

DOUBLE BLOCK & BLEED VALVE

MODEL C5.02



PRODUCT DESCRIPTION

Double block and bleed valve with flanged inlet, with threaded outlet and vent connections utilising metal to metal seat and bonnet to body connection for superior, bubble tight sealing capabilities at both extreme pressures and temperatures. Double block and bleed Valves operate on the principle that isolation can be achieved from both the upstream and downstream process flow / pressures



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KEY FEATURES

- 2 Block + 1 bleeds
- Double Block and Bleed Valves have evolved to replace the process of bolting together individual valves to provide dual isolation
- Direct mounting
- Sample probes / injection quills can be added to flanged face
- Design standards API 6D, API 6A, BS 5351, BS 6755 / BS EN 12266, NACE MR 0175, ANSI, ISO & API Standards
- Ball Type, Floating & Trunnion Mounted, Top & End Entry, Full & Reduced Bore, Cryogenic, Fire Safe Design, Anti-Static, Anti Blow- Out Stem
- Lockable & anti-tampered
- Standard Hydro-body, Hydro-seat and Gas seat testing is carried out to API 598 and API 6A

SPECIFICATIONS

Mounting	:	Remote, Flanged & Screwed
End Connection	:	Flanged, Screwed, Butt Weld, Socket Weld, Hub End
Seat Design	:	Soft Seated, Metal to Metal
Max. Working pressure	:	ASME B16.5 class 2500 and API 6A 10,000 psi
Max. Working temperature	:	200°C
Drain port	:	¼" NPT (F), plugged

APPLICATION

- Isolation & venting of pressure gauges, switches & transmitters
- High pressure line shut off
- Liquid & gas services
- Critical Isolation
- Chemical Plants
- Breweries & Distilleries
- Power Plant-Nuclear
- Petroleum Products & Handling Systems
- Pulp & Paper Plants
- Pharmaceutical Plants
- Water Treatment-Purification

MATERIAL OF CONSTRUCTION

Wetted parts	:	SS 316
Stem packing::	:	PTPE
Stem	:	Conical metal tip
"T" bar handle	:	SS 304

PACKING MATERIALS PRESSURE Vs TEMPERATURE RATING

PTFE	:	PTFE 6000 psi (414 bar) @ 100°C 3000 psi (207 bar) @ 200°C
GRAPHITE	:	6000 psi (414 bar) @ 200°C 3000 psi (207 bar) @ 430°C

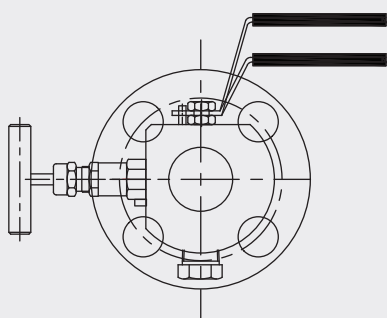
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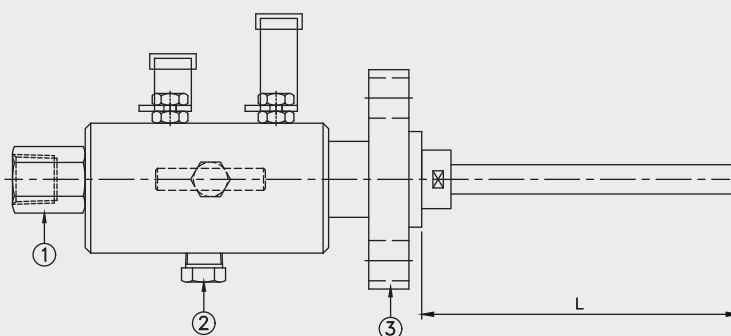
DIMENSIONAL DRAWINGS

Injection Probe Extends

Injection of chemical and other media onto the process stream can be accomplished with this valve design. The valve inlet houses a one way opens for injection and goes normally closed to eliminate process fluid outflow.

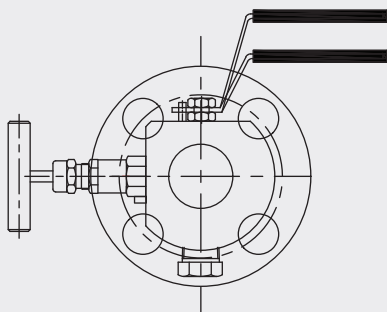


Bill of Material	
Sr.No.	Parameter
01	Instrument Connection
02	Vent Connection with Plugged
03	Process Connection

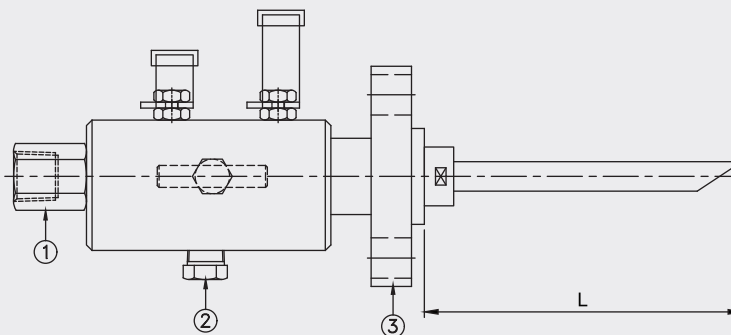


Sampling Probe Extend

Double Block and Bleed valves for chemical injection and sampling require an additional straight tubing onto the bore of the valve inlet flange face. This quill enters into the process flow and chemicals can be introduced through the valve. Incorporated in the valve design as additional check valve is required for this application in order to prevent reverse flow and process fluid contaminating the chemical source. For sampling the reverse is applied.



