

1,000 psig Ball Valves

Instrumentation ball valves in compact barstock construction.
Stainless steel, brass and high-alloy bodies — OD 1/4" to 1"
(6 to 25 mm).



Lever Handle Valves

Standard



Butterfly Handle Valves

Option BF

1,000 psig

PTFE seats · 68.9 barg

2,000 psig

TFM 1600 seats · 137 barg

1/4"–1"

OD size · 6–25 mm

5–16 mm

Orifice

01
Features

- Compact barstock construction for high integrity.
- Blow - out proof design with internally loaded stem.
- Floating ball design providing seat wear compensation.
- Micro - finished ball ensures a leak - tight shut - off on pressure.
- Standard lever handle, optional butterfly.

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Specifications

Seats	PTFE (SS & Brass) — 1,000 psig / 68.9 barg TFM 1600 (SS) — 2,000 psig / 137 barg
Body material	Stainless Steel 316, Brass, C276, Monel 400
Tube end	1/4" to 1" (6 mm to 25 mm)
Pipe thread end	1/4 to 1
Orifice	5 to 16 mm

03
Factory Test & Applications

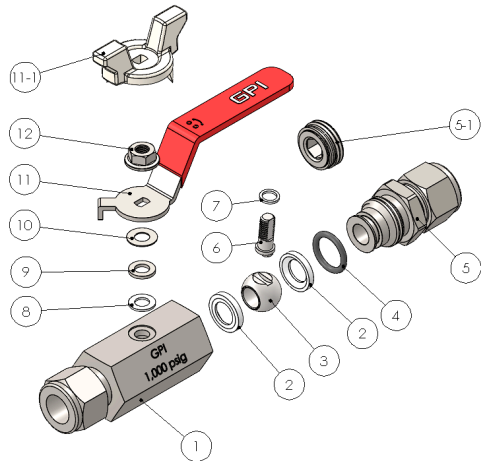
600 psig · 41 bar N₂

Every valve is tested with nitrogen at 600 psig (41 bar) for seat leakage to a maximum allowable leak rate of **0.1 SCCM**.

Packing seal integrity is tested with nitrogen for no detectable leakage.

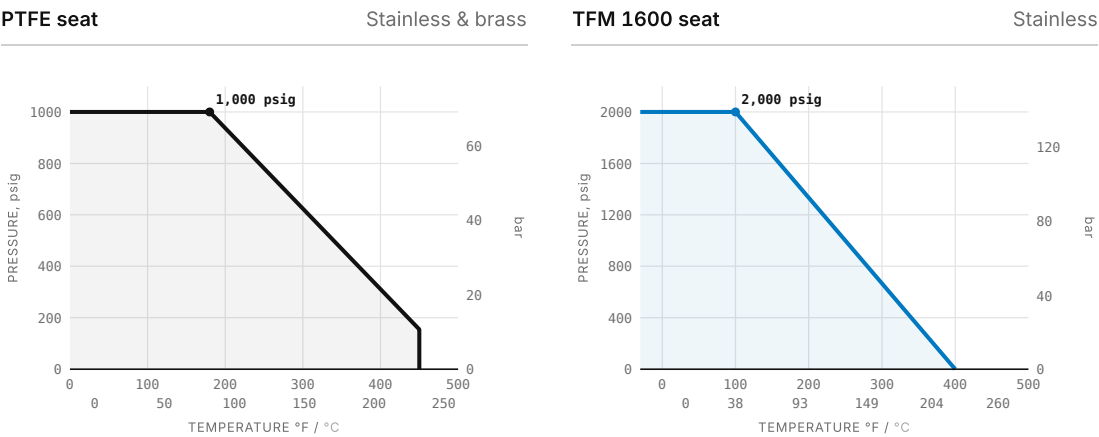
- Water, oil, gas
- Petrochemical plants
- Steel mills
- Heavy vehicles

