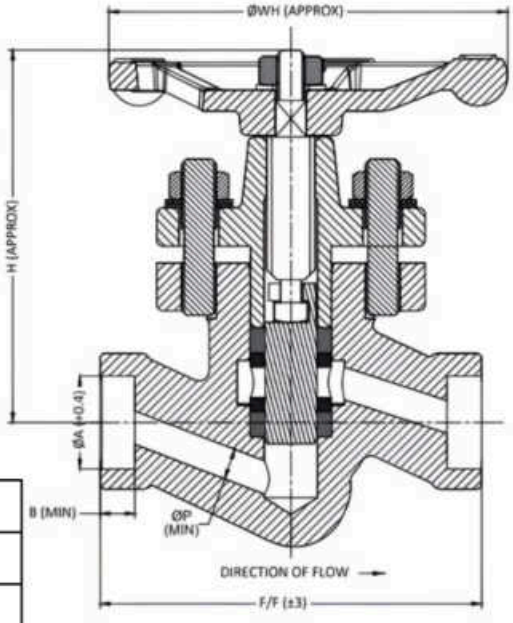
PISTON VALVE

Design and Manufacturing : ASME B16.34/API 602/IBR-1950
Inspection and Testing : API 598
Face to Face Standard for General Valves : As per Manufacturer's Standard
Face to Face Standard for Flanged Valves : ASME B16.10 Flange Standard : ASME B16.5
Socket Weld Standard : ASME B16.11
Screwed End Standard : ASME B1.20.1 (Screwed to NPT Female, BSP Female, BSPT Female)
Butt Weld Standard : ASME B16.25 (Schedule 40, 80)
Special Feature :

- Bubble Tight (ANSI leakage class VI) Shut off
- Effective sealing area is large, as compared to the conventional linear movement valves
- Compensates for thermal expansions with reinforced, Grafoil sealing rings and Belleville washers



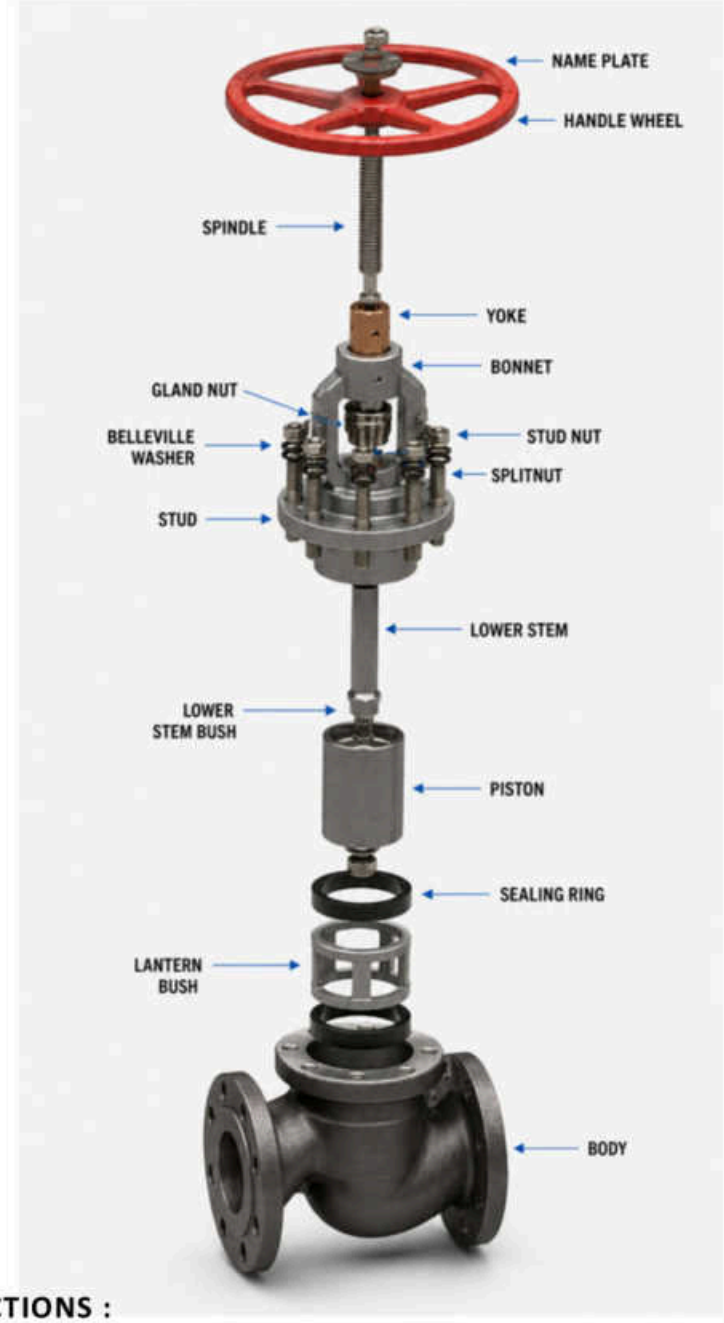
CLASS 800# (in mm)

