

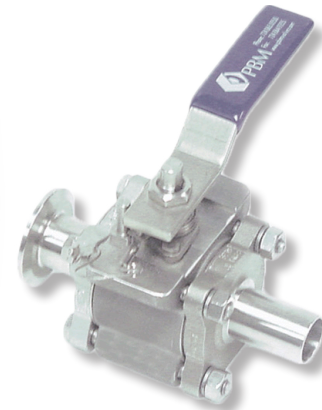
PBM IGENIX® TWO-WAY BALL VALVES

Fire Rated SI Series 6, 1/2" - 3"



DESIGN FEATURES:

- Fire Rated, tested to API-607
- **SI Series 6 Fire Rated valves have o-rings.**
- Three-piece "swing-out" body design
- Upstream and downstream bubble-tight sealing capability allows valve body cleaning and draining.
- True-Bore® design
- 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)
- Optional Fusible Link – A Spring Return Handle unit can be equipped with an optional fusible link specified to a customer's required melt temperature, which closes the valve during fire conditions.
- Direct mount automation



SPECIFICATIONS	Fire Rated, 3 piece, 2-Way Valves
Sizes	1/2" - 3"
Material	316L, (ASTM A351 CF3M), Hastelloy® C276 and other materials
Temperatures	Ambient for V-TEF™ to 400° F, S-TEF® to 450° F
End Connections	Extended tube, hygienic clamp, compression ends (1/2" - 1")
Seats & Seals	V-TEF™ or S-TEF® Seats, Graphite seals, O-rings (EPR, FKM standard)
Stem Packing Material	V-TEF™ or S-TEF®, Graphite secondary seals
Body Bolts & Nuts	18-8 Stainless Steel, Fully encapsulated
Maximum Working Pressure	up to 720 psig CWP depending on valve series, size and temperature
Temperatures	up to 450° F depending on seat and seal material
Polish	Standard internal polish of 30 Ra ID

CV Values (gpm), Series 6		
Size	End Connections	
	F-	X-
1/2"	7	8
3/4"	24	28
1"	55	60
1-1/2"	160	190
2"	370	420
2-1/2"	700	800
3"	850	1,000

ID Surface Finish, Ra Readings for Valves per ASME BPE			
Surface Finish	PBM Polish Code	µ-in.	µ-m.
Mechanical Polish			
SF 1	A	20 Ra max	0.51
SF 2	A	25 Ra max	0.64
SF 3	-	30 Ra max	0.76
Mechanical Polish and Electropolish			
SF 4	G	15 Ra max	0.38
SF 5	F	20 Ra max	0.51
SF 6	F	25 Ra max	0.64

How To Order:

PRODUCT (1-2)	MATERIAL (3-4)	SIZE (5)	SERIES (6)	END CONNECTIONS (7-8)	SEAT & SEAL (9)	PURGES (10-11)	BALL & STEM (12)	OPERATOR (13-14)	POLISH (15-16)	
SI	H- Cast 316/316L S / S	C	1/2"	6	F - Ext. Butt weld for Tube	G V-TEF™ Seats / Graphite Seals / FKM O-Rings	-- No Purge Port or Ball Option	- Standard Ball and Stem	-- W/ Standard Lever Handle	- 30 Ra ID Standard
HL	Cast 316L S / S	D	3/4"		FX Ext. Butt weld for Tube by Hygienic Clamp	J V-TEF™ Seats / Graphite Seals / VTFE Cav Fill / FKM O-Rings	- 8 Self Flushing Ball	G 17-4PH Stem	02 W/O Handle / W/ Stem Actuator Prep	A 20 Ra ID
C	Hastelloy C-276	E	1"		X- Hygienic Clamp	Z V-TEF™ Seats / Graphite Seals / EPR O-Rings	- V Slotted V-Ball		04 Locking Lever Handle	C 20 Ra ID / 32 Ra OD
		G	1-1/2"		SM Compression (thru 1")		- W 30° V-Ball		18 Extended Handle (1/2" thru 3")	
		H	2"		G- Female Cherry Burrell	2 V-TEF™ Seats / Graphite Seals / VTFE Cav Fill / EPR O-Rings	- X 45° V-Ball		20 DA 80psig actuator	F 20 Ra ID after Electro Polish
		J	2-1/2"		H- Male Cherry Burrell		- Y 60° V-Ball		27 DA 60psig actuator	
P-	AL6XN	K	3"			H S-TEF® Seats / Graphite Seals / FKM O-Rings	Other Purge Port & Ball Options - Contact PBM.		34 SR 80psig actuator	More polish available - Contact PBM.
					0 S-TEF® Seats / Graphite Seals / EPR O-Rings				41 SR 60psig actuator	
					9 V-TEF™ Seats / Seals / FEP Encaps. FKM O-Rings					

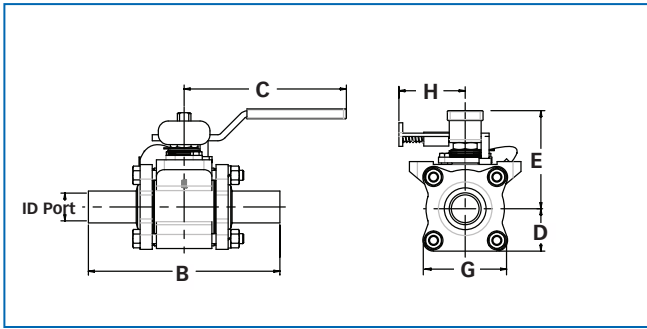
<http://pbmvalve.com/build-a-part-number>

Other Seat/seal options available - Contact PBM.

