

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series S-6800, S-6801, S-6802

3-Piece, Full Port, Stainless Steel Ball Valves

1/4" – 2"

Series S-6800, S-6801, S-6802 3-Piece, Full Port, Stainless Steel Ball Valves feature an in-line maintenance design that offers serviceability of all operating parts without disturbing the rigid pipeline system. The full port orifice of each valve ensures maximum flow capacity, while Durafill® seats, stainless steel ball and stem provide maximum safety and highest operating pressure and temperature limits.

Features

- Stainless Steel body
- 3-piece, lift-out design
- Carbon/glass reinforced PTFE Durafill® valve seats
- Stainless steel ball and stem
- Blow-out proof, pressure retaining stem
- Locking handle as standard
- Vinyl insulator on heavy duty, stainless steel handles
- Low operating torque
- Adjustable stem packing gland
- Each valve factory tested
- Designed to ASME B16.34 and MSS-SP-110
- Tested to API 598 and MSS-SP-72

Models

- S-6800** 1/4" – 2" threaded NPT end connections
- S-6801** 1/4" – 2" socket weld end connections
(ASME B16.11)
- S-6802** 1/4" – 2" butt weld end connections
(ASME B16.25)

Specification

Stainless Steel 3-Piece, Full Port, Ball Valves shall be constructed using ASTM A351 Gr CF8M. The valve must have a blowout proof stem, reinforced Durafill seats, reinforced PTFE stem packing, and stainless steel ball. Pressure rating no less than 1000 psi (68.9 bar) (41 bar) CWP non-shock. Valve must conform to MSS-SP-110 and shall be a Watts Series S-6800 (threaded) or, S-6801 (socket weld), or S-6802 (butt weld).



S-6800



S-6801



S-6802

Pressure – Temperature

Temperature Range: 0°F – 450°F (-18°C – 232°C)

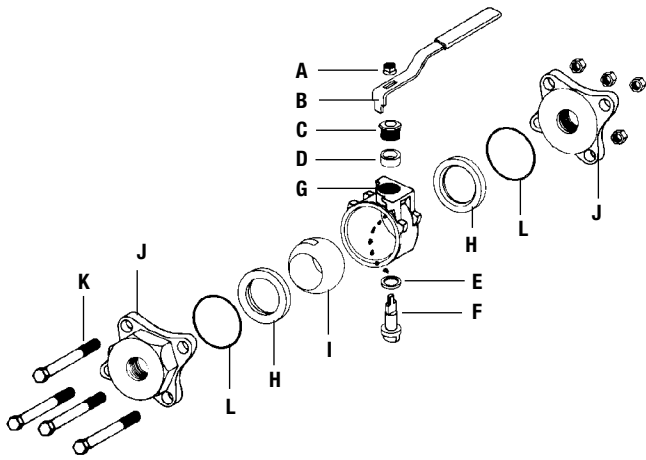
1/4" – 2" 1000 psi (68.9 bar) CWP non-shock
150psi (10 bar) WSP

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.

