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

Series FBV-4, FBVS-4

2-Piece, Full Port, Brass Ball Valves

Sizes: 1/4" - 3"

Series FBV-4, FBVS-4 2-Piece, Full Port, Brass Ball Valves are suitable for a full range of liquids and gases in residential and commercial applications.

These valves feature an adjustable packing for longer service life, a bottom loaded blow-out proof stem for safety, a fluorocarbon elastomer stem O-ring to prevent stem leaking at installation, and are rated to 600psi WOG/150psi WSP ½"–2" and 400psi WOG/125psi WSP ½"–3".

Features

- CSA approved threaded valves only 1/4" 3"
- Certified to NSF/ANSI Standard 61/8
- Metal-to-metal adapter body seal to eliminate adapter leaks after soldering
- Fluorocarbon elastomer stem O-ring prevents stem leaks
- Adjustable stem packing gland provides longer service life
- Bottom loaded blowout proof stem
- PTFE stem packing seal and seats
- Machined chrome-plated brass ball
- Complies with MSS-SP-110

Specifications

Approved valves shall be 2-piece full port design constructed of a forged brass body and end adapter. Seats and stem packing shall be PTFE. Stem to be bottom-loaded, blowout proof design with a fluorocarbon elastomer O-ring to prevent stem leakage.

Valves required to have an adjustable packing gland and chrome-plated brass ball. Threaded valves ½" – 3" shall be CSA approved to ½psig and 5psig and certified to NSF/ANSI Standard 61/8 by NSF. Solder valves also required to be certified by NSF to NSF/ANSI Standard 61/8. Valve sizes ¼" – 2" pressure rated to 600psi WOG and 150psi WSP. Valve sizes 2 ½" – 3" pressure rated to 400psi WOG and 125 WSP. Valves specified are Watts Series FBV-4 or FBVS-4.





Models

FBV-4 1/4" – 3" threaded end connections **FBVS-4** 1/2" – 3" solder end connections*

NOTICE

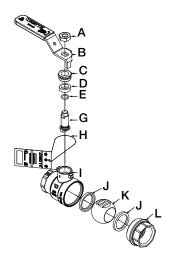
The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation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

NOTICE

Inquire with governing authorities for local installation requirements



Materials



A. Handle Nut
 B. Handle Assembly
 Zinc plated carbon steel with vinyl insulator

C. Packing Nut BrassD. Stem Packing Virgin PTFE

E. O-Ring Fluorocarbon elastomer (FKM)

G. Stem Machined Brass

H. Tag Cardboard, Mylar coated both

sides

I. Body Forged brassJ. Seats Virgin PTFE

K. Ball Chrome plated brass

L. Adaptor Forged brass

Approvals

1/4" - 3" FBV-4 1/2" - 3" FBVS-4

Certified to NSF/ANSI Standard 61/8 Domestic cold water at 73° F

Gas Approvals (Threaded Valves Only)

1/4" – 3" CSA



½ psig, 5 psig @ -40°F to 125°F

Pressure - Temperature

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

Pressure Rating: 1/4"-2"

600psi (41.4 bar) WOG non-shock 150psi (10.3 bar) WSP

21/2"-3"

400psi (27.6 bar) WOG non-shock 125psi (8.6 bar) WSP

Installation Information

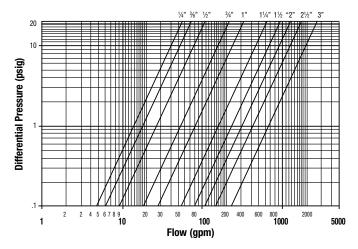
Apply heat with the flame directed **AWAY** from the center of the valve body. Excessive heat can harm the seats. After soldering, the packing nut may have to be tightened.

*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.

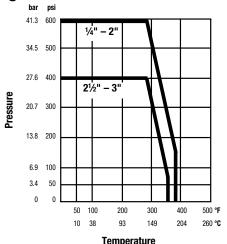
A WARNING

It is illegal to use this product in any plumbing system providing water for human consumption, such as drinking or dishwashing, in the United States. Before installing standard material product, consult your local water authority, building and plumbing codes.

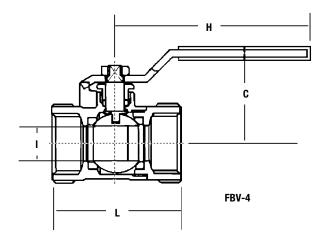
Flow Curves

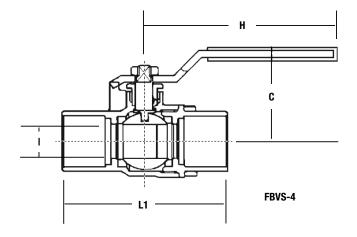


Valve Seat Rating



Dimensions-Weights





SIZE	DIMENSIONS									WEIGHT				
	С		Н		I		L		L1		FBV-4		FBVS-4	
in.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg.	lbs.	kg
1/4	1 ¹³ ⁄16	46	37/16	87	7/16	11	13/4	45	_	_	0.4	0.16		_
3/8	1 ¹³ ⁄ ₁₆	46	37/16	87	1/2	13	13/4	44.7	_	_	0.4	0.17	_	_
1/2	1 ¹³ ⁄16	46	37/16	87	1/2	13	2	50	2 ½16	53	0.4	0.18	0.4	0.16
3/4	21/16	53	3 ¹⁵ ⁄ ₁₆	101	11/16	18	21/4	57	2 5//8	67	0.6	0.27	0.5	0.24
1	2 ⁷ / ₁₆	62	41/4	108	¹⁵ ⁄16	24	2 ¹³ ⁄ ₁₆	71	34/16	83	1.1	0.49	1.0	0.44
11/4	2 ½	64	41/4	108	1 3⁄16	31	31//8	80	311/16	93	1.5	0.68	1.4	0.64
11/2	3	76	5 ⁵ ⁄ ₁₆	135	1 ½16	37	37/16	88	4 ³ ⁄ ₁₆	107	2.3	1.06	2.1	0.95
_ 2	31/2	89	6	153	2	51	41//8	105	5 ½16	135	3.7	1.69	3.8	1.74
21/2	4 ¹ / ₁₆	104	73//8	188	2 ½	64	5 ⁵ ⁄16	134	6 ³ ⁄ ₁₆	158	7.9	3.57	7.2	3.27
_ 3	41/2	114	73/4	197	3	76	61/8	155	71/4	184	11.8	5.37	11.0	4.99



USA: T: (978) 689-6066 • F: (978) 975-8350 • Watts.com
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