# MV-10 1/4" Manual 2 Way Valve

### **Product Overview**

The MV-10 PFA 2 Way Diaphragm Valve is designed for use in high purity semiconductor applications. It is also ideally suited for ultra-pure water and aggressive chemical or gas applications. The design utilizes a molded high purity PFA body with precision machined sealing areas. A one piece machined modified PTFE diaphragm is also utilized for excellent flexibility and life. A full 1/4" orifice provides maximum flow capability in a compact package.



# **Features**

One piece precision machined diaphragms manufactured from the latest technology modified PTFE. Provides over five times the flexural life as compared to conventional PTFE. Tongue and groove seat and diaphragm for positive through flow shut off and diaphragm to body seal.

PVDF coated stainless steel spring.

Quarter turn operation with removable handle for tamper resistance.

### **Benefits**

High cycle life.

Lower replacement costs.

Less downtime.

Reduces effects of corrosive environments.

Eliminates need for separate lockout device.

# **Specifications**

Materials of Construction

Wetted: PFA, Modified PTFE

Non-wetted: PFA, PVDF, 18-8 SS, Viton seals, PTFE coated SS springs

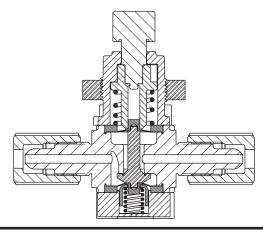
**Pressure Ranges** 

Forward: 27" HG vacuum (913 mbar) to 80 PSIG (5.5 bar) Backward: 27" HG vacuum (913 mbar) to 80 PSIG (5.5 bar)

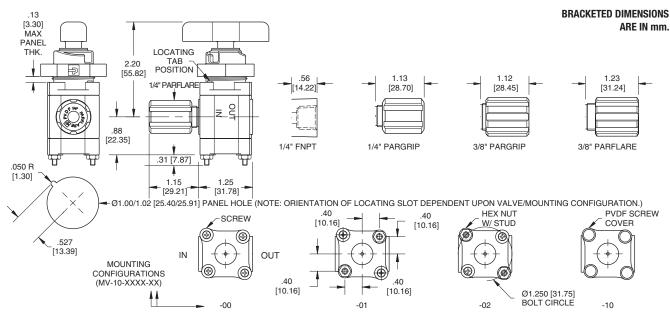
Pressure ranges for operation at ambient temperatures. For use at higher temperatures consult Pressure/Temperature chart on page 3.

### Temperature Ranges

Ambient: 0° - 150° F (17° - 66° C) Fluid: 0° - 266° F (17° - 130° C)



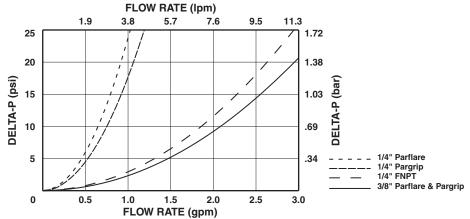




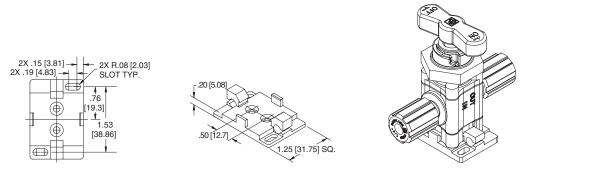
Model Number	Cv	Kv	Flow Configuration	Port Configuration	Mounting Configuration-XX (Depicted Above)
MV-10-1044-XX	.60	8.6		1/4" FNPT	
MV-10-2034-XX	.24	3.4	ON/OFF	1/4" Pargrip	00 = Screw 01 = Screw/Stud .80 Square 02 = Screw/Stud Ø1.25 Bolt Circle 10 = PVDF Screw Covers
MV-10-2046-XX	.62	8.8		3/8" Pargrip	
MV-10-6024-XX	.20	2.8		1/4" Parflare	
MV-10-6046-XX	.62	8.8		3/8"" Parflare	

Pargrip models are supplied with PFA nuts. Parflare models are supplied with PVDF nuts. For PFA nuts add -T to model number.

