

Metering Valves

VMV Series

VIGOUR

Product Features

- Low pressure metering valves
- Body materials: 316
- Panel installation is possible
- The product is fabricated in compliance with the VS001A process specification
- Vernier handles options
- Straight and Angle flow patterns
- Working pressure: Max. 2000psig (138bar)
- Straight-pattern flow coefficients (Cv) from 0.004 to 0.16

Technical Data

Series	Pressure-Temperature Ratings		Orifice in. (mm)	Shutoff Service	Stem Taper (Included Angle)
	Temperature °C	Working Pressure bar			
A type	-23°C to +204°C (FKM O-rings)	137	0.032 (0.81)	No	1°
B type			0.056 (1.42)	No	3°
C type	-23°C to +148°C (Buna N, O-rings)	68.9 ^①	0.128 (3.25)	Yes ^②	6°

① Downstream pressure 500 psig (34.4 bar) max when valve requires adjustment at pressure due to strength limitations of the fine-pitch threads and high operating torque.

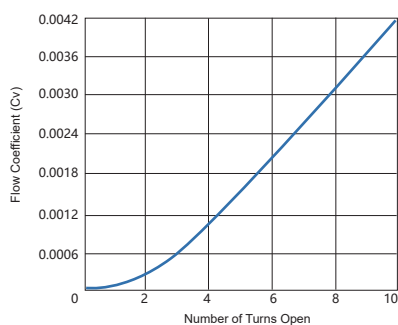
② Stainless steel L series valves are not recommended for shutoff in vacuum or gas service, or for repetitive shutoff in liquid service.



Flow Coefficient at Turns Open

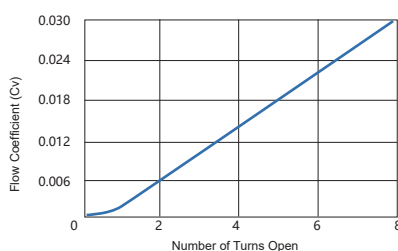
Flow Data at 70°F (20°C)

A type Metering Valves



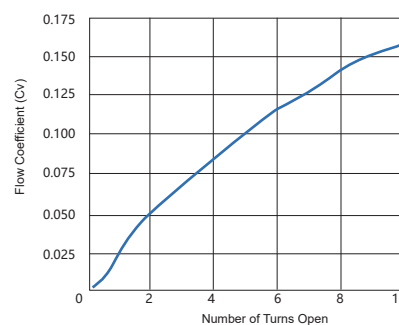
Max. Flow Cv=0.004	
Pressure Drop to Atmosphere bar	Air Flow std L/min
0.68	1.1
3.4	2.8
6.8	5.6

B type Metering Valves



Max. Flow Cv=0.03	
Pressure Drop to Atmosphere bar	Air Flow std L/min
0.68	9.3
3.4	25.4
6.8	42.4

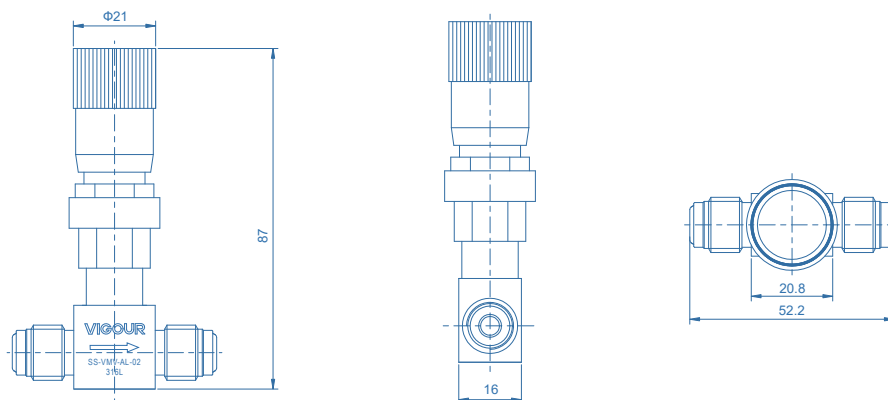
C type Metering Valves



Max. Flow Cv=0.16	
Pressure Drop to Atmosphere bar	Air Flow std L/min
0.68	56.6
3.4	181
6.8	323