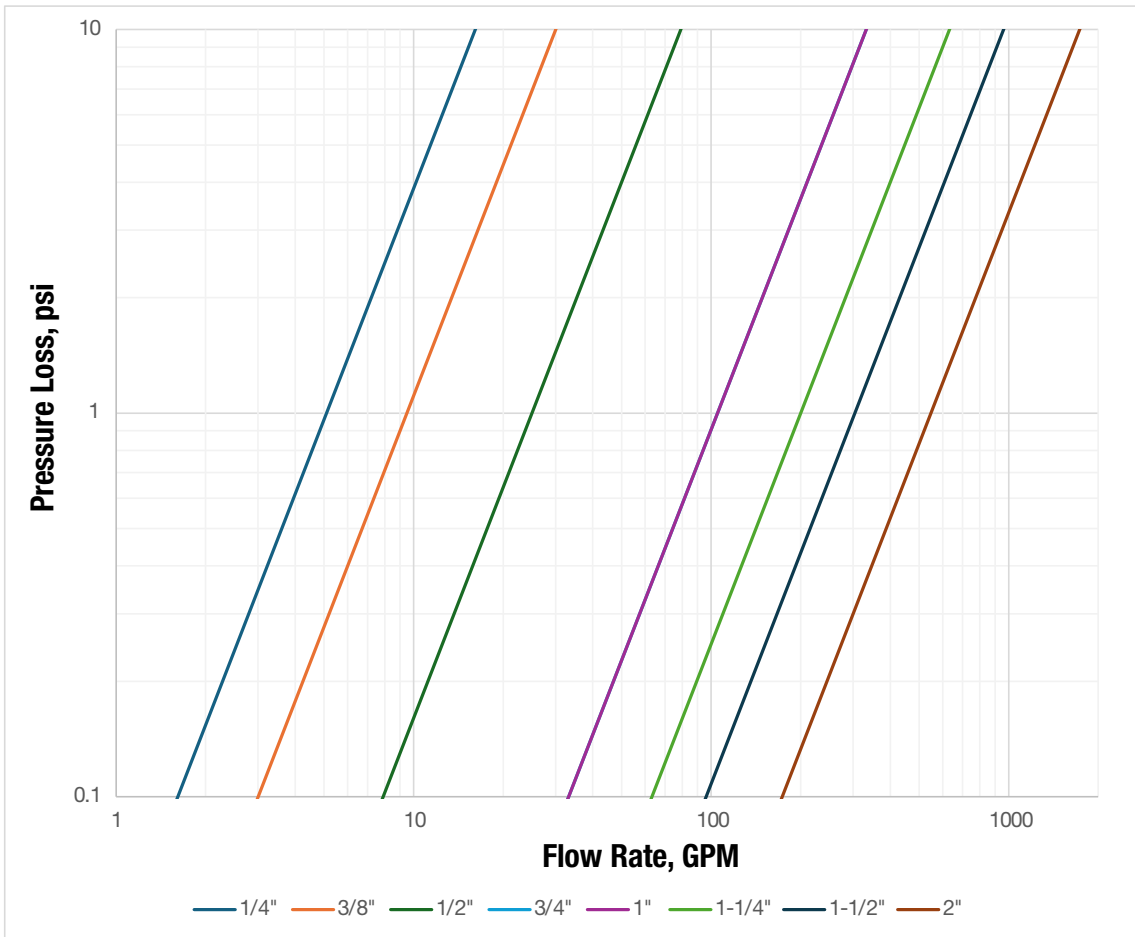
Inquire with governing authorities for local installation requirements.

Materials



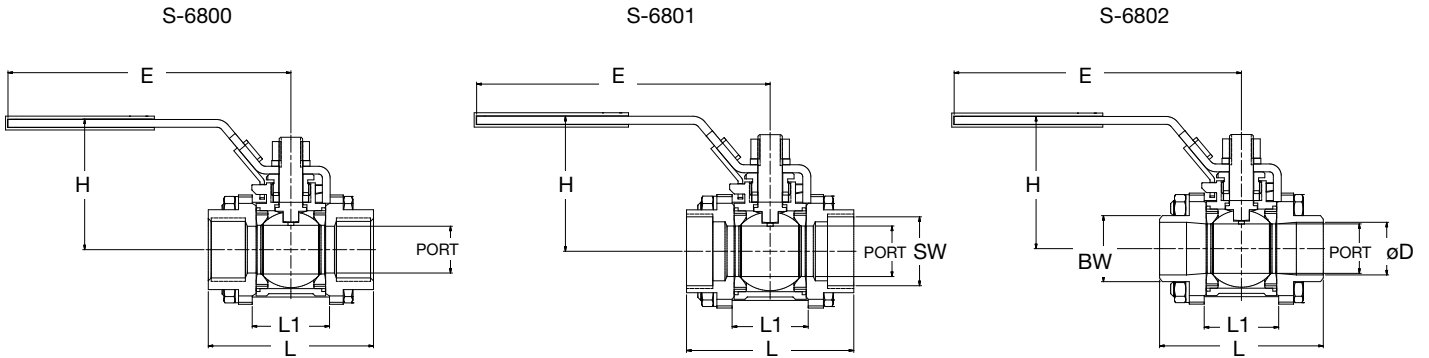
- A Handle Nut 304 Stainless Steel
- B Handle 304 Stainless Steel with vinyl insulator
- C Packing Nut 304 Stainless Steel
- D Stem Packing PTFE
- E Thrust Bearing PTFE
- F Stem 316 Stainless steel
- G Body ASTM A351 Gr. CF8M
- H Seats PTFE
- I Ball ASTM A351 Gr. CF8M
- J Adapter ASTM A351 Gr. CF8M
- K Body Bolts & Nuts 304 Stainless Steel
- L Body Seals PTFE

Pressure Drop vs. Flow



SIZE	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Cv	6	6	15	30	60	110	130	360

Dimensions — Weights



Call customer service if you need assistance with technical details.

