

## For Commercial and Industrial Applications

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

Contractor \_\_\_\_\_

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

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

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

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# LEAD FREE\*

## Series LFFBV-3C-SS, LFFBVS-3C-SS

### 2-Piece, Full Port, Brass Ball Valves

Sizes: 1/2" – 2" (15-50mm)

Series LFFBV-3C-SS, LFFBVS-3C-SS 2-Piece, Full Port, Lead Free\* copper silicon alloy ball valves are used in commercial and industrial applications for a full range of liquids and gases. They feature a bottom-loaded blowout-proof stem, virgin PTFE seats, thrust washer, and adjustable stem packing gland, stem packing nut, 316 stainless steel ball, Lead Free\* copper silicon alloy adapter, and steel handle. The LFFBV-3C-SS, LFFBVS-3C-SS features Lead Free\* construction to comply with Lead Free\* installation requirements.

#### Features

- 316 stainless steel ball and stem
- Suitable for a full range of liquids and gases
- Minimal pressure drop due to full size ports
- Bottom loaded, blow-out proof stem
- Virgin PTFE stem packing seal, thrust washer and seats
- Vinyl insulator on heavy duty, zinc plated carbon steel handles
- Quarter-turn open or close operation
- Low operating torque
- Adjustable stem packing gland

#### Models

**LFFBV-3C-SS** 1/2" – 2" (15-50mm) with threaded connections

**LFFBVS-3C-SS** 1/2" – 2" (15-50mm) with solder connections\*\*

#### Pressure – Temperature

Temperature Range: -40° F – 400° F (-40° C – 204° C)

Pressure Ratings:

600psi (41 bars) WOG non-shock  
150psi (10.3 bars) WSP

#### Approvals

LFFBV-3C-SS UL/FM Approved

LFFBVS-3C-SS UL Listed

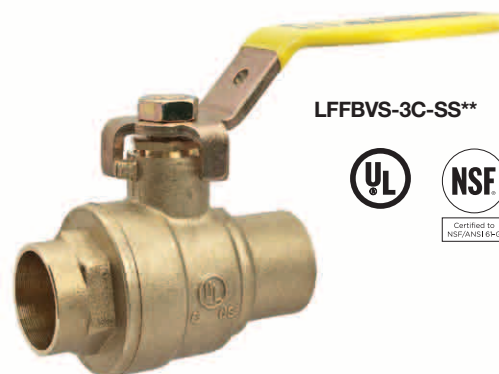
Valves comply with MSS-SP-110 standards



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



LFFBV-3C-SS



LFFBVS-3C-SS\*\*



#### Gas Approvals (Threaded Valves Only)

ASME B16.33, CSA   
1/2psig and 5psig (14 and 34 kPa) @ -40° F – 125° F (-40° C – 52° C)  
125psig (8 bars) @ -40° F – 400° F (-40° C – 204° C)

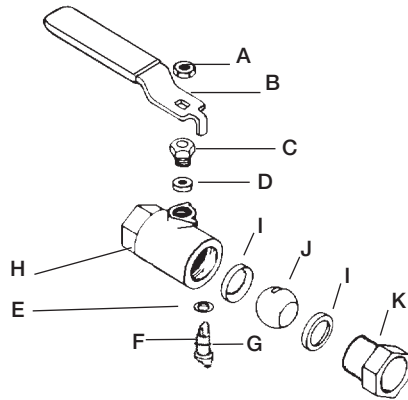
#### Specifications

Approved valves shall be 2-piece and constructed of forged lead free copper silicon alloy body and end adapter. Lead Free\* 2-Piece, Full Port, Brass Valves shall be constructed using Lead Free\* materials. Lead Free\* valve shall comply with state codes and standards, where applicable, requiring reduced lead content. Ball shall be full port, 316 stainless steel. Seats and stem packing shall be virgin PTFE. Stem shall be 316 stainless steel with adjustable stem packing nut threaded to body to prevent stem leakage if lever removed. Valves shall be rated to 600psi WOG (41 bars) and 150psi WSP (10.3 bars), and comply with MSS-SP-110, CSA, ANSI B16.33 or B16.38 where applicable. Valve shall be a Watts Series LFFBV-3C-SS (threaded) or LFFBVS-3C-SS (solder).

\*\*This valve is designed to be soft soldered into lines without disassembly, using a low temperature solder to 420°F (216°C). Higher temperature solders may damage the seat material. 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.

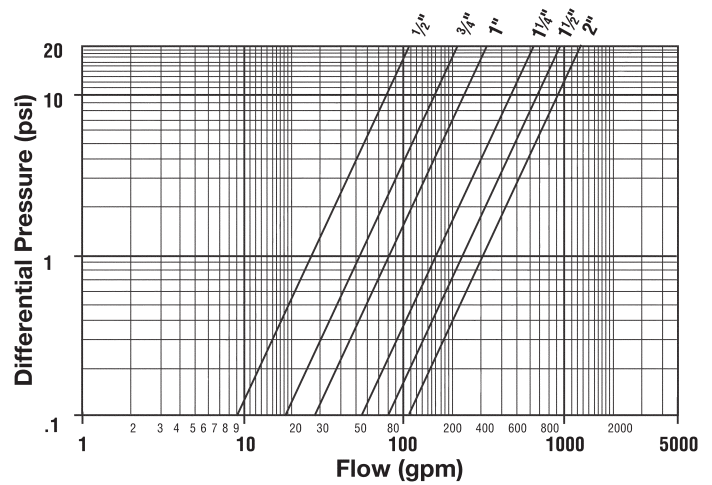
Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior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

