

HIGH FLOW MANUAL BLOCK DIAPHRAGM VALVE

STD TYPE

FEATURES

- Internally threadless and springless
- Fully functional from a vacuum to 275psig
- Aerodynamic, fully swept flow passages
- Minimum particle generation and particle entrapment areas
- 100% Helium leak tested



MAJOR SPECIFICATIONS

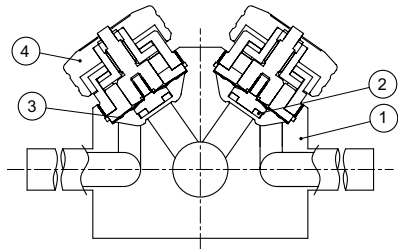
Size	Main : 1/2", 3/4", 1", 1-1/2", 2"	Branch : 1/4", 3/8", 1/2", 3/4", 1"
Cv Value	2.8	
Max. Working Pressure (G.)	1.86MPa	
Max. Working Temp.	-10°C ~ 80°C	
Internal Leakage Allowance (He)		
Test Pressure $\leq 1 \times 10^{-2}$ Torr	1x10 ⁻¹⁰ Pa · m ³ /s	
Holding Time ≥ 30 sec.		
External Leakage Allowance (He)		
Test Pressure $\leq 1 \times 10^{-2}$ Torr	1x10 ⁻¹⁰ Pa · m ³ /s	
Holding Time ≥ 1 min.		
Particle Inspection (EP only)		
Pressure : 60~80psi N₂ Gas		
Sample Volume : 1CFM		
0.1µm and Larger	No count	

PRODUCT GRADE

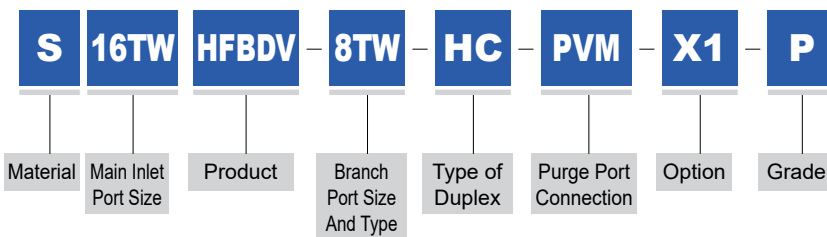
GRADE	AP	BA	EP
Inner Surface Roughness	Ry $\leq 25\mu\text{m}$ Cut off Length : 2.5mm Measuring Length : 12.5mm	Ry $\leq 3.0\mu\text{m}$ 10 µinch Ra(Avg.) Cut off Length : 0.8mm Measuring Length : 4mm	Ry $\leq 0.7\mu\text{m}$ 5 µinch Ra(Avg.) Cut off Length : 0.25mm Measuring Length : 1.25mm
Polishing	Machining Finish	Machining Finish	Electro Polishing Finish

MATERIAL

NO.	NAME	MATERIAL
1	Body	316L Stainless Steel 316L Stainless Steel VAR 304 Stainless Steel
2	Disk	PCTFE
3	Diaphragm	316L Stainless Steel
4	Handle	Aluminum



ORDERING INFORMATION



MATERIAL	MAIN INLET PORT SIZE	BRANCH PORT SIZE AND TYPE	TYPE OF DUPLEX	PURGE PORT CONNECTIONS	GRADE
S 316L Stainless Steel	8TW 1/2" Tube	4TW 1/4" Tube	HC Horizontal Cross	BLANK NO	AP AP Grade
D 316L Stainless Steel VAR	12TW 3/4" Tube	6TW 3/8" Tube	HT Horizontal Tee	PVM 1/4" MFS Male	BLANK BA Grade
4S 304 Stainless Steel	16TW 1" Tube	8TW 1/2" Tube	VT Vertical Tee		P EP Grade
	24TW 1-1/2" Tube	12TW 3/4" Tube			
	32TW 2" Tube (Not available Vertical Tee)	16TW 1" Tube			
		8VM 1/2" MFS Male			
		8VF 1/2" MFS Female			

MAIN & BRANCH PORT LOCATION

Main Port Tube Dia.	Horizontal Cross(HC)	Horizontal Tee(HT)	Vertical Tee(VT)
1/2"	15.7	15.7	15.7
3/4"	15.7	15.7	15.7
1"	15.7	15.7	15.7
1-1/2"	31.7	31.7	31.7
2"	31.7	31.7	N/A

