

LOW PRESSURE MANUAL DIAPHRAGM VALVE

WELD TEE & VALVE TYPE

FEATURES

- Used in sub-main or after of the bulk gas piping system
- Developed for low cost
- Simple and easy to use
- Minimal contributions of Moisture, Oxygen and Hydrocarbon
- Component parts are reduced to minimum



MAJOR SPECIFICATIONS

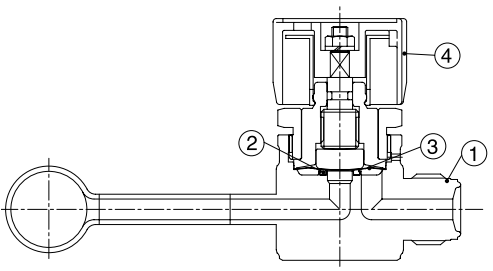
Size	1/4"	3/8", 1/2"	3/4"
Cv Value	0.3	0.7	0.7
Orifice Size	4.5mm	6.5mm	6.5mm
Max. Working Pressure (G.)	1MPa		
Max. Working Temp.	PCTFE : -10°C ~ 80°C / PI, PFA : -10°C ~ 150°C		
Internal Leakage Allowance (He)	1x10 ⁻¹⁰ Pa · m ³ /s		
Test Pressure ≤ 1×10⁻⁴ Torr			
Holding Time ≥ 30 sec.			
External Leakage Allowance (He)	1x10 ⁻¹⁰ Pa · m ³ /s		
Test Pressure ≤ 1×10⁻⁴ 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

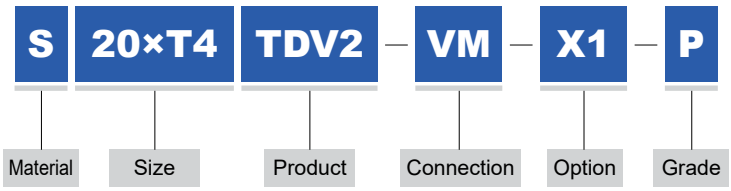
GRADE	AP	BA	EP
Inner Surface Roughness	Ry ≤ 25µm Cut off Length : 2.5mm Measuring Length : 12.5mm	Ry ≤ 3.0µm 10 µinch Ra(Avg.) Cut off Length : 0.8mm Measuring Length : 4mm	Ry ≤ 0.7µm 5 µinch Ra(Avg.) Cut off Length : 0.25mm Measuring Length : 1.25mm
Polishing	Machining Finish	Machining Finish	Electro 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	Handle	HI-100



ORDERING INFORMATION



MATERIAL	SIZE	CONNECTION	GRADE
S 316L Stainless Steel	20xT4	20Ax1/4"	VM MFS Male AP Grade
D 316L Stainless Steel VAR	20xT6	20Ax3/8"	VF MFS Female BLANK BA Grade
4S 304 Stainless Steel	20xT8	20Ax1/2"	SW Lok P EP Grade
	20xT12	20Ax3/4"	TW Butt Weld

MODEL	CONNECTION	SIZE	A	B	C	D	E	H
	MFS Male	1/4"	98.5	11	66	17	45	113.5
		3/8"	121.5	16	77	28	45	138.5
		1/2"	121.5	16	77	28	45	138.5
		3/4"	158.9	22	85	28	45	172.5
	MFS Female	1/4"	105.9	11	66	17	45	123.8
		3/8"	135.8	16	77	28	45	149.4
		1/2"	135.8	16	77	28	45	149.4
		3/4"	141.8	22	85	28	45	155.4
	Lok	1/4"	98.4	11	66	17	45	112
		3/8"	117.5	16	77	28	45	131.1
		1/2"	118.5	16	77	28	45	132.1
		3/4"	155	22	85	28	45	168.6
	Butt Weld	1/4"	138.4	11	66	17	45	152
		3/8"	157	16	77	28	45	170.6
		1/2"	157	16	77	28	45	170.6
		3/4"	155	22	85	28	45	168.6