

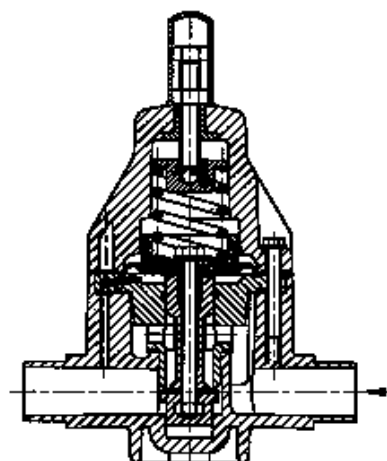
pressure reducing valves

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.

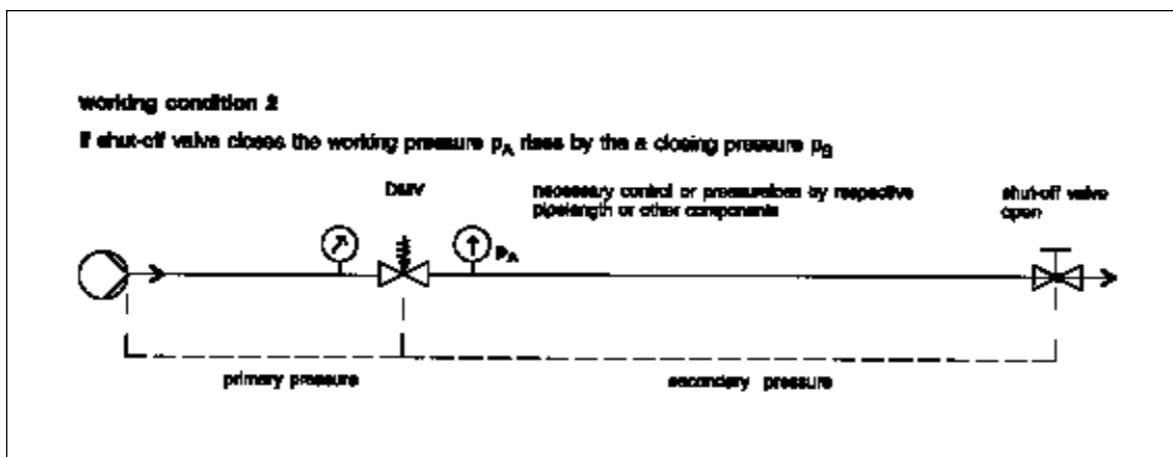
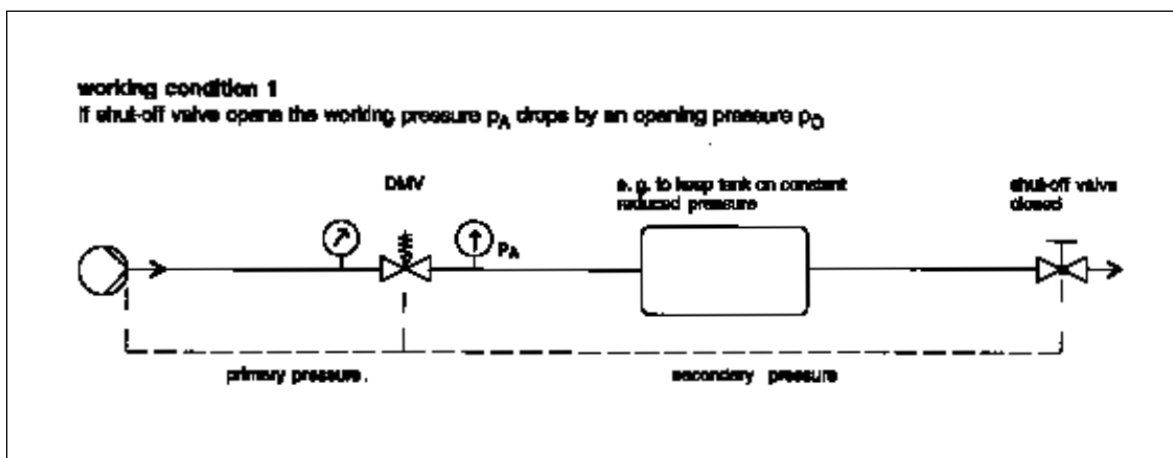
The valve works by responding to changes in the downstream pressure. For example, assume that there are normally two open valves downstream from the pressure regulator. When one is closed, the back pressure will increase. As this happens, the pressure reducing valve would close down to maintain the downstream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

Applications for Pressure Reducing Valves



ASV Stubbe Type 755 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 9 bar

Hysteresis: Approx. 0.1 to 0.4 bar

Fluid Temperature Range: 0°C-70°C

Construction:

Body: Polypropylene

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: EPDM or 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.



