

For Commercial and Industrial Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series B6800, B6801

3-Piece, Full Port, Brass Ball Valves

Sizes: 1/4" – 2"

Series B6800, B6801 3-Piece, Full Port, Brass Ball Valves feature an in-line maintenance design that offers serviceability of all operating parts without disturbing the rigid pipeline system. The B6800, B6801's full port orifice ensures maximum flow capacity, while Durafill® seats, chrome plated brass ball and blow-out proof stem provide maximum safety and highest operating pressure and temperature limits.

Features

- 3-piece, lift-out design
- Carbon/glass reinforced PTFE Durafill® valve seats
- Chrome plated brass ball
- Blow-out proof, pressure retaining stem
- Standard actuator mounting pads
- High cycle life reinforced PTFE stem packing seal and thrust washer
- Vinyl insulator on heavy duty, zinc plated carbon steel handles
- Low operating torque
- Adjustable stem packing gland
- Each valve factory tested

Models

B6800 1/4" – 2" threaded NPT end connections

B6801 1/2" – 2" solder end connections*

Specifications

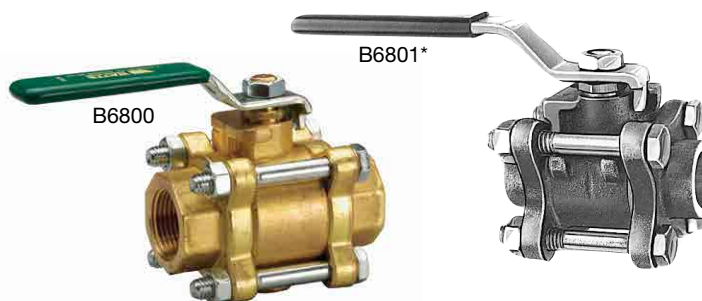
A 3-piece full port brass ball valve to be installed as indicated on the plans. The valve must have a blowout proof stem, reinforced Durafill seats, reinforced PTFE stem packing, and chrome plated brass ball. Pressure rating no less than 600psi (41 bar) WOG non-shock, 150psi (10 bar) WSP for 1/4" – 1" and 400psi (28 bar) WOG non-shock, 125psi (8.6 bar) WSP for 1 1/4" – 2". Valve must conform to MSS-SP-110 and shall be a Watts Series B6800 (threaded) or B6801 (solder).

*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) can be used. However, extreme caution must be used to prevent seat damage. Higher temperature solders will damage the seat material. ANSI B.16.18 states that the maximum operating pressure of 50-50 solder connections is 200psi (14 bar) 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.

⚠ WARNING

It is illegal to use this product in any plumbing system providing water for human consumption, such as drinking or dishwashing, in the United States. Before installing standard material product, consult your local water authority, building and plumbing codes.



BAA/ARRA Compliant**

**This product complies with the Buy American Act and The American Recovery and Reinvestment Act. For more information, visit watts.com.

Options

Suffix

- | | |
|---------|--|
| Z15 | Less lever and nut |
| XH | Extended handle |
| G | Grounded ball |
| GS | Grounded ball and stem |
| SS | 316 Stainless steel ball and stem |
| OV | Oval handle |
| RH | Round handle |
| SH | Stainless steel handle and nut |
| SE | Safety exhaust (unidirectional), see literature ES-B6800SE |
| (01) VT | Virgin PTFE seat and seal |
| BS | Balancing handle stops |
| LL | Latch-Lok handle (304 SS) |
| TH | Tee handle |
| LC | Latch-Lok handles latch and lock in "closed" position only |



Exclusive Latch-Lok Handle (option LL)

Pressure – Temperature

Temperature Range: 0°F – 450°F (-18°C – 232°C)

1/4" – 1"

600psi (41 bar) WOG non-shock
150psi (10 bar) WSP

1 1/4" – 2"

400psi (28 bar) WOG non-shock
125psi (8.6 bar) WSP

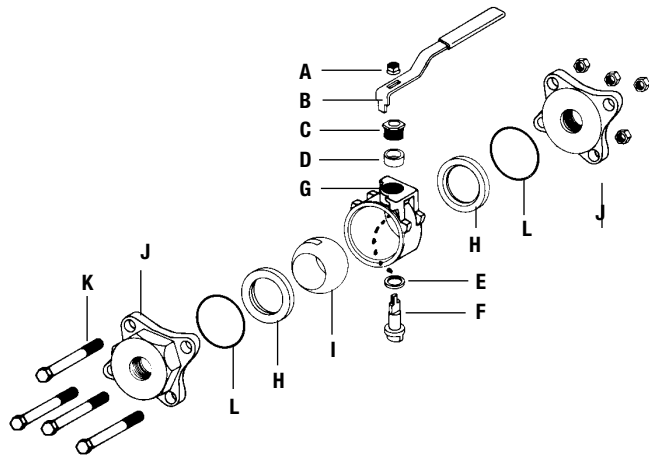
NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

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.

