

PV-12 1" Pneumatic 2 Way Valve

Product Overview

The PV-12 Diaphragm Valve is designed for use in high purity semiconductor applications, and 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 seat and diaphragm sealing areas. A one piece machined modified PTFE diaphragm is also utilized for excellent flexibility and life. A full 1" orifice provides maximum flow capability in a compact package.



Features

One piece precision machined diaphragm 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.

Submersible option isolates all valve components from the external environment.

Benefits

High cycle life.

Lower replacement costs.

Less downtime.

Reduces effects of corrosive environments.

Valve remains functional while operating in wet or gaseous corrosive environments.

Specifications

Materials of Construction

Wetted: PFA, Modified PTFE

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

Pressure Ranges

Forward: 27" HG vacuum (913 mbar) to 100 PSIG (7 bar)

Backward: 80 PSIG (5.5 bar) with 100 PSIG (3.4 bar) inlet pressure
100 PSIG (7 bar) with 60 PSIG (4.2 bar) inlet pressure

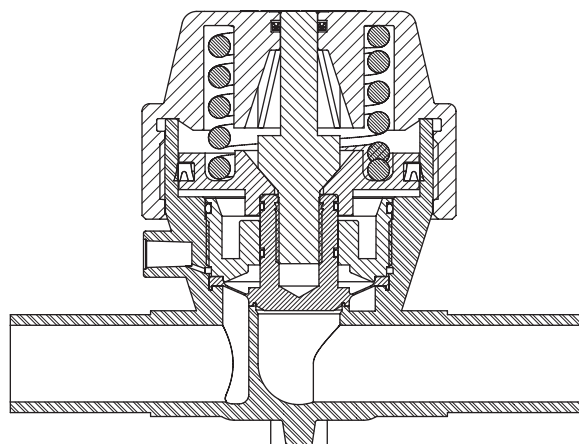
Actuator: 60 PSIG (4.2 bar) to 100 PSIG (7 bar)

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)

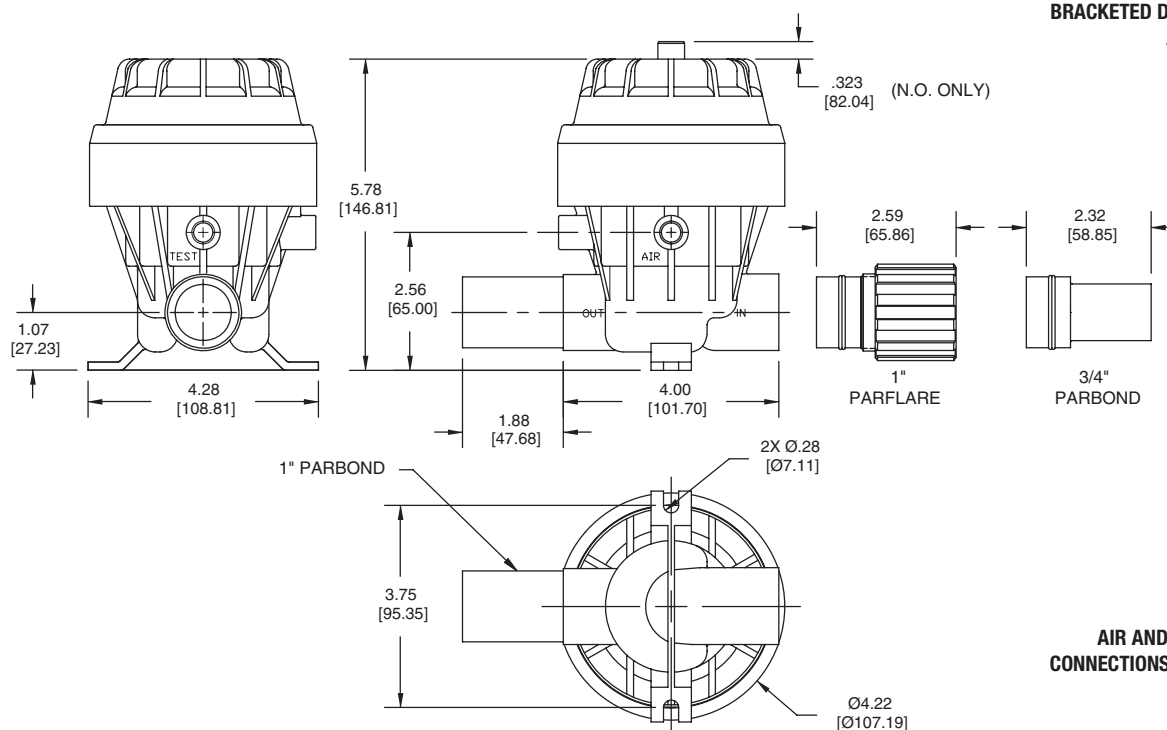
Fluid: 0° - 266° F (-17° - 130° C)



Normally Closed shown

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BRACKETED DIMENSIONS
ARE IN mm.



AIR AND TEST PORT
CONNECTIONS, 1/8" FNPT

Model Number	Cv	Kv	Flow Config.	Port Config.	Model Number	Cv	Kv	Flow Config.	Port Config.
PV-12-001	15.7	224.2	N C	1" Parbond	PV-12-005	15.7	224.2	N O	1" Parbond
PV-12-002	13.3	189.9		1" Parflare	PV-12-006	13.3	189.9		1" Parflare
PV-12-003	9.6	142.8		3/4" Parbond	PV-12-007	9.6	142.8		3/4" Parbond

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

PRESSURE DROP VS. FLOW RATE