Size	F/F	ØP	ØA	B(min)	ØWH	H(close)	H(open)	Weight(kg)
15 MM	110	9	21.8	9.5	86	104	127	1.9
20 MM	112	12	27.2	12.5	86	104	127	1.9
25 MM	126	17	33.9	12.5	116	141	175	4
40 MM	180	28	48.8	12.5	231	150	185	5.8

COMPARISON BETWEEN GLOBE VALVES AND PISTON VALVES

Parameter	Piston Valve	Traditional Globe Valve
Leakage Class	VI	IV
Valve Life	Very high compared to Globe Valve	Very low due to leakage through gland occur
Maintenance	Inline Maintenance	Valve needs to be removed from line
Gland Leakage	No gland, hence no leak	Frequent
Operation	Valve Operate without using spanner	Spanner Required for Operate valves
Sealing Area	Large	Small
Repair Cost	Very Low Wearing Parts are Sealing rings which are easily replaceable	High Seat dwarsh during isolation
Steam Leakage	Not Possible till the ring wear out	Very Common Due to friction between steam & gland
Steam Seal	Sealing Ring	Gland Packing
Equipment Down time	Low for replacing sealing ring	Very high for replacing gland packing

VALVE PARTS

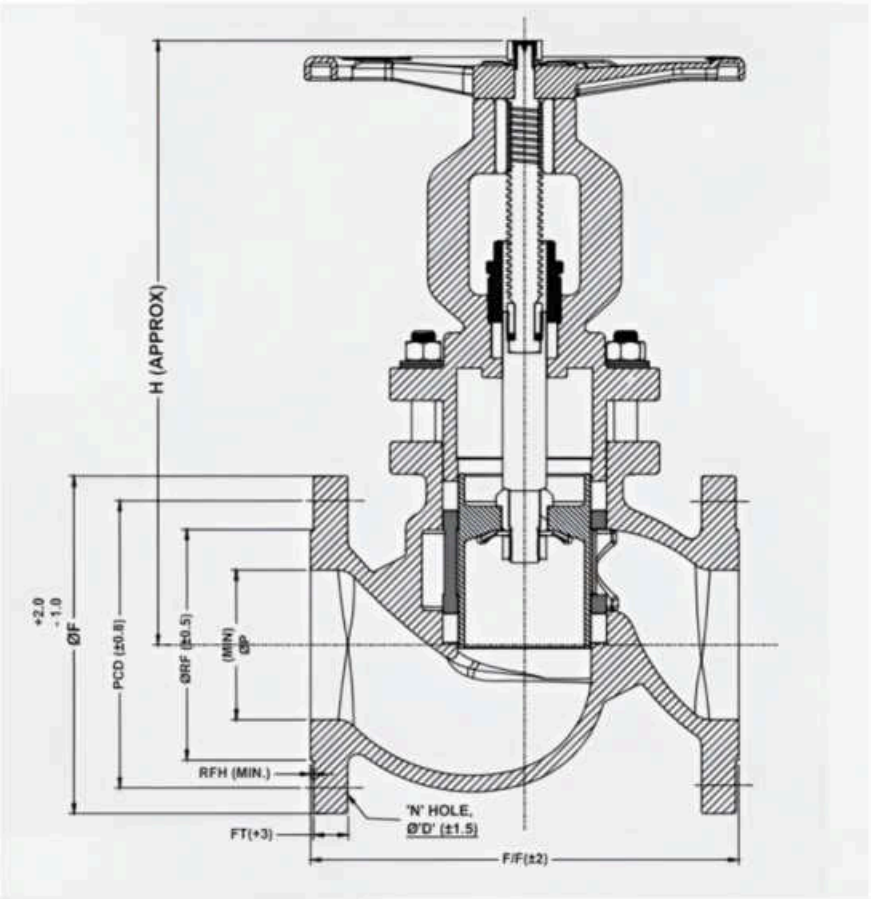


IMPORTANT INSTRUCTIONS :

INSTALLATION : The valve should be installed in the direction of ow indicated on the body. The valve can be installed in any plane, except with the handwheel on the lower side.

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 adjustment ortightening is possible. At this stage the sealing rings need to be replaced. No undue force should be used when tightening the nuts,as they should rotate easily with a standard spanner. 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.

IMPORTANT : Always use the recommended tightening torque. Avoid excessive tightening, as this may reduce the life of the sealingrings. Care should be taken while removing the old sealing rings for replacement