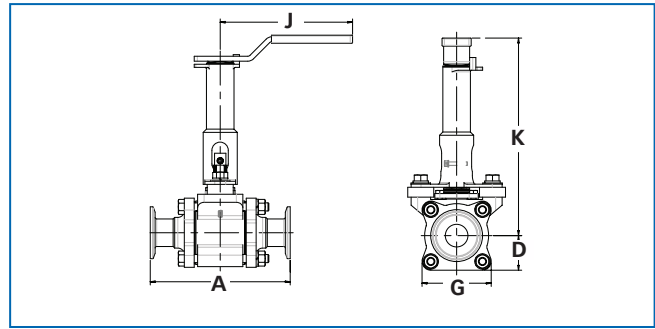
Other operator options available - Contact PBM.

PBM Fire Rated SI Series 6, Manual

2-Way Fire Rated Valve with Locking Handle



2-Way Fire Rated Valve with Extended Locking Handle



2-Way Sanitary Fire Rated Valve Dimensioned valves in inches										Locking Handle		Ext. Locking Handle		
Valve Size	Size Code	ID Port	Tubing Gauge	A Clamp	B Weld	C	D	E	Approx. Wgt (lbs)	H	Hole Dia. for Lock	J	K	Hole Dia. for Lock
1/2"	C	0.37	16 ga.	3.50	5.50	4.15	0.92	2.63	1.6	1.62	.28	5.09	4.00	0.31
3/4"	D	0.62	16 ga.	4.00	5.50	4.15	0.92	2.63	1.6	1.62	.28	5.09	4.14	0.31
1"	E	0.87	16 ga.	5.37	6.00	5.09	1.33	3.03	4.5	1.62	.25	5.09	5.44	0.31
1-1/2"	G	1.37	16 ga.	5.50	7.50	8.03	1.78	4.10	10	2.57	.38	8.00	7.46	0.38
2"	H	1.87	16 ga.	6.25	8.00	8.03	2.15	4.41	15.3	2.57	.38	8.00	9.76	0.38
2-1/2"	J	2.37	16 ga.	8.00	11.50	12.06	2.79	6.51	36	3.47	.38	12.06	11.36	0.38
3"	K	2.87	16 ga.	9.00	13.50	12.06	3.14	6.78	49	3.47	.38	12.06	11.69	0.44

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

ACTUATED DIMENSIONS

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

Size	80 PSI Double Acting					60 PSI Double Acting					80 PSI Spring Return					60 PSI Spring Return				
	L	M	N	P	R	L	M	N	P	R	L	M	N	P	R	L	M	N	P	R
1/2"	5.55	2.79	5.84	1.61	1/8	6.46	3.17	6.29	1.77	1/8	5.55	2.79	5.84	1.61	1/8	5.55	2.79	5.84	1.61	1/8
3/4"	6.46	3.17	6.44	1.77	1/8	6.46	3.17	6.44	1.77	1/8	5.55	2.79	5.99	1.61	1/8	5.55	2.79	5.99	1.61	1/8
1"	8.27	3.72	7.80	2.07	1/8	8.27	3.72	7.80	2.07	1/8	5.55	2.79	6.64	1.61	1/8	5.55	2.79	6.64	1.61	1/8
1-1/2"	10.83	4.85	10.16	2.68	1/4	10.83	4.85	10.16	2.68	1/4	6.46	3.17	8.39	1.77	1/8	8.27	3.72	9.10	2.07	1/8
2"	10.83	4.85	10.47	2.68	1/4	13.12	5.39	11.82	2.87	1/4	8.27	3.72	9.42	2.07	1/8	8.27	3.72	9.42	2.07	1/8
2-1/2"	13.12	5.39	13.48	2.87	1/4	14.65	5.83	13.96	3.15	1/4	13.12	5.39	13.48	2.87	1/4	13.12	5.39	13.48	2.87	1/4
3"	14.65	5.83	14.29	3.15	1/4	17.13	6.46	15.16	3.44	1/4	13.12	5.39	13.81	2.87	1/4	13.12	5.39	13.81	2.87	1/4



<http://pbmvalve.com/valves/fire-rated-valves-0>
<http://pbmvalve.com/maintenance-instructions>

www.PBMValve.com

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