## For Commercial and Industrial Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

# **Series B6300, B6301** 2-Piece, Full Port, Bronze Ball & Waste Valves

#### Sizes: 1/2" - 1" (15 - 25mm)

Series B6300, B6301 2-Piece, Full Port, Bronze Ball & Waste Valves feature a drain port to allow for draining or venting of downstream line when valve is in the off position. The B6300, B6301's full port orifice ensures minimal pressure drop, while virgin PTFE seats and chrome plated brass ball provide lasting service.

#### Features

- Drain port allows draining or venting of downstream line when valve is in the off position
- Minimal pressure drop due to full size ports
- Virgin PTFE seats are standard
- Suitable for a full range or liquids and gases.
- Ball is wiped clean during each operation of the valve
- Blowout proof pressure retaining stem
- Pressure rated at 400psi (28 bar) WOG non-shock
- Handle can be repositioned 180°
- High cycle life reinforced PTFE stem packing seal and thrust washer
- · Vinyl insulator on heavy duty, zinc-plated carbon steel handles
- Fast quarter-turn open or close operation
- Low operating torque
- Adjustable stem packing gland
- Each valve factory tested
- Valve is unidirectional (one-way) due to drain port on downstream

#### Models

B6300	1/2" - 1" (15 - 25mm) threaded NPT end connections
B6301	$\frac{1}{2}$ " – 1" (15 – 25mm) solder end connections*

### **Specifications**

A 2-piece full port bronze ball & waste valve to be installed as indicated on the plans. The valve must have a blowout proof pressure retaining stem, chrome plated brass ball, virgin PTFE seats and reinforced PTFE stem packing seal and thrust washer. Pressure rating no less than 400psi (28 bars) WOG non-shock. Valve shall have drain port for draining or venting of downstream line. Valve shall be a Watts Series B6300 (threaded) or B6301 (solder).



### **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

- OV High profile safety oval handle
- RH Round handle
- SH Stainless steel handle & nut
- TH Tee handle
- XH Extended handle

#### Pressure - Temperature

Temperature Range: 0°F - 350°F (-18°C – 177°C)

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

\*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 200psi (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.

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.



#### Materials



Α	Handle Nut	Zinc Plated Carbon Steel
В	Handle	Zinc Plated Carbon Steel with Vinyl Insulator
C	Packing Nut	Brass ASTM B16, C36000
D	Stem Packing	PTFE
Е	Thrust Washer	PTFE
F	Stem	Brass ASTM B16, C36000
G	Body	Bronze ASTM B584, C84400
Н	Seats	Virgin PTFE
I.	Ball	Chrome Plated Brass ASTM B16, C36000
J	Adapter	Brass
Κ	Seal	Buna-N
L	Cap	Brass

## Valve Seat Rating



	SI	ZE (DN)	RATING	OPERATING TORQUE				
	in.	тт	Cv	in./lbs.	N-m			
	1/2	15	15	60	6.80			
	3⁄4	20	30	150	16.95			
_	1	25	60	200	22.60			

### Pressure Drop vs. Flow



## Dimensions - Weights



#### B6300

SIZE	(DN)	DIMI	ENSIONS		WEIGHT										
			С	E H		I J		L							
		Center t	o Handle	Center	to End	Radius	Radius of Handle		Ball Orifice		Dia. Solder Connection		End to End		
in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	lbs.	kg.
1/2	15	13⁄4	46.0	<b>1</b> <sup>1</sup> ⁄4	31.8	33⁄4	95.3	1/2	12.7	—	—	<b>2</b> <sup>3</sup> ⁄16	60.3	.63	.29
3⁄4	20	2	47.6	<b>1</b> %16	39.7	3¾	95.3	3⁄4	19.0	—	—	<b>2</b> <sup>13</sup> ⁄16	74.6	1.00	.45
1	25	<b>2</b> <sup>5</sup> /16	54.0	<b>1</b> <sup>15</sup> ⁄16	49.2	41/2	114.3	1	25.4	_	_	37/16	90.5	1.75	.80

Pressure Drop

#### B6301

1/2	15	13⁄4	46.0	11/8	28.6	3¾	95.3	1/2	12.7	5⁄8	15.9	23/8	54.0	.59	.27
3⁄4	20	2	47.6	<b>1</b> %16	39.7	33⁄4	95.3	3⁄4	19.0	7⁄8	22.2	<b>3</b> <sup>5</sup> ⁄16	74.6	.88	.40
1	25	<b>2</b> <sup>5</sup> /16	54.0	<b>1</b> <sup>13</sup> ⁄16	49.2	41/2	114.3	1	25.4	11/8	28.6	<b>3</b> <sup>13</sup> /16	98.4	1.68	.76





A Watts Water Technologies Company

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