DIMENSIONS & WEIGHT CHART :

CLASS 150#

SIZE	F/F	ØP	ØRF	RFH	ØF	FT	PCD	N	ØD	H(CLOSE)	H(OPEN)	ØWH	WEIGHT(KG)
15 MM	108	12	34.9	1.5	90	8.0	60.3	4	15.9	104	127	86	2.3
20 MM	117	17	42.9	1.5	100	8.9	69.9	4	15.9	110	135	86	3.2
25 MM	127	25	50.8	1.5	110	12.9	79.4	4	15.9	142	176	116	4.3
32 MM	140	28	63.5	1.5	117	11.32	88.9	4	15.9	193	240	150	8.0
40 MM	165	40	73	1.5	125	12.7	98.4	4	15.9	193	240	150	9.6
50 MM	203	50	92.1	1.5	150	14.3	120.7	4	19.0	223	269	200	13.8
65 MM	216	65	104.8	1.5	180	15.7	139.7	4	19.0	252	315	250	20
80 MM	241	80	127	1.5	190	17.5	152.4	4	19.0	270	345	250	24.5
100 MM	292	100	157.2	1.5	230	22.3	190.5	8	19.0	330	412	300	47.5
125 MM	356	125	185.7	1.5	254	22.5	215.9	8	22.2	495	615	400	80
150 MM	406	152	215.9	1.5	280	23.9	251.3	8	22.2	495	615	400	88
200 MM	495	200	269.9	1.5	343	26.9	298.4	8	22.2	575	720	400	152

CLASS 300#

SIZE	F/F	ØP	ØRF	RFH	ØF	FT	PCD	N	ØD	H(CLOSE)	H(OPEN)	ØWH	WEIGHT(KG)
15 MM	152	12	34.9	1.5	95	12.5	66.7	4	15.9	104	127	86	2.9
20 MM	178	17	42.9	1.5	115	14.2	82.6	4	15.9	107	132	86	5.1
25 MM	203	25	50.8	1.5	125	15.9	88.9	4	19	142	176	116	6.8
32 MM	216	28	63.5	1.5	133	19.1	98.6	4	19	193	240	150	11
40 MM	229	40	73	1.5	155	19.1	114.3	4	22.2	193	240	150	13.7
50 MM	267	50	92.1	1.5	165	20.7	127	8	19.0	223	269	200	13.8
80 MM	318	80	127	1.5	210	27	168.3	8	22.2	270	345	250	32
100 MM	356	100	157.2	1.5	255	30.2	200	8	22.2	412	496	300	62
125 MM	400	125	185.7	1.5	279	33.3	235	8	22.2	195	615	400	95
150 MM	444	150	215.9	1.5	320	35.0	269.9	12	22.2	495	615	400	105
200 MM	559	200	269.7	1.5	381	39.6	330.0	12	25.4	575	750	400	185