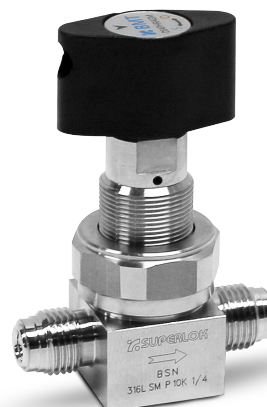


# SODV1 Diaphragm Valves

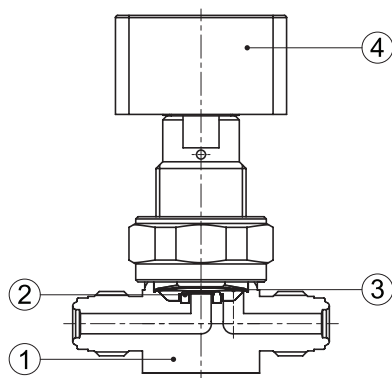
Low Pressure Manual Diaphragm Valves (Shutoff Type)



## 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 <sup>-9</sup> atm.cc/s		
Inboard Leakage Allowance (He) (Holding Time ≥ 15 sec.)	≤1x10 <sup>-9</sup> atm.cc/s		
Particle Inspection (EP Only) (0.1µm and Larger)	No Count		

## Material

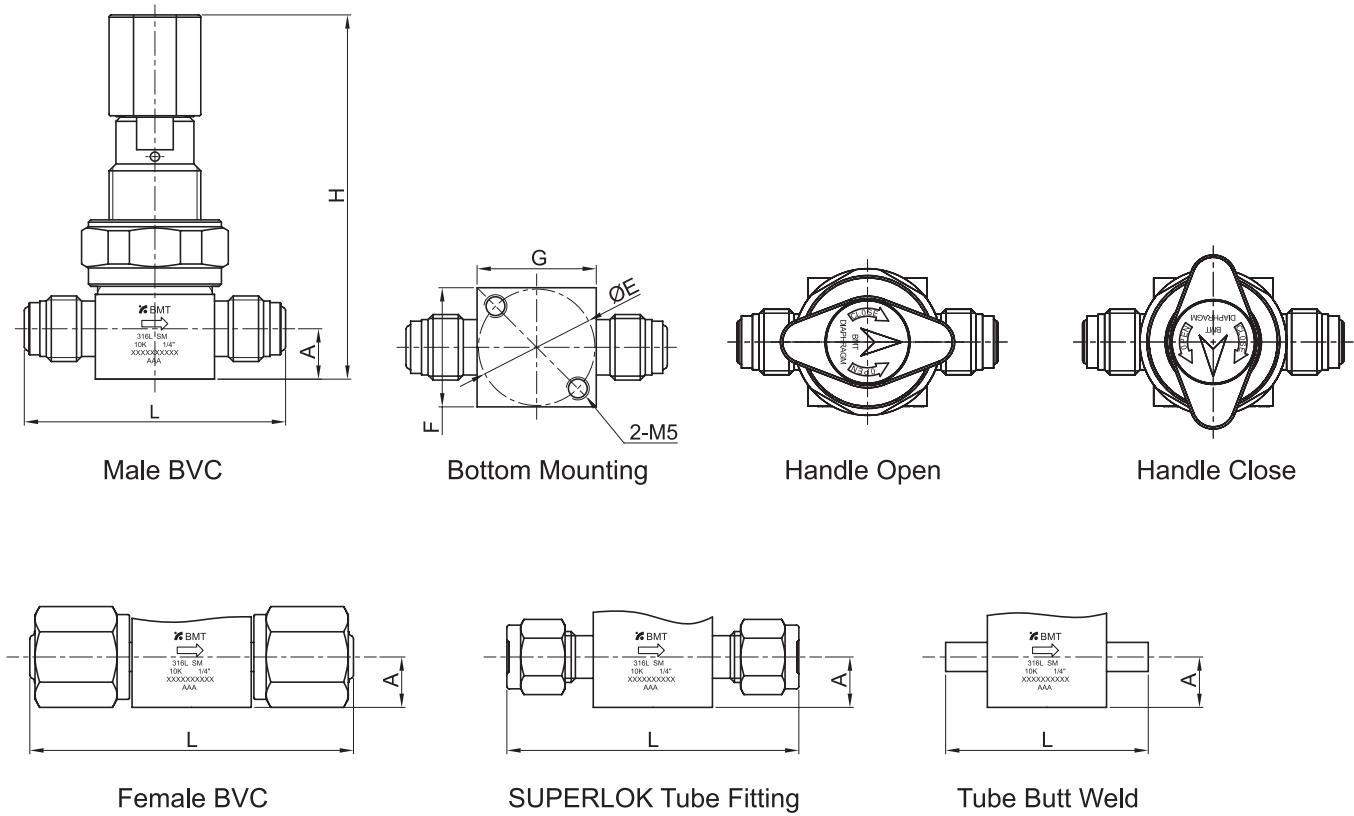


No.	Component	Material
1	Body	316L Stainless Steel 316L Stainless Steel VAR / 304 Stainless Steel
2	Seat	PCTFE ( <i>standard</i> ) / PFA / PI
3	Diaphragm	Ni-Co Alloy
4	Handle	ABS

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

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Dimensions



End Connection	Part No.	Dimensions (mm)					
		L	H	A	E (Φ)	F	G
Male BVC	SMSODV1-VM4	57	80	11	25.4	28	26
	SMSODV1-VM6	77	90	16	28	37	36
	SMSODV1-VM8	77	90	16	28	37	36
	SMSODV1-VM12	122	98	22	28	37	37
Female BVC	SMSODV1-VF4	70.6	80	11	25.4	28	26
	SMSODV1-VF6	83	90	16	28	37	36
	SMSODV1-VF8	83	90	16	28	37	36
	SMSODV1-VF12	122	98	22	28	37	37
SUPERLOK Tube Fitting	SMSODV1-S4	63.7	80	11	25.4	28	26
	SMSODV1-S6	75.6	90	16	28	37	36
	SMSODV1-S8	81.2	90	16	28	37	36
	SMSODV1-S12	104.6	98	22	28	37	37
Tube Butt Weld	SMSODV1-TW4	44.2	80	11	25.4	28	26
	SMSODV1-TW6	68	90	16	28	37	36
	SMSODV1-TW8	68	90	16	28	37	36
	SMSODV1-TW12	150	98	22	28	37	37

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

## Ordering Information

Low Pressure Manual Diaphragm Valves (Shutoff Type)

\*Additional configurations available upon request.

<b>A</b>	SODV1	<b>B</b>	-	<b>C</b>	<b>D</b>	-	<b>E</b>	-	<b>F</b>	Standard feature
SM	SODV1	L	-	VM	4	-	PA	-	P	Optional

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

B	Operation Method	
Applicable only to <b>Shutoff Type Diaphragm Valves</b> .		
L	Lock Out Tag Out	

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	
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	

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

	SMSODV1L-VF8		SMSODV1-VM4-PA-P	
Material	SM	316L Stainless Steel	SM	316L Stainless Steel
Series	SODV1	SODV1 series	SODV1	SODV1 series
Operation Method	L	Lock Out Tag Out	-	-
Connection Type	VF	BVC Female	VM	BVC Male
Connection Size	8	1/2"	4	1/4"
Flow Path		Omit for SODV1 series		Omit for SODV1 series
Seat Material		PCTFE (standard)	PA	PFA
Grade		BA grade (standard)	P	EP grade

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