

## For Commercial and Industrial Applications

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

Contractor \_\_\_\_\_

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

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

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

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# LEAD FREE\*

## Series LFFBV 2-Piece, Full Port, Bronze Ball Valves

Sizes: ½" – 2"

Series LFFBV 2-Piece, Full Port, Lead Free\* Bronze Ball Valves comply with MSS-SP-110 and feature a blowout proof stem and virgin PTFE seats. The LFFBV full port design ensures maximum flow capacity and minimal pressure drop. The LFFBV features Lead Free\* construction to comply with Lead Free\* installation requirements.

### Features

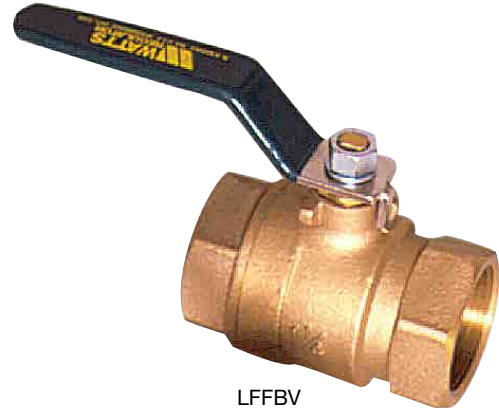
- Suitable for a full range of liquids and gases
- Minimal pressure drop due to full size ports
- Bottom loaded blowout proof stem
- Virgin PTFE stem packing seal, thrust washer and seat
- Vinyl insulator on heavy duty zinc plated carbon steel handles
- Fast quarter-turn open or close operation
- Excellent for throttling and balancing application of non-abrasive fluids where minimum flow is 20% to 100% of valve capacity
- Low operating torque
- Adjustable stem packing gland
- 600psi (41 bar) WOG, 125psi (8.6 bar) WSP.

### Models

LFFBV ½" – 2" threaded end connections

### Specifications

A 2-piece full port Lead Free bronze ball valve to be installed as indicated on the plans. Lead Free\* 2-Piece, Full Port, Bronze 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 bottom loaded blowout proof stem, adjustable packing nut, and chrome plated brass ball and brass stem. Valves with top loaded stems or without adjustable packing nuts are not acceptable. Pressure ratings no less than 600psi (41 bar) WOG non-shock, 125psi (8.6 bar) WSP. Valve must conform to MSS-SP-10 and shall be a Watts Series LFFBV (threaded).



LFFBV

### Pressure – Temperature

Temperature Range: 0°F – 350°F ( -18°C – 177°C)  
@ 50psi (3.4 bar)

Maximum Working Pressure: 600psi (41 bar) WOG non-shock  
@ 100°F (38°C) and 125psi (8.6 bar) WSP

### NOTICE

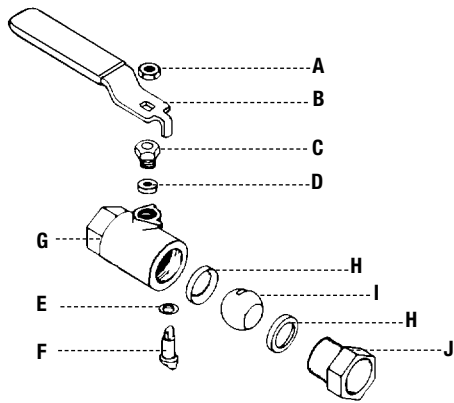
The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation 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.

