

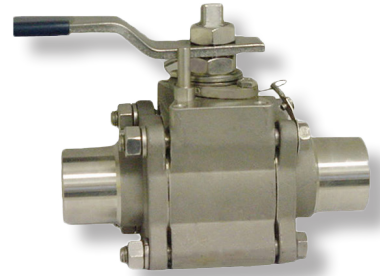
PBM FIRE RATED 2-WAY BALL VALVES

SP Series 6, 1/2" - 3"



DESIGN FEATURES:

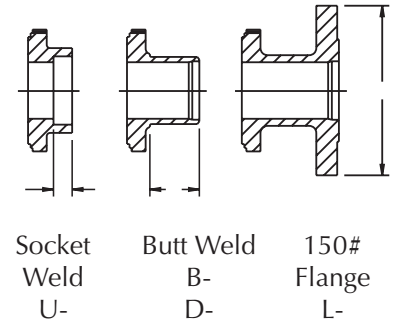
- Fire Rated, tested to API-607
- Valve shall be a three-piece "swing-out" body design
- Valves meet ASME B16.34
- Upstream and downstream bubble-tight sealing capability allows valve body cleaning and draining.
- Stem assembly accommodates PBM Direct Mount Actuation for accurate alignment and increased cycling life.
- Full port design
- Valves are full vacuum
- 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 with fusible links and/or electro thermal links



SPECIFICATIONS	Fire Rated 2-Way Valves
Sizes	1/2" - 3" Series 6
Material	316L, (ASTM A351 CF3M), Hastelloy® C276 and other ASME B16.34 materials
Temperatures	Ambient for TFM™ to 400° F, S-TEF® to 450°F
End Connections	Flange, NPT, Buttweld for pipe, Socket weld
Seats & Seals	TFM™ or S-TEF® Seats, Graphite seals, O-rings (EPR, Viton standard)
Stem Packing Material	TFM™ or S-TEF®, Graphite seals
Body Bolts & Nuts	18-8 Stainless Steel, Fully encapsulated
Maximum Working Pressure	up to 700 psig CWP depending on valve series, size and temperature
Polish	Standard internal polish of 125 Ra ID

CV Values (gpm)	
Size	Series 6
1/2"	12
3/4"	42*
1"	73
1-1/2"	170
2"	360
2-1/2"	650
3"	935

End Fitting Length or Diameter			
Size	U-	B-D-	L-
1/2"	0.41	1.50	3.50
3/4"	0.53	1.50	3.88
1"	0.53	1.50	4.25
1-1/2"	0.53	1.50	5.00
2"	0.66	1.75	6.00
2-1/2"	0.69	2.31	7.00
3"	0.69	2.31	7.50



How To Order:

PRODUCT (1-2)		SIZE (5)		END CONN.		SEAT & SEAL		PURGES		BALL & STEM		OPERATOR		POLISH			
MATERIAL (3-4)		SERIES (6)		(7-8)		(9)		(10-11)		(12)		(13-14)		(15-16)			
SP	H-	Cast 316/316L S/S	C	1/2"	6	B-	Sch. 40 Butt Weld	G	TFM Seats / Graphite Seats / Viton O-Rings	--	No Purge Port or Ball Option	-	Standard Ball and Stem	--	W/ Standard Lever Handle	-	125 Ra ID Standard
	HL	Cast 316L S/S	D	3/4"		D-	Sch. 10 Butt Weld	J	TFM Seats / Graphite Seats / VTFE Cav Fill / Viton O-Rings	-8	Self Flushing Ball	G	17-4PH Stem	02	W/O Handle W/ Stem Actuator Prep	A	20 Ra ID
	E-	Carbon Steel	E	1"		J-	Ext. Socket Weld	Z	TFM Seats / Graphite Seats / EPR O-Rings	-V	Slotted V-Ball			04	Locking Lever Handle	C	20 Ra ID / 32 Ra OD
	C-	Hastelloy C-276	G	1-1/2"		L-	150# Flange			-W	30° V-Ball			18	Extended Handle (1/2" thru 3")	F	20 Ra ID after Electro Polish
	Y-	Hastelloy C-22	H	2"		M-	300# Flange	2	TFM Seats / Graphite Seats / VTFE Cav Fill / EPR O-Rings	-X	45° V-Ball			20	DA 80psig actuator		
	P-	AL6XN	J	2-1/2"		P-	Male NPT			-Y	60° V-Ball			27	DA 60psig actuator		
			K	3"		Q-	Female NPT	H	S-TEF® Seats / Graphite Seats / Viton O-Rings	Other Purge Port & Ball Options - Contact PBM				34	SR 80psig actuator		More polish available - Contact PBM
						U-	Socket Weld	0	S-TEF® Seats / Graphite Seats / EPR O-Rings					41	SR 60psig actuator		

Other material options available - Contact PBM.

