



Breakthrough
engineering for
a better world

Process Automation

IMI PBM

CS Cast Series 9 CS Forged Series 8 Size 1/4" to 6"

Igenix® Clean Steam Ball Valves

Design Features

- Unique Adjust-O-Seal® feature allows in-line valve adjustment to compensate for normal wear
- CS Series Clean Steam Valves have O-Rings
- Valves are three-piece "swing out" body design with different sanitary end connections available
- Upstream/downstream bubble-tight sealing capability allows valve body cleaning, purging and draining
- Stem assembly accommodates IMI PBM Direct Mount Actuation for accurate alignment and increased cycling life
- Forged and Cast Valves are low controlled ferrite
- True Bore® (valve bore same as connecting tubing) (except 1/4" & 3/8" sizes)
 - no puddling (except 1/4" to 3/8")
- ASME BPE compliant (except when supplied with cavity fillers)
- Valves are rated for full vacuum
- Valves have blowout proof stem
- Standard Live Loaded Stem
- Optional purge port, milled ball flats or drain holes in ball allow inline CIP to prevent clogging and plug formation
- Self-Flushing Ball and V-Ball options available
- Valves are designed, assembled and tested at our factory in the U.S.
- V-Tef and S-Tef seats and seals are FDA Compliant and USP Class VI
- Material Test Report (MTRs) provided for wetted components
- Surface finishes are achieved without the use of Animal Derived Ingredients (ADI) - ADI free

CV Values (gpm), Series 8/Series 9		
Size	End Connections	
	F-	X-
1/4"	1.5	1.9
3/8"	4.4	5.4
1/2"	6.5	8
3/4"	23	28
1"	55	65
1 1/2"	160	193
2"	365	420
2 1/2"	700	800
3"	900	1,040
4"	1,800	2,080
*6"	4,200	5,000
*6" is Series 9 Only		

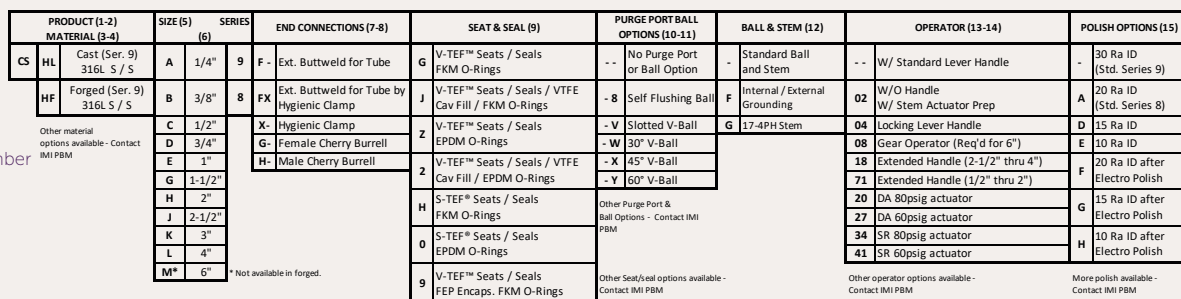
316L S/S Pressure Ratings at Ambient (PSIG)		
Size	Series 8	Series 9
1/4"	600	900
3/8"	600	900
1/2"	600	900
3/4"	600	900
1"	600	900
1 1/2"	600	900
2"	600	720
2 1/2"	600	720
3"	600	720
4"	600	720
*6"	N/A	250

ID Surface Finish Ra Readings for Valves per ASME BPE		
Surface Finish	IMI PBM Polish Code	μ-in.
Mechanical Polish		
SF 1	A	20
SF 2	A	25
SF 3	-	30
Mechanical Polish & Electropolish		
SF 4	G	15
SF 5	F	20
SF 6	F	25

SPECIFICATIONS

Igenix® CS Series 8 & 9 Sanitary 2-Way Ball Valves

Sizes	1/4" to 6" Series 9 - 1/4" to 4" Series 8
Material	Low ferrite cast and forged 316L material. Castings (Series 9) comply with A351, Alloy CF3M and/or A479, Alloy S31603. Forgings (Series 8) comply with A182, Alloy F316L/1.4404 and/or A479, Alloy S31603, others available
End Connections	Extended BW tube, hygienic clamp, (Compression Ends Product Bulletin), others available
Seats, Seals & Stem Packings	V-Tef™ and S-Tef® - others available
O-Rings	O-Ring Seal (FKM V1274-75/80, EPDM E3609-70, others available)
Body Bolts & Nuts	18-8 Stainless Steel standard, special bolting optional
Maximum Working Pressure	See table above
Temperatures	-20°F to 450°F depending on seat and seal material
Finish	Standard internal finish of 20 Ra ID Series 8 (SF1), 30 Ra ID Series 9 (SF3), other finishes available



