# For Commercial and Industrial Applications

Job Name

Job Location

Engineer

Approval



# Series LFB6800, LFB6801 3-Piece, Full Port, Lead Free<sup>\*</sup>

# Ball Valves



Series LFB6800, LFB6801 3-Piece, Full Port, Lead Free\* Ball Valves feature an in-line maintenance design that offers serviceability of all operating parts without disturbing the rigid pipeline system. The LFB6800, LFB6801's full port orifice ensures maximum flow capacity, while Durafill® seats, stainless steel ball and stem provide maximum safety and highest operating pressure and temperature limits. The LFB6800, LFB6801 features Lead Free\* construction to comply with Lead Free\* installation requirements.

#### Features

- Lead Free\* copper silicon alloy body
- 3-piece, lift-out design
- Carbon/glass reinforced PTFE Durafill® valve seats
- Stainless steel ball and stem
- Blow-out proof, pressure retaining stem
- Standard actuator mounting pads
- Vinyl insulator on heavy duty, zinc plated carbon steel handles
- Low operating torque
- Adjustable stem packing gland
- Each valve factory tested

#### Models

**LFB6800**  $\frac{1}{4}$ " - 2" threaded NPT end connections **LFB6801**  $\frac{1}{2}$ " - 2" solder end connections\*\*

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

\*\*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.

Contractor

Approval

Contractor's P.O. No.

Representative



LFB6800

#### **BAA/ARRA** Compliant\*\*\*

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

#### Specifications

Lead Free\* 3-Piece, Full Port, Ball Valves shall be constructed using Lead Free\* materials. Lead Free\* valves shall comply with state codes and standards, where applicable, requiring reduced lead content. The valve must have a blowout proof stem, reinforced Durafill seats, reinforced PTFE stem packing, and stainless steel 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 LFB6800 (threaded) or LFB6801 (solder).

#### Options

Suffix XH – Extended handle LL – Latch-Lok handle (304 SS)



Exclusive Latch-Lok Handle (option LL)

### Pressure – Temperature

Temperature Range: 0°F – 450°F (-18°C – 232°C) <sup>1</sup>/4" – 1"

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

1<sup>1</sup>/4" – 2"

/4 - 2 400-cei

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





### Materials



A B	Handle Nut Handle	Zinc plated carbon steel Zinc plated carbon steel with vinyl insulator
С	Packing Nut	Brass ASTM B16, C36000
D	Stem Packing	Glass reinforced PTFE
Е	Thrust Bearing	Glass reinforced PTFE
F	Stem	316 Stainless steel
G	Body	Lead Free* Brass
Н	Seats	Carbon/Glass reinforced PTFE Durafill®
L	Ball	316 Stainless steel
J	Adapter	Lead Free* Brass
Κ	Body Bolts & Nuts	s Zinc plated carbon steel
L	Body Seals	PTFE

# Dimensions – Weights

#### LFB6800

SIZE									WEI	GHT
	СН			I		L				
	Center to Handle		Radius of Handle		Ball Orifice		End to End			
in.	in.	тт	in.	тт	in.	тт	in.	тт	Lbs.	Kg.
1⁄4	13⁄4	44	37/8	98	3⁄8	10	<b>2</b> <sup>3</sup> / <sub>8</sub>	60	1.1	.5
3⁄8	13⁄4	44	37⁄8	98	3⁄8	10	23/8	60	1.1	.5
1/2	13⁄4	44	37⁄8	98	1/2	13	23/8	60	1.1	.5
3⁄4	21/4	57	<b>4</b> <sup>1</sup> / <sub>2</sub>	114	3⁄4	19	31⁄4	83	2.5	1.1
1	<b>2</b> <sup>3</sup> ⁄4	70	<b>6</b> <sup>1</sup> / <sub>8</sub>	156	1	25	37⁄8	98	4.1	1.9
1¼	3	76	61//8	156	11⁄4	32	<b>4</b> <sup>1</sup> / <sub>2</sub>	114	6.3	2.9
1½	<b>3</b> ½	89	8	203	1½	38	5	127	9.3	4.2
2	31/8	98	8	203	2	51	65/8	168	13.8	6.3

#### LFB6801\*\*

1/2	13⁄4	44	37/8	98	1/2	13	<b>2</b> 3⁄/8	60	1.1	.5
3⁄4	21/4	57	<b>4</b> <sup>1</sup> / <sub>2</sub>	114	3⁄4	19	31⁄4	83	2.5	1.1
1	23⁄4	70	61/8	156	1	25	37⁄8	98	4.1	1.9
11/4	3	76	61/8	156	11/4	32	<b>4</b> <sup>1</sup> / <sub>2</sub>	114	6.3	2.9
1½	<b>3</b> ½	89	8	203	<b>1</b> ½	38	5	127	9.3	4.2
2	31/8	98	8	203	2	51	65//8	168	13.8	6.3

\*\*See solder instructions on front.



A Watts Water Technologies Company

Valve Seat Rating



## Pressure Drop vs. Flow



SIZE	TORQUE							
in.	inIbs.	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					
1¼	250	28.2	110					
11/2	320	36.2	130					
2	500	56.5	360					

