

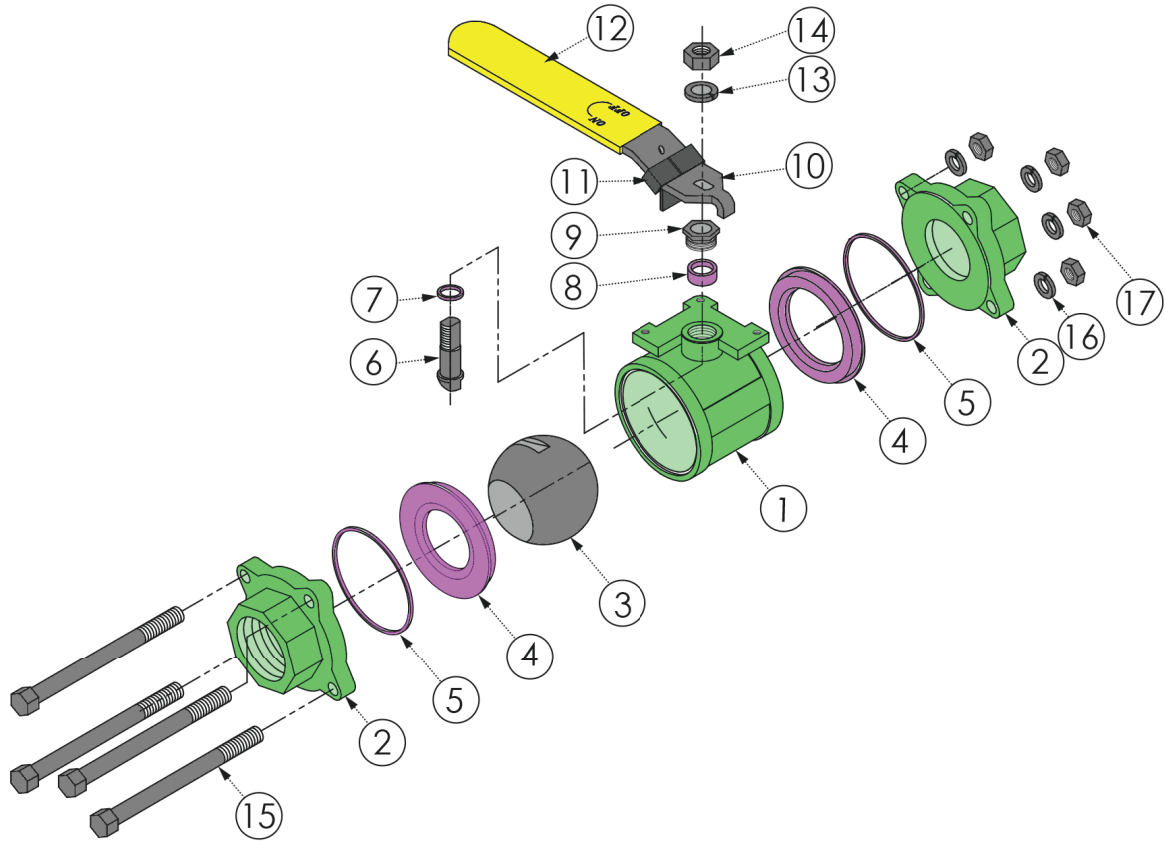


THREE PIECE BALL VALVE SELECTION GUIDE

Three Piece Ball Valve Model	Series 8400	Series 8500
Size Range	1/4" - 4"	1/2" - 4"
Type	2-Way	2-Way
Port	Full Port	
Pressure Rating	1500 WOG (1/4" - 2") / 1000 WOG (2 1/2" - 4")	
Leakage	ANSI FCI 70-2 Class VI	
Temperature Rating	-50°F to +450°F	
End Connection	NPTF per ANSI B1.20.1	
Body Material	Stainless Steel 316	
Blowout Proof Stem	✓	✓
ISO 5221 Actuator Mount	✗	✓
Available Locking Lever	✓	✓
Adjustable Stem Packing	✓	✓
NACE MR 01-75	✓	✓

