

For Commercial and Industrial Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series WBV-3, WBVS-3

2-Piece, Standard Port, Brass Ball Valves

Sizes: 1/8" – 4" (3 – 100mm)

Series WBV-3, WBVS-3 2-Piece, Standard Port, Brass Ball Valves feature a bottom loaded blowout proof stem, virgin PTFE seats & stem packing and an adjustable stem packing nut.

Features

- Suitable for a full range of liquids and gases
- Bottom loaded blowout proof stem
- Virgin PTFE stem packing seal
- Adjustable stem packing gland
- Vinyl insulator on heavy duty zinc plated carbon steel handles
- Quarter-turn open or close operation
- Low operating torque
- 400psi (28 bars) WOG non-shock

Models

WBV-3 1/8" – 4" (3 – 100mm) threaded FIP end connections

WBVS-3 3/8" – 3" (10 – 80mm) solder end connections*

Options

ITHK Tee handle kit

IOHK Oval handle kit

SXI-HK Stem Extension Kit

MSI-HK Memory Stop Kit

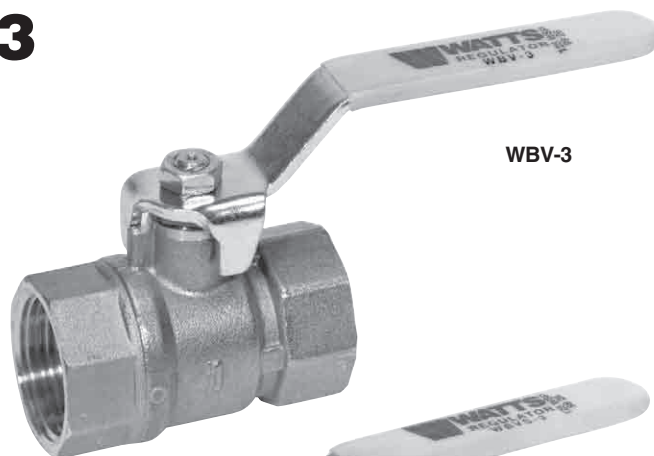
Pressure – Temperature

Temperature Range: -20°F – 302°F (-29°C – 150°C) at
50psi (3.4 bars)

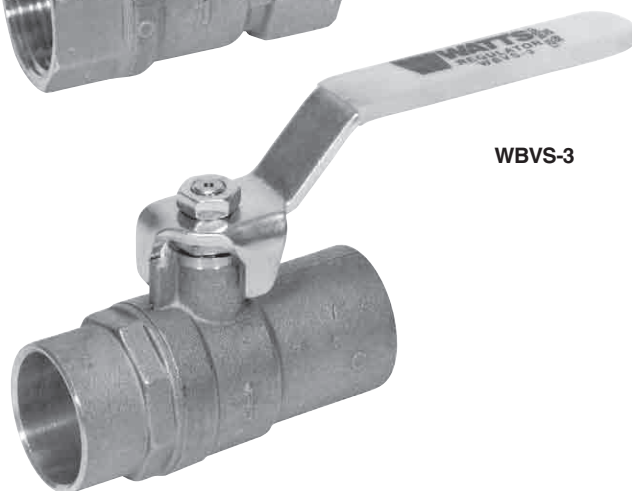
Maximum Working Pressure: 400psi (28 bars) WOG non-shock

Specifications

A 2-piece standard port brass ball valve to be installed as indicated on the plans. The valve must have a bottom loaded blowout proof stem, adjustable packing nut, and chrome plated brass ball and stem. Valves with top loaded stems or without adjustable packing nuts are not acceptable. Valve must be rated to a minimum of 400psi (28 bars) WOG non-shock and will be a Watts Series WBV-3 (threaded) or WBVS (solder).



WBV-3

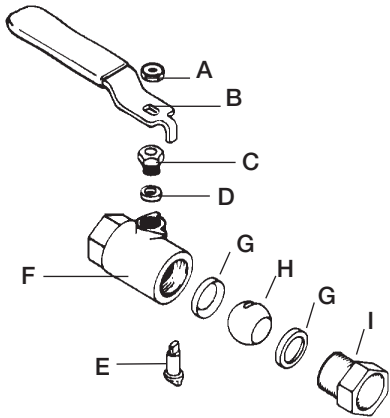


WBVS-3

*This valve is designed to be soft soldered into lines without disassembly, using a low temperature solder 420°F (216°C). Other solders such as 95/5 tin antimony 460°F (238°C) or 96/4 tin silver 430°F (221°C) can be used. However, extreme caution must be used to prevent seat damage. Higher temperature solders will damage the seat material. ANSI B16.18 states that the maximum operating pressure of 50-50 solder connections is 200psi (13.78 bars) for 1/4" – 1" (8 – 25mm) sizes, 175psi (12.06 bars) for 1/4" – 2" (32 – 50mm) sizes and 150psi (10.34 bars) for 2 1/2" – 4" (65 – 100mm) sizes at 100°F (38°C), and decreases with higher temperatures.

