

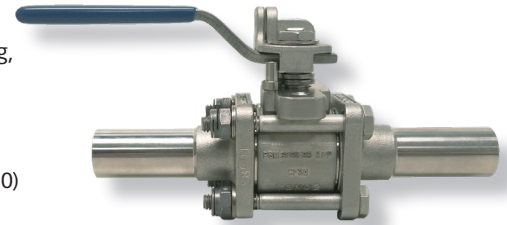
IMI PBM IGENIX® CLEAN STEAM BALL VALVES

CS Cast Series 9/Forged Series 8, DIN 11850, DN8 - DN65



DESIGN FEATURES:

- Unique Adjust-O-Seal® feature allows in-line valve adjustment to compensate for normal wear on valve seats
- **CS Series Clean Steam valves have o-rings**
- Valves are a three-piece "swing-out" body design
- Upstream and 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) – no puddling (Except DN8 & DN10)
- ASME BPE compliant
- USP Class VI elastomers and FDA compliant materials
- Valves are rated to full vacuum
- Material Test Report (MTRs) provided for wetted components
- Surface finishes are achieved without the use of ADIs (Animal Derived Ingredients)



SPECIFICATIONS	2-Way Valves
Sizes	DN8 - DN150 Series 9, DN15 - DN100 Series 8 (DN8 & DN10 in Series 8 is Ext. tube only)
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. Also available are Hastelloy™, AL6XN™, others
End Connections	Extended tube, hygienic clamp, please refer to PB-CE89 for compression ends, others available
Seats & Seals	White V-TEF™ standard, others available
Filler / Seat Options	VTFE Cavity Fillers, V-TEF™, S-TEF®, UHMWPE Seats
O-rings	O-ring seal (FKM V1274-75, EPR E3609-70, others available)
Body Bolts & Nuts	Locking Lever, 2" Stem Extension, Oval Handwheel, Grounding
Maximum Working Pressure	See table below
Temperatures	up to 232°C depending on seat and seal material
Finish	Standard internal polish of 0.5µ-m Ra ID Series 8, 0.75µ-m Ra ID Series 9, other finishes available

CV Values (liters/minute), Series 8/Series 9	
Size	End Connections
	F-
DN 8	18
DN 10	32
DN 15	90
DN 20	170
DN 25	338
DN 32	512
DN 40	722
DN 50	1,532
DN 65	3,184

Polish Options - Standard 0.75µ-m Ra ID, Series 9, 0.5 µ-m Ra ID, Series 8	
A* (Cast only)	0.5 µ-m Ra ID
D	0.375 µ-m Ra ID
E	0.25 µ-m Ra ID
F	0.50 µ-m Ra ID after EP
G	0.375 µ-m Ra ID after EP
H	0.25 µ-m Ra ID after EP
M	Electropolish

316L S/S Pressure Ratings at Ambient (BARG)		
SIZE	SERIES 8	SERIES 9
DN 8	41.37	62.05
DN 10	41.37	62.05
DN 15	41.37	62.05
DN 20	41.37	62.05
DN 25	41.37	62.05
DN 40	41.37	49.64
DN 50	41.37	49.64
DN 65	41.37	49.64

DIN 11850 Tube Weld End Dimensions		
DN8 = 10mm OD x 1mm Wall	DN10 = 13mm OD x 1.5mm Wall	DN15 = 19mm OD x 1.5mm Wall
DN20 = 23mm OD x 1.5mm Wall	DN25 = 29mm OD x 1.5mm Wall	DN32 = 35mm OD x 1.5mm Wall
DN40 = 41mm OD x 1.5mm Wall	DN50 = 53mm OD x 1.5mm Wall	DN65 = 70mm OD x 2mm Wall

How To Order:

