

BV3 Bellows Valves

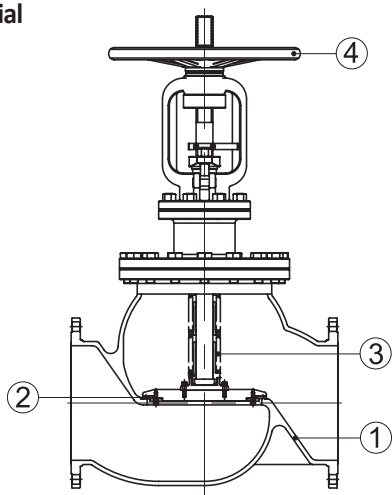
Low Pressure Manual Bellows Valves (Casted Type)



Specifications

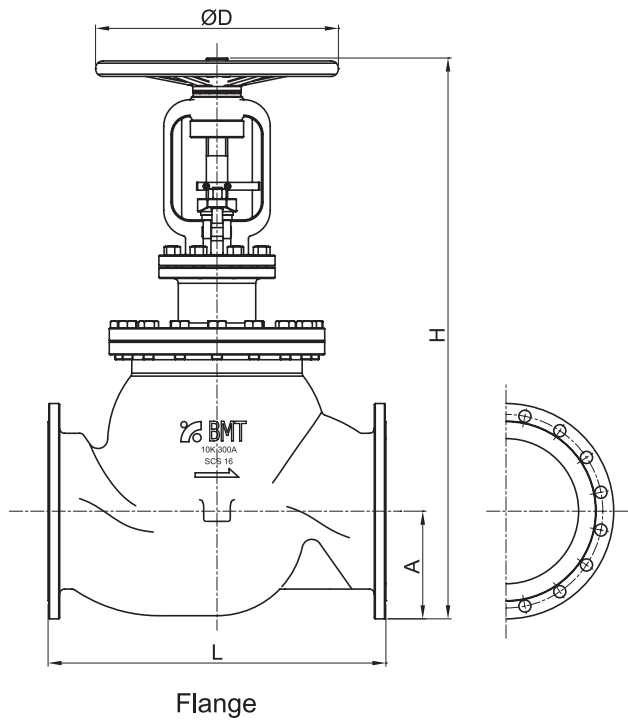
Size	65A	80A	100A	125A	150A	200A	250A	300A	350A	400A	450A	500A	550A
Cv Value	81	132	200	302	434	772	1200	1600	2000	2650	3100	3400	3400
Orifice Size	65	80	100	124	148	200	250	300	350	400	440	490	490
Max. Working Pressure	10 bar (145 psig)												
Working Temperature	-10 ~ 80°C (14 ~ 176°F)												
Internal Leakage Allowance (He) (Holding Time ≥ 15 sec.)	≤1x10 ⁻⁵ atm.cc/s												
Inboard Leakage Allowance (He) (Holding Time ≥ 15 sec.)	≤1x10 ⁻⁵ atm.cc/s												
Particle Inspection (EP Only) (0.1µm and Larger)	No Count												

Material

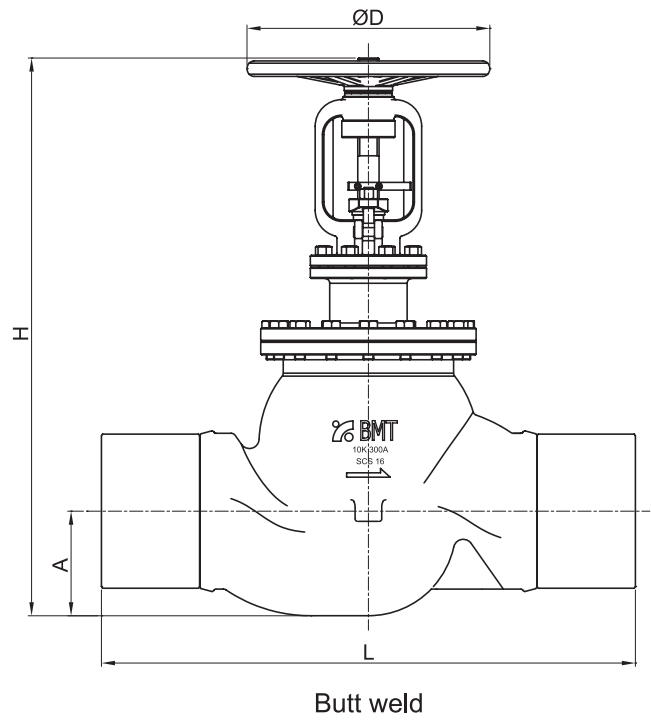


No.	Component	Material
1	Body	SCS 13 SCS 16
2	Seat	PTFE (<i>standard</i>)
3	Bellows	316L Stainless Steel
4	Handle	SCS 13