2-Way Sanitary Dimensioned Valves in Inches										Locking Handle		Extended Lockable Handle		
Valve Size	Size Code	I.D. Port	A	B	D	E	F	G	~Wt (lbs)	H	Hole Dia. for Lock	J	K	Hole Dia. for Lock
¼"	A	0.18	3.50	5.50	0.75	2.05	4.00	1.50	1.10	1.55	0.28	5.09	4.00	0.31
⅜"	B	0.31	3.50	5.50	0.75	2.05	4.00	1.50	1.10	1.55	0.28	5.09	4.00	0.31
½"	C	0.37	3.50	5.50	0.75	2.05	4.00	1.50	1.10	1.55	0.28	5.09	4.00	0.31
¾"	D	0.62	4.00	6.00	0.85	2.23	4.00	1.68	1.40	1.55	0.28	5.09	4.14	0.31
1"	E	0.87	4.50	6.50	1.09	3.01	4.15	2.18	2.70	1.62	0.25	5.09	5.44	0.31
1½"	G	1.37	5.50	7.50	1.68	5.02	8.81	3.31	8.90	2.57	0.38	8.00	7.46	0.31
2"	H	1.87	6.25	8.00	2.15	4.47	8.03	4.30	15.0	2.57	0.38	8.00	7.74	0.31
2½"	J	2.37	8.00	11.50	2.79	6.51	12.06	5.58	36.0	3.47	0.38	12.06	9.36	0.31
3"	K	2.87	8.00	10.50	2.78	6.77	12.06	5.58	33.0	3.47	0.38	12.06	9.61	0.38
4"	L	3.83	10.00	13.00	3.66	7.53	12.06	7.33	67.0	3.47	0.38	12.06	10.38	0.38
*6"	M	5.78	13.00	17.00	6.18	N/A	N/A	12.37	164.0	N/A	N/A	N/A	N/A	N/A

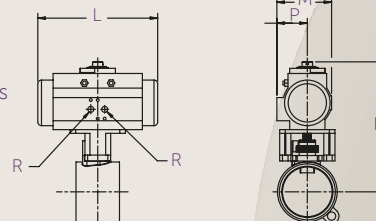
6 is Series 9 Only



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Unit of measure = inches

Dimensions based on actuators
used with V-TEF® seats



80 PSI Spring Return						60 PSI Spring Return					60, 80 PSI Double Acting				
Size	L	M	N	P	R	L	M	N	P	R	L	M	N	P	R
¼"	5.55	2.80	5.45	1.61	1/8 NPT	6.46	3.17	5.90	1.77	1/8 NPT	5.55	2.80	5.45	1.61	1/8 NPT
⅜"	5.55	2.80	5.45	1.61	1/8 NPT	6.46	3.17	5.90	1.77	1/8 NPT	5.55	2.80	5.45	1.61	1/8 NPT
½"	5.55	2.80	5.45	1.61	1/8 NPT	6.46	3.17	5.90	1.77	1/8 NPT	5.55	2.80	5.45	1.61	1/8 NPT
¾"	5.55	2.80	5.59	1.61	1/8 NPT	6.46	3.17	6.04	1.77	1/8 NPT	5.55	2.80	5.59	1.61	1/8 NPT
1"	6.46	3.17	6.51	1.77	1/8 NPT	8.27	3.72	7.22	2.07	1/8 NPT	5.55	2.80	6.06	1.61	1/8 NPT
1½"	9.47	4.17	9.65	2.30	1/8 NPT	10.83	4.85	10.16	2.68	1/4 NPT	8.27	3.72	9.10	2.07	1/8 NPT
2"	10.83	4.84	10.45	2.68	1/4 NPT	13.11	5.39	11.80	2.87	1/4 NPT	8.27	3.72	9.39	2.07	1/8 NPT
2½"	13.11	5.39	13.48	2.87	1/4 NPT	14.65	5.83	13.96	3.15	1/4 NPT	13.11	5.39	13.48	2.87	1/4 NPT
3"	14.65	5.83	14.21	3.15	1/4 NPT	16.85	6.46	15.10	3.44	1/4 NPT	13.11	5.39	13.73	2.87	1/4 NPT
4"	16.85	6.46	15.86	3.44	1/4 NPT	19.69	7.36	16.80	3.94	1/4 NPT	13.11	5.39	14.51	2.87	1/4 NPT
6"	22.78	8.54	23.02	4.29	1/4 NPT	22.46	11.42	27.74	5.71	1/4 NPT	22.78	8.54	23.02	4.29	1/4 NPT

Manual Valves with Tube Ends (when used with insulation)		
Tube OD	Insulation Max with No Extension	Insulation Max with Extension
0.50	0.76	2.68
0.75	0.79	2.72
1.00	1.45	3.88
1.50	3.10	5.57
2.00	2.31	5.60
2.50	4.00	8.88
3.00	4.08	8.88
4.00	4.35	9.12



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