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ISO 9001:2008



G M VALVE PVT. LTD.

# “COMMITTED TO QUALITY”



Manufacturers of : Forged Steel Valve | Gate Valve | Globe Valve | Check Valve | Ball Valve



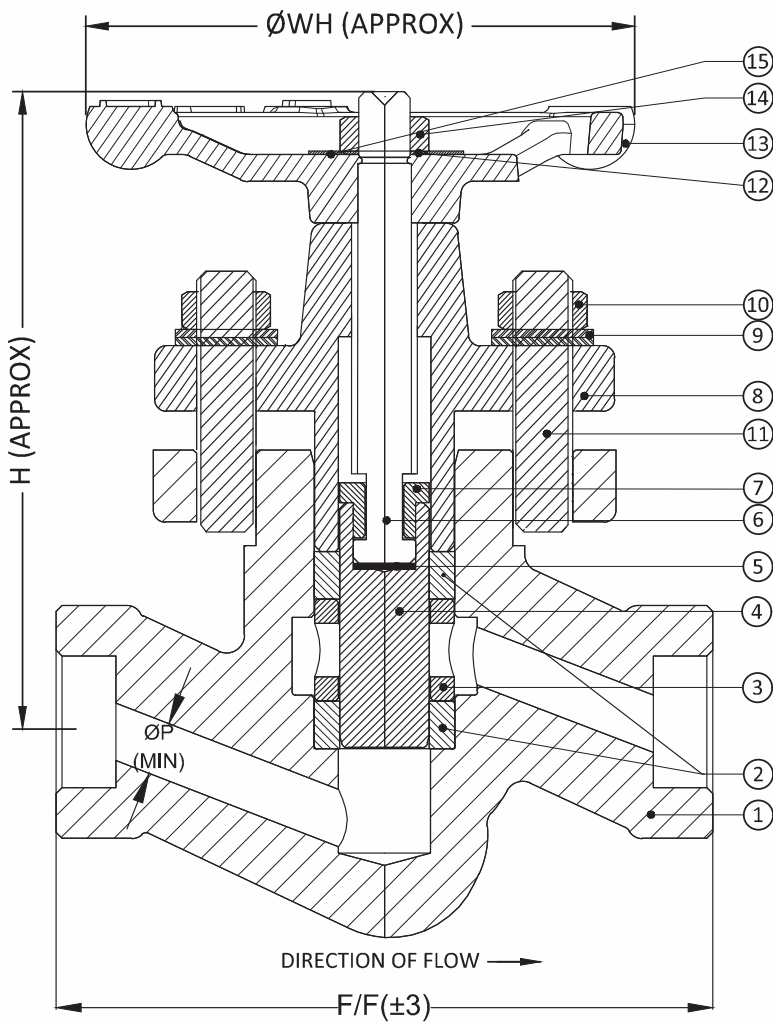
## → Forged Steel Piston Valve

### Technical Specification

<b>Design Standard</b>	API 602
<b>Testing Standard</b>	API 598
<b>Face to Face Standard</b>	Manufacture's Stanard
<b>Socket Weld Standard</b>	ASME B16.11
<b>Screwed End Standard</b>	ASME B1.20.1
<b>Butt Weld Standard</b>	ASME B16.25
<b>Flange End Standard</b>	ASME B16.5

### Material of Construction

13	HANDEHEEL NUT	ASTM 194 GR. 2H	ASTM A 194 GR. B8	ASTM A 194 GR. B8M
12	HANDWHEEL WASHER	MS	MS	MS
11	NAME PLATE	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL
10	HAND WHEEL	MI / SGIRON	MI / SGIRON	MI / SGIRON
09	STUD	ASTM A 193 GR. B7	ASTM A 193 GR. B8	ASTM A 193 GR. B8M
08	NUT	ASTM 1 194 GR. 2H	ASTM 1 194 GR. B8	ASTM 1 194 GR. B8M
07	BELLEVILLE WASHER	50CR V4/ASTM240 Gr.302	50CR V4/ASTM240 Gr.302	50CR V4/ASTM240 Gr.302
06	BONNET	ASTM A 105	ASTM A 182 GR. F304	ASTM A 182 GR. F316
05	SPINDLE	ASTM A 276 TYPE SS 410	ASTM A 276 TYPE SS 304	ASTM A 276 TYPE SS 316
04	PISTON	ASTM A 276 TYPE SS 410	ASTM A 276 TYPE SS 304	ASTM A 276 TYPE SS 316
03	LANTERN BUSH	ASTM A 276 TYPE SS 410	ASTM A 276 TYPE SS 304	ASTM A 276 TYPE SS 316
02	SEALING RING	GRAPHITE WITH SS304 REINFORCED	GRAPHITE WITH SS304 REINFORCED	GRAPHITE WITH SS304 REINFORCED
01	BODY	ASTM A 105	ASTM A 182 GR. F304	ASTM A 182 GR. F316
		<b>MATERIAL</b>	<b>MATERIAL</b>	<b>MATERIAL</b>
		MOC F-22	MOC F-22	MOC F-22



