air Actuators: Fail-safe close, fail-safe open
Protection: IP65
Manual Override: Optional
Position Indicator: Included
Contacts: Optional
Pilot Valve: Solenoid, not included



MM Fusion Spigots

Fail-safe close
PTFE Diaphragm

20	12.5742	318.89
25	12.5743	323.89
32	12.5744	424.19
40	12.5745	553.18
50	12.5746	644.20
63	12.5747	756.69

Flanged PN10/16

Fail-safe close
PTFE Diaphragm

20	12.5756	425.64
25	12.5757	431.36
32	12.5758	482.95
40	12.5759	600.48
50	12.5760	743.81
63	12.5761	902.88



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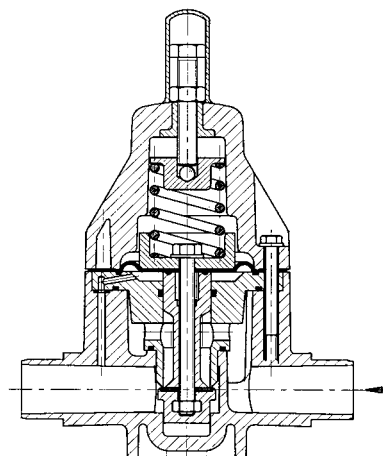
pressure reducing valves

The function of a pressure reducing valve

A pressure reducing valve is installed in-line. It is responsible for maintaining the downstream line pressure to the pressure set at the valve.

The valve works by responding to changes in the downstream pressure. For example, assume that there are normally two open valves downstream from the pressure regulator. When one is closed, the back pressure will increase. As this happens, the pressure reducing valve would close down to maintain the downstream pressure. When the valve is re-opened the pressure reducing valve would also open up again until the set pressure was reached.

Under operating conditions the pressure reducing valve is always open which means that it is balanced between the inlet pressure (primary side) and the lower outlet/working pressure. At any rise of working pressure at the valve outlet a pressure compensation via the control bore takes place at the area below the diaphragm. The higher working pressure activates the large diaphragm and lifts the piston against the spring force. The flow reduces and the working pressure drops until the balanced condition is reached again. When the working pressure drops this procedure is reversed. The spring force opens the valve seat against the lower pressure force below the diaphragm. The flow rises until the balanced condition is reached again.



Pre-setting or re-adjustment of the valve set pressure is made by removing the protective cap and by setting the control screw. The counter nut is tightened after final adjustment. When used with neutral fluids, many of the pressure relief valves can be fitted with a pressure gauge if required.

ASV Stubbe Type 750 Pressure Reducing Valve

Description: In-line adjustable valve used to reduce system pressures and to keep the working pressure constant

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Pressure Setting Range: 1 to 6 bar

Hysteresis: Approx. 0.1 to 0.4 bar

Fluid Temperature Range: 0°C-100°C

Construction:

Body: PVDF

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: FPM

End Connections: Fusion spigots

Features: Adjustable at any time, even during use. Constant pressure control to ± 0.2 bar. Installation is independent of flow direction.



MM Fusion Spigots

FPM Seals	75	1111 79	4083.97
	90	1111 80	5352.60

ASV Stubbe Type 755 and Type 765 Pressure Reducing Valve

Description: In-line adjustable valve used to reduce system pressures and to keep the working pressure constant.

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Pressure Setting Range: Type 755: 1 to 9 bar Type 765: 0.5 to 9 bar

Hysteresis: Approx. 0.1 to 0.4 bar

Fluid Temperature Range: 0°C-100°C

Construction:

Body: PVDF

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: FPM

End Connections: Union fusion sockets or fusion spigots

Features: Adjustable at any time, even during use. Constant pressure control to ± 0.2 bar. Vibration free during operation. Installation is independent of flow direction.

Options: A pressure gauge can be fitted on the primary or also on the secondary side.



Type 755

Setting Range
1 to 9 bar

MM Fusion Spigots

FPM Seals

16	1220 83	461.73
20	1220 84	461.73
25	1220 85	698.86
32	1220 86	698.86
40	1220 87	1171.15
50	1220 88	1171.15
63	1220 89	1171.15

MM Union Fusion Sockets

FPM Seals

16	1193 35	479.40
20	1193 36	481.53
25	1193 37	723.03
32	1193 38	733.04
40	1193 39	1217.45
50	1193 40	1241.79
63	1193 41	1286.24

Type 765

Setting Range
0.5 to 9 bar

MM Fusion Spigots

FPM Seals

16	1221 25	521.51
20	1221 26	521.51
25	1221 27	761.69
32	1221 28	761.69
40	1221 29	1521.15
50	1221 30	1521.15
63	1221 31	1521.15

MM Union Fusion Sockets

FPM Seals

16	1193 77	538.14
20	1193 78	541.00
25	1193 79	783.91
32	1193 80	794.69
40	1193 81	1562.11
50	1193 82	1585.75
63	1193 83	1630.20

