

BV1 Bellows Valves

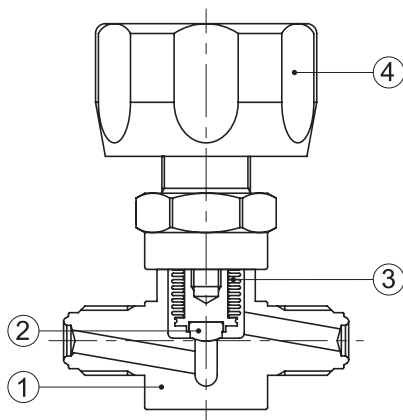
Low Pressure Manual Bellows Valves (Standard Type)



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 ⁻⁹ atm.cc/s		
Inboard Leakage Allowance (He) (Holding Time ≥ 15 sec.)	≤4x10 ⁻⁹ atm.cc/s		
Particle Inspection (EP Only) (0.1µm and Larger)	No Count		

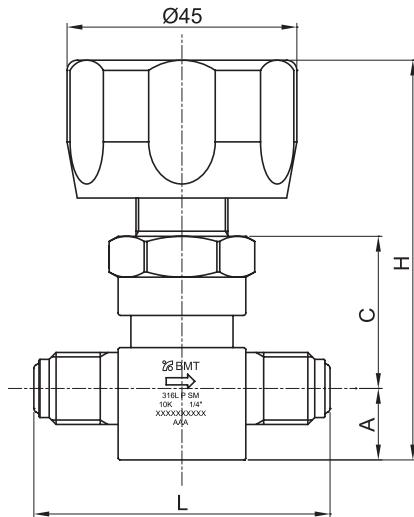
Material



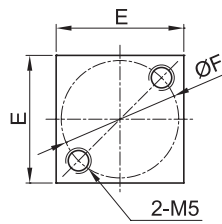
No.	Component	Material
1	Body	316L Stainless Steel
		316L Stainless Steel VAR
2	Seat	304 Stainless Steel
		PCTFE (<i>standard</i>) / PI
3	Bellows	316L Stainless Steel
4	Handle	1/4", 1/2": ABS / 3/4": Aluminium

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

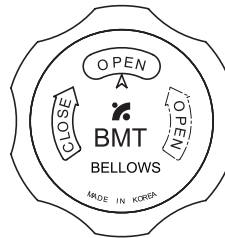
Dimensions



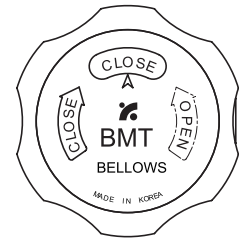
Male BVC



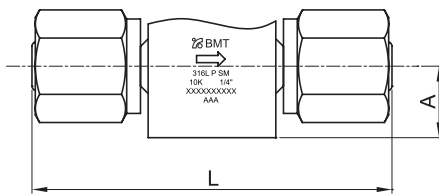
Bottom Mounting



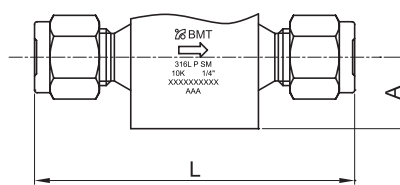
Handle Open



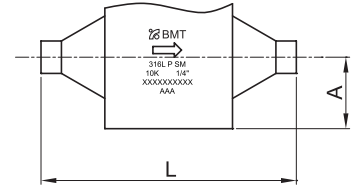
Handle Close



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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Ordering Information

Low Pressure Manual Bellows Valves (Standard Type)

*Additional configurations available upon request.

A	BV1	-	B	C	-	D	-	E	Standard feature
SM	BV1		VM	4		PI		AP	Optional

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

D	Seat Material
<i>PCTFE is standard. No part designator needed.</i>	
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
<i>BA is standard. No part designator needed.</i>	
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	

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
Operation Method	<i>Omit for Manual Valves</i>		<i>Omit for Manual Valves</i>	
Connection Type	VM	BVC Male	S	Lok
Connection Size	4	1/4"	8	1/2"
Flow Path	<i>Omit for BV1 series</i>		<i>Omit for BV1 series</i>	
Seat Material	PCTFE (standard)		PCTFE (standard)	
Grade	AP	AP grade	P	EP grade

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