

## 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 blow-out 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 blow-out 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 bronze 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 Regulator Company Series WBV-3 (threaded) or WBVS (solder).

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

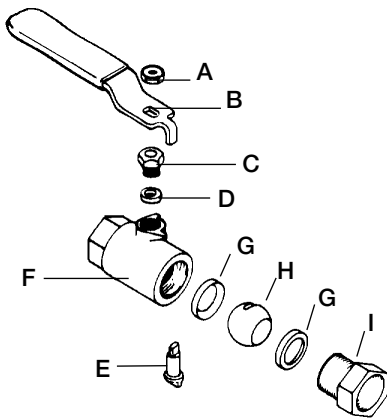


\*This valve is designed to be soft soldered into lines without disassembly, using a low temperature solder 420°F (216°C). Other solders such as 95/5 tin antimony 460°F (238°C) or 96/4 tin silver 430°F (221°C) can be used. However, extreme caution must be used to prevent seat damage. Higher temperature 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 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.

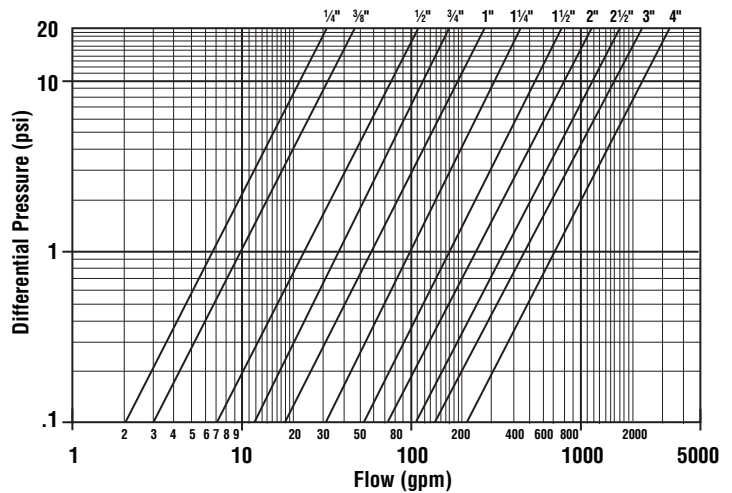
**WATTS®**  
**REGULATOR**

## Materials

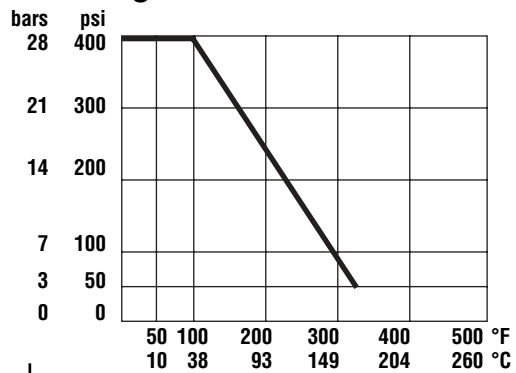


- A. Handle Nut      Zinc plated steel
- B. Handle          Zinc plated carbon steel with vinyl insulator
- C. Packing Nut     Brass
- D. Stem Packing    PTFE
- E. Stem             Brass
- F. Body             Forged brass
- G. Seats            PTFE
- H. Ball             Chrome plated brass
- I. Adapter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

## Flow Curves

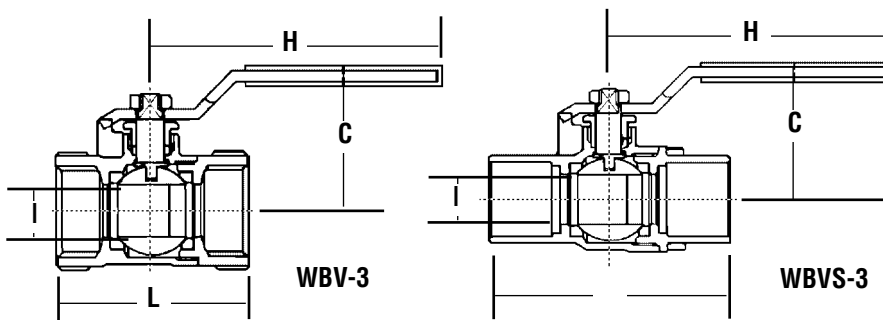


## Valve Seat Rating



\*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



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