Setting Range - 1 to 9 bar

MM Union Fusion Sockets

EPDM Seals

16	1193 14	342.14
20	1193 15	344.18
25	1193 16	451.02
32	1193 17	455.08
40	1193 18	536.22
50	1193 19	547.71
63	1193 20	567.33

MM Union Fusion Sockets

FPM Seals

16	1193 21	349.60
20	1193 22	366.49
25	1193 23	462.50
32	1193 24	465.21
40	1193 25	555.83
50	1193 26	569.34
63	1193 27	590.32

MM Fusion Spigots

EPDM Seals

16	1220 62	319.86
20	1220 63	319.86
25	1220 64	423.48
32	1220 65	423.48
40	1220 66	496.62
50	1220 67	496.62
63	1220 68	496.62

MM Fusion Spigots

FPM Seals

16	1220 69	324.91
20	1220 70	324.91
25	1220 71	429.26
32	1220 72	429.26
40	1220 73	505.61
50	1220 74	505.61
63	1220 75	505.61



Free Training

We can provide free installer training either on site or at our bespoke training facility.

Contact Tony Charlton or Tom Tate on:

0800 975 79 71



ASV Stubbe 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: 0.5 to 9 bar

Hysteresis: Approx. 0.1 to 0.4 bar

Fluid Temperature Range: 0°C-70°C

Construction:

Body: Polypropylene

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: EPDM or 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.



Setting Range - 0.5 to 9 bar

MM Union Fusion Sockets

EPDM Seals

16	1193 56	356.36
20	1193 57	357.70
25	1193 58	463.87
32	1193 59	467.25
40	1193 60	545.69
50	1193 61	557.87
63	1193 62	577.46

MM Union Fusion Sockets

FPM Seals

16	1193 63	362.43
20	1193 64	366.49
25	1193 65	474.68
32	1193 66	478.07
40	1193 67	564.63
50	1193 68	578.14
63	1193 69	599.78

MM Fusion Spigots

EPDM Seals

16	1221 04	333.24
20	1221 05	333.24
25	1221 06	435.62
32	1221 07	435.62
40	1221 08	506.15
50	1221 09	506.15
63	1221 10	506.15

MM Fusion Spigots

FPM Seals

16	1221 11	337.72
20	1221 12	337.72
25	1221 13	441.30
32	1221 14	441.30
40	1221 15	514.46
50	1221 16	514.46
63	1221 17	514.46

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-70°C

Construction:

Body: Polypropylene

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: EPDM or 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.



Setting Range - 1 to 6 bar

MM Fusion Spigots

EPDM Seals	75	1111 76	1559.06
	90	1111 77	3700.41

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The function of a pressure relief valve

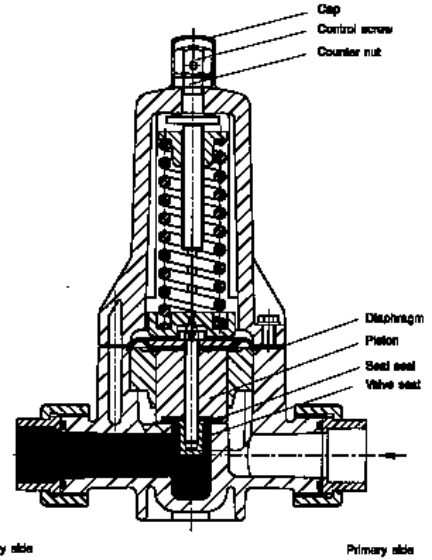
A pressure relief valve is most often used to protect a system from over-pressurisation, but it can also be used to maintain a constant upstream pressure or even as a non-return valve in certain installations.