Bill of Material	
Sr.No.	Parameter
01	Instrument Connection
02	Vent Connection with Plugged
03	Process Connection



Important Notes: Above drawings are not to scale. All Dimension are in mm

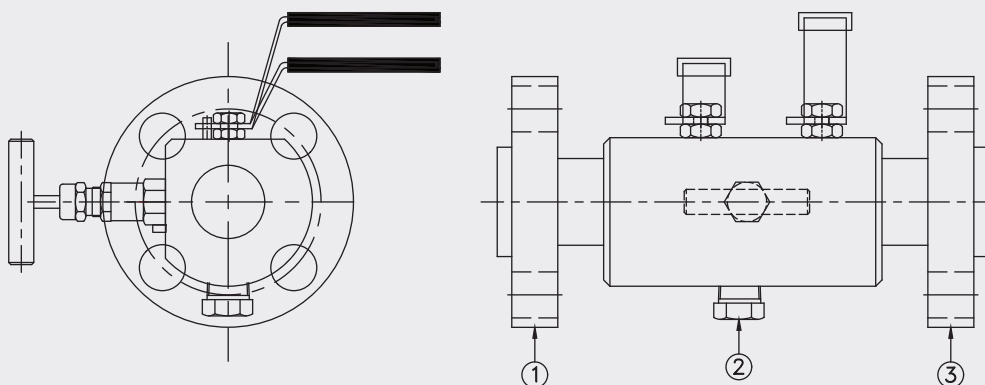


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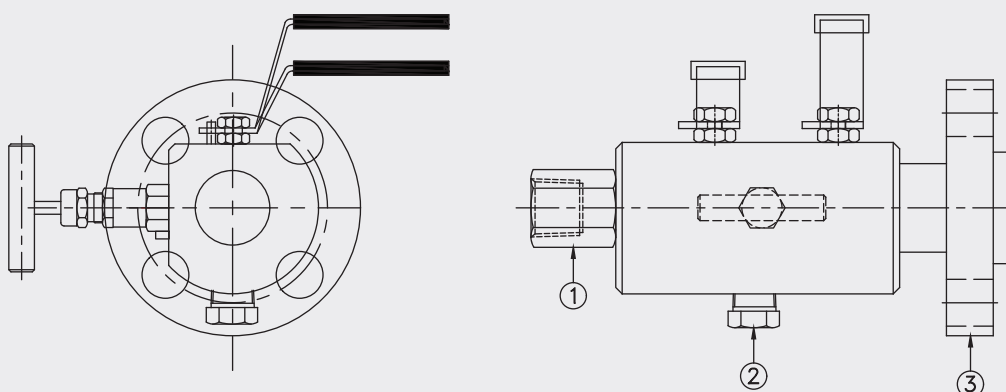
DIMENSIONAL DRAWINGS

Flange x Flange



Bill of Material	
Sr.No.	Parameter
01	Instrument Connection
02	Vent Connection with Plugged
03	Process Connection

Flange x Screwed



Bill of Material	
Sr.No.	Parameter
01	Instrument Connection
02	Vent Connection with Plugged
03	Process Connection