Dimensions



End Connections		Ordering Number	Dimensions, in. (mm)					
Inlet/Outlet	Size		L	H	H1	H2	E	G
A type (Straight Pattern)								
Tube Fittings	1/16 in.	SS-VMV-A-01	1.56 (39.6)	2.34 (59.4)	0.92 (23.4)	/	0.38 (9.6)	0.45 (11.4)
	1/8 in.	SS-VMV-A-02	1.90 (48.3)					
	1/4 in.	SS-VMV-A-04	2.04 (51.8)					
	3mm	SS-VMV-A-3M	1.90 (48.3)					
	6mm	SS-VMV-A-6M	2.04 (51.8)					
VFS Male	1/4 in.	SS-VMV-A-MV4	2.06 (52.3)					
A type (Angle Pattern)								
Tube Fittings	1/16 in.	SS-VMV-AL-01	0.81 (20.6)	3.22 (81.8)	0.92 (23.4)	0.88 (22.4)	0.38 (9.6)	0.45 (11.4)
	1/8 in.	SS-VMV-AL-02	0.98 (24.9)	3.22 (81.8)		0.98 (24.9)		
	1/4 in.	SS-VMV-AL-04	1.02 (25.9)	3.36 (85.3)		1.02 (25.9)		
	3mm	SS-VMV-AL-3M	0.98 (24.9)	3.32 (84.3)		0.99 (25.1)		
Male NPT / Tube Fittings	1/8 in.	SS-VMV-AL-M2-02	0.98 (24.9)	3.07 (78.0)		0.98 (24.9)		
B type (Straight Pattern)								
Tube Fittings	1/8 in.	SS-VMV-B-02	2.02 (51.3)	2.78 (70.6)	1.56 (39.6)	/	0.50 (12.7)	0.58 (14.7)
	1/4 in.	SS-VMV-B-04	2.20 (55.9)					
	3mm	SS-VMV-B-3M	2.02 (51.3)					
	6mm	SS-VMV-B-6M	2.20 (55.9)					
Male NPT	1/8 in.	SS-VMV-B-M2	1.50 (38.1)					
	1/4 in.	SS-VMV-B-M4	1.96 (49.8)					
Female NPT	1/8 in.	SS-VMV-B-F2	1.94 (49.3)					
VFS Male	1/4 in.	SS-VMV-B-MV4	2.06 (52.3)					
B type (Angle Pattern)								
Tube Fittings	1/8 in.	SS-VMV-BL-02	1.01 (25.7)	3.30 (83.8)	1.07 (27.2)	1.01 (25.7)	0.50 (12.7)	0.58 (14.7)
	1/4 in.	SS-VMV-BL-04	1.10 (27.9)	3.39 (86.1)		1.10 (27.9)		
	3mm	SS-VMV-BL-3M	1.01 (25.7)	3.30 (83.8)		1.01 (25.7)		
	6mm	SS-VMV-BL-6M	1.10 (27.9)	3.39 (86.1)		1.10 (27.9)		
Male NPT	1/8 in.	SS-VMV-BL-M2	0.75 (19.1)	3.04 (77.2)		0.75 (19.1)		
	1/4 in.	SS-VMV-BL-M4	0.98 (24.9)	3.27 (83.1)		1.02 (25.9)		
Male NPT / Tube Fittings	1/8 in.	SS-VMV-BL-M2-02	1.01 (25.7)	3.04 (77.2)		0.75 (19.1)		
Female NPT	1/8 in.	SS-VMV-BL-F2	0.97 (24.6)	3.26 (82.8)		0.97 (24.6)		



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Inlet/Outlet	Size		L	H	H1	H2	E	G
C type (Straight Pattern)								
Tube Fittings	1/4 in.	SS-VMV-C-04	2.34 (59.4)	2.82 (71.6)	1.26 (32.0)	/	1.13 (28.7)	0.58 (14.7)
	3/8 in.	SS-VMV-C-06	2.46 (62.5)					
	6mm	SS-VMV-C-6M	2.34 (59.4)					
Male NPT	1/4 in.	SS-VMV-C-M4	2.00 (50.8)					
C type (Angle Pattern)								
Tube Fittings	1/4 in.	SS-VMV-CL-04	1.17 (29.7)	3.77 (95.8)	1.04 (26.4)	1.17 (29.7)	1.13 (28.7)	0.58 (14.7)
	6mm	SS-VMV-CL-6M						

Options and Accessories



Vernier Handle

Product Features:

- Helps ensure repeatable flow adjustments.
- Provides readings accurate to 1/25 turn.
- Kits contain all parts necessary to add a Vernier handle to an existing valve.

Ordering Example:

SS-VMV-AL-02-Y

Ordering Information