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.

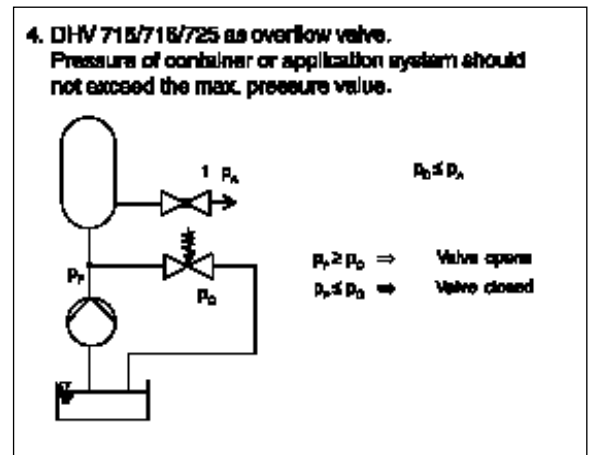
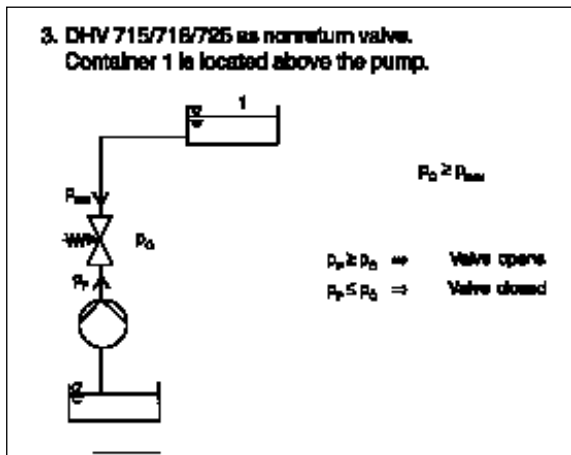
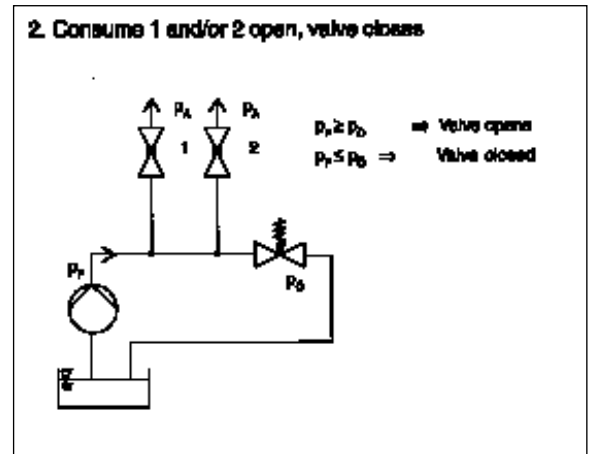
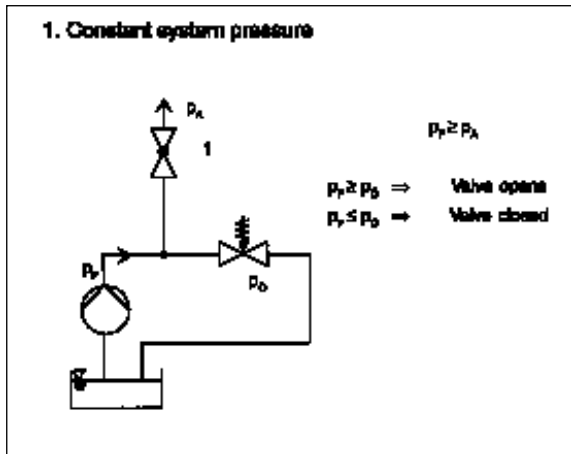
The pre-formed diaphragm allows full opening of the valve whilst separating the fluid in the lower body from the bonnet and therefore the atmosphere. The seal is additionally secured by crimped seal O-rings at the diaphragm.

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.