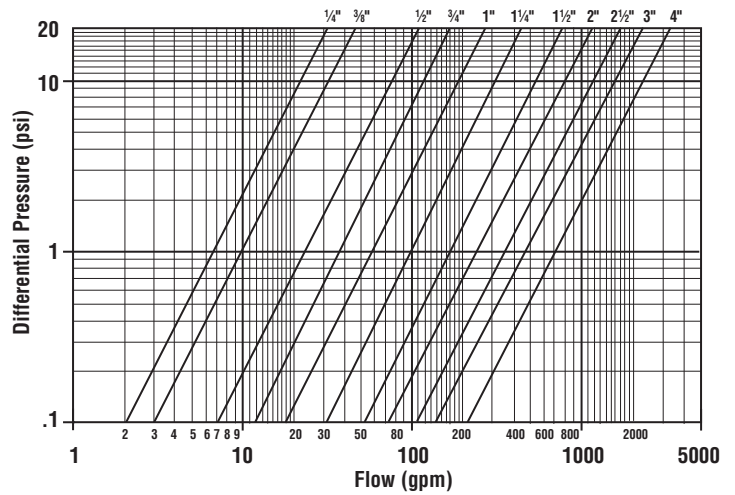
Apply heat with the flame directed **AWAY** from the center of the valve body. Excessive heat can harm the seats. After soldering, the packing nut may have to be tightened.

Materials

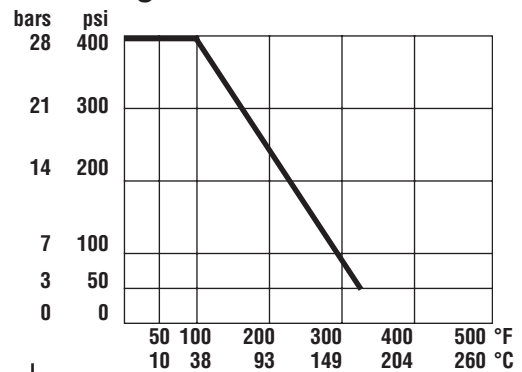


- A. Handle Nut Zinc plated steel
- B. Handle Zinc plated carbon steel with vinyl insulator
- C. Packing Nut Brass
- D. Stem Packing PTFE
- E. Stem Brass
- F. Body Forged brass
- G. Seats PTFE
- H. Ball Chrome plated brass
- I. Adapter Forged brass

Flow Curves

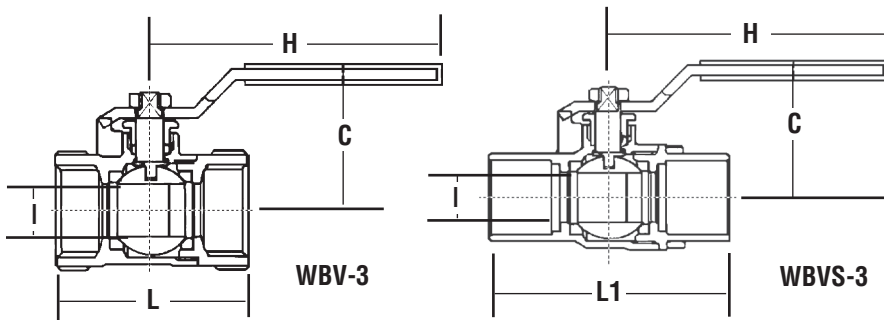


Valve Seat Rating



* See applicable note on reverse side for solder end valves with regards to pressure/temperature rating.

Dimensions – Weights



SIZE (DN)		DIMENSIONS										WEIGHT	
in.	mm	C		H		I		L		L1		lbs.	kg.
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
1/8	6	1 3/8	36	3 3/16	81	5/16	8	1 11/16	42	—	—	.25	.11
1/4	8	1 3/8	36	3 3/16	81	5/16	8	1 11/16	42	—	—	.25	.11
3/8	10	1 3/8	36	3 3/16	81	5/16	8	1 11/16	42	1 5/8	41	.25	.11
1/2	15	1 5/8	41	3 3/16	81	1/2	12	2	50	2 1/16	52	.34	.15
3/4	20	1 3/4	44	3 5/8	93	9/16	15	2 5/16	58	2 3/4	71	.50	.23
1	25	2 1/4	57	4 5/8	117	1 3/16	20	2 3/4	69	3 1/4	83	.88	.40
1 1/4	32	2 7/16	62	4 5/8	117	1	25	3 1/16	78	3 1/2	88	1.28	.58
1 1/2	40	2 7/8	72	5	127	1 1/4	32	3 7/16	87	4	102	2.00	.91
2	50	3	76	6	152	1 9/16	39	3 7/8	99	4 13/16	122	2.78	1.26
2 1/2	65	3 3/8	86	5 5/8	142	1 15/16	50	4 7/16	112	5 7/8	149	4.42	2.00
3	80	4 3/8	110	8	203	2 3/8	60	5 3/8	136	6 15/16	177	6.88	3.12
4	100	4 3/4	121	8	203	2 15/16	74	6	152	—	—	10.10	4.59



A Watts Water Technologies Company



ISO 9001-2008
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USA: No. Andover, MA • Tel. (978) 688-1811 • Fax: (978) 794-1848 • www.watts.com
Canada: Burlington, ONT. • Tel. (905) 332-4090 • Fax: (905) 332-7068 • www.wattscanada.ca