S-6800

SIZE	DIMENSIONS										WEIGHTS	
	Port		L		E		H		L1		lb	kgs.
	in	mm	in	mm	in	mm	in	mm	in	mm		
¼"	7/16	11.5	2 1/8	54.0	3 13/16	97.4	2	49.0	¾	19.0	0.68	0.31
⅜"	½	12.5	2 1/8	54.0	3 13/16	97.4	2	49.0	¾	19.0	0.68	0.31
½"	9/16	15.0	2 ½	63.5	4 13/16	122.9	2 ¼	58.0	7/8	22.5	1.03	0.47
¾"	¾	20.0	2 13/16	72.5	4 13/16	122.9	2 3/8	61.0	1	27.5	1.32	0.60
1"	1	25.0	3 3/16	81.0	5 11/16	144.9	2 5/8	68.0	1 5/16	34.0	2.00	0.91
1 ¼"	1 ¼	32.0	3 11/16	94.5	5 11/16	144.9	2 7/8	73.5	1 5/8	42.5	3.11	1.41
1 ½"	1 ½	38.0	4 ¼	108.0	7 7/16	188.9	3 5/16	84.5	2	52.0	4.51	2.05
2"	2	50.0	4 ¾	121.5	7 7/16	188.9	3 5/8	93.2	2 ½	63.5	6.60	3.00

S-6801

SIZE	DIMENSIONS												WEIGHTS	
	Port		L		E		H		SW		L1		lb	kgs.
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
¼"	7/16	11.5	2 1/8	54.0	3 13/16	97.4	2	49.0	½	14.2	¾	19.0	0.68	0.31
⅜"	½	12.5	2 1/8	54.0	3 13/16	97.4	2	49.0	11/16	17.5	¾	19.0	0.68	0.31
½"	9/16	15.0	2 ½	63.5	4 13/16	122.9	2 ¼	58.0	13/16	21.8	7/8	22.5	1.03	0.47
¾"	¾	20.0	2 13/16	72.5	4 13/16	122.9	2 3/8	61.0	1	27.4	1	27.5	1.32	0.60
1"	1	25.0	3 3/16	81.0	5 11/16	144.9	2 5/8	68.0	1 5/16	34.1	1 5/16	34.0	2.00	0.91
1 ¼"	1 ¼	32.0	3 11/16	94.5	5 11/16	144.9	2 7/8	73.5	1 5/8	42.7	1 5/8	42.5	3.11	1.41
1 ½"	1 ½	38.0	4 ¼	108.0	7 7/16	188.9	3 5/16	84.5	2	49.0	2	52.0	4.51	2.05
2"	2	50.0	4 ¾	121.5	7 7/16	188.9	3 5/8	93.2	2 3/8	61.2	2 ½	63.5	6.60	3.00

S-6802

SIZE	DIMENSIONS										WEIGHTS			
	Port		L		E		H		BW		L1		lb	kgs.
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
¼"	7/16	11.0	2 1/8	54.0	3 13/16	97.4	2	49.0	½	13.7	¾	19.0	0.68	0.31
⅜"	½	12.5	2 1/8	54.0	3 13/16	97.4	2	49.0	5/8	17.1	¾	19.0	0.68	0.31
½"	9/16	15.0	2 ½	63.5	4 13/16	122.9	2 ¼	58.0	13/16	21.3	7/8	22.5	1.03	0.47
¾"	¾	20.0	2 13/16	72.5	4 13/16	122.9	2 3/8	61.0	1	26.7	1	27.5	1.32	0.60
1"	1	25.0	3 3/16	81.0	5 11/16	144.9	2 5/8	68.0	1 5/16	33.4	1 5/16	34.0	2.00	0.91
1 ¼"	1 ¼	32.0	3 11/16	94.5	5 11/16	144.9	2 7/8	73.5	1 5/8	42.2	1 5/8	42.5	3.11	1.41
1 ½"	1 ½	38.1	4 ¼	108.0	7 7/16	188.9	3 5/16	84.5	1 9/8	48.3	2	52.0	4.51	2.05
2"	2	50.0	4 ¾	121.5	7 7/16	188.9	3 5/8	93.2	2 3/8	60.3	2 ½	63.5	6.60	3.00



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