### Key Features

- Seatless & Glandless valve
- Perfect shut off
- Robust, maintenance free for a long time
- Tight sealing is achieved by the cylindrical, precision ground stainless steel piston
- Economy, easy to service
- Absolutely leak-tight across the ports and to the atmosphere
- No erosion of sealing surface

### Dimension Table

800#	15mm (1/2")	20mm (3/4")	25mm (1")	40mm (1-1/2")
F/F (mm)	110	110	126	165
ØP (mm)	9	12	17	28
H OPEN (mm)	130	130	171	235
H CLOSE (mm)	105	105	137	191
ØWh (mm)	86	86	116	150
Approx. Weight (Kg)	1.9	1.9	4	5.3

### Maximum Operating Testing Pressure

Pressure Rating for 800#	
Hydro Test Pressure (Body) kg/cm <sup>2</sup>	209
Pneumatic Test Pressure kg/cm <sup>2</sup>	7

### Design Feature

- > GM Piston Valve is basically seat less and Glandless valve and by virtue of its design can replace both, the conventional type of Gate & Globe valves, with distinct advantages over them.
- > Piston Valve works on the principle of Resilient rings in conjunction with a Metallic Stainless Steel Piston, that moves vertically between the rings, giving a Seal that is both effective as well as Durable. This sealing system gives a bubble tight shut off.

### Maintenance

- > In case any leakage is observed the bonnet nuts should be tightened with the valve in the fully closed position. Tightening the bonnet nuts may be repeated as and when required until the rings are worn out and no further tightening is possible. At this stage the sealing rings need to be replaced.
- > Care should be taken while tightening the nuts to avoid tilting of the bonnet. Undue force should not be used to shut the valve as this may damage the spindle or the wheel.



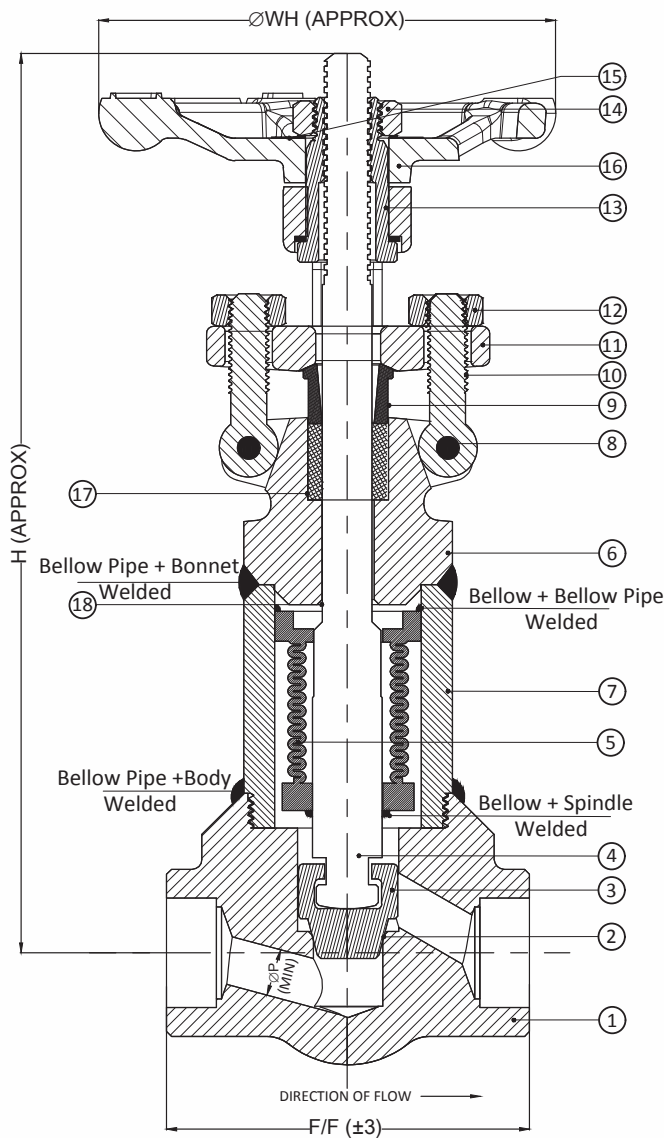
## → Forged Steel Bellow Seal Globe Valve

