

## For Commercial Applications

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# Series B6010, B6011 and B6013

## 2-Piece, Standard Port, Bronze Ball Valves

**Sizes: 1/2" – 2" (15 – 50mm)**

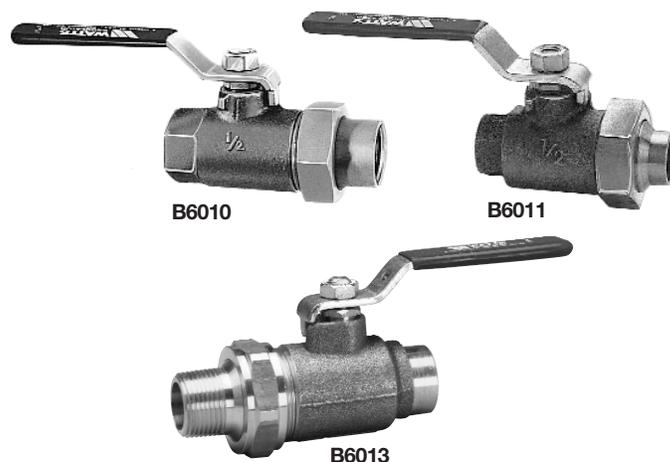
Series B6010, B6011 and B6013 2-Piece, Standard Port, Bronze Ball Valves feature a blowout proof pressure retaining stem. The B6010, B6011, B6013's standard port orifice ensures minimal pressure drop, while Durafill® and Uniseal® seats and chrome plated brass ball provide lasting service for a wide range of liquids and gases.

### Features

- Designed for quick and easy cleaning or replacement of worn parts without dismantling pipe line
- Durafill® (carbon/glass filled PTFE) seats for size 1/2" and 1 1/4" – 2" (15 and 32 – 50mm) and Uniseal® (enhanced PTFE) seats for sizes 3/4" & 1" (20 & 25mm) for lasting service for a wide range of liquids and gases
- Chrome plated brass ball is wiped clean during each operation of the valve
- Minimal pressure drop due to large ports
- Blowout proof, pressure retaining stem
- Pressure rated at 600psi (41 bar) WOG non-shock for threaded end; 400psi (28 bar) WOG non-shock for solder end at 100°F (38°C)
- High cycle life reinforced PTFE stem packing seal and thrust washer
- Vinyl insulator on heavy duty, zinc-plated, carbon steel handles
- Quarter-turn open or close operation
- Low operating torque
- Adjustable stem packing gland
- Each valve factory tested

### Models

- B6010 1/2" – 2" (15 – 50mm) threaded NPT end connections  
 B6011 1/2" – 2" (15 – 50mm) solder end connections\*  
 B6013 1/2" – 1" (15-25mm) solder end x threaded end male union\*



### Specifications

A 2-piece standard port bronze ball valve to be installed as indicated on the plans. The valve must have a blowout proof pressure retaining stem, Durafill® seats (1/2" and 1 1/4" – 2") or Uniseal® seats (3/4" & 1"), reinforced PTFE stem packing seal, and chrome plated brass ball. Pressure rating no less than 600psi (41 bar) WOG non-shock for threaded end and 400psi (28 bar) WOG non-shock for solder end. Valve shall be a Watts Regulator Company Series B6010, B6011 or B6013.

### Options

#### Suffix

- SS – Stainless steel ball and stem  
 VT – Virgin PTFE seat material

### Pressure – Temperature

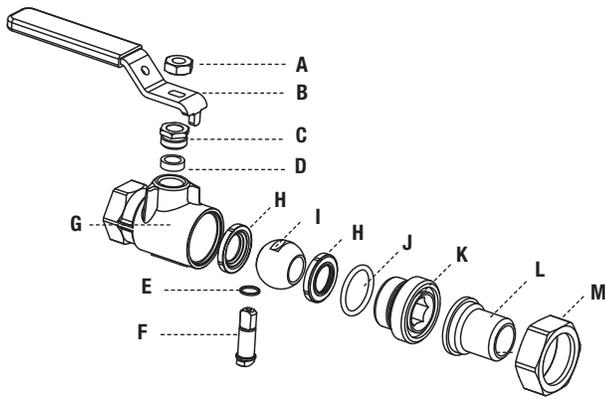
Temperature Range: 0°F – 225°F (-18°C – 107°C)