Dimensions



Flange



Butt weld

Flange				
Part No.	L	A	H	D
SMBV3-FE65A	216	87.5	350.5	160
SMBV3-FE80A	241	92.5	375.5	160
SMBV3-FE100A	292	105.0	456.0	200
SMBV3-FE125A	356	125.0	589.5	300
SMBV3-FE150A	406	140.0	605.0	300
SMBV3-FE200A	495	165.0	796.0	350
SMBV3-FE250A	622	200.0	1034.5	450
SMBV3-FE300A	698	222.5	1159.0	500
SMBV3-FE350A	787	245.0	1189.0	710
SMBV3-FE400A	914	280.0	1230.0	710
SMBV3-FE450A	1040	310.0	1461.0	800
SMBV3-FE500A	1040	337.5	1505.5	800
SMBV3-FE550A	1040	382.5	1540.5	800

Butt Weld				
Part No.	L	A	H	D
SMBV3-TW65A	416	68	331.0	160
SMBV3-TW80A	441	80	363.0	160
SMBV3-TW100A	492	95	446.0	200
SMBV3-TW125A	556	111	575.5	300
SMBV3-TW150A	606	126	591.0	300
SMBV3-TW200A	795	157	788.0	350
SMBV3-TW250A	1022	190	1024.5	450
SMBV3-TW300A	1100	216	1152.5	500
SMBV3-TW350A	1187	241	1185.0	710
SMBV3-TW400A	1314	268	1218.0	710
SMBV3-TW450A	1440	305	1454.0	800

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

Ordering Information

Low Pressure Manual Bellows Valves (Casted Type)

*Additional configurations available upon request.

A	BV3	-	B	C	-	D	Standard feature
13	BV3	-	FE	500A	-	AP	Optional

A	Materials	
13	SCS 13	
16	SCS 16	

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	
FE	Flange	

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

C Connection Size				
JIS Pipe				
Designator	Nominal Size	Outside Diameter	Schedule	Wall Thickness
65A	65A	76.3 mm	SCH 5S	2.10 mm
65AS			SCH 10S	3.00 mm
80A	80A	89.1 mm	SCH 5S	2.10 mm
80AS			SCH 10S	3.00 mm
100A	100A	114.3 mm	SCH 5S	2.10 mm
100AS			SCH 10S	3.00 mm
125A	125A	139.8 mm	SCH 5S	2.80 mm
125AS			SCH 10S	3.40 mm
150A	150A	165.2 mm	SCH 5S	2.80 mm
150AS			SCH 10S	3.40 mm
200A	200A	216.3 mm	SCH 5S	2.80 mm
200AS			SCH 10S	4.00 mm
250A	250A	267.4 mm	SCH 5S	3.40 mm
250AS			SCH 10S	4.00 mm
300A	300A	318.5 mm	SCH 5S	4.00 mm
300AS			SCH 10S	4.50 mm
350A	350A	355.6 mm	SCH 5S	4.00 mm
350AS			SCH 10S	4.80 mm
400A	400A	406.4 mm	SCH 5S	4.20 mm
400AS			SCH 10S	4.80 mm
450A	450A	457.2 mm	SCH 5S	4.20 mm
450AS			SCH 10S	5.50 mm

Part Number Examples

	13BV3-FE500A-AP		16BV3-TW400A-P	
Material	13	SCS13	16	SCS16
Series	BV3	BV3 series	BV3	BV3 series
Operation Method		Omit for Manual Valves		Omit for Manual Valves
Connection Type	FE	Flange	TW	Butt Weld
Connection Size	500A	500A	400A	SCH5S, 400A
Flow Path		Omit for BV3 series		Omit for BV3 series
Seat Material		PTFE (standard)		PTFE (standard)
Grade	AP	AP grade	P	EP grade

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