

Piston Valves

Description :

Forged steel piston valves provide perfect tightness and durable stability on different mediums such as steam, superheated steam, heat transfer fluid, ammonia, L.P.G., acids, alkalies etc.

Size and Pipe Connections :

15 NB / 20 NB / 25 NB / 40 NB

1. Screwed BSPT/NPT Ends.
2. Socket weld Ends.

IBR APPROVED VALVES AVAILABLE ON REQUEST.

Limiting Conditions :

Maximum operating conditions for Socket weld ends.

PMO - Max. operating Pressure 78 kg/cm²

TMO - Max. operating Temperature 427°C

Cold Hydraulic test Pressure 156 kg/cm²

Maximum operating condition for Screwed ends

PMO - Max. operating Pressure 31.64 kg/cm²

TMO - Max. operating Temperature 427°C

Cold Hydraulic test Pressure 63.0 kg/cm²

Body Designed for Max. Cold Hydraulic test Pressure of 212 kg/cm²

How to order :

Example : Forbes Marshall 15 NB Piston Valve with socket weld ends.

Available Spares :

Sealing Rings

How to order Spares :

Order Spares as per the code no. specified in the 'User Manual'.

Installation :

The Valve is designed for installation in a vertical line or horizontal line with inlet as per the arrow direction. To open the valve turn hand wheel till it stops at the top and to close turn hand wheel till it touches the bonnet. If any leakage is observed during operation from the bonnet hole or at the outlet, close valve fully and tighten Opposite Nuts (7) equally half or one turn until leakage stops.

Safety Information :

Pressure

Before attempting any maintenance of the Valve, ensure that pressure is isolated and safely vented to atmosphere. Do not assume that the system is depressurized even when a pressure gauge indicates zero.



15/20 NB



25 NB



40 NB

Material :

No.	Part	Material
1	Body	Forged Carbon Steel ASTMA 105
2	Bonnet	Forged Carbon Steel ASTMA 105
3	Piston	Stainless Steel ASTMA276 TP 304
4	Spindle	Stainless Steel ASTMA276 TP 410
5	Nut	Carbon Steel Carbon Steel
6	Stud	Carbon Steel ASTMA 193 B7
7	Nut	Carbon Steel ASTMA 194 2H
8	B. Washer	Spring Steel Spring Steel
9	Sealing Rings	S/S reinforced Graphite
10	Spacer	Stainless Steel ASTMA276 TP 410
11	Handwheel	Malleable C.I./Sheet Metal

Dimensions : (approximate) in millimeters

Size	A	B	C
15 NB	110	118	146
20 NB	110	118	146
25 NB	126	133	165
40 NB	164	175	215

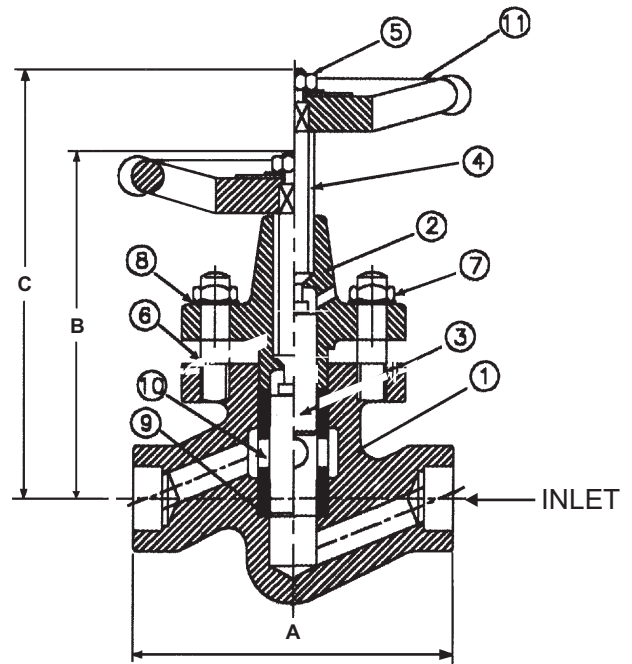
Additional Material for 40 NB:

NO	Part	Material
12	Split Nut	Stainless Steel ASTM A 276 TP 410
13	Thrust Plate	Stainless Steel ASTM A 276 TP 410

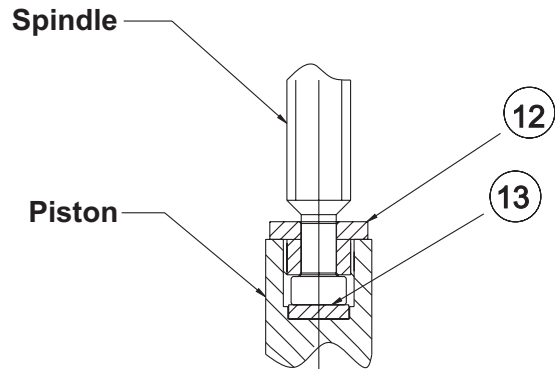
Maintenance :

Maintenance of Piston valve is very easy and can be done while the valve is in position & not in service. Remove nuts (7) and bonnet (2) remove the top sealing rings spacer and bottom sealing rings. Replace with a new set of rings and spacer in the same order. Ensure that Belleville washers are placed properly and all Nuts are tightened with equal pressure. Open isolation valve if any leakage is observed tighten opposite nut equally in close position of valve till leakage stops. Take care to tighten diagonally opposite nuts.

Sectional View



Always Open & Close Valve Fully



Only for 40 NB