

MDV1 Diaphragm Valves

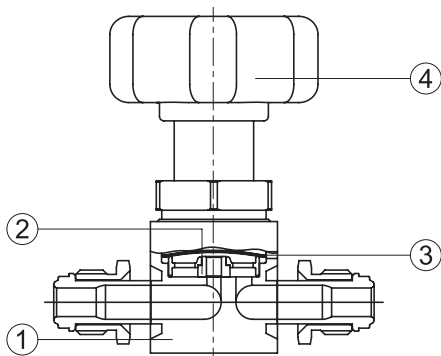
Medium Pressure Manual Diaphragm Valves (Standard Type)



Specifications

Size	1/4"
Cv Value	0.3
Orifice Size	6.3 mm
Max. Working Pressure	20 bar (290 psig)
Working Temperature	PCTFE: -10 ~ 80°C (14 ~ 176°F) / PFA, PI: -10 ~ 150°C (14 ~ 302°F)
Internal Leakage Allowance (He) (Holding Time ≥ 15 sec.)	≤1x10 ⁻⁹ atm.cc/s
Inboard Leakage Allowance (He) (Holding Time ≥ 15 sec.)	≤1x10 ⁻⁹ atm.cc/s
Particle Inspection (EP Only) (0.1µm and Larger)	No Count
Inner Surface Roughness	MP: Ra ≤ 20 µin, Ry ≤ 6 µm BA: Ra ≤ 10 µin, Ry ≤ 3 µm EP: Ra ≤ 5 µin, Ry ≤ 0.7 µm

Material

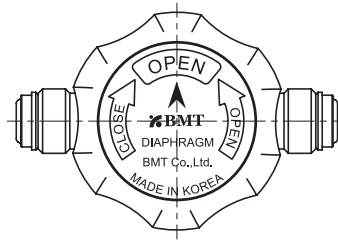
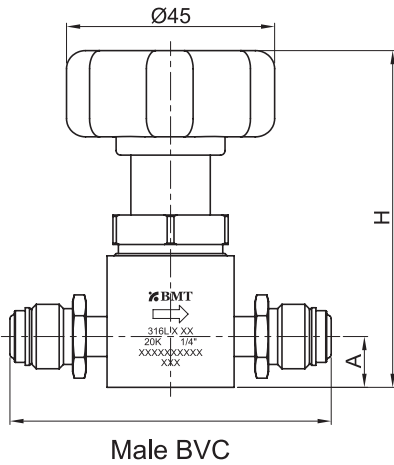


No.	Component	Material
1	Body	316L Stainless Steel 316L Stainless Steel VAR 304 Stainless Steel
2	Seat	PCTFE (<i>standard</i>) / PFA / PI
3	Diaphragm	Ni-Co Alloy
4	Handle	Aluminium

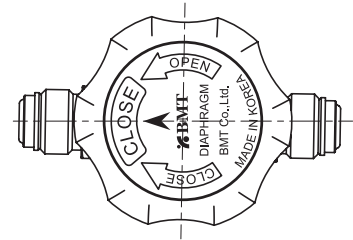
NOTE:

·Dimensions and Drawings are for reference only and are subject to change without prior notice.
·Unless otherwise specified, all dimensions are in millimeters.

Dimensions



Open



Close

End Connection	Part No.	Dimensions (mm)					
		L	H	A	E (Φ)	F	G
Male BVC	SMMDV1-VM4	70.6	76.2	11.2	25.4	28	28
Female BVC	SMMDV1-VF4	70.6	76.2	11.2	25.4	28	28

NOTE:

- Dimensions and Drawings are for reference only and are subject to change without prior notice.
- Unless otherwise specified, all dimensions are in millimeters.

Ordering Information

A	MDV1	-	B	C	-	D	-	E
SM	MDV1		VM	4				P

Standard feature
Optional

A	Materials	
SM	316L Stainless Steel	
DM	316L Stainless Steel VAR	
4SS	304 Stainless Steel	

B	Connection Type	
VM	Male BVC (BMT Vacuum Coupling)	
VF	Female BVC (BMT Vacuum Coupling)	
S	SUPERLOK Tube Fitting	
TW	Butt Weld	

C	Connection Size			
ASTM Tube				
Designator	Nominal Size	Outside Diameter	Wall Thickness	
4	1/4 in.	6.35 mm	1.00 mm	

D	Seat Material	
PCTFE is standard. No part designator needed.		
PA	PFA	
PI	PI	

E	Wetted Surface Grade	
BA is standard. No part designator needed.		
P	EP	
MP	MP	

Part Number Examples

	DMMDV1-VM4		SMMDV1-VF4-P	
Material	DM	316L Stainless Steel VAR	SM	316L Stainless Steel
Series	MDV1	MDV1 series	MDV1	MDV1 series
Operation Method	<i>Omit for Manual Valves</i>		<i>Omit for Manual Valves</i>	
Connection Type	VM	BVC Male	VF	BVC Female
Connection Size	4	1/4"	4	1/4"
Seat Material	PCTFE (standard)		PCTFE (standard)	
Grade	BA grade (standard)		P	EP grade

NOTE:

·Dimensions and Drawings are for reference only and are subject to change without prior notice.
 ·Unless otherwise specified, all dimensions are in millimeters.