Maximum Working Pressure: 600psi (41 bar) WOG non-shock for threaded end and 400psi (28 bar) WOG non-shock for solder end @ 100°F (38°C). Not rated for steam service due to union end gasket.

\*This valve is designed to be soft soldered into lines without disassembly, using a low temperature solder 420°F (215°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.15.18 states that the maximum operating pressure of 50-50 solder connections is 200 psi (14 bar) at 100°F (38°C) and decreases with higher temperature.

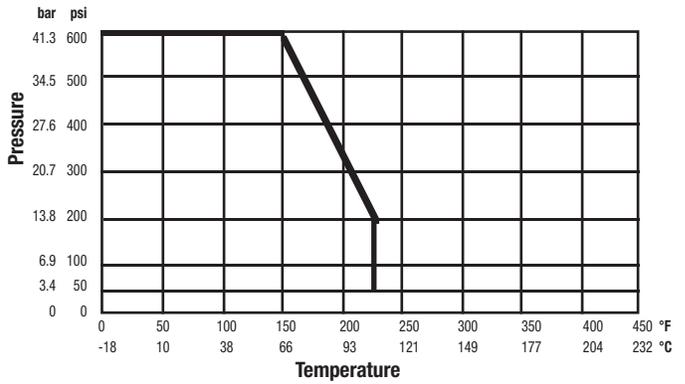
Apply heat with the flame directed **AWAY** from the center of the valve body. Excessive heat can harm the seats. After soldering, the packing nut may have to be tightened.

## Materials

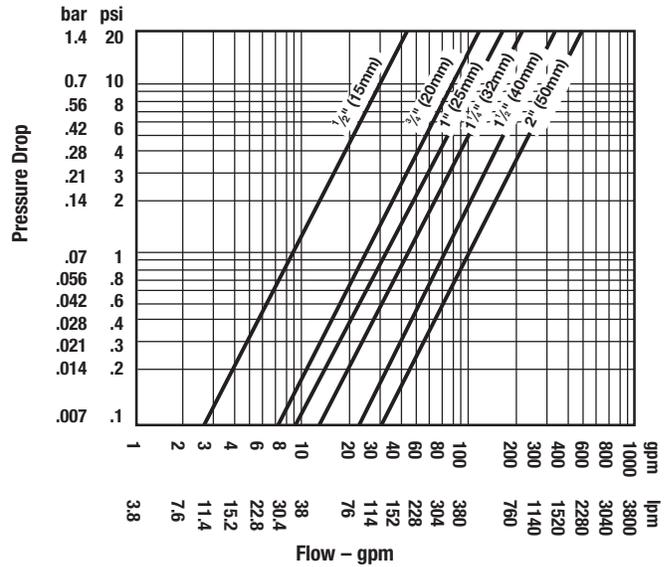


<b>A</b>	<b>Handle Nut</b>	Zinc Plated Carbon Steel
<b>B</b>	<b>Handle</b>	Zinc Plated Carbon Steel with Vinyl Insulator
<b>C</b>	<b>Packing Nut</b>	Brass ASTM B16, C36000
<b>D</b>	<b>Stem Packing</b>	Glass Reinforced PTFE
<b>E</b>	<b>Thrust Washer</b>	Glass Reinforced PTFE
<b>F</b>	<b>Stem</b>	Brass ASTM B16, C36000
<b>G</b>	<b>Body</b>	Cast Bronze ASTM B584, C84400
<b>H</b>	<b>Seats</b>	Durafill® (1/2" & 1 1/4"-2") Uniseal® (3/4" & 1")
<b>I</b>	<b>Ball</b>	Chrome Plated Brass ASTM B16, C36000
<b>J</b>	<b>Retainer</b>	Brass
<b>K</b>	<b>O-ring</b>	Buna-N
<b>L</b>	<b>Union Tailpiece</b>	Brass
<b>M</b>	<b>Union Nut</b>	Brass

