For Commercial and Industrial Applications

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

LEAD FREE*

Series LFB6080, LFB6081

2-Piece, Full Port, Lead Free* Brass Ball Valves

Sizes: ½" – 2" (15 – 50mm)

Series LFB6080, LFB6081 2-Piece, Full Port, Lead Free* brass Ball Valves feature 316 stainless steel balls and stems with virgin PTFE seats and seals. The LFB6080, LFB6081's full port orifice ensures minimal pressure drop, while virgin PTFE stem packing seal and thrust washer provide lasting service. The Series LFB6080 and LFB6081 feature Lead Free* construction to comply with low lead installation requirements.

LFB6080

LFB6081**

Features

- Lead Free* brass body and adapter
- 316 stainless steel balls and stems are standard
- Virgin PTFE seats and seals are standard
- Suitable for a full range of liquids and gases
- Minimal pressure drop due to full port design
- Blowout proof pressure retaining stem
- Pressure rated at 600psi (41.4 bar) WOG non-shock; 150psi (10.3 bar) WSP
- Virgin PTFE stem packing seal and thrust washer
- Vinyl insulator on heavy duty, zinc-plated carbon steel handles
- Fast quarter-turn open or close operation
- Excellent for throttling and balancing applications of non-abrasive fluids where minimum flow is 20% to 100% of valve capacity
- Low operating torque
- Adjustable stem packing
- Each valve factory tested

Models

LFB6080 ½" – 2" (15 – 50mm) threaded NPT end connections

LFB6081 ½" – 2" (15 – 50mm) solder end connections

Specifications

A 2-piece full port Lead Free* brass ball valve to be installed as indicated on the plans. The valve must have a blowout proof pressure retaining 316 stainless steel stem, 316 stainless steel ball, virgin PTFE seats, seals, stem packing seal and thrust washer. Valve must have adjustable packing. Valves with O-ring stem seal only are not acceptable. Pressure rating no less than 600psi (41.4 bar) WOG non-shock, 150psi (10.3 bar) WSP. The valve body and adapter shall be constructed using Lead Free* brass. Lead Free* ball valves shall comply with state codes and standards, where applicable, requiring reduced lead content. Valve shall be manufactured to the MSS-SP-110 standard and shall be a Watts Series LFB6080 (threaded) or LFB6081 (solder).

Pressure — Temperature

Temperature Range: 0°F - 350°F (-18°C – 177°C) @ 50psi (3.5 bar)

Maximum Working Pressure: 600psi (41 bar) WOG non-shock; 150psi (10 bar) WSP

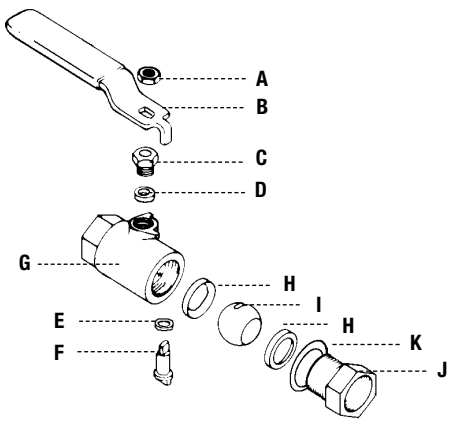
**This valve is designed to be soft soldered into lines without disassembly, using a low temperature solder 420°F (215°C). Other solders such as 95/5 tin antimony 460°F (238°C) can be used. However, extreme caution must be used to prevent seat damage. Higher temperature solders will damage the seat material. ANSI B.15.18 states that the maximum operating pressure of 50-50 solder connections is 200psi (14 bar) at 100°F (38°C) and decreases with higher temperature.

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.

