

PBM BOLTED INSTRUMENT VALVES

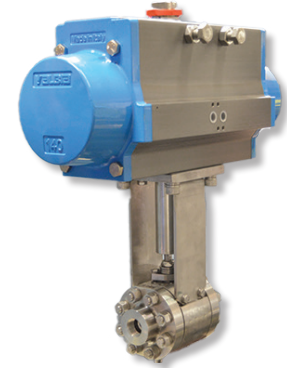
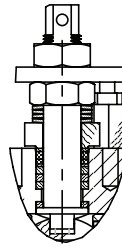
IB Series, Sizes 1/2" - 2"



DESIGN FEATURES:

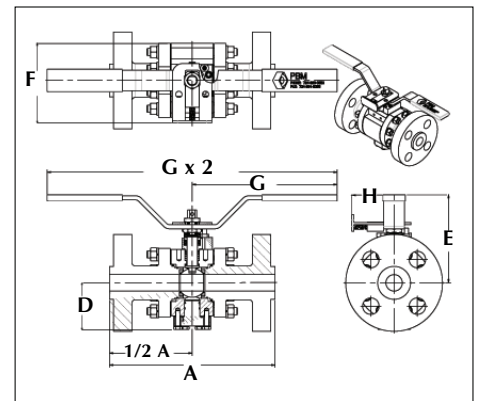
- End Connection design and fabrication flexibility
- **IB Series Instrument valves may have o-rings. Consult factory.**
- Full and reduced port designs
- Customizable end connections
- Quarter turn operation
- Bleed or gauge ports available
- Bolted Body
- Tested to API-607 Fire Rated
- Braided Graphite Packing
- API-641 Low-E, 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	V-TEF™, C-TEF™, S-TEF™, PEEK®, Stellite, Tungsten or Chrome Carbide Coated S/S Balls & Seats
Stem Packing Material	Braided graphite, V-TEF™, C-TEF™ or S-TEF™, API-622 Low-E Stem Packing Standard
Maximum Working Pressure	Maximum CWP depends on class and valve material of construction per ASME B16.34

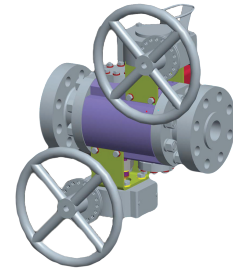
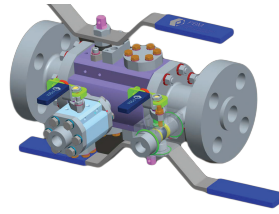
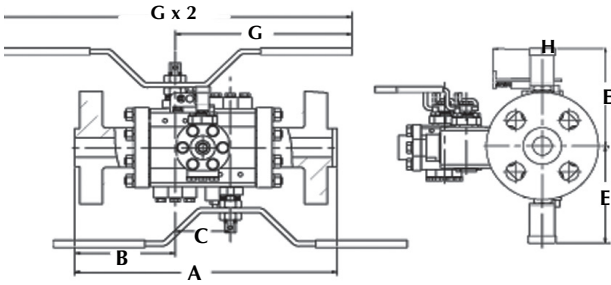
Size	Ends	Units Inches	A		D		E		F		G		H	
			Overall Length	CL to Bottom of Valve (2-Way)	Distance to Top of Valve	Body Width without Ends	Handle Radius	CL to Locking Mechanism	CL600	CL1500	CL600	CL1500	CL600	CL1500
1/2" DN 15	Flanged	in (mm)	6.5 (165)	8.5 (216)	1.72 (44)	5.2 (132)	2.4 (61)	3.47 (88)	1.61 (41)	N/A	N/A	N/A	N/A	N/A
	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)	N/A	N/A	N/A	N/A	N/A
	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)	N/A	N/A	N/A	N/A	N/A
	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	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	N/A
	Female NPT	in (mm)	8 (203)	10 (254)										
	Others	in (mm)	14.5 (368)											



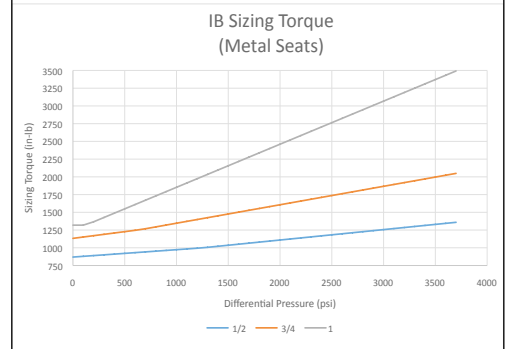
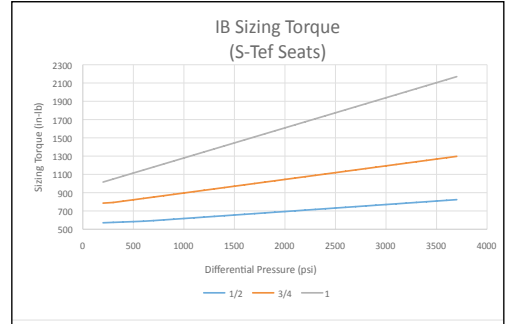
How To Order:

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 - 316 S/S Body & End Conn. H4 = 316H (High Temp) S/S Body & End Conn. E7 = A-105 Carbon Steel Body & End Connections C = Hastelloy C-276 Body & End Connections Cl = Hastelloy B-2 Body & End Connections Y = Hastelloy C-22 Body & End Connections M = Monel Body & End Connections P = AL6XN Body & End Connections 22 = Duplex 2205 Body & End Connections 25 = 254 SMO 6 Mo Body & End Connections F9 = A182 Gr. F9 Carbon Steel Body & End Conn. Note: Other materials of construction available.	C = 800# 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 W = RTJ Flange * Ferrules Not Included	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 = V-TEF™ / Graphite / FKM H = S-TEF™ / Graphite / FKM N = PEEK / Graphite / Kalrez Q = Carbon Graphite / Graphite - 750° F. S = Stellite Ball & Seats / Graphite Seals - 800° F. Max. T = Tungsten Carb. Old Ball & Seats/ Graphite Seals - 800° F. Max. U = Chrome Carb. Old Ball & Seats/ Graphite Seals - 800° F. Max. Y = C-TEF™ / Graphite / FKM Valves seal HP to LP. Consult PBM for other configurations.	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	-- Manual Lever Handle 02 = W/O Handle, Stem Prep for Automation 03 = With Handle, Stem Prep for Automation 04 = Manual Locking Lever Handle 05 = Manual Oval Hand Wheel 06 = 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 = 60 PSIG Spring Return Actuator 41 = 60 PSIG Spring Return Actuator Note: Additional operator options available.

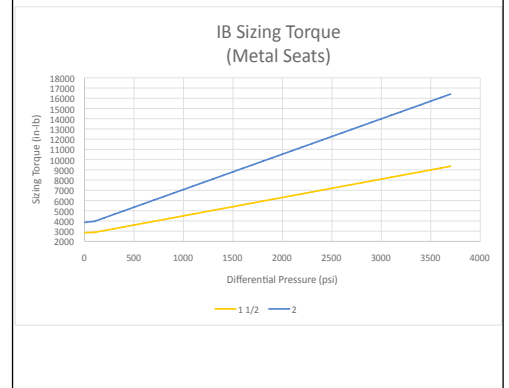
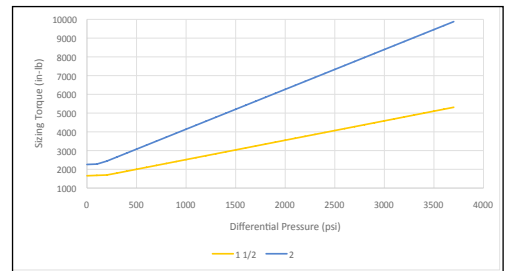
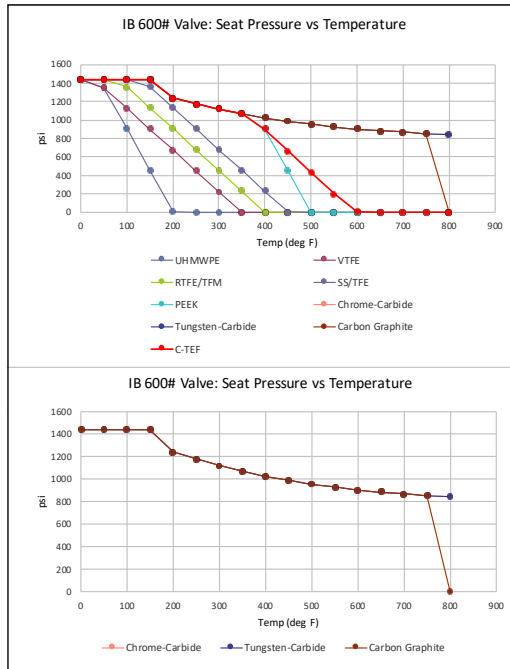
PBM Bolted Instrument Valves



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>

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