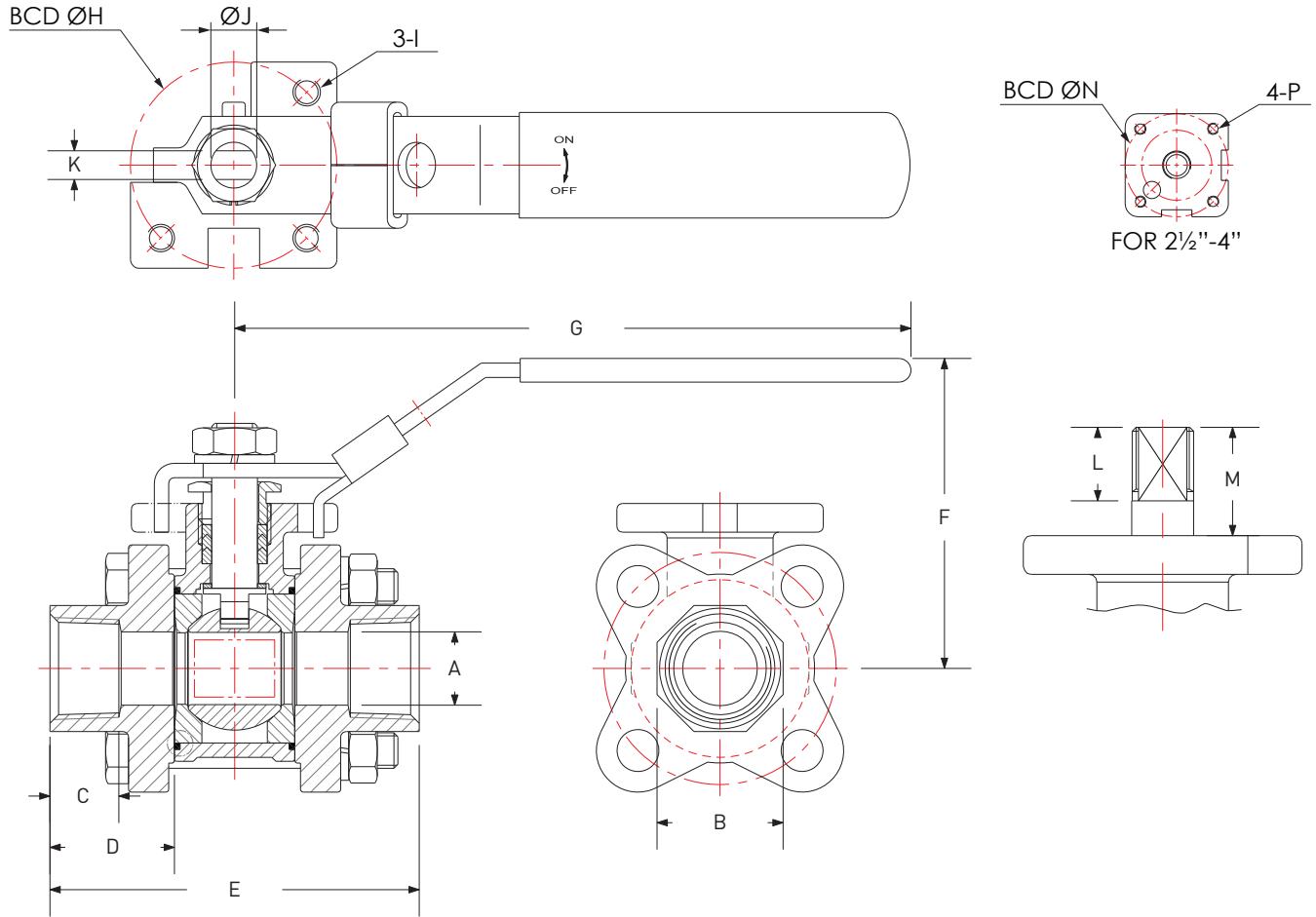
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MATERIALS OF CONSTRUCTION



Item	Description	Materials Available	Standard	QTY
1	Body	Stainless Steel 316	ASTM A351 CF8M	1
2	End Cap	Stainless Steel 316	ASTM A351 CF8M	2
3	Ball	Stainless Steel 316	ASTM A351 CF8M	1
4	Seat	RPTFE	Commercial	2
5	Body Seal	PTFE	Commercial	2
6	Stem	Stainless Steel 316	ASTM A276 316	1
7	Thrust Washer	PTFE	Commercial	1
8	Stem Packing	PTFE	Commercial	1 Set
9	Gland Nut	Stainless Steel 304	ASTM A276 304	1
10	Handle	Stainless Steel 304	Commercial	1
11	Lock Pad	Stainless Steel 304	Commercial	1
12	Handle Cover	Vinyl	Commercial	1
13	Split Washer	Stainless Steel 304	Commercial	1
14	Nut	Stainless Steel 304	ASTM F594M 304	1
15	Body Bolts or Studs	Stainless Steel 316	ASTM A193 B8M	4-6
16	Lock Washer	Stainless Steel 316	ASTM F594M 316	4-12
17	Nut	Stainless Steel 316	ASTM F594M 316	4-12
NS	Tag	Aluminum	UV Screen Printed	1