## Materials

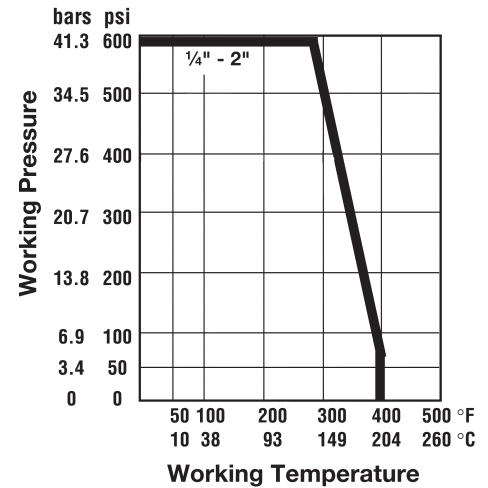


- A. Handle Nut - Zinc plated carbon steel
- B. Handle - Zinc plated carbon steel with vinyl insulator
- C. Packing Nut - Brass
- D. Stem Packing - Virgin PTFE
- E. Thrust Washer - Virgin PTFE
- F. Stem - 316 stainless steel
- G. O-ring - Fluorocarbon elastomer (FKM)
- H. Body - Lead Free\* forged copper silicon alloy
- I. Seats - Virgin PTFE
- J. Ball - 316 stainless steel
- K. Adaptor - Lead Free\* forged copper silicon alloy

## Flow Curves

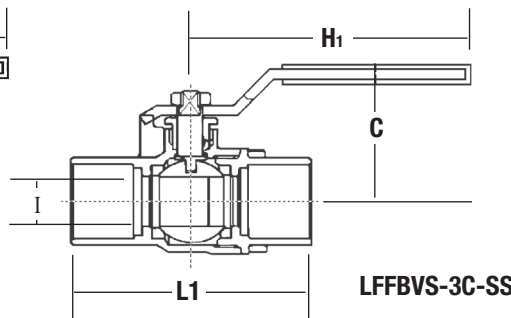
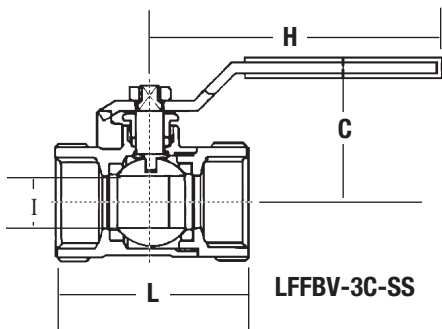


## Temperature/Pressure Rating



\*\*See applicable note on reverse side for solder end valves with regards to pressure/temperature rating.

## Dimensions-Weights



SIZE (DN)		DIMENSIONS										WEIGHT			
in.	mm	C		H		H <sub>1</sub>		I		L		L <sub>1</sub>		lbs.	kg.
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
1/2	15	1 <sup>15</sup> / <sub>16</sub>	50	3 <sup>5</sup> / <sub>8</sub>	91	3 <sup>5</sup> / <sub>8</sub>	91	1 <sup>19</sup> / <sub>32</sub>	12.5	2 <sup>3</sup> / <sub>8</sub>	60	2 <sup>1</sup> / <sub>8</sub>	53	.5	.2
3/4	20	2 <sup>1</sup> / <sub>16</sub>	52	4 <sup>1</sup> / <sub>2</sub>	114	4 <sup>1</sup> / <sub>2</sub>	114	1 <sup>13</sup> / <sub>16</sub>	20.0	2 <sup>1</sup> / <sub>16</sub>	68	2 <sup>13</sup> / <sub>16</sub>	72	.8	.3
1	25	2 <sup>7</sup> / <sub>16</sub>	62	4 <sup>15</sup> / <sub>16</sub>	125	4 <sup>15</sup> / <sub>16</sub>	125	1	25.0	3 <sup>1</sup> / <sub>8</sub>	80	3 <sup>3</sup> / <sub>8</sub>	86	1.4	.6
1 1/4	32	2 <sup>5</sup> / <sub>8</sub>	66	4 <sup>15</sup> / <sub>16</sub>	125	4 <sup>15</sup> / <sub>16</sub>	125	1 <sup>1</sup> / <sub>4</sub>	31.0	3 <sup>1</sup> / <sub>16</sub>	90	3 <sup>7</sup> / <sub>8</sub>	98	2.0	.9
1 1/2	40	2 <sup>15</sup> / <sub>16</sub>	75	5 <sup>1</sup> / <sub>2</sub>	140	5 <sup>1</sup> / <sub>2</sub>	140	1 <sup>1</sup> / <sub>2</sub>	39.0	3 <sup>7</sup> / <sub>8</sub>	99	4 <sup>3</sup> / <sub>8</sub>	112	2.6	1.2
2	50	3 <sup>1</sup> / <sub>8</sub>	80	7 <sup>7</sup> / <sub>8</sub>	200	7 <sup>7</sup> / <sub>8</sub>	200	2	50.0	4 <sup>7</sup> / <sub>16</sub>	113	5 <sup>5</sup> / <sub>16</sub>	135	4.0	1.8



A Watts Water Technologies Company



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