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

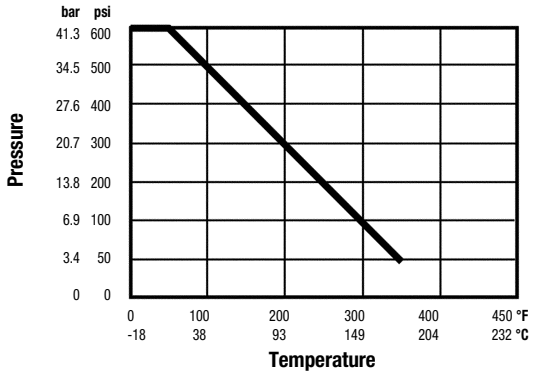
WATTS®

Materials



A	**Handle Nut**	Zinc Plated Carbon Steel
B	**Handle**	Zinc Plated Carbon Steel with Vinyl Insulator
C	**Packing Nut**	Brass, ASTM B16, C36000
D	**Stem Packing**	PTFE
E	**Thrust Washer**	PTFE
F	**Stem**	316 stainless steel
G	**Body**	Lead Free* brass
H	**Seats**	Virgin PTFE
I	**Ball**	316 stainless steel
J	**Adapter**	Lead Free* brass
K	**Body Seal**	PTFE (1¼" – 2")

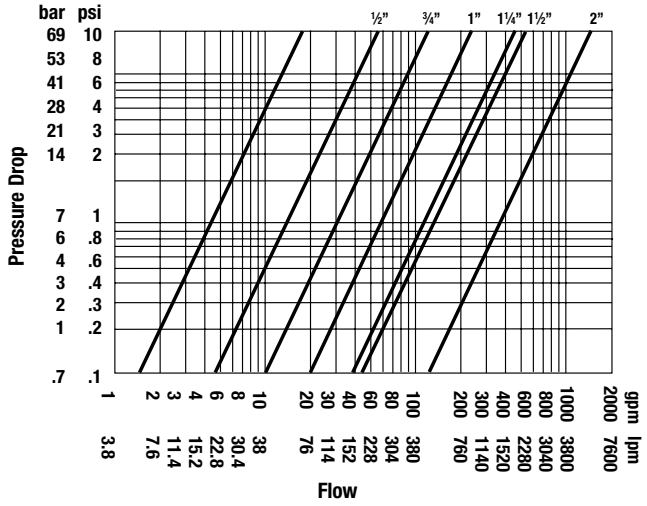
Valve Seat Rating



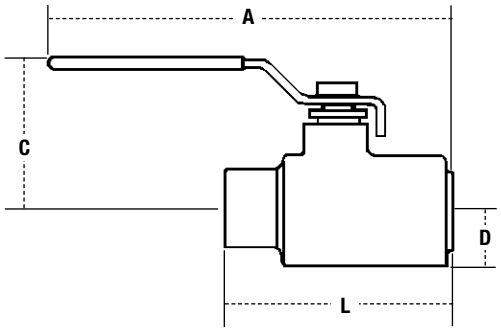
Valve Torque Rating

SIZE (DN)		OPERATING TORQUE		
in.	*mm*	*in.– lbs.*	*N-m*	*Cv*
½	15	60	6.8	15
¾	20	150	16.95	30
1	25	200	22.60	60
1¼	32	250	28.25	110
1½	40	320	36.16	130
2	50	500	56.50	360

Pressure Drop vs. Flow



Dimensions — Weights



SIZE (DN)		DIMENSIONS														WEIGHTS	
		Ball Orifice		A (LFB6080)		A (LFB6081)		C		D		L (LFB6080)		L (LFB6081)			
in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs.*
½	15	½	13	4 25/32	121	4 7/8	124	1 5/8	41	7/8	22	2 9/32	58	2 9/16	65	0.6	0.3
¾	20	¾	19	5	127	5 5/16	135	1 3/4	45	1	25	2 13/16	71	2 13/16	71	1.0	0.5
1	25	1	25	5 7/16	138	5 11/16	145	2	51	1 1/4	32	3 9/16	91	3 7/8	98	1.8	0.8
1¼	32	1¼	32	7 9/16	192	7 9/16	192	2 7/8	73	1 1/2	38	4 1/8	105	4 5/16	110	4.0	1.8
1½	40	1½	38	7 11/16	195	7 7/8	200	3	76	1 5/8	41	4 7/16	113	4 3/4	121	5.5	2.5
2	50	2	51	10 11/16	272	11	279	4	102	2	51	5 3/8	137	6	152	10.0	4.5

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