DIMENSIONS



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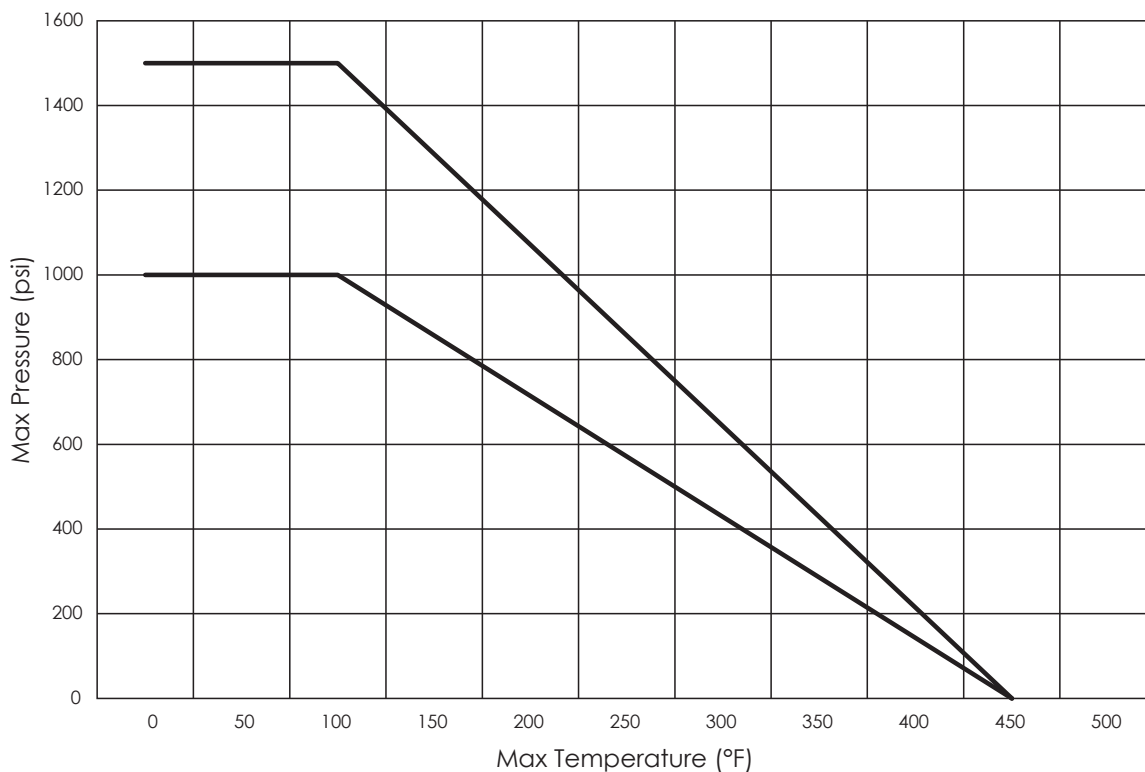
SIZE	A	B	C	D	E	F	G	H*	I*	J	K	L	M	N*	P*
1/4"	0.50	0.87	0.47	0.85	2.54	2.18	4.65	1.42	3/16-24UNC	0.31	0.197	0.37	0.55	-	-
3/8"	0.50	0.87	0.47	0.85	2.54	2.18	4.65	1.42	3/16-24UNC	0.31	0.197	0.37	0.55	-	-
1/2"	0.59	1.07	0.51	0.83	2.54	2.30	5.42	1.42	3/16-24UNC	0.37	0.252	0.52	0.75	-	-
3/4"	0.79	1.33	0.77	1.00	3.18	2.44	5.42	1.42	3/16-24UNC	0.37	0.252	0.52	0.74	-	-
1"	0.98	1.57	0.71	1.11	3.74	3.30	6.34	1.65	3/16-24UNC	0.44	0.311	0.71	0.98	-	-
1 1/4"	1.26	1.91	0.75	1.19	4.32	3.63	6.34	1.97	1/4-20UNC	0.44	0.311	0.71	0.96	-	-
1 1/2"	1.50	2.19	0.98	1.41	5.10	3.81	7.58	1.97	1/4-20UNC	0.50	0.350	0.74	1.04	-	-
2"	2.00	2.66	1.06	1.51	5.85	4.41	8.05	2.76	5/16-18UNC	0.50	0.350	0.74	1.07	-	-
2 1/2"	2.56	Ø3.5	1.34	1.91	7.20	5.47	10.91	-	-	0.75	0.472	1.08	1.08	4.02	5/16-18UNC
3"	3.15	Ø4.1	1.61	2.15	8.23	5.93	12.68	-	-	0.75	0.472	1.08	1.08	4.02	7/16-14UNC
4"	3.94	5.06	1.54	2.17	9.25	6.64	12.68	-	-	1.00	0.630	1.55	1.55	4.02	7/16-14UNC

