

JACKETED BALL VALVES

Jacketed ball valves to handle highly viscous materials or materials that solidify at ambient temperatures, are available from Metso for use with steam or other heat transfer media. These valves ensure free flow through the valve and prevent clogging when the valve is closed.

AVAILABLE TYPES

Two-Piece Bolted Jacket

A two-piece removable jacket that is bolted securely in position around the valve is offered for maximum flexibility.

This design offers three advantages. First, the jacket can be retained and reused if the basic valve needs to be replaced. Second, if the valve should be removed for repair, the jacket can remain connected to keep the heat transfer media flowing. The bolted jacket also eliminates the need for oversized flanges normally required with full welded jackets to provide the advantage of full jacketing at no increase in cost over partial jackets.

This type of jacket is available on nearly all JAMESBURY® flanged valves. It is especially well-suited for split body valves like the 8" (DN 200) and larger Series 7000 and the 2" (DN 50) and larger Series 9000.

Single-Piece Welded Jacket for Standard Bore Valves

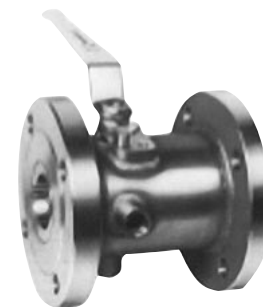
A second type of jacket is the full jacket. Integral to the valve, this jacket extends from one flange to the other, with oversize flanges (generally one size larger than the valve size), and with a face-to-face dimension corresponding to the basic valve. A 3" (DN 80) valve assembly, for example, has 4" (DN 100) flanges to allow enough bolting clearance outside the jacket while maintaining the face-to-face dimension of the standard 3" (DN 80) valve.

Both types of jackets are rated for heat transfer media pressures up to 150 psi (10.3 bar). Standard arrangement for jacket connections are shown in the drawings here and on page 2. Jacket connections are threaded half couplings with sizes shown in the following table. Other connection arrangements and styles, such as socket weld and weld nipple stubs are also available.

Two-Piece Removable Jackets			
Valve Size		Connection Size (NPT)	
inches	DN	inches	mm
1/2 – 2	15 – 50	1/2	N/A
3 – 6	80 – 150	3/4	
8 – 12	200 – 300	1	

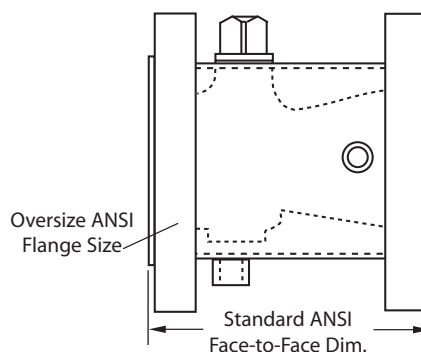


Bolted Jacket



Fabricated Jacket

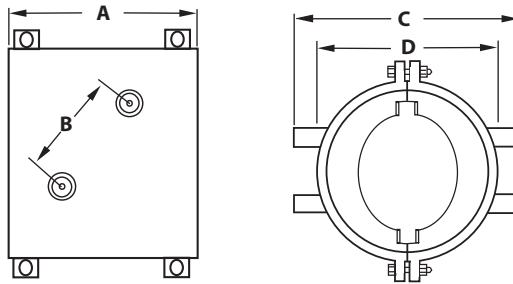
FABRICATED JACKETS FLANGE SIZE



Valve Size		Flange Size	
inches	DN	inches	mm
1/2	15	1-1/2	38
3/4	20	1-1/2	38
1	25	2	50
1-1/2	40	3	76
2	50	3	76
3	80	4	102
4	100	6	152

BOLTED JACKETS

The table below provides approximate dimensions, weights, and surface areas of the bolt-on jackets for 5000, 6000, 7000, and 9000 Series ball valves in sizes 1/2" – 4" (DN 15 – 100). For data on larger valves, please consult factory.



Approximate Dimensions, Weights, and Surface Areas of Bolt-On Jackets For Series 5000 & 6000 Flanged Ball Valves, ANSI Class 150 and 300																	
Valve Size		ANSI Class	Valve Series	A Face-to Face		B Coupling Clearance		C Distance Between Couplings		D Overall Diameter		3000# Coupling Size (NPT)		Weight of Bolt-On Jacket		External Surface Area of Bolt-On Jacket	
inches	DN			inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	lb	kg	sq ft	sq cm
1/2	15	150	5150	4-1/4	108	2	51	7	178	4-1/2	114	1/2	4	102	0.25	232	
		300	530S	4-1/2	114	2-1/2	57	7-1/2	191	4-1/2	114	1/2	5	7	0.38	353	
3/4	20	150	5150	4-3/4	121	2	51	7-1/2	191	4-1/2	114	1/2	6	152	0.35	325	
		300	530S	4-3/4	121	2-1/2	57	8-1/2	216	5-1/2	140	1/2	8	203	0.47	437	
1	25	150	5150	5	127	2	51	8-1/2	216	5-1/2	140	1/2	10	254	0.41	380	
		300	530S	5	127	2-1/2	57	8-1/2	216	5-1/2	140	1/2	12	305	0.69	641	
1-1/2	40	150	5150	6-1/2	165	2-1/2	57	9-1/2	241	6-1/2	165	1/2	13	330	0.92	855	
		300	530S	6-1/2	165	3	96	9-1/2	241	7-1/2	191	1/2	16	406	1.1	1022	
			5300	7-1/2	191	3	96	9-1/2	241	7-1/2	191	1/2	18	457	1.5	1394	
2	50	150	5150	7	178	4	102	10	254	7-1/2	191	1/2	N/A	22	559	1.4	1301
			9150														
		300	530S	8-1/2	216	4-1/2	114	11-1/2	292	8-1/2	216	1/2		26	660	1.6	1486
			5300														
9300																	
3	80	150	7150	8	203	4-1/2	114	12	305	9	229	3/4	N/A	34	864	2.0	1858
			9150														
		300	730S	11-1/2	292	5	127	12-1/2	318	9-1/2	241	3/4		44	1118	2.3	2137
			7300														
9300																	
4	100	150	7150	9	229	6-1/2	165	13-1/2	343	10-1/2	267	3/4	N/A	58	1473	2.5	2323
			9150														
		300	730S	12	305	7	178	14-1/2	368	11-1/2	292	3/4		68	1727	3.3	3066
			7300														
9300																	

Subject to change without prior notice.

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