

PBV2 Bellows Valves

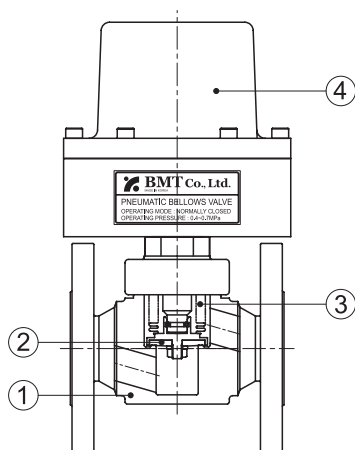
Low Pressure Pneumatic Bellows Valves (Forged Type)



Specifications

Size	3/4"	15A	1"	20A	25A	32A	40A	2"	50A
Cv Value	2.9	2.9	4.1	4.1	6.9	16	16	16	21
Orifice Size	15 mm	15 mm	19 mm	19 mm	25 mm	40 mm	40 mm	40 mm	45 mm
Max. Working Pressure	10 bar (145 psig)								
Operating Pressure	0.4 ~ 0.7 MPa (58 ~ 101 psig)								
Working Temperature	-10 ~ 80°C (14 ~ 176°F)								
Inboard Leak Test Rates (He) (Holding Time ≥ 15 sec.)	≤1x10 ⁻⁵ atm.cc/s								
Across the Seat Leak Test Rates (He) (Holding Time ≥ 15 sec.)	≤1x10 ⁻⁵ atm.cc/s								
Particle Inspection (EP Only) (0.1µm and Larger)	No Count								
Inner Surface Roughness	AP: Ra ≤ 40 µin, Ra ≤ 1 µm (100A이하) / Ra ≤ 100 µin, Ra ≤ 2.54 µm (125A이상) MP: Ra ≤ 20 µin, Ry ≤ 6 µm BA: Ra ≤ 10 µin, Ry ≤ 3 µm EP: Ra ≤ 5 µin, Ry ≤ 0.7 µm								