04
Material of Construction



No.	Component	Material Grade & ASTM Spec.	
		Stainless Steel	Brass
1	Body	SS316 / A276, A479	B16, JIS H3250
2	Seat (2)	PTFE D1710 / optional TFM 1600	
3	Ball	SS316 / A276	
4	O - ring	FKM	NBR
5	Connector	SS316 / A276, A479	B16, JIS H3250
5-1	Insert		SS316 / A276
6	Stem	SS316 / A276, A479	
7	Lower Packing	PTFE D1710	
8	Upper Packing	PTFE D1710	
9	Gland	SS304 / A276, A479	
10	Gland Washer	SS304 / A276, A479	
11	Handle	SS304 + Red PVC Coated	
11-1		Zinc / ASTM B240 B.F Handle	
12	Lock Nut	SS304	

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Pressure-
Temperature Rating



06
Ordering Information

1	2	3	4	5	6	7
GBV1A Valve Series	G Connection	4T Size	PG Seat	BF Handle	SG Sour Gas	SS Body Material
GBV1A GBV1B GBV1C GBV1D GBV1E	G M F	4T 4N Full size list in the dimension table	PG PTFE + G15% TF TFM 1600	Nil Standard lever handle BF Butterfly LD Locking device	Nil Without (standard) SG NACE MR-01-75, ISO 15156-3	SS SUS316 S4 SUS304 B Brass C276 Hastelloy C276 M400 Monel Alloy 400 I625 Inconel 625 I825 Inconel 825

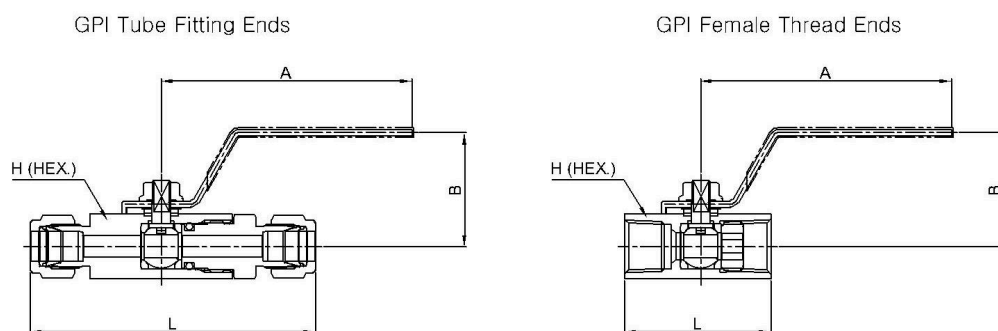
Example

GBV1A-G-4T-PG-BF-SG-SS

1/4" tube fitting ball valve, PTFE + G15% seat, butterfly handle, NACE MR-01-75 / ISO 15156-3 sour gas service, SUS316 body.

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Table of Dimensions



Basic Ordering No.	End Connections	Orifice mm (in.)	Cv	Dimensions, mm (in.)			
				L	H (Hex.)	A	B
GBV1A-	G4T Tube fitting 1/4"	5 (0.2)	1.25	79 (3.11)	17.46 (11/16)	59.5 (2.34)	31 (1.22)
	G6M Tube fitting 6 mm						
	F4N Female NPT 1/4		1.35	41.9 (1.65)			
GBV1B-	G6T Tube fitting 3/8"	7.5 (0.3)	2.50	90 (3.54)	20.46 (13/16)	81 (3.19)	40 (1.57)
	G10M Tube fitting 10 mm						
	F6N Female NPT 3/8			45 (1.77)			
GBV1C-	G8T Tube fitting 1/2"	9 (0.35)	9.25	98 (3.86)	26.98 (1-1/16)	81 (3.19)	42 (1.65)
	G12M Tube fitting 12 mm						
	F8N Female NPT 1/2			56 (2.2)			
GBV1D-	G10T Tube fitting 5/8"	12.5 (0.49)	10.60	108 (4.25)	31.75 (1-1/4)	102.5 (4.04)	51 (2.01)
	G12T Tube fitting 3/4"		12.65	109 (4.29)			
	G16M Tube fitting 16 mm		10.60	108 (4.25)			
	F12N Female NPT 3/4		12.65	60 (2.36)			
GBV1E-	G16T Tube fitting 1"	16 (0.63)	17.35	133 (5.23)	38.1 (1-1/2)	102.5 (4.04)	55 (2.16)
	F16N Female NPT 1			78.1 (3.07)			

Dimensions are for reference only, subject to change. Dimensions with tube fittings are in finger-tight position.



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