

For Commercial and Industrial Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series FBV

2-Piece, Full Port, Bronze Ball Valves

Sizes: ½" – 2" (15 – 50mm)

Series FBV 2-Piece, Full Port, Bronze Ball Valves comply with MSS-SP-110 and feature a blow-out proof stem and virgin PTFE seats. The FBV full port design ensures maximum flow capacity and minimal pressure drop.

Features

- 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 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

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

Specifications

A 2-piece full port bronze ball valve to be installed as indicated on the plans. 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 Regulator Company Series FBV (threaded).

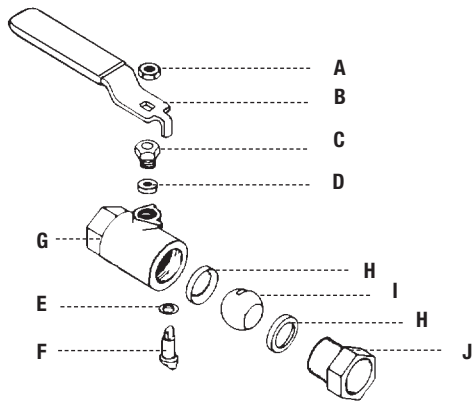
Pressure – Temperature

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

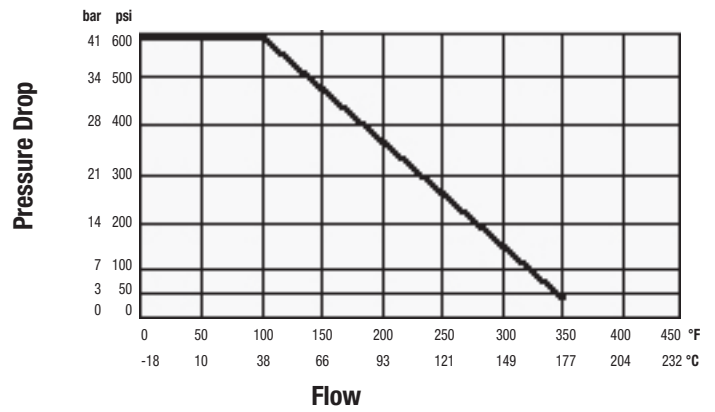


Materials

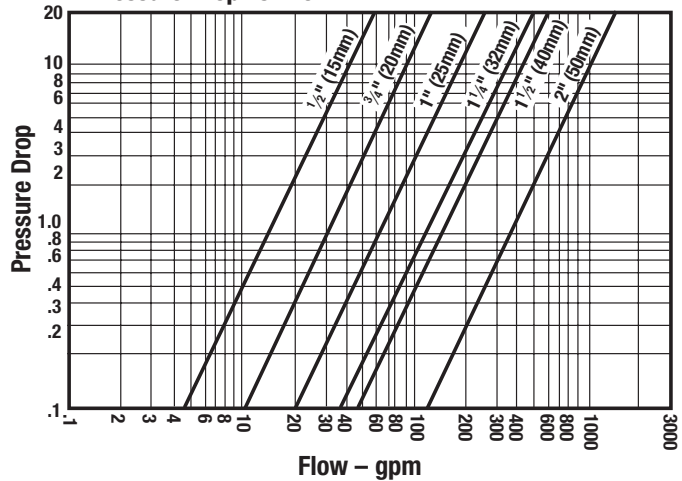


- A Handle Nut** Zinc Plated Carbon Steel
- B Handle** Zinc Plated Carbon Steel with Vinyl Insulator
- C Packing Nut** Brass
- D Stem Packing** Virgin PTFE
- E Thrust Washer** Virgin PTFE
- F Stem** Brass
- G Body** Bronze
- H Seats** Virgin PTFE
- I Ball** Chrome Plated Brass
- J Adapter** Bronze

Valve Seat Rating



Pressure Drop vs. Flow



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

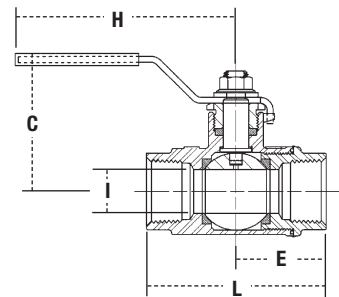
Valve Torque Rating

SIZE		MAX. BREAKAWAY/TORQUE		
in.	mm	in.-lbs	N-m	Cv
1/2	15	60	6.8	15
3/4	20	150	16.95	30
1	25	200	22.60	60
1 1/4	32	250	28.25	110
1 1/2	40	320	36.16	130
2	50	500	56.50	360

Dimensions — Weights

FBV

SIZE (DN)		DIMENSIONS								WEIGHT			
in.	mm	C		E		H		I		L		lbs.	kg.
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
1/2	15	1 3/4	44	1 3/32	28	3 3/8	86	1 1/2	13	2 3/16	56	.6	.3
3/4	20	2 1/16	52	1 9/32	33	3 3/8	92	3/4	19	2 9/16	65	.8	.4
1	25	2 1/2	64	1 7/32	31	4 3/8	111	1	25	3 1/16	78	1.5	.7
1 1/4	32	2 5/8	67	1 9/16	40	4 3/8	111	1 1/4	32	3 1/2	89	2.5	1.1
1 1/2	40	3 1/8	79	1 15/16	49	6 1/8	156	1 1/2	38	3 7/8	98	3.5	1.6
2	50	3 1/2	89	2 7/32	56	6 1/8	156	2	51	4 7/16	113	5.5	2.5



Water Safety & Flow Control Products



ISO 9001-2000
CERTIFIED

USA: 815 Chestnut St., No. Andover, MA 01845-6098; www.watts.com

Canada: 5435 North Service Rd., Burlington, ONT. L7L 5H7; www.wattscanada.ca