

# BV1 Bellows Valves

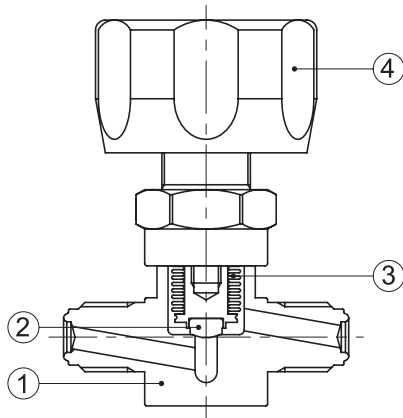
Low Pressure Manual Bellows Valves (Standard Type)



## Specifications

Size	1/4"	3/8", 1/2"	3/4"
Cv Value	0.36	1.1	2.6
Orifice Size	4.5 mm	8.0 mm	12 mm
Max. Working Pressure	10 bar (145 psig)		
Working Temperature	PCTFE: -10 ~ 80°C (14 ~ 176°F) / PI: -10 ~ 150°C (14 ~ 302°F)		
Internal Leakage Allowance (He) (Holding Time ≥ 15 sec.)	≤4x10 <sup>-9</sup> atm.cc/s		
External Leakage Allowance (He) (Holding Time ≥ 1 min.)	≤4x10 <sup>-9</sup> atm.cc/s		
Particle Inspection (EP Only) (0.1µm and Larger)	No Count		

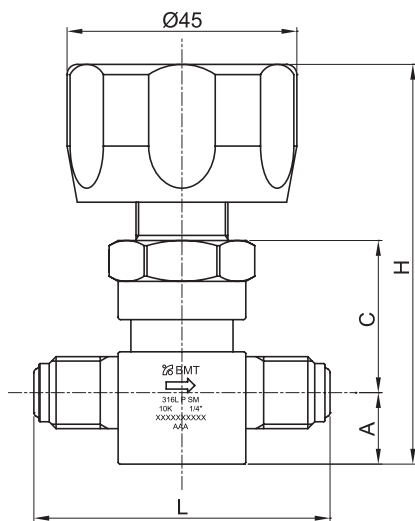
## Material



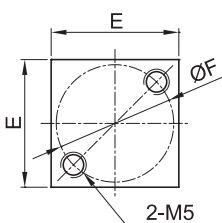
No.	Component	Material
1	Body	316L Stainless Steel 316L Stainless Steel VAR 304 Stainless Steel
2	Seat	PCTFE ( <i>standard</i> ) / PI
3	Bellows	316L Stainless Steel
4	Handle	1/4", 1/2": ABS / 3/4": Aluminium

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

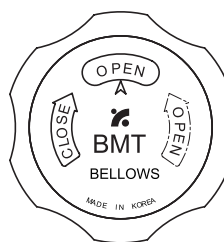
### Dimensions



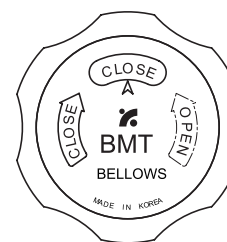
Male BVC



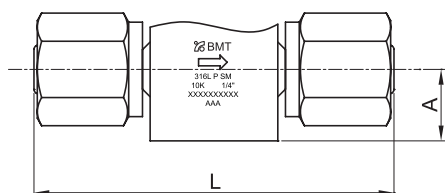
Bottom Mounting



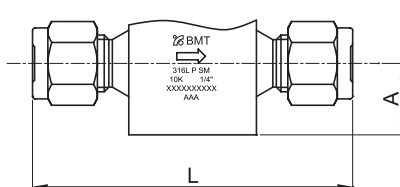
Handle Open



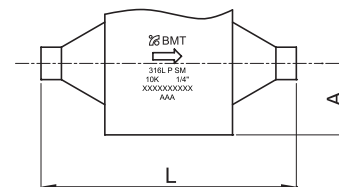
Handle Close



Female BVC



SUPERLOK Tube Fitting



Tube Butt Weld

End Connection	Part No.	Dimensions (mm)					
		L	H	A	C	E	F (Φ)
Male BVC	SMBV1-VM4	58	79		30		
	SMBV1-VM6	60	85	14	36.5	25	23
	SMBV1-VM8	60	85		36.5		
Female BVC	SMBV1-VF4	70.5	79		30		
	SMBV1-VF6	90	85	14	36.5	25	23
	SMBV1-VF8	90	85		36.5		
SUPERLOK Tube Fitting	SMBV1-S4	65	79		30		
	SMBV1-S6	78	85	14	36.5	25	23
	SMBV1-S8	83.4	85		36.5		
Tube Butt Weld	SMBV1-TW4	150	79		36.5		
	SMBV1-TW6	150	85	14	36.5	25	23
	SMBV1-TW8	150	85		36.5		

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·Unless otherwise specified, all dimensions are in millimeters.

## Ordering Information

\*Additional configurations available upon request.

<b>A</b>	BV1	-	<b>B</b>	<b>C</b>	-	<b>D</b>	-	<b>E</b>	<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>
4SS	BV1	-	S	8	-	PI	-	AP	

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.	
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

	4SSBV1-VM4-AP		SMBV1-S8-P	
Material	4SS	304 Stainless Steel	SM	316L Stainless Steel
Series	BV1	BV1 series	BV1	BV1 series
Connection Type	VM	BVC Male	S	Lok
Connection Size	4	1/4"	8	1/2"
Seat Material		PCTFE (standard)		PCTFE (standard)
Grade	AP	AP grade	P	EP grade