

IMI PBM BOLTED INSTRUMENT VALVES

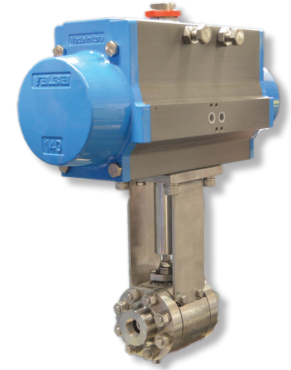
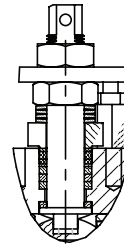
IB Series, Sizes 1/2" - 2"



DESIGN FEATURES:

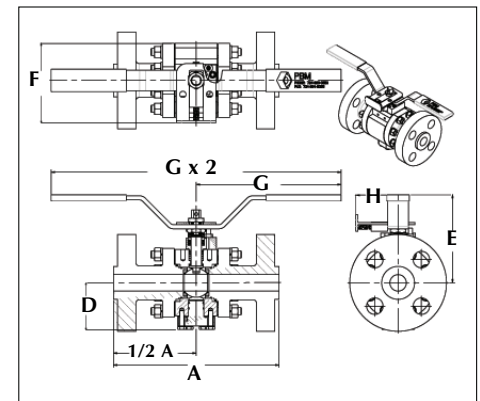
- End Connection design and fabrication flexibility
- **IB Series Instrument valves may have o-rings. Consult factory.**
- Full and reduced port designs
- Customizable end connections
- Quarter turn operation
- Bleed or gauge ports available
- Bolted Body
- Tested to API-607 Fire Rated
- Braided Graphite 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	CL600	CL1500	CL600	CL1500	CL600	CL1500			
1/2" DN 15	Female NPT	in (mm)	6.5 (165)	8.5 (216)	1.72 (44)	5.2 (132)	2.4 (61)	3.47 (88)	1.61 (41)								
	Others	in (mm)	4.75 (121)	8.5 (216)													
		in (mm)	7.5 (191)	9 (229)													
3/4" DN 20	Female NPT	in (mm)	5.5 (140)	9 (229)	2.33 (59)	3.96 (101)	3.75 (95)	5 (127)	2.08 (53)								
	Others	in (mm)	8.5 (216)	10 (254)													
		in (mm)	6 (152)	10 (254)													
1" DN 25	Female NPT	in (mm)	6 (152)	10 (254)	2.92 (74)	5.2 (132)	4.5 (114)	8.81 (224)	2.57 (65)								
	Others	in (mm)	9.5 (241)	12 (305)													
		in (mm)	6.5 (165)	7.5 (191)						2.82 (72)	4.17 (106)	5.76 (146)	7.18 (182)	5.38 (137)	7.5 (191)	11.8 (300)	12 (305)
1-1/2" DN 40	Female NPT	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				
	Others	in (mm)	8 (203)	10 (254)													
		in (mm)	14.5 (368)														
2" DN 50	Female NPT	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				
	Others	in (mm)	8 (203)	10 (254)													
		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.	C = 600# Class	6	B = Ext. Butt weld Sch. 40	B = Ext. Butt weld Sch. 40	G = V-TEF™ / Graphite / FKM	1 = 1/2 inch, Full Port	1 = 1/2 inch, Full Port	-- = Manual Lever Handle
HH = 316H (High Temp) S/S Body & End Conn.	D = 900# Class		D = Ext. Butt weld Sch. 10	D = Ext. Butt weld Sch. 10	H = S-TEF® / Graphite / FKM	E = 3/4 inch, Full Port	E = 3/4 inch, Full Port	B2 = W/O Handle, Stem Prep for Automation
E7 = A-105 Carbon Steel Body & End Connections	E = 1500# Class		L = RF Flange	L = RF Flange	N = PEEK / Graphite / Kalrez	4 = 1 inch, Full Port	4 = 1 inch, Full Port	B3 = With Handle, Stem Prep for Automation
C = Hastelloy C-276 Body & End Connections	Consult Factory for DBB Valves.		N = Extended Male NPT	N = Extended Male NPT	Q = Carbon Graphite / Graphite - 750° F.	G = 1-1/2 inch, Full Port	G = 1-1/2 inch, Full Port	B4 = Manual Locking Lever Handle
C1 = Hastelloy B-2 Body & End Connections			P = Male NPT	P = Male NPT	S = Stellite Ball & Seats / Graphite Seals - 800° F. Max.	H = 2 inch, Full Port	H = 2 inch, Full Port	B5 = Manual Oval Hand Wheel
Y = Hastelloy C-22 Body & End Connections			Q = Female NPT	Q = Female NPT	T = Tungsten Carb. Old Ball & Seats/ Graphite Seals - 800° F. Max			B6 = Gear operator
M = Monel Body & End Connections			R = Extended Female NPT	R = Extended Female NPT	U = Chrome Carb. Old Ball & Seats/ Graphite Seals - 800° F. Max			B7 = Extended Lockable Lever Handle
P = AL6XN Body & End Connections			S = Female Comp. Thread *	S = Female Comp. Thread *	V = Chrome Carb. Old Ball & Seats/ Graphite Seals - 800° F. Max			B8 = Extended Lockable Oval Handle
22 = Duplex 2205 Body & End Connections			J = Ext. Female Socket Weld	J = Ext. Female Socket Weld	Y = C-TEF™ / Graphite / FKM			B9 = 80 PSIG Double Acting Actuator
25 = 254 SMO 6 Moly Body & End Connections			V = Ext. Male Socket Weld	V = Ext. Male Socket Weld				B10 = 60 PSIG Double Acting Actuator
F9 = A182 Gr. F9 Carbon Steel Body & End Conn.			W = RTJ Flange	W = RTJ Flange				B11 = 60 PSIG Spring Return Actuator

