

# Piston Valves

## Description :

Cast 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 :

50 NB Flanged Ends.

Flange Type : ANSI 300

IBR APPROVED VALVES AVAILABLE.

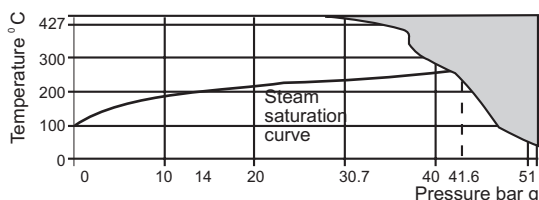
## Limiting Conditions :


Body design Conditions : ANSI 300

Maximum design temperature : 427°C

Maximum Hydraulic test Pressure : 77 bar g

## Operating Range :



 The product must not be used in this region.

Flanged ANSI 300

## How to order :

Example : Forbes Marshall 50 NB Piston Valve with ANSI 300 Flanged connection IBR or NIBR.

**Please specify medium.**

## 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. Do not use 'F' Key. 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.



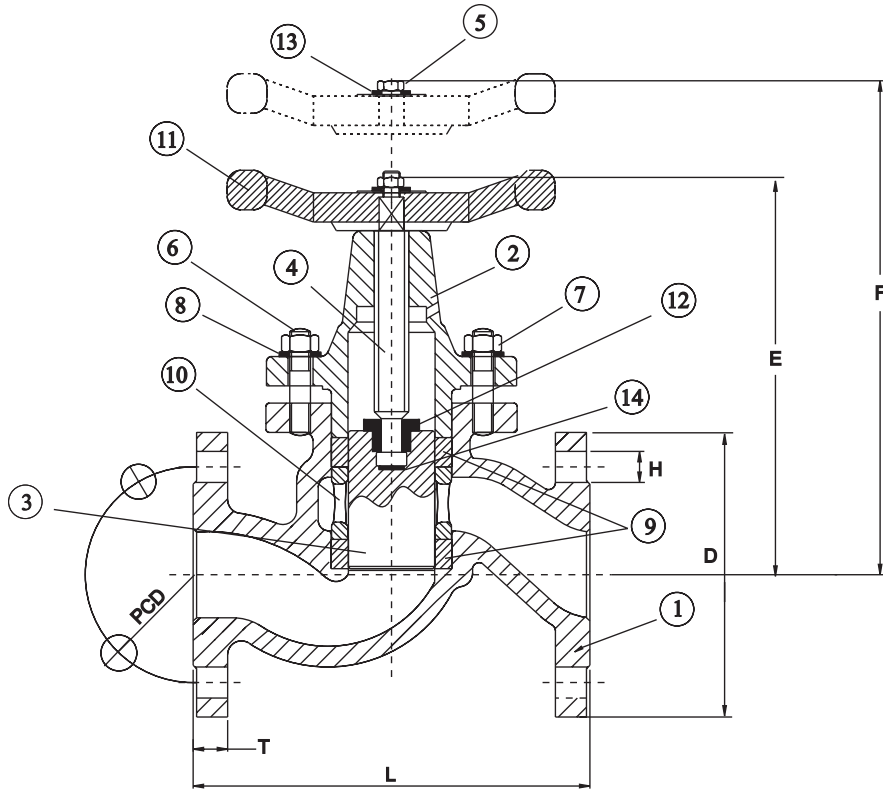
## Safety Information :

### 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

### 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.



**Always open & close valve Fully  
Do not use Valve Key**

**Material :**

No	Part	Material	
1	Body	Cast Steel	ASTM A 216 Gr.WCB
2	Bonnet	Cast Steel	ASTM A 216 Gr.WCB
3	Piston	Stainless Steel	ASTM A 276 TP 304
4	Spindle	Stainless Steel	ASTM A 276 TP 410
5	Handwheel Nut	Carbon Steel	
6	Stud	Carbon Steel	ASTM A 193 GR B7
7	Nut	Carbon Steel	ASTM A 194 GR 2H
8	B.Washer	Spring Steel	Spring Steel
9	Sealing Ring	S/S reinforced Graphite	
10	Spacer	Stainless Steel	ASTM A 743 Gr.CA10
11	Handwheel	S.G. Iron / Malleable Iron	
12	Split Nut	Stainless Steel	ASTM A 276 TP 410
13	Handwheel Washer	Carbon Steel	
14	Thrust Plate	Stainless Steel	ASTM A 276 TP 410

**Dimensions:(approximate) in millimeters**

SIZE	L	D	PCD	H	No. of Holes	T	E	F
50NB	267	165	127	19	8	22	225	285

Manufactured Marketed by :  
**Forbes Marshall Pvt. Limited**

A Forbes Marshall Company

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