

Metering Valve

MV3 Series



- ❖ Maximum working pressure up to 1000 psig (68.9 bar)
- ❖ Working temperature from -10°F to 400°F (-23°C to 204°C)
- ❖ One-piece forged body
- ❖ Orifice size is 0.128" (3.25 mm)
- ❖ Straight and angle patterns

Features

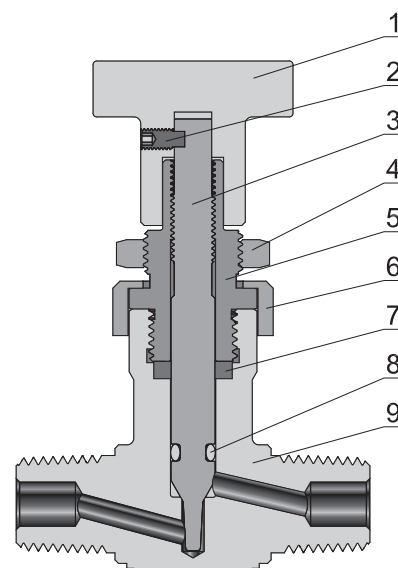
- ❖ Maximum working pressure up to 1000 psig (68.9 bar)
- ❖ Working temperature from -10°F to 400°F (-23°C to 204°C)
- ❖ Orifice size: 0.128" (3.25 mm)
- ❖ Stem taper: 6°
- ❖ Shutoff service: yes
- ❖ Panel mountable
- ❖ Straight and angle pattern
- ❖ Handle type: vernier and knurled
- ❖ Variety of end connections

Temperature Ranges for Different seal Materials

Seal Material	Temperature Range°F (°C)
Buna N	-10 to 300 (-23 to 148)
Ethylene Propylene	-10 to 300 (-23 to 148)
Fluorocarbon FKM	-10 to 400 (-23 to 204)
Kalrez	0 to 300 (-17 to 148)
Neoprene	-10 to 250 (-23 to 121)

Standard Materials of Construction

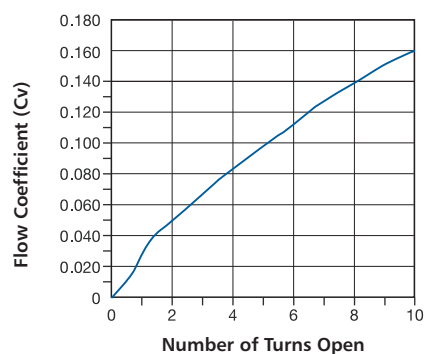
Component		Material Grade/ASTM Specification	
		316 S.S.	Brass
1	Handle	Anodized aluminum	
2	Handle Screw	Black oxide alloy steel/ANSI 18.3	
3	Stem	Hard chrome-plated 316 S.S./A479	
4	Panel nut	316 S.S./B783	Silver-mist chrome-plated C36000/B16
5	Bonnet	316 S.S./A479	Silver-mist chrome-plated C34500/B453
6	Bonnet Sleeve	Sintered 316 S.S.	
7	Stem Guide Ring	Glass-filled PTFE	
8	O-ring	Fluorocarbon FKM	Buna N
9	Body	316 S.S./A182	Silver-mist chrome-plated C37700/B283



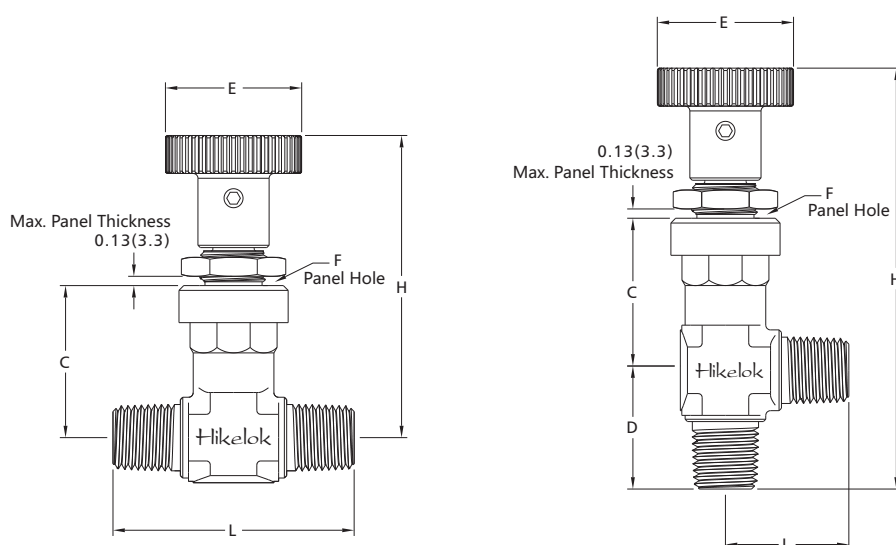
Flow Data at 70°F (20°C)

Pressure Drop to Atmosphere psig (bar)	Air Flow std ft ³ /min (std L/min)	Water Flow U.S. gal/min (L/min)
10 (0.69)	1.6 (45.3)	0.47 (1.7)
50 (3.45)	4.5 (127)	1.0 (3.7)
100 (6.90)	7.9 (223)	1.5 (5.6)

Flow Coefficient at Turns Open



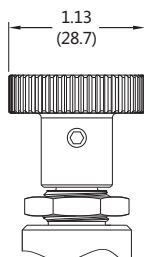
Dimensions



Basic Ordering Number	Connection Type and Size	Dimension, in. (mm)					
		H	L	C	D	E	F
Straight Pattern							
MV3-F4-	1/4" Hikelok	2.82 (71.6)	2.34 (59.4)	1.26 (32.0)	—	1.13 (28.7)	0.58 (14.7)
MV3-F6-	3/8" Hikelok		2.46 (62.5)				
MV3-M6-	6 mm Hikelok		2.34 (59.4)				
MV3-NPT4-	1/4 Male NPT		2.00 (50.8)				
Angle Pattern							
MV3-F4-	1/4" Hikelok	3.77 (95.8)	1.17 (29.7)	1.04 (26.4)	1.17 (29.7)	1.13 (28.7)	0.58 (14.7)
MV3-M6-	6 mm Hikelok						

Optional Handles

Knurled Handle



Vernier Handle

- ❖ Repeatability flow setting
- ❖ Adjustment accurate to 1/25 turn (1/1000 of an inch)



How to Order

MV3 — **NPT4** — **M6** — **EV** — **A1** — **316**

Series	Inlet Type	Inlet Size	Outlet Type	Outlet Size	O-Ring Material	Handle Type	Flow Pattern	Material
MV3	FNPT Female NPT	1 1/16 in.	Same as inlet type and inlet size		Fluorocarbon FKM	Knurled	Straight	316 316 S.S.
	NPT Male NPT	2 1/8 in.						316L 316L
	FBT Female BSPT	3 3 mm	If outlet and inlet are the same, eliminate the outlet designator		B Buna N	V Vernier	A1 Angle	304 304
	MBT Male BSPT	4 1/4 in.			E Ethylene Propylene			304L 304L
	FMS Female ISO 261	6 3/8 in. or 6 mm			N Neoprene			BR Brass
	MS Male ISO 261	8 1/2 in. or 8 mm			Z Kalrez			
	FBP Female BSPP	10 10 mm						
	MBP Male BSPP	12 3/4 in. or 12 mm						
	F Fractional Tube Fitting							
	M Metric Tube Fitting							
	GFS Male GFS Fitting							