

PBM BOLTED INSTRUMENT VALVES

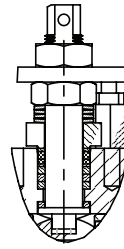
IB Series, Sizes 1/2" - 2"



DESIGN FEATURES:

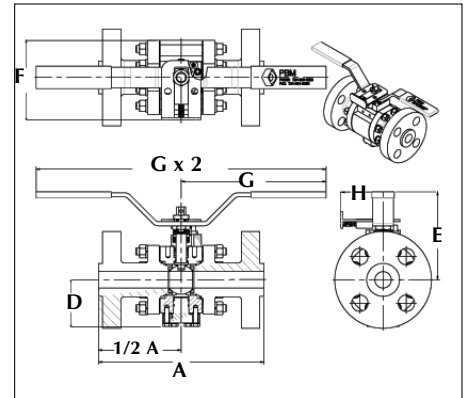
- End Connection design and fabrication flexibility
- Full and reduced port designs
- Customizable end connections
- Quarter turn operation
- Bleed or gauge ports available
- Bolted Body
- Tested to API-608 Fire Rated
- Braided Graphite Packing
- API-622/API-641 Low-E Stem Packing, standard
- Gear operated recommended for 1-1/2" and above

The high temperature valve version consists of carbide coating on the ball and seats.



SPECIFICATIONS	Bolted (IB Series) Instrument Valves
Sizes	1/2" - 2"
Material	316 Stainless Steel, Hastelloys Duplex SS, Carbon Steels, Monel or others
Temperatures	Ambient to 800°F depending on material
End Connections	Thread Pipe, Butt weld, Socket Weld, Instrument Adapter Flange, Others
Seats & Seals	TFM™, C-TEF™, S-TEF® , PEEK®, Stellite, Tungsten or Chrome Carbide Coated S/S Balls & Seats
Stem Packing Material	Die molded graphite TFM™, C-TEF™ or S-TEF®, API-622 Low-E Stem Packing Standard in 1/2" and 3/4" sizes with .41 bore. It is optional in larger sizes.
Maximum Working Pressure	Maximum CWP 800°F depending on seating and valve material of construction

Size	Ends	Units Inches	A		D		E		F		G		H	
			Overall Length	CL to Bottom of Valve (2-Way)	Distance to Top of Valve	Body Width without Ends	Handle Radius	CL to Locking Mechanism						
			CL600	CL1500	CL600	CL1500	CL600	CL1500	CL600	CL1500	CL600	CL1500	CL600	CL1500
1/2" DN 15	Flanged	in (mm)	6.5 (165)	8.5 (216)	1.72 (44)		5.2 (132)		2.4 (61)		3.47 (88)		1.61 (41)	
	Female NPT	in (mm)	4.75 (121)											
	Others	in (mm)	8.5 (216)											
3/4" DN 20	Flanged	in (mm)	7.5 (191)	9 (229)	2.33 (59)		3.96 (101)		3.75 (95)		5 (127)		2.08 (53)	
	Female NPT	in (mm)	5.5 (140)											
	Others	in (mm)	9 (229)											
1" DN 25	Flanged	in (mm)	8.5 (216)	10 (254)	2.92 (74)		5.2 (132)		4.5 (114)		8.81 (224)		2.57 (65)	
	Female NPT	in (mm)	6 (152)											
	Others	in (mm)	10 (254)											
1-1/2" DN 40	Flanged	in (mm)	9.5 (241)	12 (305)	2.82 (72)	4.17 (106)	5.76 (146)	7.18 (182)	5.38 (137)	7.5 (191)	11.8 (300)	12 (305)	N/A	
	Female NPT	in (mm)	6.5 (165)	7.5 (191)										
	Others	in (mm)	12 (305)											
2" DN 50	Flanged	in (mm)	11.5 (292)	14.5 (368)	3.42 (87)	4.82 (122)	6.13 (156)	7.43 (189)	6.25 (159)	8 (203)	11.8 (300)	12 (305)	N/A	
	Female NPT	in (mm)	8 (203)	10 (254)										
	Others	in (mm)	14.5 (368)											

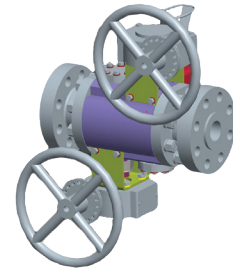
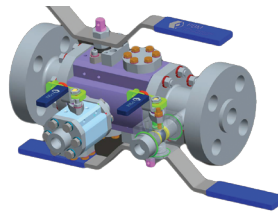
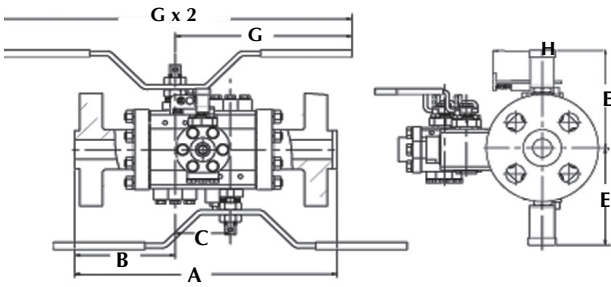