PRODUCT (1-2) MATERIAL (3-4)		SIZE (5) SERIES			END CONN. (7-8)		SEAT & SEAL (9)		PURGES (10-11)		BALL & STEM (12)		OPERATOR (13-14)		POLISH (15-16)	
PRODUCT (1-2) MATERIAL (3-4)	SIZE (5) SERIES (6)	END CONNECTION (7-8)		SEAT / SEAL / O-RING (9)		PURGE PORT BALL OPTIONS (10-11)		BALL / STEM OPTIONS (12)		OPERATOR (13- 14)		POLISH OPTIONS (15)				
CS	HF	F316L Forged Low Ferrite F316L / DIN 1.4404	1	8	8	F - Ext. Butt-weld for Tube	G	V-TEF™ Seats / Seals FKM O-Rings	--	No Purge Port or Ball Option	-	Standard Ball and Stem	--	W/ Standard Lever Handle	-	0.75 µm ID (Std. Series 9)
			2	10	9		J	V-TEF™ Seats / Seals / VTFE Cav Fill / FKM O-Rings	- 8	Self Flushing Ball	F	Internal / External Grounding	02	W/O Handle W/ Stem Actuator Prep	A	0.50 µm ID (Std. Series 8)
	35	316L Cast Body, 1.4435 Weld Ends, Low Ferrite	3	15		Z	V-TEF™ Seats / Seals EPR O-Rings	- V	Slotted V-Ball	G	17-4PH Stem	04	Locking Lever Handle	D	0.375 µm ID	
			4	20		2	V-TEF™ Seats / Seals / VTFE Cav Fill / EPR O-Rings	- W	30° V-Ball	08	Gear Operator	E	0.25 µm ID			
			5	25		- X	45° V-Ball	18	Extended Handle (DN65)	F	0.50 µm ID after Electro Polish					
			6	32		- Y	60° V-Ball	71	Extended Handle (DN8 thru DN50)	G	0.375 µm ID after Electro Polish					
			7	40		H	S-TEF™ Seats / Seals FKM O-Rings	Other Purge Port & Ball Options - Contact IMI PBM.		20	DA 80psig actuator	H	0.25 µm ID after Electro Polish			
			8	50		0	S-TEF™ Seats / Seals EPR O-Rings			27	DA 60psig actuator	H	0.25 µm ID after Electro Polish			
			9	65		9	V-TEF™ Seats / Seals FEP Encaps. FKM O-Rings	Other Seat/seal options available - Contact IMI PBM.		34	SR 80psig actuator					
										41	SR 60psig actuator					

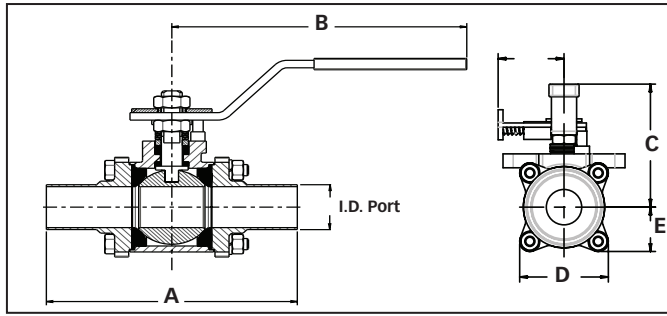
<http://pbmvalve.com/build-a-part-number>

Other operator options available - Contact IMI PBM.

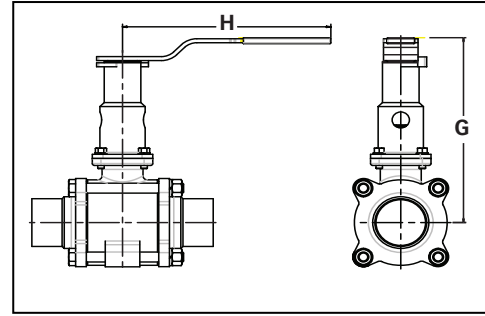
More polish available - Contact IMI PBM.