## Materials

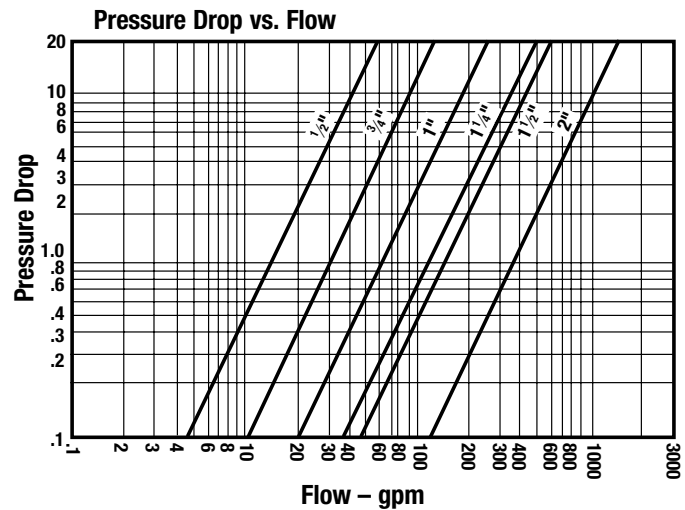
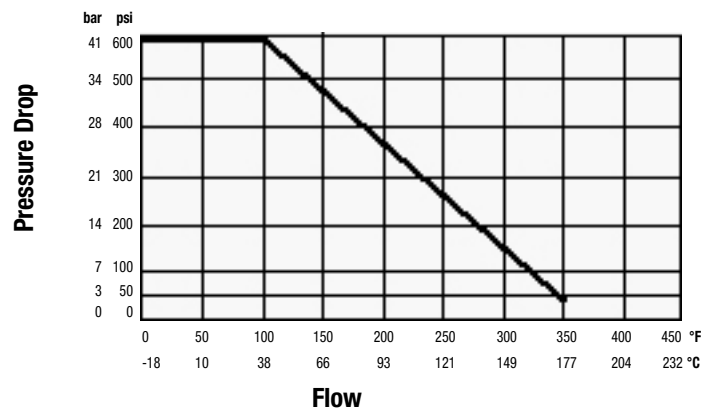


<b>A Handle Nut</b>	Zinc plated carbon steel
<b>B Handle</b>	Zinc plated carbon steel with vinyl insulator
<b>C Packing Nut</b>	Brass
<b>D Stem Packing</b>	Virgin PTFE
<b>E Thrust Washer</b>	Virgin PTFE
<b>F Stem</b>	Brass
<b>G Body</b>	Lead Free* silicon bronze
<b>H Seats</b>	Virgin PTFE
<b>I Ball</b>	Chrome plated Lead Free* brass
<b>J Adapter</b>	Lead Free* silicon bronze

## Valve Torque Rating

SIZE		MAX. BREAKAWAY/TORQUE		
in.	in.-lbs	N-m	Cv	
1/2	60	6.8	15	
3/4	150	16.95	30	
1	200	22.60	60	
1 1/4	250	28.25	110	
1 1/2	320	36.16	130	
2	500	56.50	360	

## Valve Seat Rating

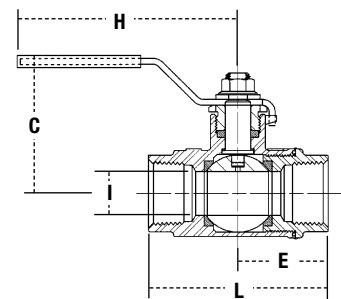


**\*Note:** 1 gpm equals 3.785 liters per minute  
1 psi equals .07 bar

## Dimensions — Weights

### LFFBV

SIZE			DIMENSIONS						WEIGHT	
in.	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg
1/2	1 1/4	44	1 1/32	28	3 3/8	86	1/2	13	.6	.3
3/4	2 1/16	52	1 9/32	33	3 5/8	92	3/4	19	.8	.4
1	2 1/2	64	1 7/32	31	4 3/8	111	1	25	1.5	.7
1 1/4	2 5/8	67	1 1/16	40	4 3/8	111	1 1/4	32	2.5	1.1
1 1/2	3 1/8	79	1 15/16	49	6 1/8	156	1 1/2	38	3.5	1.6
2	3 1/2	89	2 7/32	56	6 1/8	156	2	51	5.5	2.5



**USA:** T: (978) 689-6066 • F: (978) 975-8350 • Watts.com  
**Canada:** T: (905) 332-4090 • F: (905) 332-7068 • Watts.ca  
**Latin America:** T: (52) 81-1001-8600 • Watts.com