How To Order:

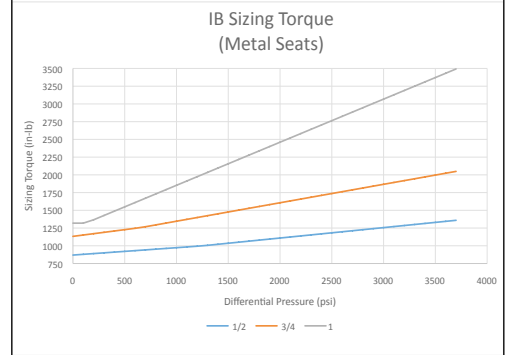
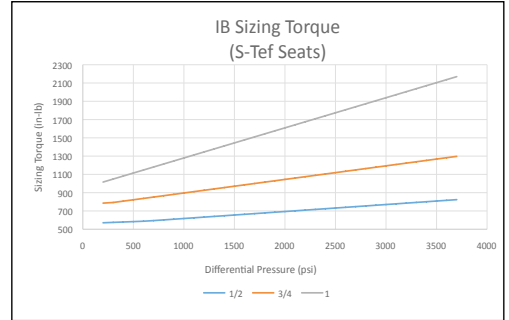
PRODUCT (1-2) MATERIAL (3-4)	SIZE (5) VALVE TYPE SERIES (6)	1ST END CONN. TYPE (7) (HP UPSTREAM)	2ND END CONN. TYPE (8) (LP DOWNSTREAM)	SEAT/STEM PACKINGS/O-RINGS (9)	1ST END CONN. SIZE (10)	2ND END CONN. SIZE (11)	BLEED/GAUGE PORT (12)	OPERATOR OPTIONS
IB HH = 316 S/S Body & End Conn. EH = 316H (High Temp) S/S Body & End Conn. E7 = A-105 Carbon Steel Body & End Connections C = Hastelloy C-276 Body & End Connections CI = Hastelloy B-2 Body & End Connections Y = Hastelloy C-22 Body & End Connections M = Monel Body & End Connections P = AL6XN Body & End Connections Z2 = Duplex 2205 Body & End Connections 25 = 254 SMO 6 Moly Body & End Connections F9 = A182 Gr. F9 Carbon Steel Body & End Conn. <small>Note: Other materials of construction available.</small>	C = 600# Class D = 900# Class E = 1500# Class Consult Factory for DBB Valves.	B = Ext. Butt weld Sch. 40 D = Ext. Butt weld Sch. 10 L = RF Flange N = Extended Male NPT P = Male NPT Q = Female NPT R = Extended Female NPT S = Female Comp. Thread * J = Ext. Female Socket Weld V = Ext. Male Socket Weld W = RTJ Flange	B = Ext. Butt weld Sch. 40 D = Ext. Butt weld Sch. 10 L = RF Flange N = Extended Male NPT P = Male NPT Q = Female NPT R = Extended Female NPT S = Female Comp. Thread * J = Ext. Female Socket Weld V = Ext. Male Socket Weld W = RTJ Flange	G = TFM™ / Graphite / FKM H = S-TEF® / Graphite / FKM N = PEEK / Graphite / Kalrez O = Carbon Graphite / Graphite - 750° F S = Stellite Ball & Seats / Graphite Seals - 800° F. Max. T = Tungsten Carb. Ctd Ball & Seats/ Graphite Seals - 800° F. Max. U = Chrome Carb. Ctd Ball & Seats/ Graphite Seals - 800° F. Max. Y = C-TEF™ / Graphite / FKM	1 = 1/2 inch, Full Port E = 3/4 inch, Full Port 4 = 1 inch, Full Port G = 1-1/2 inch, Full Port H = 2 inch, Full Port	1 = 1/2 inch, Full Port E = 3/4 inch, Full Port 4 = 1 inch, Full Port G = 1-1/2 inch, Full Port H = 2 inch, Full Port	= No Bleed or Gauge Ports	1 = Manual Lever Handle 12 = W/O Handle, Stem Prep for Automation 13 = With Handle, Stem Prep for Automation 14 = Manual Locking Lever Handle 15 = Manual Oval Hand Wheel 16 = Gear operator 17 = Extended Lockable Lever Handle 18 = Extended Lockable Oval Handle 20 = 80 PSIG Double Acting Actuator 27 = 60 PSIG Double Acting Actuator 34 = 80 PSIG Spring Return Actuator 41 = 60 PSIG Spring Return Actuator <small>Note: Additional operator options available</small>

* Ferrules Not Included
Valves seal HP to LP.
Note: Other end connection types available. Consult PBM for other configurations.