Applications for Pressure Relief Valves



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-70°C

Construction:

Body: Polypropylene

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: EPDM or 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 Union Fusion Sockets

EPDM Seals

16	1206 74	181.90
20	1206 75	184.61
25	1206 76	255.60
32	1206 77	259.67
40	1206 78	328.63
50	1206 79	340.13
63	1206 80	361.10

MM Union Fusion Sockets

FPM Seals

16	1206 81	185.27
20	1206 82	189.33
25	1206 83	263.04
32	1206 84	267.10
40	1206 85	345.53
50	1206 86	359.07
63	1206 87	383.40

MM Fusion Spigots

EPDM Seals

16	1218 94	164.33
20	1218 95	164.33
25	1218 96	233.95
32	1218 97	233.95
40	1218 98	297.53
50	1218 99	297.53
63	1219 00	297.53

MM Fusion Spigots

FPM Seals

16	1219 01	166.34
20	1219 02	166.34
25	1219 03	237.33
32	1219 04	237.33
40	1219 05	306.32
50	1219 06	306.32
63	1219 07	306.32

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: 0.2 to 10 bar
Opening Pressure: Approx. 0.2 bar
Hysteresis: Approx. 0.3 bar
Fluid Temperature Range: 0°C-70°C
Construction:
Body: Polypropylene
Diaphragm: EPDM with PTFE liner on fluid side
Seats and Seals: EPDM or 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 Union Fusion Sockets

EPDM Seals	Size	Part No.	Price
	16	1190 98	220.44
	20	1190 99	223.14
	25	1191 00	296.17
	32	1191 01	300.24
	40	1191 02	512.55
	50	1191 03	522.02
	63	1191 04	540.95

MM Union Fusion Sockets

FPM Seals	Size	Part No.	Price
	16	1191 05	223.83
	20	1191 06	227.21
	25	1191 07	304.27
	32	1191 08	308.34
	40	1191 09	528.79
	50	1191 10	542.29
	63	1191 11	563.93

MM Fusion Spigots

EPDM Seals	Size	Part No.	Price
	16	1220 20	199.74
	20	1220 21	199.74
	25	1220 22	271.58
	32	1220 23	271.58
	40	1220 24	471.88
	50	1220 25	471.88
	63	1220 26	471.88

MM Fusion Spigots

FPM Seals	Size	Part No.	Price
	16	1220 27	201.65
	20	1220 28	201.65
	25	1220 29	274.75
	32	1220 30	274.75
	40	1220 31	479.55
	50	1220 32	479.55
	63	1220 33	479.55

Machine Hire

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 welding equipment available to
 hire on a weekly basis.



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-70°C
Construction:
Body: Polypropylene
Diaphragm: EPDM with PTFE liner on fluid side
Seats and Seals: EPDM or FPM
End Connections: Fusion spigots
Features: Adjustable at any time, even during use. Vibration and flutter free during operation. Maintenance free.



Setting Range
0.3 to 4 bar

MM Fusion Spigots			
EPDM Seals	75	1105 46	1019.52
	90	1105 49	1614.49
	110	1129 27	2446.22

MM Fusion Spigots			
FPM Seals	75	1129 21	1122.09
	90	1129 24	1775.47
	110	1129 30	2690.84

Setting Range
0.5 to 6 bar

MM Fusion Spigots			
EPDM Seals	110	1118 57	2446.22

MM Fusion Spigots			
FPM Seals	110	1129 33	2690.84

Setting Range
0.5 to 10 bar

MM Fusion Spigots			
EPDM Seals	75	1100 61	1019.52
	90	1100 64	1614.49

MM Fusion Spigots			
FPM Seals	75	1129 12	1122.09
	90	1129 15	1775.47

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-70°C
Flow Rate: Up to 500 l/hr
Construction:
Body: Polypropylene
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



Size 12mm

MM Union Fusion Sockets			
EPDM Seals	12	1278 41	118.47

MM Union Fusion Sockets			
FPM Seals	12	1278 42	121.58

MM Fusion Spigots			
EPDM Seals	16	1352 83	137.18
	20	1352 84	137.18
	25	1352 85	195.76
	32	1352 86	195.76
	40	1352 87	260.18
	50	1352 88	260.18
	63	1352 89	260.18



Sizes 16-63mm

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-70°C

Construction:

Body: Polypropylene

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: EPDM or 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 Union Fusion Sockets