*Only Series 8500 have ISO mounting pad. Series 8400 do NOT have actuator mount

QUANTITY INFORMATION

SIZE	NUMBER OF BODY BOLTS	NUMBER OF PACKING RINGS
1/4"	4	1
3/8"	4	1
1/2"	4	1
3/4"	4	1
1"	4	2
1 1/4"	4	2
1 1/2"	4	2
2"	4	2
2 1/2"	4	2
3"	6	3
4"	6	3

PRESSURE/TEMPERATURE RATINGS





FLOW COEFFICIENTS

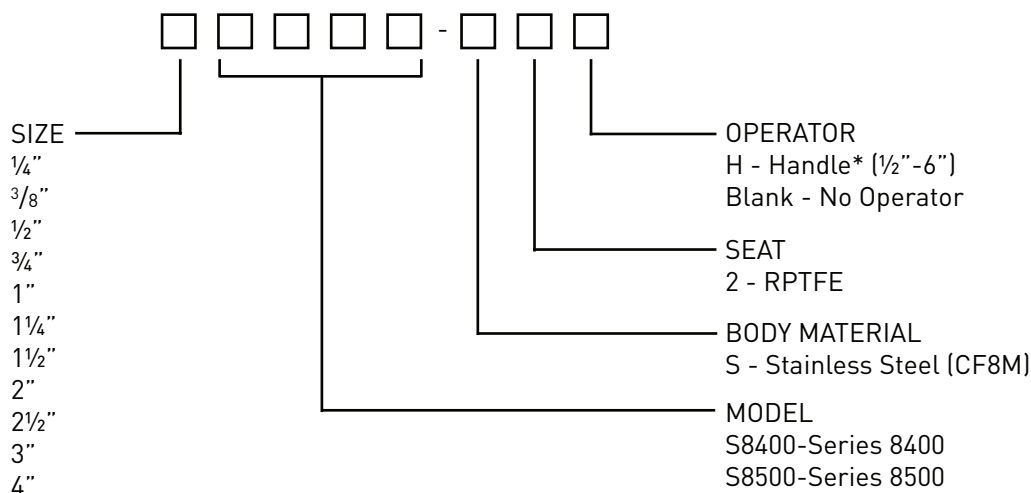
SIZE	S8400/S8500 Cv
1/4"	20
3/8"	25
1/2"	28
3/4"	50
1"	70
1 1/4"	112
1 1/2"	170
2"	395
2 1/2"	835
3"	860
4"	1780

OPERATING TORQUES

SIZE	600 PSI	1000 PSI	1500 PSI
1/4"	-	23	32
3/8"	-	27	34
1/2"	-	45	50
3/4"	-	79	88
1"	-	113	125
1 1/4"	-	-	-
1 1/2"	-	227	253
2"	-	342	380
2 1/2"	347	500	-
3"	390	600	-
4"	607	900	-

Operating torque in in-lbs, no safety factor included. Torques are with water as operating fluid, dry media may require a higher safety factor

PART NUMBER MATRIX



EXAMPLE:

1"S8400-S2H

A 1" Series 8400, SS316 body, RPTFE seat, with Handle operator

OTHER PART NUMBER INFORMATION

ASSEMBLIES

The part numbers above represent only the part number for the valve without any actuator or accessories. The Series 8400 is available only with handle operator however the Series 8500 features an integrated actuator mount that allows the mounting of many actuator options. When purchased with an actuator as part of an assembly the entire part number will be formatted as the valve part number, forward slash, then the actuator and accessory part numbers.

Example: 1"8500-S2H/C-SR092/ALS-100

The above valve is a 1" valve model S8100 with a C-SR092 spring return pneumatic actuator and ALS-100 switch-box.

