

BV1 Bellows Valves

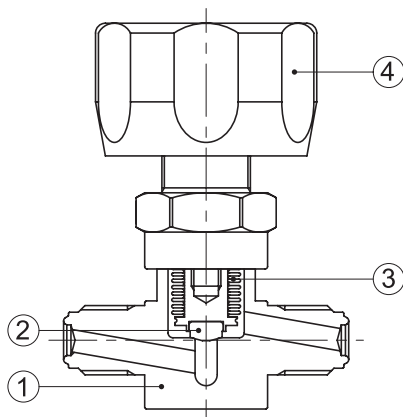
Low Pressure Manual Bellows Valves (Standard Type)



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)		
Inboard Leak Test Rates (He) (Holding Time ≥ 15 sec.)	≤4x10 ⁻⁹ atm.cc/s		
Across the Seat Leak Test Rates (He) (Holding Time ≥ 15 sec.)	≤4x10 ⁻⁹ 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

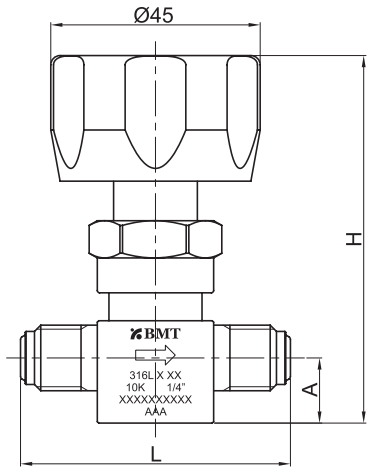


No.	Component	Material
1	Body	316L Stainless Steel
		316L Stainless Steel VAR
		304 Stainless Steel
2	Seat	PCTFE (<i>standard</i>) / PI
3	Bellows	316L Stainless Steel
4	Handle	1/4" ~ 1/2": ABS / 3/4": Aluminium

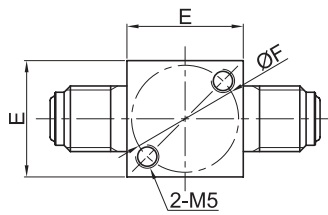
NOTE:

·Dimensions and Drawings are for reference only and are subject to change without prior notice.
·Unless otherwise specified, all dimensions are in millimeters.

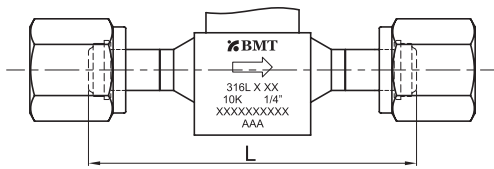
Dimensions



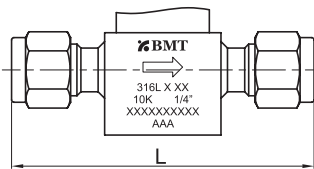
Male BVC



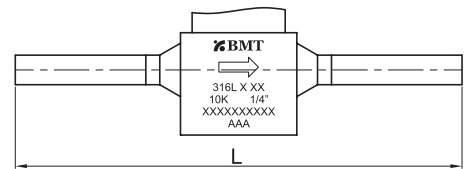
Bottom Mounting



Female BVC



SUPERLOK Tube Fitting



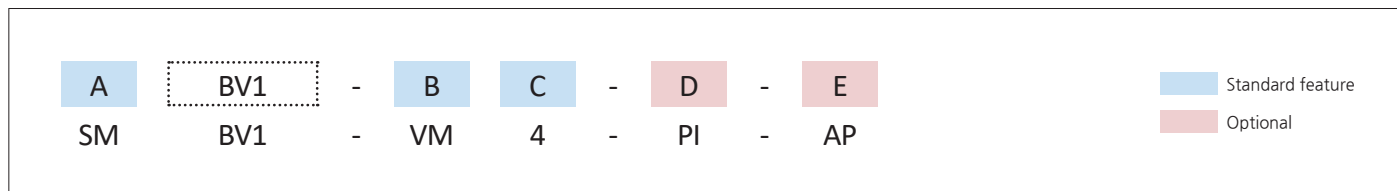
Tube Butt Weld

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

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Ordering Information

Low Pressure Manual Bellows Valves (Standard 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.	
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

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"
Seat Material		PCTFE (<i>standard</i>)		PCTFE (<i>standard</i>)
Grade	AP	AP grade	P	EP grade

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