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pressure relief valves

The function of a pressure relief valve

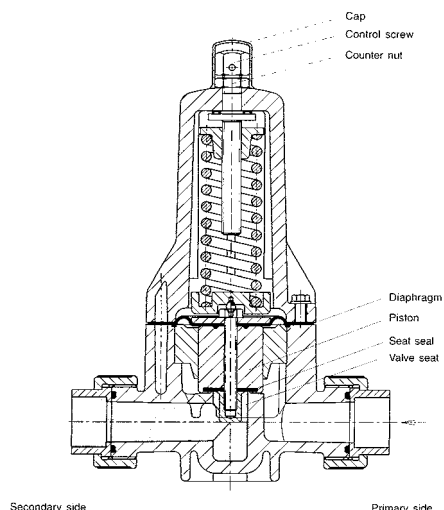
A pressure relief valve is most often used to protect a system from over-pressurisation, but it can also be used to maintain a constant upstream pressure or even as a non-return valve in certain installations.

Not normally installed as an in-line valve, it only opens when the system pressure exceeds the pressure set against the diaphragm of the valve. When this happens, the excess pressure forces the valve piston off its seat, compressing the spring and allowing fluid to flow through the valve body to discharge. Damping at the valve piston suppresses vibration and fluttering.

The pre-formed diaphragm allows full opening of the valve whilst separating the fluid in the lower body from the bonnet and therefore the atmosphere. The seal is additionally secured by crimped seal O-rings at the diaphragm.

When the system pressure falls back to below the set pressure, the spring forces the piston back into the seat, closing the valve.

Pre-setting or re-adjustment of the valve set pressure is made by removing the protective cap and by setting the control screw. The counter nut is tightened after final adjustment. When used with neutral fluids, many of the pressure reducing valves can be fitted with a pressure gauge if required.



ASV Stubbe Type 725 Pressure Relief Valve

Description: Adjustable pressure relief valve

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Pressure Setting Range: Approx. 0.2 to 10 bar

Opening Pressure: Approx. 0.2 bar

Hysteresis: Approx. 0.3 bar

Fluid Temperature Range: 0°C-100°C

Construction:

Body: PVDF

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: FPM

End Connections: Union fusion sockets or fusion spigots

Features: Adjustable at any time, even during use. Vibration and flutter free during operation. Maintenance free. High reproducibility, low hysteresis.

Options: A pressure gauge can be fitted on the primary or also on the secondary side.



Setting Range - 0.2 to 10 bar

MM Fusion Spigots

FPM Seals	MM	Part No.	Price
	16	1220 41	376.38
	20	1220 42	636.70
	25	1220 43	595.64
	32	1220 44	595.64
	40	1220 45	881.37
	50	1220 46	1176.58
	63	1220 47	1176.58

MM Union Fusion Sockets

FPM Seals	MM	Part No.	Price
	16	1191 19	404.87
	20	1191 20	407.02
	25	1191 21	636.31
	32	1191 22	644.91
	40	1191 23	1253.98
	50	1191 24	1274.78
	63	1191 25	1311.30

ASV Stubbe Type 715-SL Pressure Relief Valve

Description: Adjustable pressure relief valve with no metal fixings for aggressive environments

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Pressure Setting Range: 0.2 to 4 bar

Hysteresis: Approx. 0.3 bar

Fluid Temperature Range: 0°C-100°C

Construction:

Body: PVDF

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: FPM

End Connections: Union fusion sockets or fusion spigots

Features: Body is internally screwed together making this valve suitable for externally corrosive environments. Adjustable at any time, even during use. Vibration and flutter free during operation. Maintenance free. High reproducibility, low hysteresis.

Options: A pressure gauge can be fitted on the primary side or also on the secondary side.



Setting Range - 0.2 to 4 bar

MM Fusion Spigots

FPM Seals

16	1383 18	367.31
20	1383 19	367.31
25	1383 20	568.91
32	1383 21	568.91

MM Union Fusion Sockets

FPM Seals

16	1383 14	395.02
20	1383 15	395.02
25	1383 16	612.72
32	1383 17	612.72

ASV Stubbe Type 715 Pressure Relief Valve

Description: Adjustable pressure relief valve

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Pressure Setting Range: 0.2 to 4 bar

Opening Pressure: Approx. 0.2 bar

Hysteresis: Approx. 0.3 bar

Fluid Temperature Range: 0°C-100°C

Construction:

Body: PVDF

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: FPM

End Connections: Union fusion sockets or fusion spigots

Features: Adjustable at any time, even during use. Vibration and flutter free during operation. Maintenance free. High reproducibility, low hysteresis.

Options: A pressure gauge can be fitted on the primary or also on the secondary side.



Setting Range - 0.2 to 4 bar

MM Fusion Spigots

FPM Seals

16	1219 57	357.85
20	1219 58	357.85
25	1219 59	554.22
32	1219 60	554.22
40	1219 61	858.04
50	1219 62	858.04
63	1219 63	858.04

MM Union Fusion Sockets

FPM Seals

16	1190 35	384.80
20	1190 36	388.38
25	1190 37	596.89
32	1190 38	600.48
40	1190 39	921.51
50	1190 40	943.74
63	1190 41	978.84

ASV Stubbe Type 716-SL Pressure Relief Valve

Description: Adjustable pressure relief valve with no metal fixings for aggressive environments

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Pressure Setting Range: 0.5 to 10 bar

Hysteresis: Approx. 0.3 bar

Fluid Temperature Range: 0°C-100°C

Construction:

Body: PVDF

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: FPM

End Connections: Union fusion sockets or fusion spigots

Features: Body is internally screwed together making this valve suitable for externally corrosive environments. Adjustable at any time, even during use. Vibration and flutter free during operation. Maintenance free. High reproducibility, low hysteresis.

