

## For Commercial and Industrial Applications

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

Contractor \_\_\_\_\_

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

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

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

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# Series B6400

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

Sizes: 1/4" – 4" (8 – 100mm)

Series B6400 2-Piece, Standard Port, Bronze Ball Valves come standard with actuator mounting pads, Durafill® (carbon/glass filled PTFE) seats, bottom loaded blowout proof stem, chrome plated brass ball, and adjustable stem packing to provide lasting service for a wide range of liquids and gases.

### Features

- Actuator mounting pads
- 1/4" – 2" (8 – 50mm) pressure rated at 600psi (41 bar) WOG non-shock; 150psi (10 bar) WSP. 2 1/2" – 4" (65 – 100mm) pressure rated at 400psi (28 bar) WOG non-shock; 125psi (8.6 bar) WSP
- Latch-Lok handle available (suffix LL)
- Durafill® (carbon/glass filled PTFE) seats are standard for longer lasting seats in high or low temperature applications
- Suitable for a full range of liquids and gases
- Chrome plated brass ball is wiped clean during each operation of the valve
- Blowout proof pressure retaining stem
- High cycle life reinforced PTFE stem packing seal and thrust washer
- Vinyl insulator on heavy duty, zinc-plated, carbon steel handles
- Excellent for throttling and balancing applications of non-abrasive fluids where minimum flow is 20% to 100% of valve capacity
- Adjustable stem packing gland
- Each valve factory tested

### Specifications

A 2-piece, standard port, bronze ball valve to be installed as indicated on the plans. Valve shall have ASTM B584 bronze body, chrome plated ASTM B16 brass ball, ASTM B16 brass blowout proof stem, glass filled PTFE seats, PTFE stem packing, PTFE stem thrust bearing, and adjustable packing nut. Top loaded stems or valves without adjustable packing are not acceptable. Pressure rating no less than 600psi (41 bar) WOG non-shock; 150psi (10 bar) WSP for sizes 1/4" – 2" and 400psi (28 bar) WOG non-shock; 125psi (8.6 bar) WSP for sizes 2 1/2" – 4". Valve must conform to MSS-SP-110 and shall be a Watts Series B6400.

#### ⚠ 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.



B6400



B6400LL

### BAA/ARRA Compliant\*

\*This product complies with the Buy American Act and The American Recovery and Reinvestment Act. For more information, visit [watts.com](http://watts.com).

### Pressure – Temperature

Temperature Range: -55°F – 450°F (-49°C – 232°C)  
@ 50psi (3.4 bar)

1/4" – 2" (8 – 50mm): 600psi (41 bar) WOG non-shock;  
150psi (10 bar) WSP

2 1/2" – 4" (65 – 100mm): 400psi (28 bar) WOG non-shock;  
125psi (8.6 bar) WSP

Durafill® is a registered trademark of Cargill, Limited.

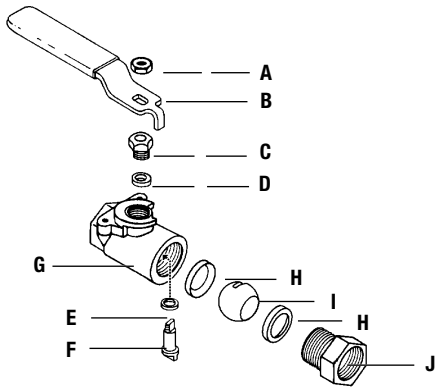
### Options

- Suffix
- LC – Lever latches and locks in closed position only
- LL – Lever latches and locks in open and closed positions
- RH – Round handle
- SE – Safety exhaust port (see literature ES-B6400-SE)
- SH – Stainless steel handle and nut
- SS – 316SS ball and stem
- TH – Tee handle
- UL – UL approved under: YSDT, YRPV, HNF, MHKZ
- VT – Virgin PTFE seat
- XH – Extended handle

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.

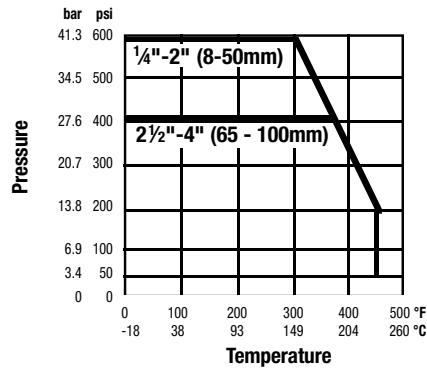


## Materials



<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>	Bronze ASTM B584, C84400
<b>H</b>	<b>Seats</b>	Durafill® (carbon/glass filled PTFE)
<b>I</b>	<b>Ball</b>	Chrome Plated Brass ASTM B16, C36000
<b>J</b>	<b>Adapter</b>	Brass ASTM B16, C36000

