

DV2 Diaphragm Valves

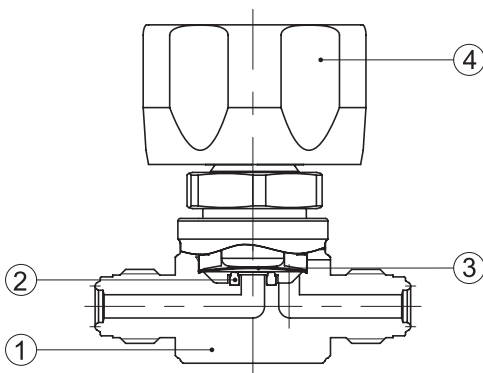
Low Pressure Manual Diaphragm Valves (Forged Type)



Specifications

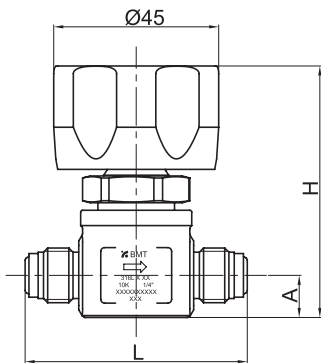
Size	1/4"	3/8", 1/2"	3/4"
Cv Value	0.3	0.7	0.7
Orifice Size	4.5 mm	7.0 mm	7.0 mm
Max. Working Pressure	10 bar (145 psig)		
Working Temperature	PCTFE: -10 ~ 80°C (14~176°F) / PFA, PI: -10 ~ 150°C (14 ~ 302°F)		
Internal Leakage Allowance (He) (Holding Time ≥ 15 sec.)	≤1x10 ⁻⁹ atm.cc/s		
Inboard Leakage Allowance (He) (Holding Time ≥ 15 sec.)	≤1x10 ⁻⁹ atm.cc/s		
Particle Inspection (EP Only) (0.1µm and Larger)	No Count		

Material

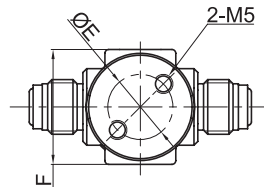


No.	Component	Material
1	Body	316L Stainless Steel
		316L Stainless Steel VAR
		304 Stainless Steel
2	Seat	PCTFE (<i>standard</i>) / PFA / PI
3	Diaphragm	Ni-Co Alloy
4	Handle	ABS

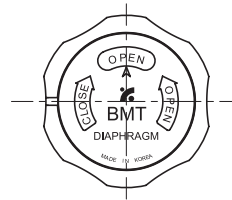
Dimensions



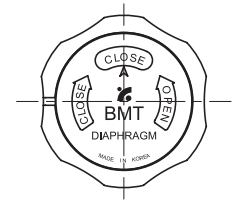
Male BVC



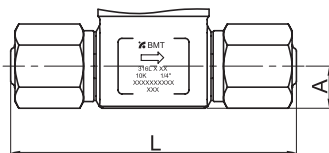
Bottom Mounting



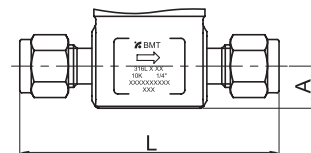
Handle Open



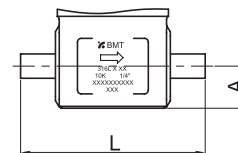
Handle Close



Female BVC



SUPERLOK Tube Fitting



Tube Butt Weld

End Connection	Part No.	Dimensions (mm)				
		L	H	A	E (Φ)	F
Male BVC	SMDV2-VM4	58	66	11	17	30
	SMDV2-VM6	76	77	16	28	40
	SMDV2-VM8	76	77	16	28	40
	SMDV2-VM12	122	86.4	22	28	40
Female BVC	SMDV2-VF4	78	66	11	17	30
	SMDV2-VF6	104.6	77	16	28	40
	SMDV2-VF8	104.6	77	16	28	40
	SMDV2-VF12	122	86.4	22	28	40
SUPERLOK Tube Fitting	SMDV2-S4	70.1	66	11	17	30
	SMDV2-S6	83	77	16	28	40
	SMDV2-S8	90.4	77	16	28	40
	SMDV2-S12	105	86.4	22	28	40
Tube Butt Weld	SMDV2-TW4	54	66	11	17	30
	SMDV2-TW6	69	77	16	28	40
	SMDV2-TW8	69	77	16	28	40
	SMDV2-TW12	150	86.4	22	28	40

*Dimensions and Drawings are for reference only and are subject to change without prior notice.

Ordering Information

Low Pressure Manual Diaphragm Valves (Forged Type)

*Additional configurations available upon request.

A	DV2	-	B	C	-	D	-	E	<div style="display: flex; align-items: center; gap: 5px;"> <div style="width: 15px; height: 10px; background-color: #ADD8E6; border: 1px solid black;"></div> Standard feature </div> <div style="display: flex; align-items: center; gap: 5px; margin-top: 5px;"> <div style="width: 15px; height: 10px; background-color: #F08080; border: 1px solid black;"></div> Optional </div>
SM	DV2		VM	4		PA		P	

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

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

B	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

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

C Connection Size			
ASTM Tube			
Designator	Nominal Size	Outside Diameter	Wall Thickness
4	1/4 in.	6.35 mm	1.00 mm
6	3/8 in.	9.53 mm	1.00 mm
8	1/2 in.	12.7 mm	1.24 mm
12	3/4 in.	19.05 mm	1.65 mm

Part Number Examples

	SMDV2-VF8		SMDV2-VM4-PA-P	
Material	SM	316L Stainless Steel	SM	316L Stainless Steel
Series	DV2	DV2 series	DV2	DV2 series
Operation Method		<i>Omit for Manual Valves</i>		<i>Omit for Manual Valves</i>
Connection Type	VF	BVC Female	VM	BVC Male
Connection Size	8	1/2"	4	1/4"
Flow Path		<i>Omit for DV2 series</i>		<i>Omit for DV2 series</i>
Seat Material		PCTFE (standard)	PA	PFA
Grade		BA grade (standard)	P	EP grade

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