

MPDV1 Diaphragm Valves

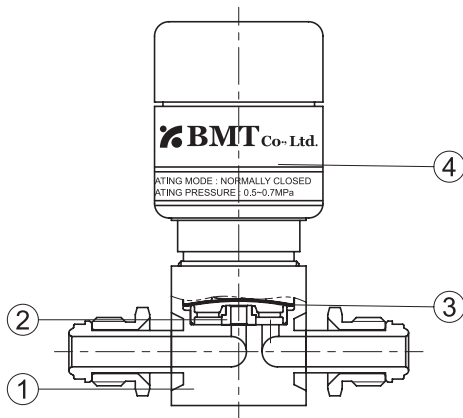
Medium Pressure Pneumatic Diaphragm Valves (Standard Type) - N.O/N.C



Specifications

Size	1/4"
Cv Value	0.3
Orifice Size	6.3 mm
Operating Pressure	0.5 ~ 0.7 MPa (73 ~ 101 psig)
Max. Working Pressure	20 bar (290 psig)
Working Temperature	PCTFE: -10 ~ 80°C (14 ~ 176°F) / PFA, PI: -10 ~ 150°C (14 ~ 302°F)
Inboard Leak Test Rates (He) (Holding Time ≥ 15 sec.)	≤1x10 ⁻⁹ atm.cc/sec
Across the Seat Leak Test Rates (He) (Holding Time ≥ 15 sec.)	≤1x10 ⁻⁹ atm.cc/sec
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

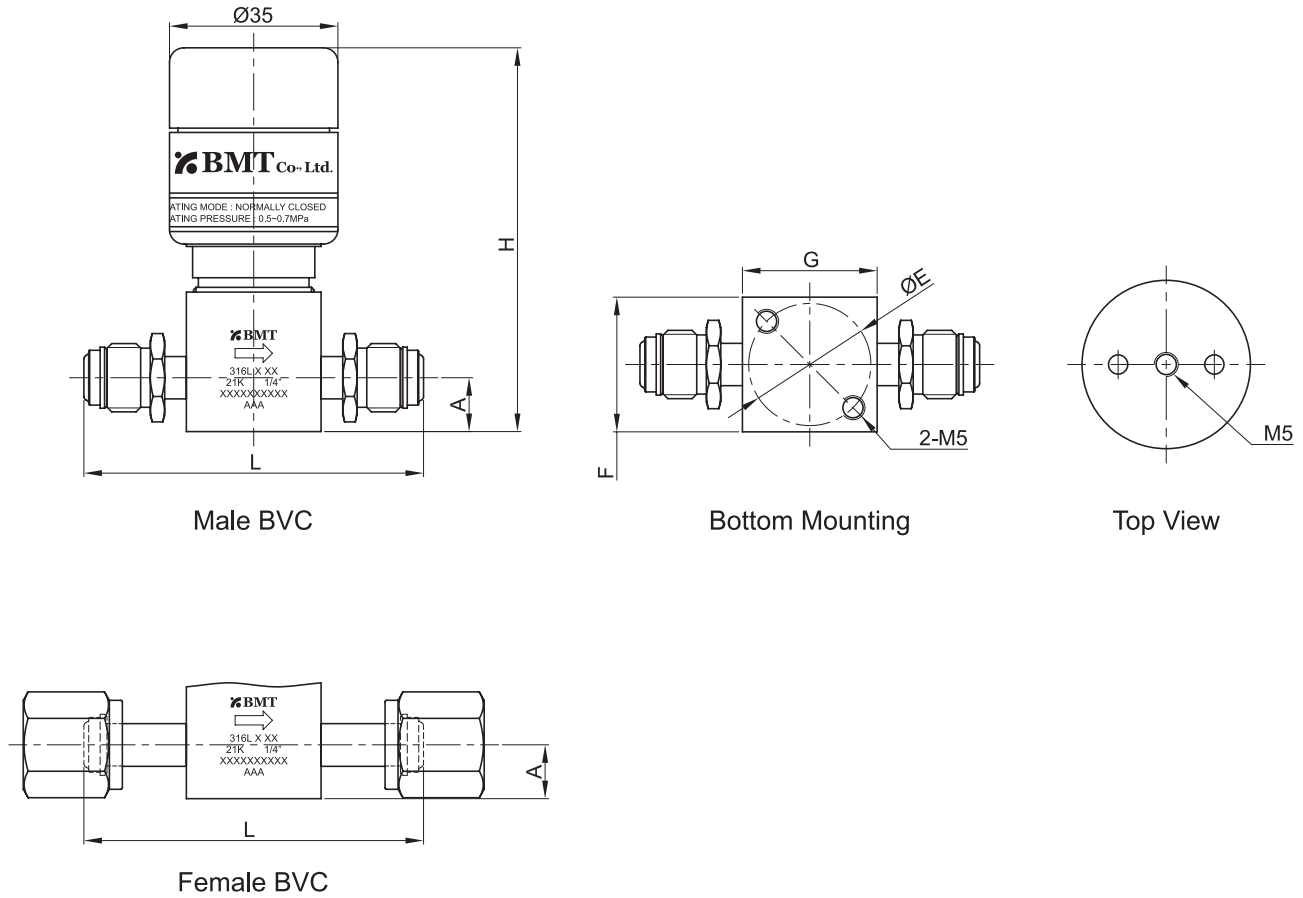


No.	Component	Material
1	Body	316L Stainless Steel
		316L Stainless Steel VAR
		304 Stainless Steel
2	Seat	PCTFE (<i>standard</i>) / PFA / PI
3	Diaphragm	Ni-Co Alloy
4	Actuator	304 Stainless Steel

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



End Connection	Part No.	Dimensions (mm)					
		L	H	A	E (\varnothing)	F	G
Male BVC	SMMPDV1C-VM4	70.6	80	11.2	25.4	28	28
Female BVC	SMMPDV1C-VF4	70.6	80	11.2	25.4	28	28

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Ordering Information

Medium Pressure Pneumatic Diaphragm Valves (Standard Type) - N.O/N.C
*Additional configurations available upon request.

A	MPDV1	B	-	C	D	-	E	-	F	
SM	MPDV1	C	-	VM	4	-	PA	-	P	

A Standard feature
E Optional

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

B	Operation Method	
Add an operation method designator for Pneumatic Valves .		
C	Normally Closed	
O	Normally Open	

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

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

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

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

Part Number Examples

	DMMPDV1C-VM4		SMMPDV10-VF4-PA-P	
Material	DM	316L Stainless Steel VAR	SM	316L Stainless Steel
Series	MPDV1	MPDV1 series	MPDV1	MPDV1 series
Operation Method	C	Normally Closed	O	Normally Open
Connection Type	VM	BVC Male	VF	BVC Female
Connection Size	4	1/4"	4	1/4"
Seat Material		PCTFE (standard)	PA	PFA
Grade		BA grade(standard)	P	EP grade

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