

MFPDV1 Diaphragm Valves

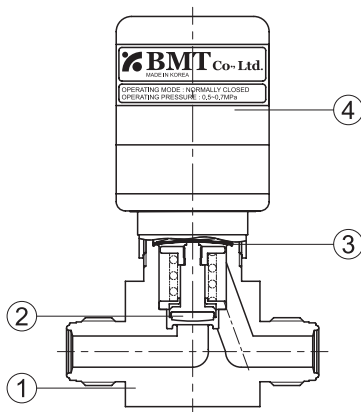
Medium Pressure Pneumatic Diaphragm Valves (High Flow Type) - N.O/N.C



Specifications

Size	1/2"
Cv Value	1.5
Orifice Size	10.2 mm
Max. Working Pressure	20 bar (290 psig)
Operating Pressure	0.5 ~ 0.7 MPa (73 ~ 101 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

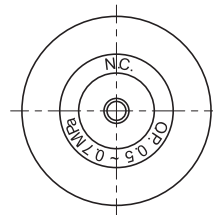
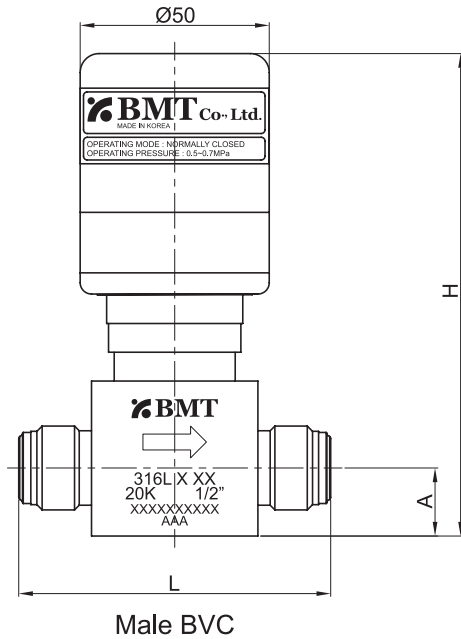


No.	Component	Material
1	Body	316L Stainless Steel
		316L Stainless Steel VAR
		304 Stainless Steel
2	Seat	PCTFE (<i>standard</i>) / PFA / PI
3	Diaphragm	Ni-Co Alloy
4	Actuator	Aluminium

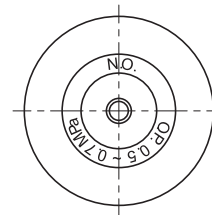
NOTE:

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

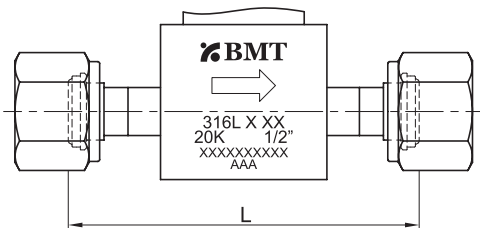
Dimensions



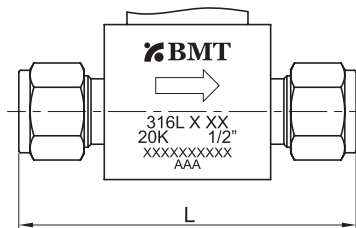
Normal Close



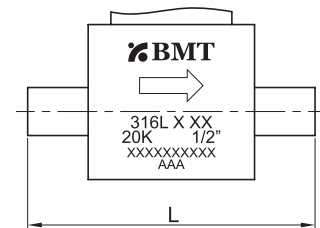
Normal Open



Female BVC



SUPERLOK Tube Fitting



Tube Butt Weld

End Connection	Part No.	Dimensions (mm)					
		L	H	A	E (Φ)	F	G
Male BVC	SMMFPDV1C-VM8	82.5	127.6	18	38	38	44
Female BVC	SMMFPDV1-VF8	92.8	127.6	18	38	38	44
SUPERLOK Tube Fitting	SMMFPDV1-S8	89.2	127.6	18	38	38	44
Tube Butt Weld	SMMFPDV1-TW8	76	127.6	18	38	38	44

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Ordering Information

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

*Additional configurations available upon request.

A	MFPDV1	B	-	C	D	-	E	-	F	
SM	MFPDV1	C	-	VM	4	-	PA	-	P	

A Standard feature
MFPDV1 Standard feature
B Optional
C Standard feature
D Standard feature
E Optional
F 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	
VMXVF	In Male-Out Female	

D	Connection Size			
	Designator	Nominal Size	Outside Diameter	Wall Thickness
	8	1/2 in.	12.7 mm	1.24 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	
AP	AP	

Part Number Examples

	DMMFPDV1C-VM8		SMMFPDV10-VM8-PA-P	
Material	DM	316L Stainless Steel VAR	SM	316L Stainless Steel
Series	MFPDV1	MFPDV1 series	MFPDV1	MFPDV1 series
Operation Method	C	Normally Closed	O	Normally Open
Connection Type	VM	BVC Male	VM	BVC Male
Connection Size	8	1/2"	8	1/2"
Seat Material		PCTFE (standard)	PA	PFA
Grade		BA grade (standard)	P	EP grade

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