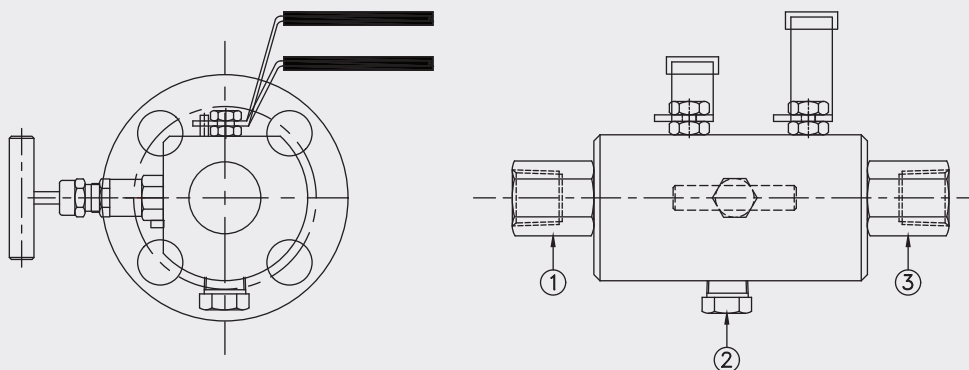
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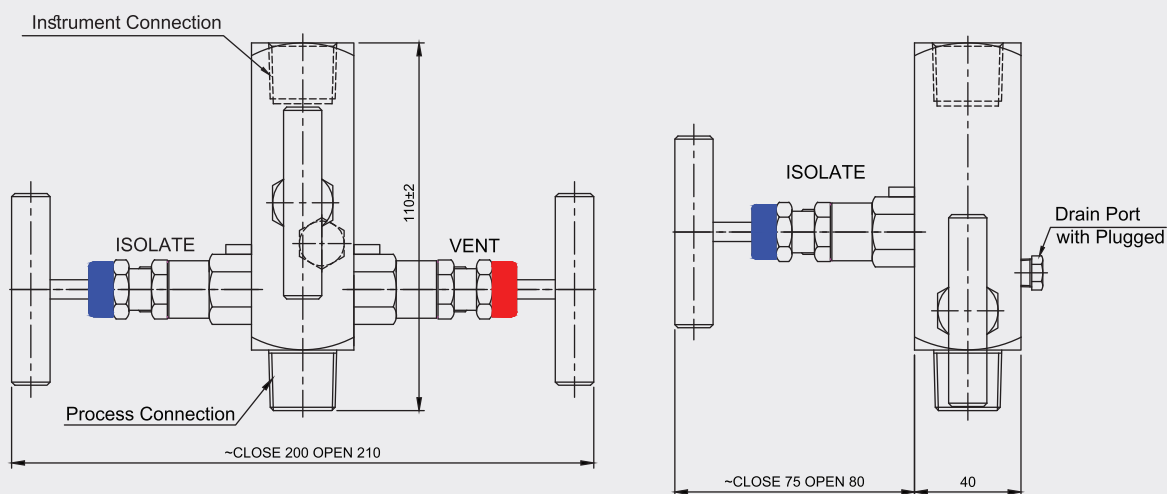
DIMENSIONAL DRAWINGS

Screwed x Screwed



Bill of Material	
Sr.No.	Parameter
01	Instrument Connection
02	Vent Connection with Plugged
03	Process Connection

Type 1



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MODEL CODING & ORDERING INFORMATION

DESCRIPTION	CODE	C5.02	TP1	PB	SC1	S6	SS1	12NF	12NF	14NF	X17
Model Double Block & Bleed Valve	C5.02	C5.02									
Type Type-1 Type-2 Type-3	TP1 TP2 TP3		TP1								
Sampling Probe Injection	PB IJ			PB							
Mounting Screwed x Screwed Flange x Screwed Flange x Flange As per customer specify	SC1 FS1 FF1 XXX				SC1						
Material SS 304 SS 310 SS 316 SS 316L Duplex SS 2205 Duplex SS 2207 Inconel 625 Inconel 825 Hast C-276 Monel 400	S6 SL M4 HC DU D7 I5 I2 HC M4					S6					
Seat Type Soft seat Metal to Metal	SS1 MM1						SS1				
Instrument Connection ½" NPT (F) ½" BSP (F) 1" NPT (F) 1" BSP (F) Flange as per table-1	12NF 12BF 25NF 25BF XXX							12NF			
Process Connection ½" NPT (F) ½" BSP (F) 1" NPT (F) 1" BSP (F) Flange as per table-1	12NF 12BF 25NF 25BF XXX								12NF		
Drain Connection 1/4" NPT (F) ½" NPT (F) As per customer specify	14NF 12NF XXX									14NF	
Other Options Material Test Certificate Wetted part complied to NACE Certification for Oxygen service Customized Marking Hydro test certificate Circular Handle	X17 X20 X21 X51 X53 X70										X17

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Table –1 AS PER ANSI B 16.5

NOMINAL SIZE	RATING/ CLASS	CODE	NOMINAL SIZE	RATING/ CLASS	CODE	NOMINAL SIZE	RATING/ CLASS	CODE	NOMINAL SIZE	RATING/ CLASS	CODE
1/2"	150	B09	1"	150	B21	1 1/2"	150	B33	2 1/2"	150	B45
	300	B10		300	B22		300	B34		300	B46
	600	B11		600	B23		600	B35		600	B47
	900	B12		900	B24		900	B36		900	B48
	1500	B13		1500	B25		1500	B37		1500	B49
	2500	B14		2500	B26		2500	B38		2500	B50
3/4"	150	B15	1 1/4"	150	B27	2"	150	B39	3"	150	B51
	300	B16		300	B28		300	B40		300	B52
	600	B17		600	B29		600	B41		600	B53
	900	B18		900	B30		900	B42		900	B54
	1500	B19		1500	B31		1500	B43		1500	B55
	2500	B20		2500	B32		2500	B44		2500	B56

SAMPLE ORDERING CODE:

C5.02.TP1.PB.SC1.S6.SS1.12NF.12NF.14NF.X17

Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing. Modifications may take place and material specified may be replaced by others without prior notice.