### PRESSURE DROP VS. FLOW RATE



Accessories	Description
SB-10	PVDF Snap-in Mounting Base. For use with MV-10-XXXX-00 and MV-10-XXXX-10 models only. (Sold separately)





# MV-10 1/4" Manual 3 Way Valve

### **Product Overview**

The MV-10 PFA 3 Way Diaphragm Valve is designed for use in high purity semiconductor applications. It is also ideally suited for ultra-pure water and aggressive chemical or gas applications. The design utilizes a molded high purity PFA body with precision machined sealing areas. A one piece machined modified PTFE diaphragm is also utilized for excellent flexibility and life. A full 1/4" orifice provides maximum flow capability in a compact package.



# **Features**

One piece precision machined diaphragms manufactured from the latest technology modified PTFE. Provides over five times the flexural life as compared to conventional PTFE. Tongue and groove seat and diaphragm for positive through flow shut off and diaphragm to body seal.

PVDF coated stainless steel spring.

Quarter turn operation with removable handle for tamper resistance.

### **Benefits**

High cycle life.

Lower replacement costs.

Less downtime.

Reduces effects of corrosive environments.

Eliminates need for separate lockout device.

# **Specifications**

Materials of Construction

Wetted: PFA, Modified PTFE

Non-wetted: PFA, PVDF, 18-8 SS, Viton seals, PTFE coated SS springs

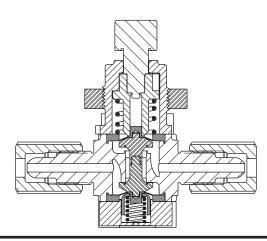
**Pressure Ranges** 

Forward: 27" HG vacuum (913 mbar) to 80 PSIG (5.5 bar) Backward: 27" HG vacuum (913 mbar) to 80 PSIG (5.5 bar)

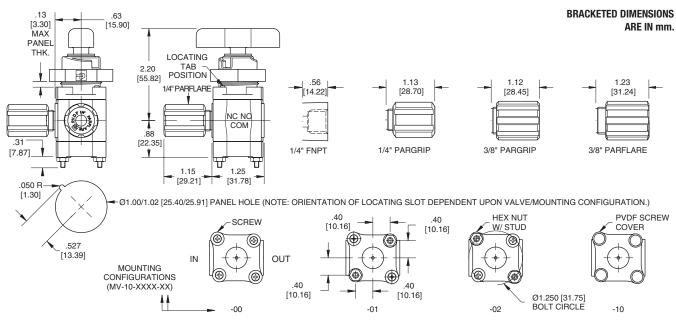
Pressure ranges for operation at ambient temperatures. For use at higher temperatures consult Pressure/Temperature chart on page 3.

### Temperature Ranges

Ambient:  $0^{\circ} - 150^{\circ} \text{ F } (17^{\circ} - 66^{\circ} \text{ C})$ Fluid:  $0^{\circ} - 266^{\circ} \text{ F } (17^{\circ} - 130^{\circ} \text{ C})$ 







Model Number	Cv	Kv	Flow Configuration	Port Configuration	Mounting Configuration-XX (Depicted Above)
MV-10-1344-XX	.60	8.6	3 WAY	1/4" FNPT	00 = Screw 01 = Screw/Stud .80 Square 02 = Screw/Stud Ø1.25 Bolt Circle 10 = PVDF Screw Covers
MV-10-2334-XX	.24	3.4		1/4" Pargrip	
MV-10-2346-XX	.62	8.8		3/8" Pargrip	
MV-10-6324-XX	.20	2.8		1/4" Parflare	
MV-10-6346-XX	.62	8.8		3/8"" Parflare	

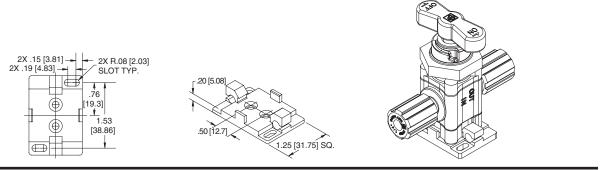
Pargrip models are supplied with PFA nuts. Parflare models are supplied with PVDF nuts. For PFA nuts add -T to model number.

PRESSURE DROP VS. FLOW RATE

FLOW RATE (gpm)

#### FLOW RATE (Ipm) 1.9 3.8 5.7 9.5 11.3 25 1.72 1.38 20 DELTA-P (psi) **DELTA-P** (bar) 1.03 15 10 .69 1/4" Parflare 5 .34 1/4" Pargrip 1/4" FNPT 3/8" Parflare & Pargrip

Accessories	Description
SB-10	PVDF Snap-in Mounting Base. For use with MV-10-XXXX-00 and MV-10-XXXX-10 models only. (Sold separately)



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