

# MV21, MV22, MV23 SERIES

Metering Valves

GENTEC® Valves



Slotted Handle

Vernier Handle

## Product Features

- Maximum operating pressure  
MV21: 2000 psi (138 bar)  
MV22, MV23: 1000 psi (69 bar)
- End connections: GENLOK and NPT  
(please refer to the specification tables for available dimensions)
- Panel mounting available
- Cleaned and degreased for oxygen service according to CGA G-4.1 and ASTM G93 Class C, respectively

## Pressure-Temperature Rating

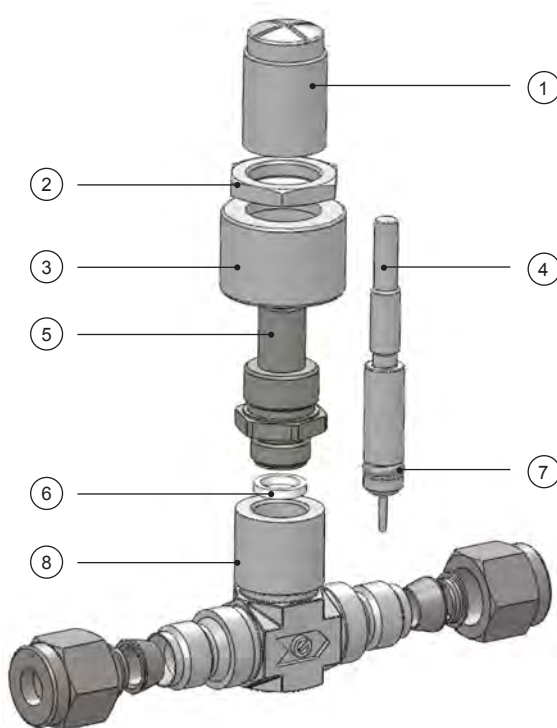
Series	Pressure-Temperature Ratings		Orifice in.(mm)	Shutoff	Stem Taper
	Temperature °F(°C)	Working Pressure psi (bar)			
MV21		2000 (138)	0.032 (0.8)	No	1°
MV22	-10 ~ 400 (-23 ~ 204)*	1000 (69)**	0.06 (1.5)	No	3°
MV23		1000 (69)**	0.13 (3.3)	Yes***	5°

\*: -10 to 300°F (-23 to 148°C) for Buna N

\*\* : 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.

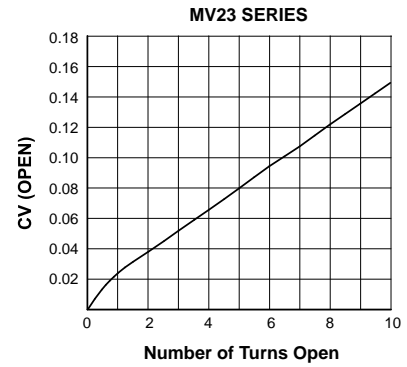
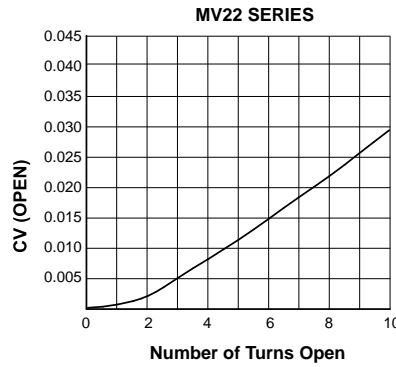
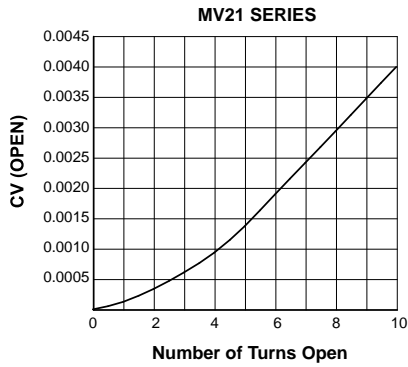
\*\*\*: NV23 series valves are not recommended for shutoff in vacuum or gas service, or for repetitive shutoff in liquid service.

## Materials of Construction

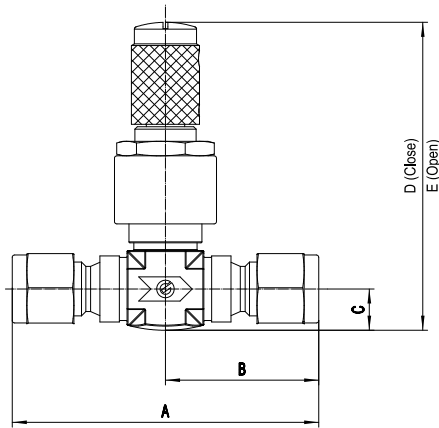


Components	Material
1 Handle	316 SS
2 Panel Nut	316 SS
3 Bonnet Sleeve	316 SS
4 Valve Stem	316 SS
5 Bonnet	316 SS
6 Lower Gland	PTEF
7 O-ring	Fluorine rubber
8 Body	316 SS

## CV-Number of Turns Open



## Dimensions



### Fractional Tube Fittings

Model	Orifice (mm)	CV	Connection Type		Dimension (in.)				
			Inlet	Outlet	A	B	C	D Close	E Open
SS-MV21-TF2	0.8	0.004	1/8" GENLOK		2.09	1.04	0.33	2.58	3.00
SS-MV21-TF4			1/4" GENLOK		2.31	1.15	0.33	2.58	3.00
SS-MV22-TF2	1.5	0.03	1/8" GENLOK		2.52	1.24	0.33	2.69	3.11
SS-MV22-TF4			1/4" GENLOK		2.52	1.24	0.33	2.69	3.11
SS-MV23-TF2	3.3	0.15	1/8" GENLOK		2.52	1.24	0.33	2.69	3.11
SS-MV23-TF4			1/4" GENLOK		2.52	1.24	0.33	2.69	3.11

### NPT Fittings

Model	Orifice (mm)	CV	Connection Type		Dimension (in.)				
			Inlet	Outlet	A	B	C	D Close	E Open
SS-MV21-NT2	0.8	0.004	1/8" Male NPT		2.31	1.15	0.33	2.58	3.00
SS-MV21-NT4			1/4" Male NPT		2.44	1.22	0.33	2.58	3.00
SS-MV21-FNT2			1/4" Female NPT		2.44	1.22	0.33	2.58	3.00
SS-MV22-NT2	1.5	0.03	1/8" Male NPT		2.52	1.24	0.33	2.69	3.11
SS-MV22-NT4			1/4" Male NPT		2.52	1.24	0.33	2.69	3.11
SS-MV22-FNT2			1/4" Female NPT		2.52	1.24	0.33	2.69	3.11
SS-MV22-NT2	3.3	0.15	1/8" Male NPT		2.52	1.24	0.33	2.69	3.11
SS-MV22-NT4			1/4" Male NPT		2.52	1.24	0.33	2.69	3.11
SS-MV22-FNT2			1/4" Female NPT		2.52	1.24	0.33	2.69	3.11

## Ordering Information

EX: SS -	MV22	M -	TF4 -	B
Body Material	Series	Knob	Inlet \ Outlet Connection	O-ring
SS: 316 SS	MV21 MV22 MV23	Blank: Slotted Handle M: Vernier Handle	TF4: 1/4" GENLOK TF2: 1/8" GENLOK NT4: 1/4" NPT NT2: 1/8" NPT FNT2: 1/8" NPT(F)	Blank: Standard B: Nitrile Butadiene Rubber A: Angle Pattern (MV22, MV23 available)