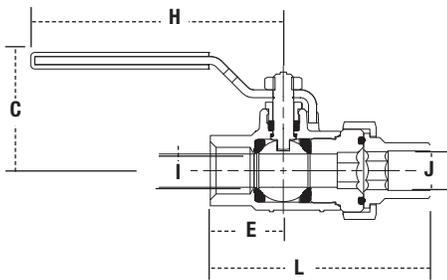
## Valve Seat Rating



## Pressure Drop vs. Flow



## Dimensions – Weights



SIZE (DN)		CV RATING	
In.	mm		
1/2	15	9	
3/4	20	25	
1	25	34	
1 1/4	32	46	
1 1/2	40	73	
2	50	102	

Durafill® is a registered trademark of Cargill, Limited.  
Uniseal® is a registered trademark of Uniseal, Incorporated.

MODEL	SIZE (DN)		DIMENSIONS								WEIGHT					
	in	mm	C		E		H		I		L		J		lbs.	kg
B6010	1/2	15	1 1/4	44	1 1/8	28	3 3/4	95	1/2	13	3	75	-	-	0.63	0.28
B6010	3/4	20	2 1/16	52	1 7/16	36	3 7/8	98	1 11/16	17	3 9/16	90	-	-	1.19	0.54
B6010	1	25	2 1/4	57	1 3/4	44	3 7/8	98	7/8	22	4 3/8	110	-	-	2.13	0.97
B6010	1 1/4	32	2 5/8	67	1 15/16	49	5 3/4	146	1	25	5 1/16	129	-	-	4.00	1.81
B6010	1 1/2	40	3 3/8	78	2 1/8	54	5 5/8	143	1 1/4	32	5 5/8	143	-	-	5.65	2.56
B6010	2	50	4 1/16	103	2 7/16	61	8 7/16	214	1 1/2	38	6 1/4	158	-	-	8.25	3.74
B6011	1/2	15	1 1/4	44	1 1/16	26	3 3/4	95	1/2	13	2 3/4	70	5/8	16	0.63	0.28
B6011	3/4	20	2 1/16	52	1 7/16	37	3 7/8	98	1 11/16	17	3 13/16	96	7/8	22	1.13	0.51
B6011	1	25	2 1/4	57	1 3/4	44	3 7/8	98	7/8	22	4 3/8	111	1 1/8	29	1.81	0.82
B6011	1 1/4	32	2 5/8	67	2 1/4	57	5 3/4	146	1	25	5 5/8	142	1 3/8	35	2.88	1.31
B6011	1 1/2	40	3 3/8	78	2 1/4	57	5 5/8	143	1 1/4	32	6 5/16	160	1 5/8	41	4.25	1.93
B6011	2	50	4 1/16	103	3 3/16	80	8 7/16	214	1 1/2	38	7 9/16	191	2 1/8	54	6.81	3.09
B6013	1/2	15	1 1/4	44	1 1/16	26	3 3/4	95	1/2	13	3 1/4	81	-	-	0.79	0.36
B6013	3/4	20	2 1/16	52	1 7/16	37	3 7/8	98	1 11/16	17	4	102	-	-	1.45	0.66
B6013	1	25	2 1/4	57	1 3/4	44	3 7/8	98	7/8	22	4 7/8	123	-	-	2.05	0.93



Water Safety & Flow Control Products



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Canada: 5435 North Service Rd., Burlington, ONT. L7L 5H7; www.wattscanada.ca