

Proportional Relief Valves

VSV2 Series

VIGOUR

Product Features

- Liquid or gas service
- Set pressures from 10~6000psig(0.7~413 bar)
- 1/4 and 1/2 in. and 6 to 12mm end connections
- Identifying colored springs for each pressure range
- SS 316L construction



Technical Data

Pressure-Temperature Ratings

Series	VSV 2			VSV 2A			VSV 2B & VSV 2C		
Inlet Pressure	6000 psig (413 bar)			6000 psig (413 bar)			300 psig (20.6 bar)		
Outlet Pressure	1500 psig (103 bar)			2500 psig (172 bar)			225 psig (15.5bar)		
Set pressure	50 to 6000 psig (3.4 to 413 bar)			50 to 1500 psig (3.4 to 103 bar)			10 to 225 psig (0.7 to 15.5 bar)		
Seal Material	FKM	NBR	EPDM	FKM	NBR	EDPM	FKM	NBR	EPDM
Temperature °F(°C)	Maximum Set Pressure, psig (bar)								
-40 (-40)	—	—	—	—	—	—	—	—	—
-30 (-34)									
-10 (-23)									
0 (-17)									
10 (-12)									
25 (-4)	6000 (413)	6000 (413)	—	1500 (103)	—	—	225 (15.5)	225 (15.5)	225 (15.5)
30 (-1)									
40 (4)									
50 (10)									
70 (20)									
150 (65)	5580 (384)	5580 (384)	5580 (384)	1500 (103)	1500 (103)	225 (15.5)	225 (15.5)	225 (15.5)	225 (15.5)
200 (93)	5160 (355)	5160 (355)	5160 (355)						
250 (121)	4910 (338)	4910 (338)	4910 (338)						
275 (135)	—	—	—						
300 (148)	—	—	—						

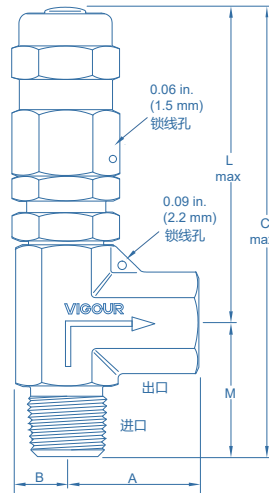
Testing

Every relief valve is tested for set and resealing performance

Series	Test Set Pressure, psig (bar)	Minimum Resealing Pressure as a Percentage
VSV 2B	10 to 20 (0.7 to 1.3)	50
VSV 2C	175 to 225 (12.0 to 15.5)	91
VSV 2	100 to 200 (6.8 to 13.7)	50
VSV 2A	850 to 1000 (58.5 to 68.9)	84



Dimensions (mm)



Dimensions shown with tube fitting nuts finger-tight.

Low-Pressure Valves

- Service up to 300 psig (20.6 bar)
- One spring for the full set pressure range
- Valves available factory-set to a specified set pressure

End Connections		Ordering Number	Dimensions, in. (mm)				
Inlet / Outlet	Size		L	M	A	B	C
VSV 2B Series: 0.19 in. (4.8 mm) fully open orifice (set pressure range: 10~225 psig)							
Tube fittings	1/4 in.	VSV2B-S-*-04-04	2.70 (68.6)	1.44 (36.6)	1.60 (40.6)	0.43 (10.9)	4.14 (105)
	6mm	VSV2B-S-*-6M-6M					
	8mm	VSV2B-S-*-8M-8M					
Male NPT / Tube fitting	1/4 in.	VSV2B-S-*-F4-04		1.19 (30.2)	1.60 (40.6)		3.89 (98.8)
Male NPT / Female NPT	1/4 in.	VSV2B-S-*-M4-F4		1.19 (30.2)	1.17 (29.7)		3.89 (98.8)
VSV 2C Series: 0.25 in. (6.4 mm) fully open orifice (set pressure range: 10~225 psig)							
Tube fitting	1/2 in.	VSV2C-S-*-08-08	4.09 (104)	1.83 (46.5)		0.50 (12.7)	5.92 (150)
	12mm	VSV2C-S-*-12M-12M					
Male NPT / Tube fitting	1/2 in.	VSV2C-S-*-M8-08		1.43 (36.3)	1.83 (46.5)		5.52 (140)
Male NPT / Female NPT	1/2 in.	VSV2C-S-*-M8-F8		1.43 (36.3)	1.43 (36.3)		5.52 (140)

* set pressure, the desinator accroding to the ordering information



Proportional Relief Valves

VSV2 Series

VIGOUR

High-Pressure Valves

- Service up to 6000 psig (413 bar)
- Multiple springs for a selection of set pressure ranges
- Valves available factory-set to a specified set pressure

End Connections		Ordering Number	Dimensions, in. (mm)				
Inlet / Outlet	Size		L	M	A	B	C
VSV 2 Series: 0.14 in. (3.6 mm) fully open orifice (set pressure range: 50~6000 psig)							
Tube fittings	1/4 in.	VSV2-S-*-04-04	2.70 (68.6)	1.44 (36.6)	1.60 (40.6)	0.43 (10.9)	4.14 (105)
	6mm	VSV2-S-*-6M-6M					
	8mm	VSV2-S-*-8M-8M					
Male NPT / Tube fitting	1/4 in.	VSV2-S-*-M4-04		1.19 (30.2)	1.60 (40.6)		3.89 (98.8)
Male NPT / Female NPT	1/4 in.	VSV2-S-*-M4-F4		1.19 (30.2)	1.17 (29.7)		3.89 (98.8)
VSV 2A Series: 0.25 in. (6.4 mm) fully open orifice (set pressure range: 50~1500 psig)							
Tube fittings	1/2 in.	VSV2A-S-*-08-08	4.09 (104)	1.83 (46.5)		0.50 (12.7)	5.92 (150)
	12mm	VSV2A-S-*-12M-12M					
Male NPT / Tube fitting	1/2 in.	VSV2A-S-*-M8-08		1.43 (36.3)	1.83 (46.5)		5.52 (140)
Male NPT / Female NPT	1/2 in.	VSV2A-S-*-M8-F8		1.43 (36.3)	1.43 (36.3)		5.52 (140)

* set pressure, the desinator accroding to the orering information.

Ordering Information

SS - VSV2 - 50 - 04 - 04 - B

Body Material

SS: 316
S4: 304

Series

2: VSV2 series
2A: VSV2A series
2B: VSV2B series
2C: VSV2C series

Set Pressure

3.5: 0.7 to 3.5 bar
25: 3.5 to 25 bar
50: 25 to 50 bar
100: 50 to 100 bar
150: 100 to 150 bar
200: 150 to 200 bar
250: 200 to 250 bar
350: 250 to 350 bar
400: 350 to 400 bar

Seal Material

None: FKM
B: NBR
E: EPDM
N: CR
Z: Kalrez®

Inlets / Outlets

Tube fitting: see above tables
NPT threads: see above tables