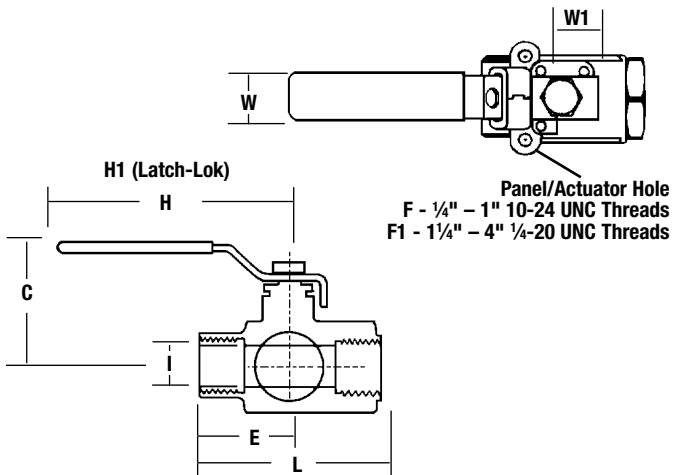
## Valve Seat Rating



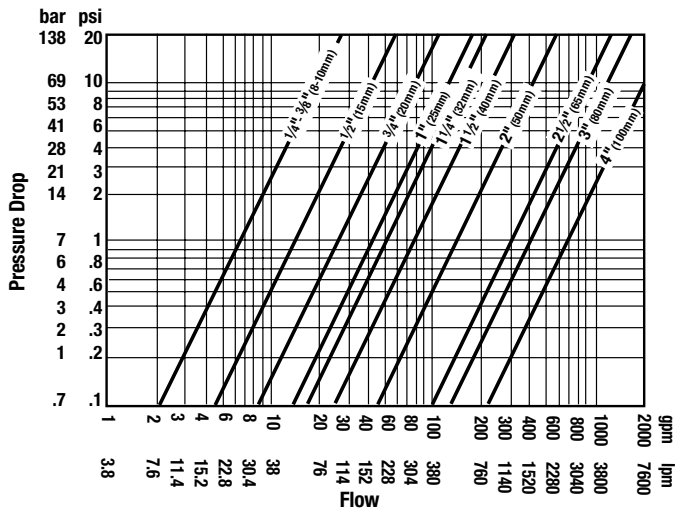
## Valve Torque Rating

SIZE (DN)		CV	OPERATING TORQUE	
in.	mm	Rating	in.-lb.	N-m
1/4	8	6.3	60	6.8
3/8	10	6.3	60	6.8
1/2	15	15	60	6.8
3/4	20	25	90	10.2
1	25	40	150	16.9
1 1/4	32	50	200	22.6
1 1/2	40	75	250	28.2
2	50	110	320	36.2
2 1/2	65	300	500	56.5
3	80	400	600	67.8
4	100	450	800	90.4

## Dimensions — Weights



## Pressure Drop vs. Flow



SIZE (DN)		DIMENSIONS				WEIGHT											
in.	mm	C Center to Handle	E Center to End	H Handle	H1 Latch-Lok Handle	I Ball Orifice	L End to End	W & W1 Mounting Ctr. - Ctr.		lbs.	kg.						
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm								
1/4	8	1 3/4	45	1 1/8	29	3 3/4	95	3 3/4	95	1/2	13	2 1/4	57	1 1/8	29	.6	.3
3/8	10	1 3/4	45	1 1/8	29	3 3/4	95	3 3/4	95	1/2	13	2 1/4	57	1 1/8	29	.6	.3
1/2	15	1 3/4	45	1 1/8	29	3 3/4	95	3 3/4	95	1/2	13	2 1/4	57	1 1/8	29	.6	.3
3/4	20	2	51	1 1/2	38	3 3/4	95	4 3/8	111	1 1/16	17	2 7/8	74	1 3/8	35	1.2	.5
1	25	2 3/8	60	1 3/4	45	4 1/2	114	4 1/2	114	7/8	22	3 1/2	89	1 3/8	35	2.1	1.0
1 1/4	32	3	76	2	51	5 1/2	140	6 1/8	156	1	25	3 7/8	98	1 1/8	29	3.3	1.5
1 1/2	40	3	76	2 1/8	53	5 1/2	140	6 1/8	156	1 1/4	32	4 1/4	108	1 1/8	29	4.1	1.9
2	50	3 5/8	92	2 1/2	64	8	203	8	203	1 1/2	38	4 7/8	124	1 1/2	38	6.4	2.9
2 1/2	65	4 1/4	108	3 1/4	83	8	203	8	203	2	51	6 1/2	165	1 1/2	38	12.8	5.8
3	80	4 3/8	111	3 1/2	89	8	203	8	203	2 1/2	64	6 13/16	173	1 1/2	38	17.8	8.1
4	100	5	127	3 7/8	98	11	279	—	—	3	76	7 11/16	196	1 1/2	38	32.0	14.5



A Watts Water Technologies Company

USA: Tel: (978) 689-6066 • Fax: (978) 975-8350 • Watts.com  
 Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • Watts.com  
 Latin America: Tel: (52) 81-1001-8600 • Fax: (52) 81-8000-7091 • Watts.com