Note: Series 8400 are not available with actuators or accessories - only available with lever operator. Consider Series 8500 where actuators are required

MANUAL OPERATORS

All sizes are available with a locking lever operator, add a "H" suffix.



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This limited warranty applies in the United States to products manufactured by VSI, LLC. VSI, LLC. warrants the product purchased from it or its authorized reseller to be free from defects in material and workmanship under normal use during the two year warranty period from the date of its purchase. Other products not manufactured by VSI, LLC. which are provided as part of an assembly may carry additional warranties from that manufacturer or supplier.

During the warranty period, VSI, LLC. will repair or replace defective parts of the product, or, at VSI, LLC. sole option, issue a credit for the original purchase price of the product. Repaired or replaced product will be warranted hereunder only for the remaining portion of the original warranty period. All exchanged products under this Limited Warranty will become the property of VSI, LLC. A proper Return Material Authorization (RMA) number will have to be obtained for all products to be returned under this Limited Warranty. Any claim under this Limited Warranty must include a description of the problem encountered and any relevant information that may assist VSI, LLC. in the replication or resolution of the problem.

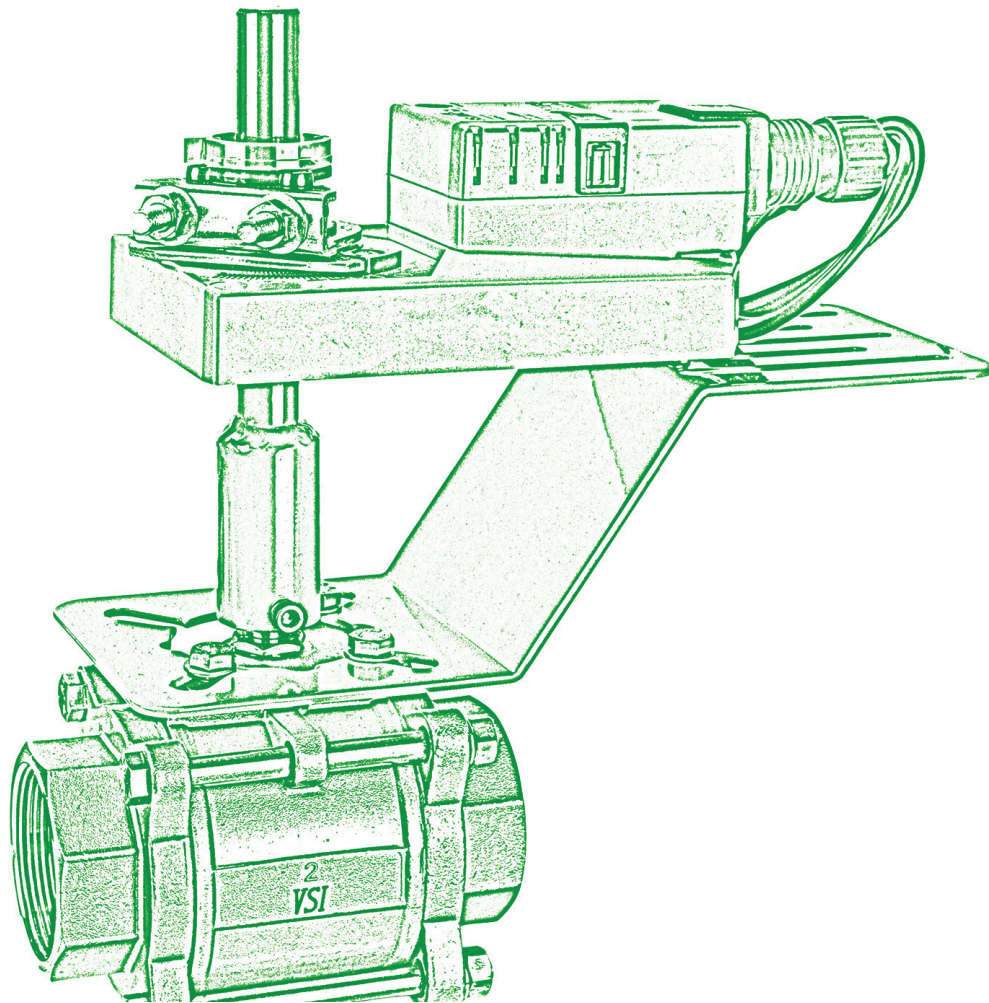
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NOTES



Valve Solutions, Inc
tel: 1 (770) 740 0800
fax: 1 (770) 740 8777
email: sales@valvesolutions.com

VSI

www.ValveSolutions.com

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