Material

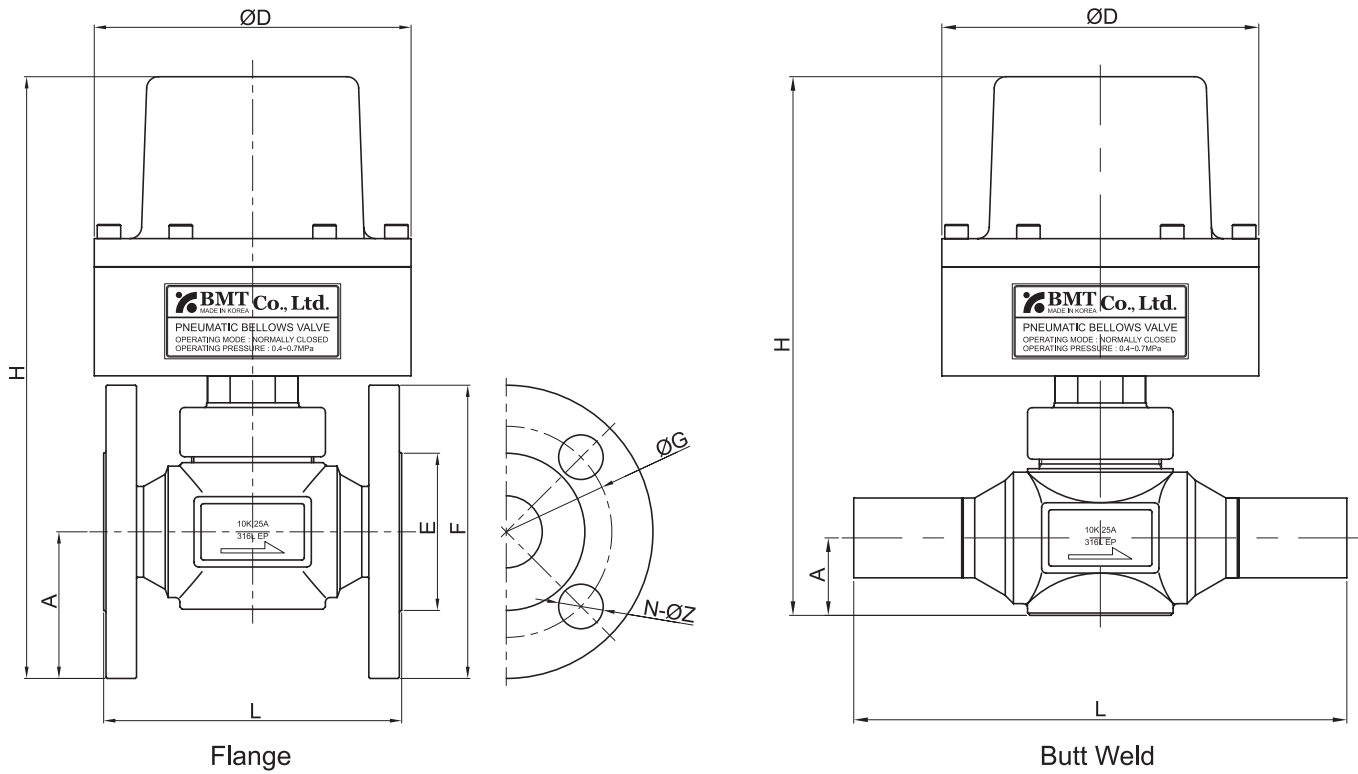


No.	Component	Material
1	Body	316L Stainless Steel
		316L Stainless Steel VAR
		304 Stainless Steel
2	Seat	PTFE (standard)
3	Bellows	316L Stainless Steel
4	Actuator	Aluminium

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



Flange									
Part No.	L	A	H	D	E	F	G	N	Z
SMPBV2C-FE15A	108	47.5	228	110	51	95	70	4	15
SMPBV2C-FE16	117	50	237	135	56	100	75	4	15
SMPBV2C-FE20A	117	50	237	135	56	100	75	4	15
SMPBV2C-FE25A	127	62.5	258.5	135	67	125	90	4	19
SMPBV2C-FE32A	165	67.5	376.5	188	76	135	100	4	19
SMPBV2C-FE40A	165	70	379	188	81	140	105	4	19
SMPBV2C-FE32	165	70	379	188	81	140	105	4	19
SMPBV2C-FE50A	203	77.5	403	188	96	155	120	4	19

Butt Weld				
Part No.	L	A	H	D
SMPBV2C-TW15A	190	24	204	110
SMPBV2C-TW16	200	28	215	135
SMPBV2C-TW20A	200	28	215	135
SMPBV2C-TW25A	210	33	229	135
SMPBV2C-TW32A	270	51	360	188
SMPBV2C-TW40A	270	51	360	188
SMPBV2C-TW32	270	51	360	188
SMPBV2C-TW50A	295	57	387	188

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Ordering Information

Low Pressure Pneumatic Bellows Valves (Forged Type) - N.C

*Additional configurations available upon request.

A	PBV2	B	-	C	D	-	E	
SM	PBV2	C	-	FE	25A	-	P	

A Standard feature
PBV2 Standard feature
B Standard feature
C Standard feature
D Standard feature
E Optional

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

B	Operation Method	
C	Normally	Closed
O	Normally	Open

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	
FE	Flange	

E	Wetted Surface Grade	
BA is standard. No part designator needed.		
P	EP	
MP	MP	
AP	AP	

D	Connection Size			
ASTM Tube				
Designator	Nominal Size	Outside Diameter	Wall Thickness	
16	1 in.	25.4 mm	1.65 mm	
32	2 in.	50.8 mm	1.65 mm	
JIS Pipe				
Designator	Nominal Size	Outside Diameter	Schedule	Wall Thickness
15A	15A	21.7 mm	SCH 5S	1.65 mm
15AS			SCH 10S	2.10 mm
20A	20A	27.2 mm	SCH 5S	1.65 mm
20AS			SCH 10S	2.10 mm
25A	25A	34.0 mm	SCH 5S	1.65 mm
25AS			SCH 10S	2.80 mm
32A	32A	42.7 mm	SCH 5S	1.65 mm
32AS			SCH 10S	2.80 mm
40A	40A	48.6 mm	SCH 5S	1.65 mm
40AS			SCH 10S	2.80 mm
50A	50A	60.5 mm	SCH 5S	1.65 mm
50AS			SCH 10S	2.80 mm

Part Number Examples

	SMPBV2C-FE25A-P		4SSPBV2C-TW32A-AP	
Material	SM	316L Stainless Steel	4SS	304 Stainless Steel
Series	PBV2	PBV2 series	PBV2	PBV2 series
Operation Method	C	Normally Closed	C	Normally Closed
Connection Type	FE	Flange	TW	Butt Weld
Connection Size	25A	25A	32A	SCH5S, 32A
Seat Material		PTFE (standard)		PTFE (standard)
Grade	P	EP grade	AP	AP grade

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