WATTS®

Materials



A Handle Nut	Zinc Plated Carbon Steel
B Handle	Zinc Plated Carbon Steel with Vinyl Insulator
C Packing Nut	Brass ASTM B16, C36000
D Stem Packing	Glass Reinforced PTFE
E Thrust Bearing	Glass Reinforced PTFE
F Stem	Brass ASTM B16, C36000
G Body	Forged Brass ASTM B124
H Seats	Carbon/Glass Reinforced PTFE Durafill®
I Ball	Chrome Plated Brass
J Adapter	Forged Brass ASTM B124
K Body Bolts & Nuts	Zinc Plated Carbon Steel
L Body Seals	PTFE

Dimensions – Weights

B6800

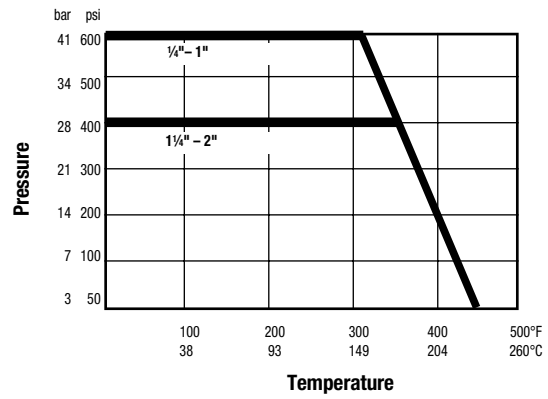
SIZE	DIMENSIONS								WEIGHT	
	C Center to Handle		H Radius of Handle		I Ball Orifice		L End to End		lbs.	kg
in.	in.	mm	in.	mm	in.	mm	in.	mm		
1/4	1 3/4	44	3 7/8	98	3/8	10	2 3/8	60	1.1	.5
3/8	1 3/4	44	3 7/8	98	3/8	10	2 3/8	60	1.1	.5
1/2	1 3/4	44	3 7/8	98	1/2	13	2 3/8	60	1.1	.5
3/4	2 1/4	57	4 1/2	114	3/4	19	3 1/4	83	2.5	1.1
1	2 3/4	70	6 1/8	156	1	25	3 3/8	98	4.1	1.9
1 1/4	3	76	6 1/8	156	1 1/4	32	4 1/2	114	6.3	2.9
1 1/2	3 1/2	89	8	203	1 1/2	38	5	127	9.3	4.2
2	3 7/8	98	8	203	2	51	6 3/8	168	13.8	6.3

*B6801

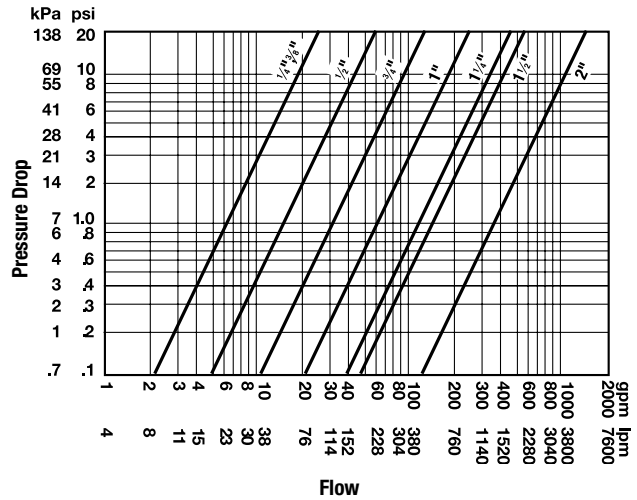
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*See solder instructions on front

Valve Seat Rating



Pressure Drop vs. Flow



SIZE	TORQUE		
	in.-lbs.	N-m	Cv
1/4-3/8	60	6.8	6
1/2	60	6.8	15
3/4	150	16.9	30
1	200	22.6	60
1 1/4	250	28.2	110
1 1/2	320	36.2	130
2	500	56.5	360