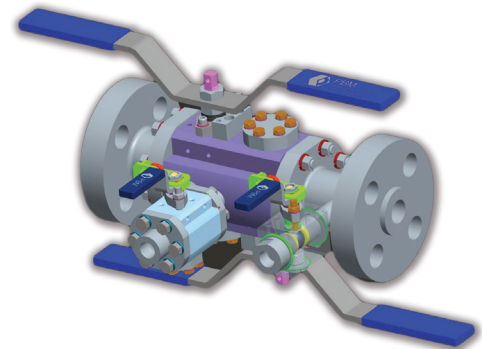
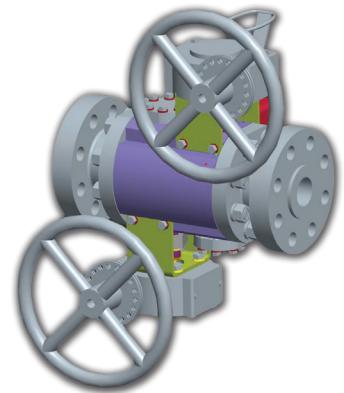
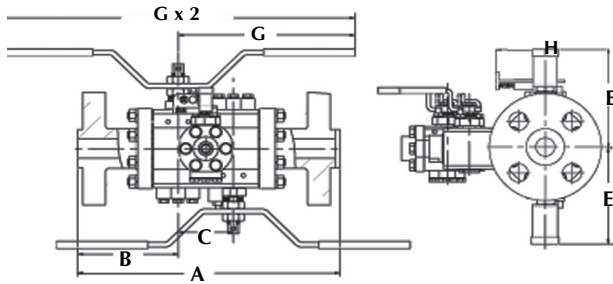
Note: Other materials of construction available.

* Ferrules Not Included
Note: Other end connection types available.

Valves seal HP to LP.
Consult PBM for other configurations.

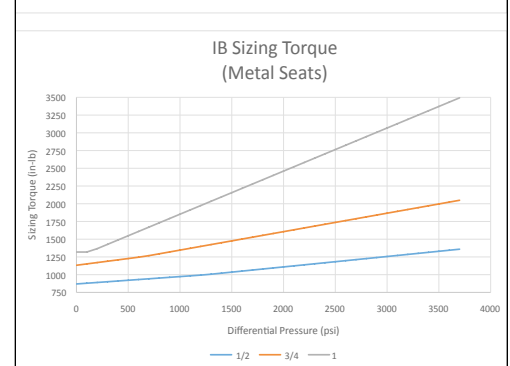
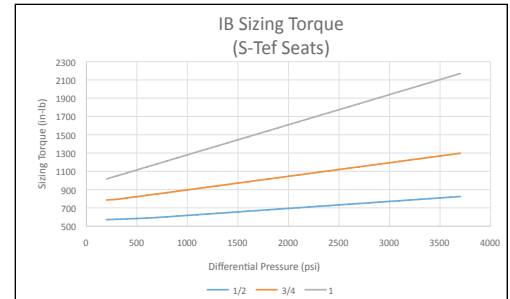
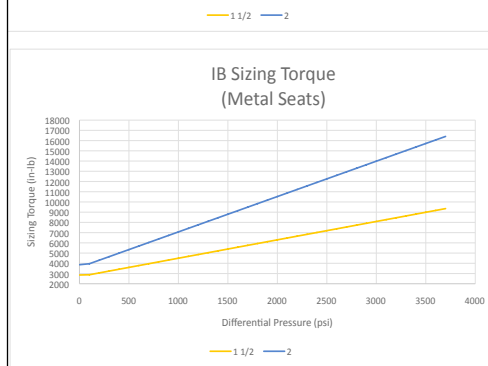
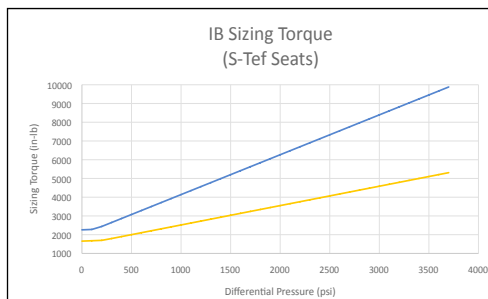
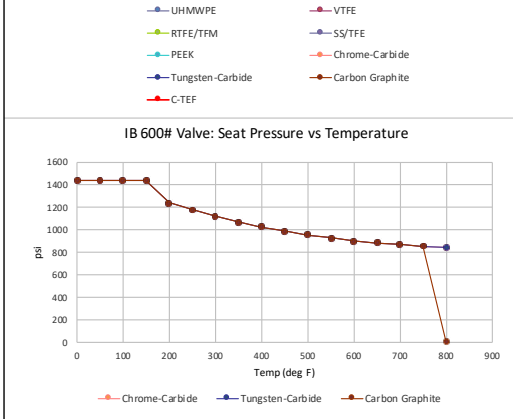
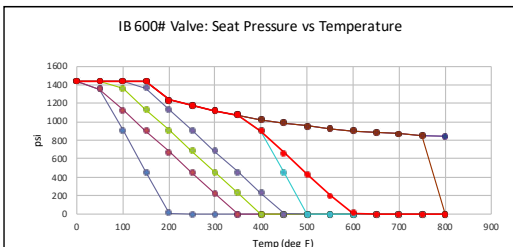
Note: Additional operator options available.

IMI PBM Bolted Instrument Valves



Size	Ends	Units	A		B		C		E		G		H				
			Overall Length		Q to End		Ball Separation		Distance to Top of Valve		Body Width without Ends		Handle Radius		Q 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



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