EPDM Seals			
	16	1382 82	168.49
	20	1382 83	170.55
	25	1382 84	236.58
	32	1382 85	480.06

MM Union Fusion Sockets

FPM Seals			
	16	1382 98	171.94
	20	1382 99	175.37
	25	1383 00	244.16
	32	1383 01	248.28

MM Fusion Spigots

EPDM Seals			
	16	1382 86	148.80
	20	1382 87	148.80
	25	1382 88	212.17
	32	1382 89	212.17

MM Fusion Spigots

FPM Seals			
	16	1383 02	150.70
	20	1383 03	150.70
	25	1383 04	215.41
	32	1383 05	215.41

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-70°C

Construction:

Body: Polypropylene

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: EPDM or 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 Union Fusion Sockets

EPDM Seals			
	16	1190 14	165.67
	20	1190 15	167.70
	25	1190 16	232.61
	32	1190 17	236.00
	40	1190 18	313.08
	50	1190 19	323.89
	63	1190 20	343.51

MM Union Fusion Sockets

FPM Seals			
	16	1190 21	169.04
	20	1190 22	172.43
	25	1190 23	240.05
	32	1190 24	244.11
	40	1190 25	329.98
	50	1190 26	342.83
	63	1190 27	365.82

MM Fusion Spigots

EPDM Seals			
	16	1219 36	146.31
	20	1219 37	146.31
	25	1219 38	208.61
	32	1219 39	208.61
	40	1219 40	277.92
	50	1219 41	277.92
	63	1219 42	277.92

MM Fusion Spigots

FPM Seals			
	16	1219 43	148.18
	20	1219 44	148.18
	25	1219 45	211.80
	32	1219 46	211.80
	40	1219 47	285.60
	50	1219 48	285.60
	63	1219 49	285.60

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-70°C

Construction:

Body: Polypropylene

Diaphragm: EPDM with PTFE liner on fluid side

Seats and Seals: EPDM or 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 Union Fusion Sockets

EPDM Seals	Size	Part No.	Price
	16	1382 90	168.49
	20	1382 91	170.55
	25	1382 92	236.58
	32	1382 93	240.03

MM Union Fusion Sockets

FPM Seals	Size	Part No.	Price
	16	1383 06	171.94
	20	1383 07	175.37
	25	1383 08	244.16
	32	1383 09	248.28

MM Fusion Spigots

EPDM Seals	Size	Part No.	Price
	16	1382 94	148.80
	20	1382 95	148.80
	25	1382 96	212.17
	32	1382 97	212.17

MM Fusion Spigots

FPM Seals	Size	Part No.	Price
	16	1383 10	150.70
	20	1383 11	150.70
	25	1383 12	215.41
	32	1383 13	215.41

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: 0.5 to 10 bar

Opening Pressure: Approx. 0.4 bar

Hysteresis: Approx. 0.3 bar

Fluid Temperature Range: 0°C-70°C

Construction:

Body: Polypropylene **Diaphragm:** EPDM with PTFE liner on fluid side

Seats and Seals: EPDM or 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 Union Fusion Sockets

EPDM Seals	Size	Part No.	Price
	16	1190 56	165.67
	20	1190 57	167.70
	25	1190 58	232.61
	32	1190 59	236.00
	40	1190 60	313.08
	50	1190 61	323.89
	63	1190 62	343.51

MM Union Fusion Sockets

FPM Seals	Size	Part No.	Price
	16	1190 63	169.04
	20	1190 64	172.43
	25	1190 65	240.05
	32	1190 66	244.11
	40	1190 67	329.98
	50	1190 68	342.83
	63	1190 69	365.82

MM Fusion Spigots

EPDM Seals	Size	Part No.	Price
	16	1219 78	146.31
	20	1219 79	146.31
	25	1219 80	208.61
	32	1219 81	208.61
	40	1219 82	277.92
	50	1219 83	277.92
	63	1219 84	277.92

MM Fusion Spigots

FPM Seals	Size	Part No.	Price
	16	1219 85	148.18
	20	1219 86	148.18
	25	1219 87	211.80
	32	1219 88	211.80
	40	1219 89	285.60
	50	1219 90	285.60
	63	1219 91	285.60