

CV1 Check Valves

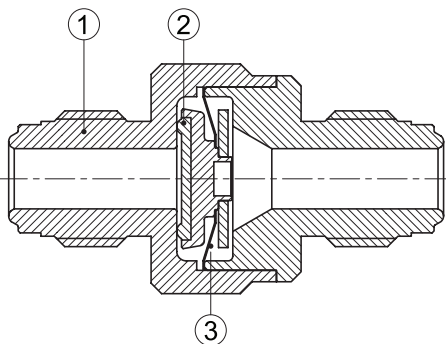


Specifications

Size	1/4"	3/8", 1/2"
Cv Value	0.55	0.7
Max. Working Pressure	206 bar (3,000 psig)	
Nominal Reseal Pressure	0.276 bar (4 psig)	
Nominal Cracking Pressure	0.138 bar (2 psig)	
Maximum Pressure Drop	10 bar (145 psi)	
Working Temp.	-10 ~ 80°C (14 ~ 176°F)	
Inboard Leak Test Rates (He) (Holding Time ≥ 15 sec.)	≤1x10 ⁻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	

※ BMT CV1 Series Check Valves are designed for directional flow control only. The CV1 Series Check Valve should never be used as safety relief devices.

Material

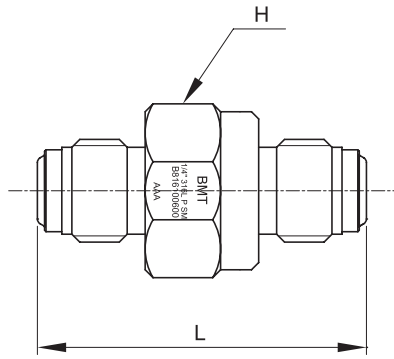


No.	Component	Material
1	Body	316L Stainless Steel
		316L Stainless Steel VAR
2	Seal Ring	Viton (<i>standard</i>) / Neoprene
3	Spring	HASTELLOY C-22

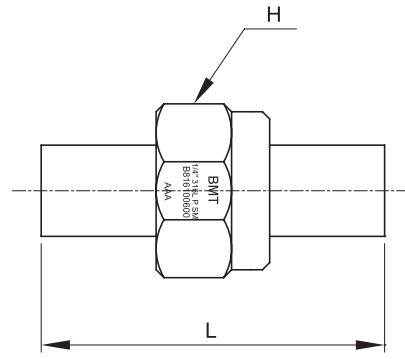
NOTE:

·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



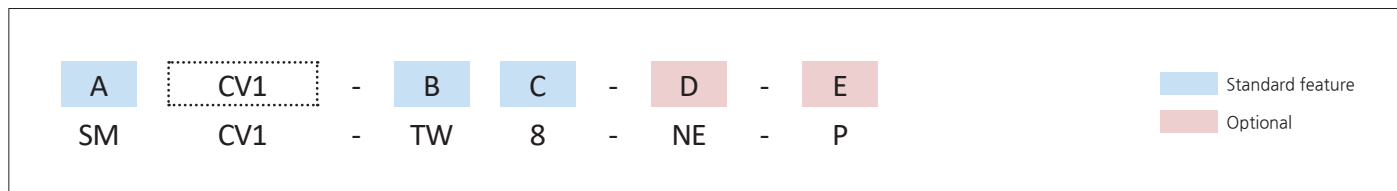
Tube Butt Weld

End Connection	Part No.	L	H (Hex.)
Male BVC	SMCV1-VM4	45.8	22
	SMCV1-VM8	52.3	27
Tube Butt Weld	SMCV1-TW4	47.8	22
	SMCV1-TW8	54.3	27

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Ordering Information

*Additional configurations available upon request.



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

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	

C	Connection Size			
ASTM Tube				
Designator	Nominal Size	Outside Diameter	Wall Thickness	
4	1/4 in.	6.35 mm	1.00 mm	
8	1/2 in.	12.7 mm	1.24 mm	

D	Seat Material	
Viton is Standard. No part designator needed		
NE	Neoprene	

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

Part Number Examples

	SMCV1-VM4-P		DMCV1-TW8-NE	
Material	SM	316L Stainless Steel	DM	316L Stainless Steel VAR
Series	CV1	CV1 series	CV1	CV1 series
Operation Method	Omit for Manual Valves		Omit for Manual Valves	
Connection Type	VM	BVC Male	TW	Butt Weld
Connection Size	4	1/4"	8	1/2"
Seal Material	Viton (standard)		NE	Neoprene
Grade	P	EP grade	BA grade (standard)	

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