

## Engineering Specification

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

Contractor \_\_\_\_\_

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

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

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

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# LEAD FREE\*

## Series LFB6400 2-Piece, Standard Port, Lead Free\* Ball Valves with Mounting Pads

Sizes: 1/4" – 4"

Series LFB6400 2-Piece, Standard Port, Lead Free Ball Valves come standard with actuator mounting pads, Durafill® (carbon/glass filled PTFE) seats, bottom loaded blowout proof stem, stainless steel ball, and adjustable stem packing to provide lasting service for a wide range of liquids and gases. The LFB6400 features Lead Free\* construction to comply with Lead Free\* installation requirements.

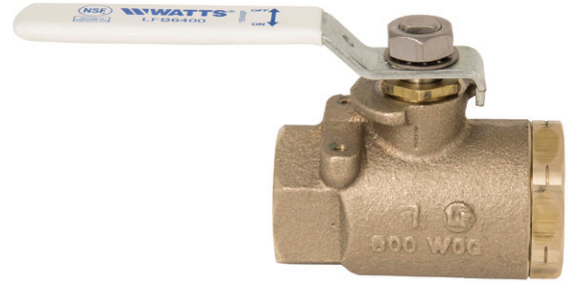
### Features

- Excellent for throttling and balancing applications of non-abrasive fluids where minimum flow is 20% to 100% of valve capacity
- Actuator mounting pads
- Durafill® (carbon/glass filled PTFE) seats are standard for longer lasting seats in high or low temperature applications
- 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
- Adjustable stem packing gland

### Specifications

A 2-piece, standard port, Lead Free\* copper silicon alloy ball valve to be installed as indicated on the plans. Valve shall have Lead Free\* copper silicon alloy body, stainless steel ball, stainless steel 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". Lead Free\* Ball Valves shall be constructed using Lead Free\* materials. Lead Free LFB6400 shall comply with state codes and standards, where applicable, requiring reduced lead content. Valve must conform to MSS-SP-110 and shall be a Watts Series LFB6400.

Durafill® is a registered trademark of Cargill, Limited.



LFB6400



Please refer to [watts.com](http://watts.com) for BAA information on specific models.

### Pressure – Temperature

Temperature Range: -55°F – 450°F (-49°C – 232°C) @ 50psi (3.4 bar)  
1/4" – 2": 600psi (41 bar) WOG non-shock; 150psi (10 bar) WSP  
2 1/2" – 4": 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.

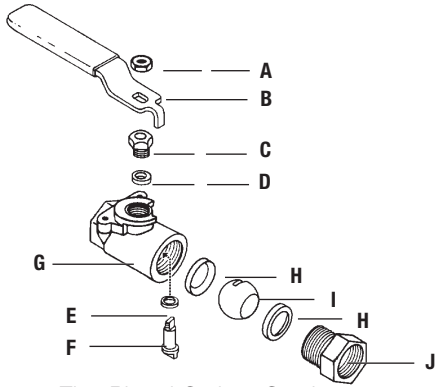
#### NOTICE

Inquire with governing authorities for local installation requirements

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

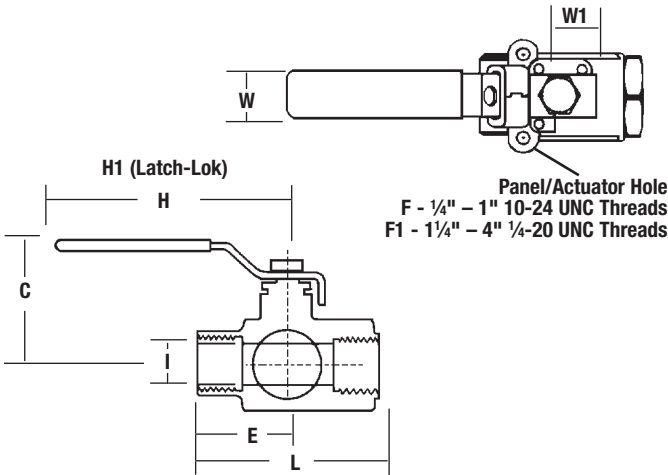
Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior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

## Materials

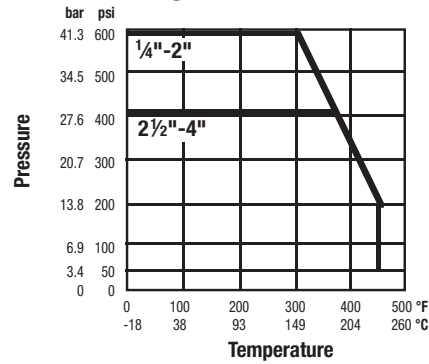


<b>A Handle Nut</b>	Zinc Plated Carbon Steel
<b>B Handle</b>	Zinc Plated Carbon Steel with Vinyl Insulator
<b>C Packing Nut</b>	Brass ASTM B16, C36000
<b>D Stem Packing</b>	Glass Reinforced PTFE
<b>E Thrust Washer</b>	Glass Reinforced PTFE
<b>F Stem</b>	316 Stainless Steel
<b>G Body</b>	Lead Free Copper Silicon Alloy
<b>H Seats</b>	Durafill® (carbon/glass filled PTFE)
<b>I Ball</b>	316 Stainless Steel
<b>J Adapter</b>	Lead Free Brass

## Dimensions — Weights



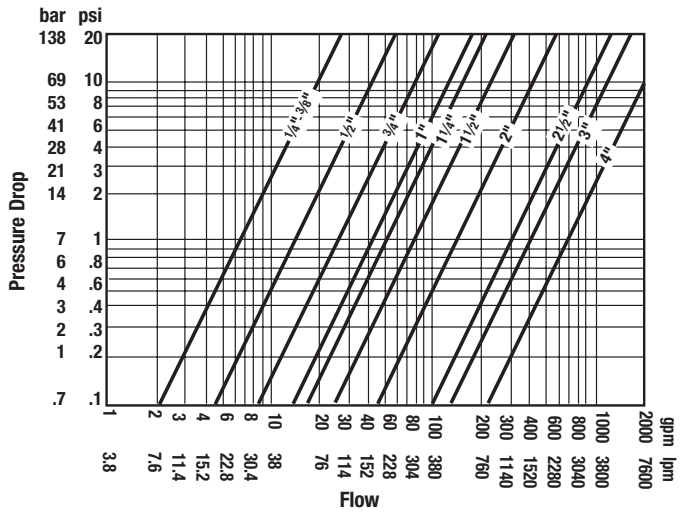
## Valve Seat Rating



## Valve Torque Rating

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

## Pressure Drop vs. Flow



SIZE	DIMENSIONS								WEIGHT							
	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.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
1/4	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	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	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	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	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	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	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	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	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	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	5	127	3 7/8	98	11	279	—	—	3	76	7 11/16	196	1 1/2	38	32.0	14.5



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