IMI PBM Igenix® Clean Steam Cast Series 9/Forged Series 8

2-Way Valve with Locking Handle



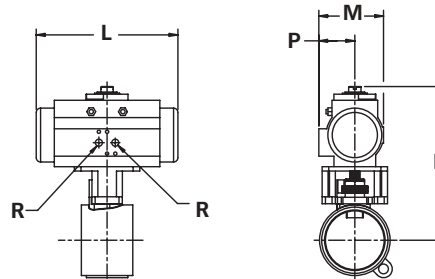
2-Way Valve with Extended Lockable Handle



CS DIN Valve Dimensions (mm)									Locking Handle		Ext. Locking Handle		
Valve Size	Size Code	I.D. Port	A	B	C	D	E	Approx. Wgt (kg)	F	Hole Dia. for Lock	G	H	Hole Dia. for Lock
DN 8	1	8.0	139.7	101.6	52.1	38.1	19.1	0.5	39.4	7.1	101.6	129.3	7.9
DN 10	2	10.0	139.7	101.6	52.1	38.1	19.1	0.5	39.4	7.1	101.6	129.3	7.9
DN 15	3	16.0	152.4	101.6	56.4	42.9	21.6	0.6	39.4	7.1	105.7	129.3	7.9
DN 20	4	20.0	165.1	105.4	76.2	55.4	27.7	1.4	41.1	6.4	138.2	129.3	7.9
DN 25	5	26.0	190.5	223.8	124.7	84.2	42.1	4.0	65.3	9.7	189.5	203.2	9.7
DN 32	6	32.0	190.5	223.8	124.7	84.2	42.1	4.0	65.3	9.7	189.5	203.2	9.7
DN 40	7	38.0	190.5	223.8	124.7	84.2	42.1	4.0	65.3	9.7	189.5	203.2	9.7
DN 50	8	50.0	200.0	204.0	118.6	109.2	54.6	7.1	65.5	9.7	196.6	203.2	9.7
DN 65	9	66.0	292.1	306.3	165.5	141.7	70.9	16.5	88.1	9.7	288.5	306.3	9.7

ACTUATED DIMENSIONS

Unit of Measure = mm
Dimensions based on actuators used with V-TEF™ seats.



Size	80 PSI Spring Return					60 PSI Spring Return					60, 80 PSI Double Acting				
	L	M	N	P	R	L	M	N	P	R	L	M	N	P	R
DN 8	141.0	70.9	138.4	40.9	1/8 NPT	164.1	80.5	149.9	45.0	1/8 NPT	141.0	70.9	138.4	40.9	1/8 NPT
DN 10	141.0	70.9	138.4	40.9	1/8 NPT	164.1	80.5	149.9	45.0	1/8 NPT	141.0	70.9	138.4	40.9	1/8 NPT
DN 15	141.0	70.9	142.0	40.9	1/8 NPT	164.1	80.5	153.4	45.0	1/8 NPT	141.0	70.9	142.0	40.9	1/8 NPT
DN 20	164.1	80.5	165.4	45.0	1/8 NPT	210.1	94.5	183.4	52.6	1/8 NPT	141.0	70.9	153.9	40.9	1/8 NPT
DN 25	240.8	105.9	245.1	58.4	1/8 NPT	275.1	122.9	257.9	68.1	1/4 NPT	210.1	94.5	231.1	52.6	1/8 NPT
DN 32	240.8	105.9	245.1	58.4	1/8 NPT	275.1	122.9	257.9	68.1	1/4 NPT	210.1	94.5	231.1	52.6	1/8 NPT
DN 40	240.8	105.9	245.1	58.4	1/8 NPT	275.1	122.9	257.9	68.1	1/4 NPT	210.1	94.5	231.1	52.6	1/8 NPT
DN 50	275.1	122.9	265.4	68.1	1/4 NPT	333.0	136.9	299.7	72.9	1/4 NPT	210.1	94.5	238.5	52.6	1/8 NPT
DN 65	333.0	136.9	342.4	72.9	1/4 NPT	372.1	148.1	354.6	80.0	1/4 NPT	333.0	136.9	342.4	72.9	1/4 NPT

Tube OD	Manual Valves with Tube Ends when used with insulation	
	Insulation max with no extension	Insulation max with extension
12.7	19.3	68.1
19.1	20.1	69.1
25.4	36.8	98.6
38.1	78.7	141.5
50.8	58.7	142.2
63.5	101.6	225.6
76.2	103.6	225.6
101.6	110.5	231.6

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