

## DV2 Diaphragm Valves

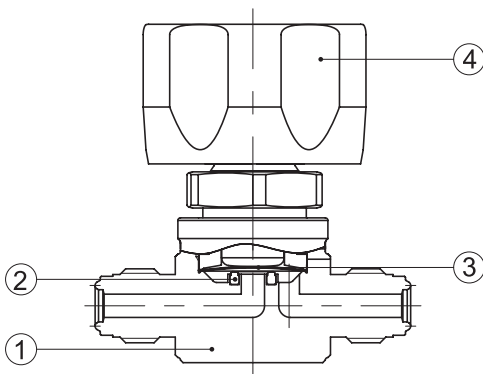
### Low Pressure Manual Diaphragm Valves (Forged Type)



#### 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)		
Inboard Leak Test Rates (He) (Holding Time ≥ 15 sec.)	≤1x10 <sup>-9</sup> atm.cc/s		
Across the Seat Leak Test Rates (He) (Holding Time ≥ 15 sec.)	≤1x10 <sup>-9</sup> 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

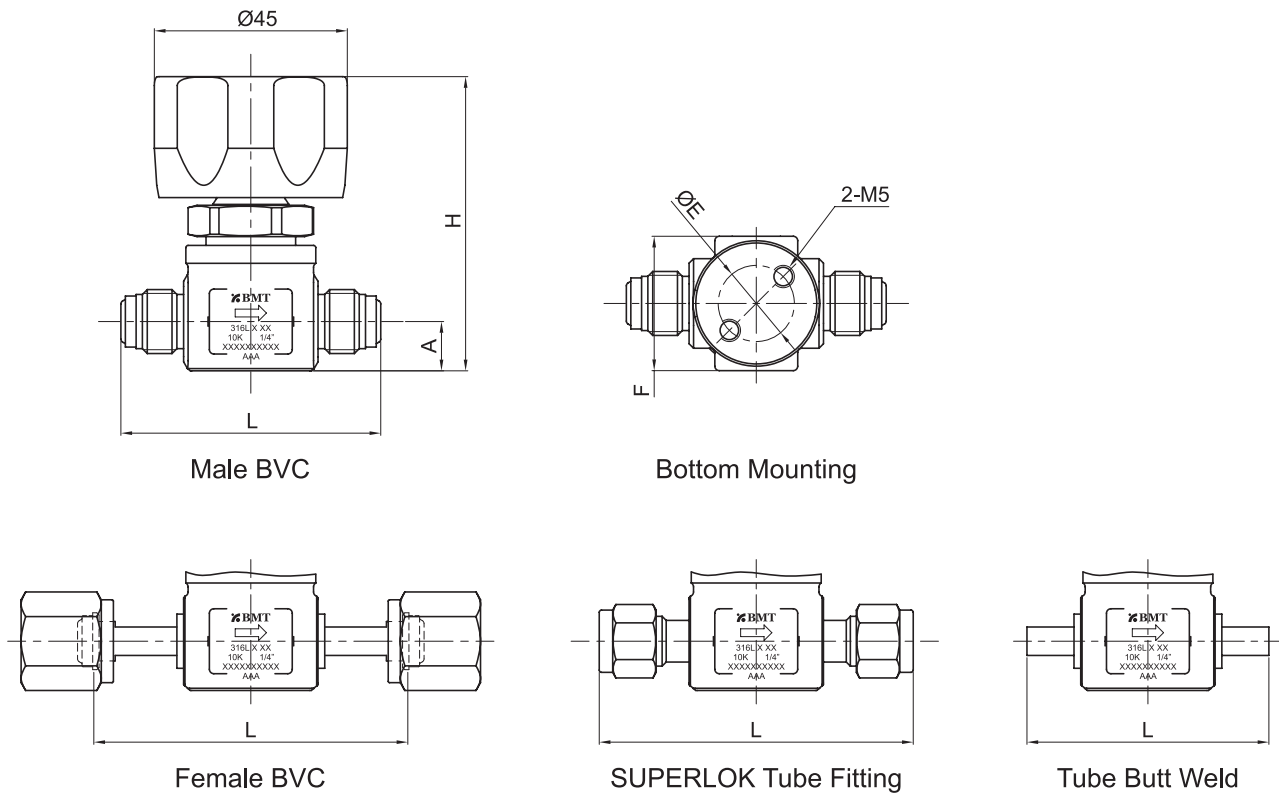


No.	Component	Material
1	Body	316L Stainless Steel
		316L Stainless Steel VAR
		304 Stainless Steel
2	Seat	PCTFE ( <i>standard</i> ) / PFA / PI
3	Diaphragm	Ni-Co Alloy
4	Handle	ABS

#### 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

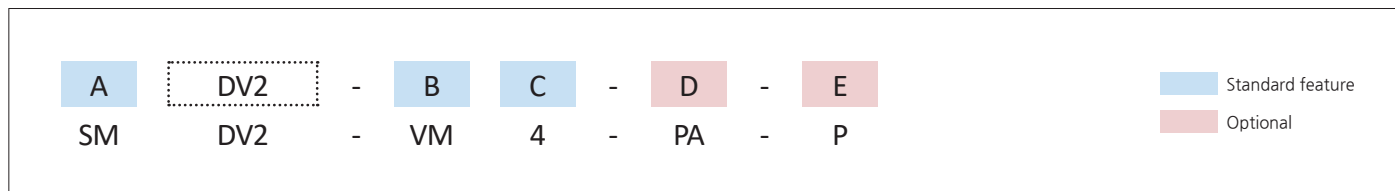


End Connection	Part No.	Dimensions (mm)				
		L	H	A	E (Φ)	F
Male BVC	SMDV2-VM4	58	67	11	17	30
	SMDV2-VM6	76	77	16	28	40
	SMDV2-VM8	76	77	16	28	40
	SMDV2-VM12	122	87.2	22	28	40
Female BVC	SMDV2-VF4	78	67	11	17	30
	SMDV2-VF6	104.6	77	16	28	40
	SMDV2-VF8	104.6	77	16	28	40
	SMDV2-VF12	122	87.2	22	28	40
SUPERLOK Tube Fitting	SMDV2-S4	70.1	67	11	17	30
	SMDV2-S6	84.8	77	16	28	40
	SMDV2-S8	90.4	77	16	28	40
	SMDV2-S12	105	87.2	22	28	40
Tube Butt Weld	SMDV2-TW4	54	67	11	17	30
	SMDV2-TW6	69	77	16	28	40
	SMDV2-TW8	69	77	16	28	40
	SMDV2-TW12	150	87.2	22	28	40

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## Ordering Information

Low Pressure Manual Diaphragm Valves (Forged Type)  
 \*Additional configurations available upon request.



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	
MP	MP	
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"
Seat Material		PCTFE (standard)	PA	PFA
Grade		BA grade (standard)	P	EP grade

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