

HPFPDV1 Diaphragm Valves

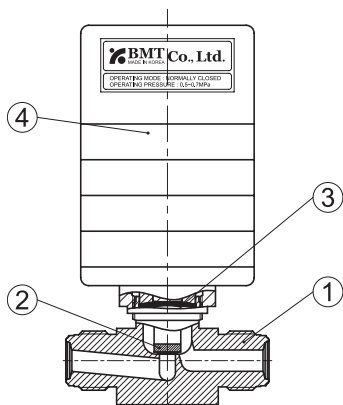
High Pressure Pneumatic Diaphragm Valves (High Flow Type) - N.C



Specifications

Size	1/2"
Cv Value	0.5
Orifice Size	6 mm
Max. Working Pressure (Positive Pressure / Back Pressure)	210 bar (3,045 psig)
Operating Pressure	0.5 ~ 0.7 Mpa
Max. Working Temperature	PCTFE: -10 ~ 40°C (14 ~ 104°F) / 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)	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

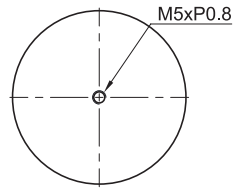
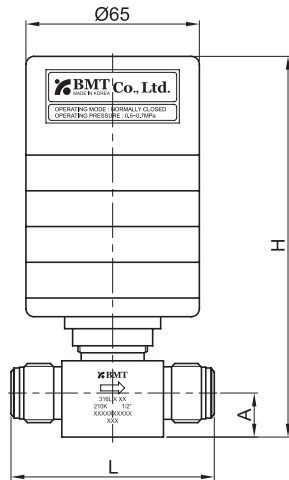


No.	Component	Material
1	Body	316L Stainless Steel
		316L Stainless Steel VAR
2	Seat	304 Stainless Steel
		PCTFE (<i>standard</i>) / PI
3	Diaphragm	Ni-Co Alloy
4	Actuator	Aluminium

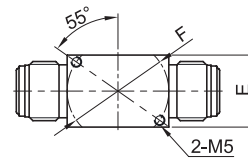
NOTE:

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

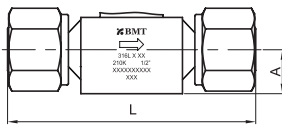
Dimensions



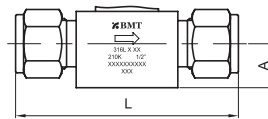
Top View



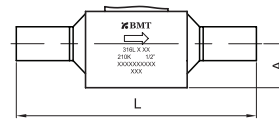
Bottom Mounting



Female BVC



SUPERLOK Tube Fitting



Tube Butt Weld

End Connection	Part No.	Dimensions (mm)				
		L	H	A	E	F
Male BVC	SMHPPDV1C-VM8	76	142	16.5	27	38
Female BVC	SMHPPDV1C-VF8	90	142	16.5	27	38
SUPERLOK Tube Fitting	SMHPPDV1C-S8	90	142	16.5	27	38
Tube Butt Weld	SMHPPDV1C-TW8	90	142	16.5	27	38

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Ordering Information

High Pressure Pneumatic Diaphragm Valves (High Flow Type) - N.C.
 *Additional configurations available upon request.

A	HPFPDV1	B	-	C	D	-	E	Standard feature
DM	HPFPDV1	C	-	VM	8	-	P	Optional

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

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

B	Operation Method	
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			
ASTM Tube				
	Designator	Nominal Size	Outside Diameter	Wall Thickness
	8	1/2 in.	12.7 mm	1.24 mm

Part Number Examples

	DMHPFPDV1C-VM8-P		SMHPFPDV1C-VF8-P	
Material	DM	316L Stainless Steel VAR	SM	316L Stainless Steel
Series	HPFPDV1	HPFPDV1 series	HPFPDV1	HPFPDV1 series
Operation Method	C	Normally Closed	C	Normally Closed
Connection Type	VM	BVC Male	VF	BVC Female
Connection Size	8	1/2"	8	1/2"
Seat Material		PCTFE (standard)		PCTFE (standard)
Grade	P	EP grade	P	EP grade

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