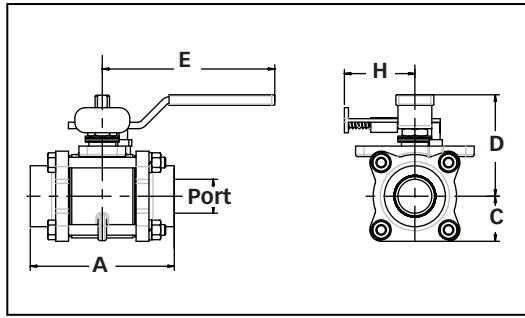
Other seat/seal options available - Contact PBM

Other operator options available - Contact PBM

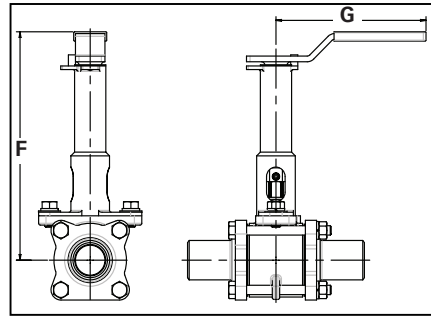
<http://pbmvalve.com/build-a-part-number>

PBM Industrial Fire Rated 2-Way Ball Valves Manual

2-Way Valve with Locking Handle



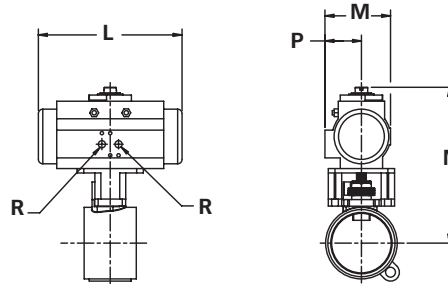
2-Way Valve with Ext. Locking Handle



Valve Size	Size Code	Port Dia.	A			C Q to Bottom B- D- Q- S- T- U	D Q to Top of Handle	E Handle Length from Q	Ext. Locking Handle		Locking Handle		Approx. Weights	
			Face to Face						F	G	H	Hole Dia. for Lock	B- D- Q- U-	L-
			Q- U- S- T-	B- D-	L-									
1/2"	C	0.5	3.12	5.5	5.5	0.92	2.63	4.15	7.19	5.09	1.62	.25	1.7 lbs.	4.0 lbs.
3/4"	D	0.75	3.44	5.5	5.8	1	2.78	4.15	7.34	5.09	1.62	.25	2.0 lbs.	5.2 lbs.
1"	E	1	4.25	5.99	6.5	1.33	3.03	5.09	7.62	5.09	2.08	.28	4.5 lbs.	8.7 lbs.
1-1/2"	G	1.5	5.5	7.5	8	1.78	4.1	8.68	9.45	8.00	2.58	.38	10.2 lbs.	17.4 lbs.
2"	H	2	6	8	9.8	2.15	4.41	8.68	9.76	8.00	2.58	.38	15.4 lbs.	26.5 lbs.
2-1/2"	J	2.5	8	11.5	11.5	2.79	6.45	12.44	11.36	12.06	3.47	.38	36.0 lbs.	53.5 lbs.
3"	K	3	9	13.5	12.8	3.14	6.78	12.44	11.69	12.06	3.47	.38	48 lbs.	68 lbs.

ACTUATED DIMENSIONS

Unit of Measure = inches
Dimensions based on actuators used with TFM™ 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	2.8	5.84	1.61	1/8	5.55	2.8	5.84	1.61	1/8	5.55	2.8	5.84	1.61	1/8	6.46	3.17	6.29	1.77	1/8
3/4"	5.55	2.8	5.99	1.61	1/8	5.55	2.8	5.99	1.61	1/8	6.46	3.17	6.44	1.77	1/8	6.46	3.17	6.44	1.77	1/8
1"	5.55	2.8	6.64	1.61	1/8	5.55	2.8	6.64	1.61	1/8	8.27	3.72	7.8	2.07	1/8	8.27	3.72	7.80	2.07	1/8
1-1/2"	6.46	3.17	8.39	1.77	1/8	8.27	3.72	9.1	2.07	1/8	10.83	4.84	10.15	2.68	1/4	10.83	4.84	10.15	2.68	1/4
2"	8.27	3.72	9.41	2.07	1/8	8.27	3.72	9.41	2.07	1/8	10.83	4.84	10.46	2.68	1/4	13.11	5.39	11.82	2.87	1/4
2-1/2"	13.11	5.39	13.48	2.87	1/4	13.11	5.39	13.48	2.87	1/4	13.11	5.39	13.48	2.87	1/4	14.65	5.83	13.96	3.15	1/4
3"	13.11	5.39	13.81	2.87	1/4	13.11	5.39	13.81	2.87	1/4	14.65	5.83	14.29	3.15	1/4	17.15	6.46	15.18	3.44	1/4



<http://www.pbmvalve.com/valves/2-way-ball-valve-industrial>

<http://pbmvalve.com/maintenance-instructions>

www.PBMValve.com

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