Options: A pressure gauge can be fitted on the primary side or also on the secondary side.



Setting Range - 0.5 to 10 bar

MM Fusion Spigots

FPM Seals

16	1383 26	367.34
20	1383 27	367.34
25	1383 28	568.91
32	1383 29	568.91

MM Union Fusion Sockets

FPM Seals

16	1383 22	395.02
20	1383 23	398.68
25	1383 24	612.72
32	1383 25	612.72

ASV Stubbe Type 716 Pressure Relief Valve

Description: Adjustable pressure relief valve

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Pressure Setting Range: Approx. 0.5 to 10 bar

Opening Pressure: Approx. 0.4 bar

Hysteresis: Approx. 0.3 bar

Fluid Temperature Range: 0°C-100°C

Construction:

Body: PVDF

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: FPM

End Connections: Union fusion sockets or fusion spigots

Features: Adjustable at any time, even during use. Vibration and flutter free during operation. Maintenance free. High reproducibility, low hysteresis.

Options: A pressure gauge can be fitted on the primary or also on the secondary side.



Setting Range - 0.5 to 10 bar

MM Fusion Spigots

FPM Seals

16	1219 99	357.85
20	1220 00	357.85
25	1220 01	554.22
32	1220 02	554.22
40	1220 03	858.04
50	1220 04	858.04
63	1220 05	858.04

MM Union Fusion Sockets

FPM Seals

16	1190 77	384.80
20	1190 78	388.38
25	1190 79	596.89
32	1190 80	600.48
40	1190 81	921.51
50	1190 82	943.74
63	1190 83	978.84

ASV Stubbe Type 712-R Pressure Relief and Non-Return Valve

Description: Adjustable pressure relief and overflow valve, back pressure safe

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Pressure Setting Range: 0.3 to 10 bar

Opening Pressure: Approx. 0.5 bar

Hysteresis: Approx. 0.3 bar

Fluid Temperature Range: 0°C-100°C

Construction:

Body: PVDF

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: FPM

End Connections: Union fusion sockets or fusion spigots

Features: Unique design: valve acts as a non-return valve, if there is no pressure on the inlet side. Adjustable at any time, even during use. Vibration free during operation. Maintenance free. High reproducibility, low hysteresis.

Options: A pressure gauge can be fitted on the primary or also on the secondary side.



Setting Range - 0.3 to 10 bar

MM Fusion Spigots

FPM Seals			
	16	1219 15	383.38
	20	1219 16	383.38
	25	1219 17	593.33
	32	1219 18	593.33
	40	1219 19	917.92
	50	1219 20	917.92
	63	1219 21	917.92

MM Union Fusion Sockets

FPM Seals			
	16	1206 95	404.14
	20	1206 96	407.02
	25	1206 97	621.26
	32	1206 98	921.51
	40	1206 99	968.08
	50	1207 00	991.02
	63	1207 01	1027.56

ASV Stubbe Type 712 Pressure Relief Valve

Description: Adjustable pressure relief valve

Mounting: In any position

Maximum Fluid Pressure at 20°C: Sizes 75mm & 90mm: 10 bar; 110mm: 6 bar

Pressure Setting Range: Choice of 0.3 to 4 bar, 0.5 to 6 bar or 0.5 to 10 bar

Opening Pressure: Approx. 0.3 to 0.5 bar

Hysteresis: Maximum approx. 1 bar

Fluid Temperature Range: 0°C-100°C

Construction:

Body: PVDF

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: FPM

End Connections: Fusion spigots

Features: Adjustable at any time, even during use. Vibration and flutter free during operation. Maintenance free.

Setting Range
0.5 to 10 bar

MM Fusion Spigots

FPM Seals			
	75	1129 13	3569.91
	90	1129 16	4691.35



ASV Stubbe Type 718 Pressure Relief Valve

Description: Adjustable pressure relief valve

Mounting: In any position

Maximum Fluid Pressure at 20°C: 10 bar

Pressure Setting Range: 0.5 to 10 bar

Opening Pressure: Approx. 0.5 bar

Fluid Temperature Range: 0°C-100°C

Flow Rate: Up to 500 l/hr

Construction:

Body: PVDF

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: EPDM or FPM

End Connections: Union fusion sockets

Features: Ideal for oscillating pumps. Adjustable at any time, even during use. Vibration and flutter free during operation. Diaphragm controlled, insensitive to back-pressure. Installation is independent of flow direction.

Ideal for
Oscillating
Pumps



Setting Range - 0.5 to 10 bar

MM Union Fusion Sockets

EPDM Seals			
	12	1278 43	139.48

MM Union Fusion Sockets

FPM Seals			
	12	1278 44	146.93