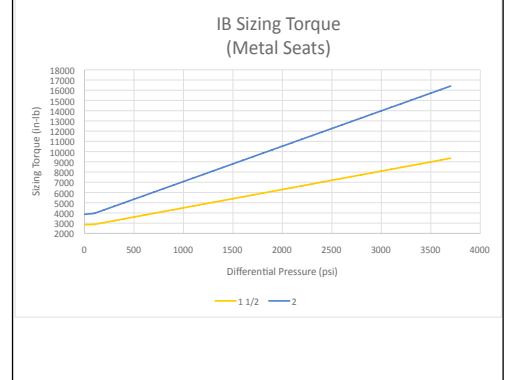
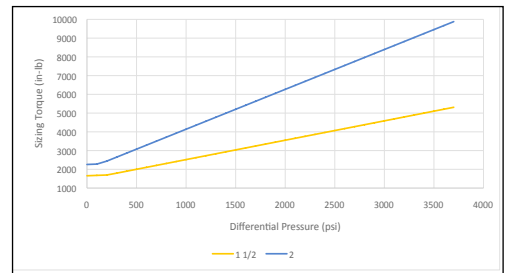
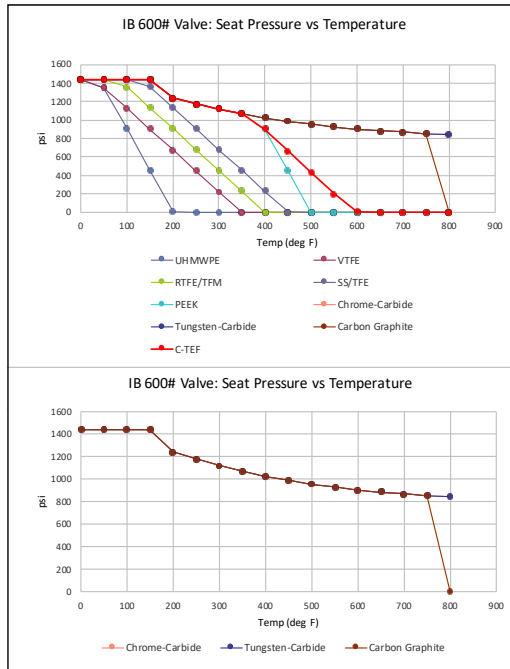
PBM Bolted Instrument Valves



Size	Ends	Units	A		B		C		E		F		G		H	
			Overall Length		C to End		Ball Separation		Distance to Top of Valve		Body Width without Ends		Handle Radius		C to Locking Mechanism	
			CL600	CL1500	CL600	CL1500	CL600	CL1500	CL600	CL1500	CL600	CL1500	CL600	CL1500	CL600	CL1500
1/2" DN 15	Flanged	in (mm)	8.25 (210)	10.25 (260)	3.25 (83)	4.25 (108)	1.75 (44)		5.2 (132)		2.4 (61)		3.47 (88)		1.61 (41)	
	Female NPT	in (mm)	6.5 (165)	2.375 (60)												
	Others	in (mm)	10.25 (260)	4.25 (108)												
3/4" DN 20	Flanged	in (mm)	9.75 (248)	11.25 (286)	3.75 (95)	4.5 (114)	2.25 (57)		3.96 (101)		3.75 (95)		5 (127)		2.08 (53)	
	Female NPT	in (mm)	7.75 (197)	2.75 (70)												
	Others	in (mm)	11.25 (286)	4.5 (114)												
1" DN 25	Flanged	in (mm)	11.25 (286)	12.75 (324)	4.25 (108)	5 (127)	2.75 (70)		5.2 (132)		4.5 (114)		8.81 (224)		2.57 (65)	
	Female NPT	in (mm)	8.75 (222)	3 (76)												
	Others	in (mm)	12.75 (324)	5 (127)												
1-1/2" DN 40	Flanged	in (mm)	13.25 (337)	15.75 (400)	4.75 (121)	6 (152)	3.75 (95)		5.76 (146)	7.18 (182)	6 (152)	7.5 (191)	12 (305)		N/A	
	Female NPT	in (mm)	10.25 (260)	11.25 (286)	3.25 (83)	3.75 (95)										
	Others	in (mm)	15.75 (400)	6 (152)												
2" DN 50	Flanged	in (mm)	15.25 (387)	18.5 (470)	5.75 (146)	7.25 (184)	3.75 (95)	4 (102)	6.13 (156)	7.43 (189)	6.75 (171)	8 (203)	12 (305)		N/A	
	Female NPT	in (mm)	11.75 (298)	14 (356)	4 (102)	5 (127)										
	Others	in (mm)	18.5 (470)	7.25 (184)												



BOLTED INSTRUMENT VALVES PRESSURE/TEMPERATURE AND TORQUE CHARTS



<http://www.pbmvalve.com/valves/instrument-isolation-valve-0>

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

www.PBMValve.com

PBM, Inc. • 1070 Sandy Hill Road, Irwin, PA 15642

Phone: 800.967.4PBM • 724.863.0550

E-mail: info@pbmvalve.com

© Copyright 2018 PBM, Inc. PB-IB