### Technical Specification

<b>Design Standard</b>	ISO 15761
<b>Testing Standard</b>	API 602
<b>Face to Face Standard</b>	Manufacture's Standard
<b>Socket Weld Standard</b>	ASME B16.11
<b>Screwed End Standard</b>	ASME B1.20.1
<b>Butt Weld Standard</b>	ASME B16.25
<b>Flange End Standard</b>	ASME B16.5

### Material of Construction

18	BACK SHEET	INTEGRAL	-
17	GLAND PACKING	FLEXIBLE GRAPHITE RINGS	5
16	HAND WHEEL	MI / SGIRON	1
15	NAME PLATE	STAINLESS STEEL	1
14	STEM NUT	ASTM A 194 GR. 2H	1
13	YOKE SLEEVE	ASTM A 582 GR. SS-416	1
12	EYE BOLT NUT	ASTM A 194 GR. 2H	2
11	GLAND FLANGE	ASTM A 105	1
10	EYE BOLT	ASTM A 193 GR. B7	2
09	GLAND BUSH	ASTM A 276 TYPE SS-410	1
08	EYE BOLT PIN	ASTM A 276 TYPE SS-410	2
07	BELLOW PIPE	ASTM A 105	1
06	BONNET	ASTM A 105	1
05	BELLOW	SS316Ti / SS321	1
04	STEM	ASTM A 182 GR. F6a	1
03	PLUG	ASTM A 217 GR. CA-15	1
02	SEAT RING	13% CR. INTEGRAL	-
01	BODY	ASTM A 105	1
	<b>DESCRIPTION</b>	<b>MATERIAL</b>	<b>QTY.</b>



**Maximum Operating Testing Pressure**

Pressure Rating	150#	300#	800#
Hydro Test Pressure (Body) kg/cm <sup>2</sup>	32	78	211
Hydro Test Pressure (Seat) kg/cm <sup>2</sup>	22	56	153
Pneumatic Test Pressure kg/cm <sup>2</sup>	7	7	7

DIMENSION	150#				
	15mm (1/2")	20mm (3/4")	25mm (1")	40mm (1-1/2")	50mm (2")
F/F (mm)	73	80	100	145	160
ØP (mm)	9.5	12.7	17.5	28.6	36.5
H APPROX	181	184	224	261	298
ØWh (mm)	86	86	116	150	150
Approx. Weight (Kg)	1.6	1.9	3.2	6.3	9.4

DIMENSION	300#				
	15mm (1/2")	20mm (3/4")	25mm (1")	40mm (1-1/2")	50mm (2")
F/F (mm)	73	80	100	145	160
ØP (mm)	9.5	12.7	17.5	28.6	36.5
H APPROX	186	189	232	266	303
ØWh (mm)	86	86	116	150	150
Approx. Weight (Kg)	1.6	1.9	3.2	6.3	9.4

DIMENSION	800#				
	15mm (1/2")	20mm (3/4")	25mm (1")	40mm (1-1/2")	50mm (2")
F/F (mm)	73	80	100	145	160
ØP (mm)	9.5	12.7	17.5	28.6	36.5
H APPROX	191	194	237	271	308
ØWh (mm)	86	86	116	150	150
Approx. Weight (Kg)	1.6	1.9	3.2	6.3	9.4

**Comparison Between Bellow Seal, Piston & Traditional Valves**

	Bellow Seal Valve	Piston Valve	Conventional Valve
<b>Stem Seal</b>	Metallic Bellow Gland Packing	Sealing Ring	Gland Packing
<b>Steam Leakage</b>	Not Possible Since Metallic Bellow are designed to several thousands cycle	Not Possible till the ring wear out	Very Common Due to friction between stem & gland
<b>Equipment Downtime</b>	Nil	Low for replacing ring	Very High for replacing gland packing
<b>Safety</b>	Can be used safety for almost any media	Can be used for limited media steam, hot water	Highly unsafe when the media is poisonous/hazardous
<b>Valve Life</b>	Very High in Years	High compared to Conventional Valve	Very low due to leakage through gland occur in some month



## Our Reputed Clients



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