For Commercial and Industrial Applications

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

LEAD FREE*

Series LFFBV

2-Piece, Full Port, Bronze Ball Valves

Sizes: 1/2" - 2" (15 - 50mm)

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 1/2" - 2" (15 - 50mm) 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).



Pressure - Temperature

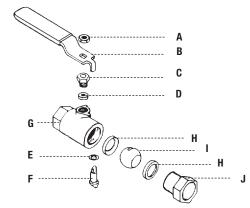
Temperature Range: 0°F – 350°F (-18°C – 177°C) @ 50psi (3.4 bar)

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

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



Materials



A Handle Nut Zinc plated carbon steel

B Handle Zinc plated carbon steel with vinyl

insulator

C Packing Nut Brass
D Stem Packing Virgin PTFE
E Thrust Washer Virgin PTFE
F Stem Brass

G Body Lead Free* silicon bronze

H Seats Virgin PTFE

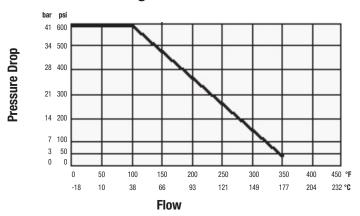
I Ball Chrome plated Lead Free* brass

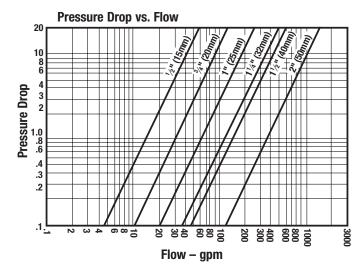
J Adapter Lead Free* silicon bronze

Valve Torque Rating

SIZEMAX	. BREAKAWAY/TORQ	UE		
in.	mm	inIbs	N-m	Cv
1/2	15	60	6.8	15
3/4	20	150	16.95	30
1	25	200	22.60	60
11/4	32	250	28.25	110
11/2	40	320	36.16	130
2	50	500	56.50	360

Valve Seat Rating



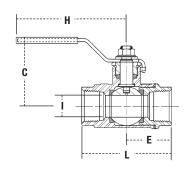


*Note: 1 gpm equals 3.785 liters per minute 1psi equals .07 bar

Dimensions - Weights

LFFBV

SIZE	(DN)	DIMENSIONS WEIGHT							GHT				
		C	;	E			Н		I	l	_		
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg.
1/2	15	13/4	44	13/32	28	33/8	86	1/2	13	2 ³ ⁄ ₁₆	56	.6	.3
3/4	20	21/16	52	19/32	33	35/8	92	3/4	19	2 %16	65	.8	.4
1	25	21/2	64	17/32	31	43/8	111	1	25	31/16	78	1.5	.7
11/4	32	2%	67	1 %16	40	43/8	111	11/4	32	31/2	89	2.5	1.1
11/2	40	31//8	79	1 15/16	49	61//8	156	11/2	38	37/8	98	3.5	1.6
2	50	31/2	89	2 ⁷ / ₃₂	56	61//8	156	2	51	47/16	113	5.5	2.5



Tapped LFFBV

SI	L	
in.	mm	in.
1/2	15	21/4
3/4	20	211/16
1	25	33/16
11/4	32	39/16
11/2	40	3 1/8
2	50	41/2



