

LOW PRESSURE PNEUMATIC DIAPHRAGM VALVE

STD TYPE

FEATURES

- Reduced inner capacity
- Electropolished, D.I. water cleaned, assembled, tested and packaged in a certified clean room
- Minimal contributions of Moisture, Oxygen and Hydrocarbon
- Permanently heat code laser marked; material traceable to original mill certificate of test
- Hastelloy® C-22™ and custom configurations available upon request



MAJOR SPECIFICATIONS

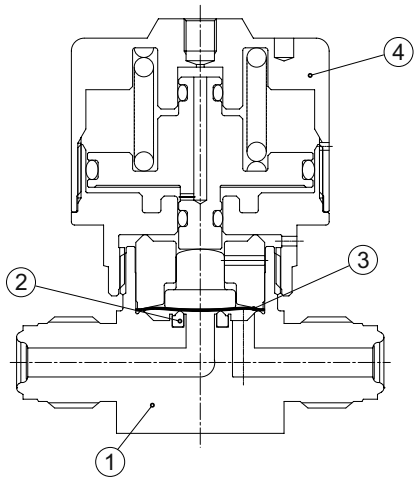
Size	1/4"	3/8", 1/2"	3/4"
Cv Value	0.3	0.7	0.7
Orifice Size	4.5mm	7mm	7mm
Max. Working Pressure (G.)	1MPa		
Operating Pressure (G.)	0.4 ~ 0.6MPa		
Max. Working Temp.	PCTFE : -10°C ~ 80°C / PI, PFA : -10°C ~ 150°C		
Internal Leakage Allowance (He)	1x10 ⁻¹⁰ Pa · m ³ /s		
Test Pressure ≤ 1×10⁻² Torr			
Holding Time ≥ 15 sec.			
External Leakage Allowance (He)	1x10 ⁻¹⁰ Pa · m ³ /s		
Test Pressure ≤ 1×10⁻² Torr			
Holding Time ≥ 1 min.			
Particle Inspection (EP only)	No count		
Pressure : 60~80psi N₂ Gas			
Sample Volume : 1CFM			
0.1µm and Larger			

PRODUCT GRADE

GRADE	AP	BA	EP
Inner Surface Roughness	Ry ≤ 25µm Cut off Length : 2.5mm Measuring Length : 12.5mm	Ry ≤ 3.0µm 10 µinch Ra(Avg.) Cut off Length : 0.8mm Measuring Length : 4mm	Ry ≤ 0.7µm 5 µinch Ra(Avg.) Cut off Length : 0.25mm Measuring Length : 1.25mm
Polishing	Machining Finish	Machining Finish	Electro Polishing Finish

MATERIAL

NO.	NAME	MATERIAL
1	Body	316L Stainless Steel 316L Stainless Steel VAR 304 Stainless Steel
2	Seat	PCTFE / PI / PFA
3	Diaphragm	Ni-Co Alloy
4	Actuator	Aluminum



ORDERING INFORMATION

S
4
PDVN
VM
C
X1
P

Material
Size
Product
Connection
Operation Method
Option
Grade

MATERIAL	SIZE	CONNECTION	OPERATION METHOD	OPTION	GRADE
S 316L Stainless Steel	4 1/4"	VM MFS Male	C Normally Close	×47 Constant Bleed ø0.3	AP AP Grade
D 316L Stainless Steel VAR	6 3/8"	VF MFS Female	O Normally Open	×59 Constant Bleed ø0.6	BLANK BA Grade
4S 304 Stainless Steel	8 1/2"	SW Lok			P EP Grade
	12 3/4"	TW Butt Weld			

MODEL	CONNECTION	SIZE	A	B	C	D	E	F	G
	MFS Male	1/4"	57	11	64.3	40	26	25.4	
		3/8"	76.2	16	83.8	55	37	28	
		1/2"	76.2	16	83.8	55	37	28	
		3/4"	122	22	89.8	55	37	28	
	MFS Female	1/4"	70.6	11	64.3	40	26	25.4	
		3/8"	83	16	83.8	55	37	28	
		1/2"	83	16	83.8	55	37	28	
		3/4"	122	22	89.8	55	37	28	
	Lok	1/4"	69.5	11	64.3	40	26	25.4	55
		3/8"	82.5	16	83.8	55	37	28	68
		1/2"	91	16	83.8	55	37	28	70
		3/4"	106	22	89.8	55	37	28	84
	Butt Weld	1/4"	54	11	64.3	40	26	25.4	
		3/8"	69	16	83.8	55	37	28	
		1/2"	69	16	83.8	55	37	28	
		3/4"	150	22	89.8	55	37	28	