

USER MANUAL

- **INSTALLATION**
- **OPERATION**
- **MAINTENANCE**

TAPER PLUG VALVE – JACKETED & NON-JACKETED CONSTRUCTION
SIZE – 10 MM To 450 MM



These instructions must be read thoroughly prior to Installing, Operating and Maintaining of this equipment.

Designed to Meet Your Specifications!

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'Chemlin' Taper Plug Valve

1. Introduction:

Chemlin Valves are developed and manufactured with state-of-the-art manufacturing facility. The products are committed to continuous quality control and improvements using modern quality techniques, inspection procedures and instruments.

The reference standards used for designing, dimensioning and testing of the Taper Plug valves are BS -10, ANSI-B 16.10, ANSI-B 16.5 and ASA Standards.

Proper care in Installation and Operation of Chemlin Valves will give trouble free performance over long periods of operation.

Chemlin Valves are designed to handle various types of volatile liquids and gasses in different Chemical, Steel, Fertilizer, Process & Allied Industries.

2. Inspection:

On receipt of the consignment, the Valves must be checked immediately against the necessary Dispatch/Shipping Documents and that there has been no damage in transportation. Check Packing list and contents of the Packing. Any shortage and damage must be informed in writing to 'Chemlin' immediately within seven Days on receipt of the consignment and the matter to be taken up with the transporter/ Insurance agency.

3. Storage and Handling:

The Boxes or Cartons may be unloaded using Forklifts or suitable handling devices and stored in position with no strains applied on any part of the Valve.

1. Do not lift the Valve by its handle. Make sure no excessive weight is put on the valve while in storage.
2. Avoid standing below any suspended valve.
3. Make sure there is enough space for maintenance and inspection of the valve before its installation.
4. Store them in corrugated boxes and avoid contact of direct sunlight, moisture or dust.
5. Keep the openings of the valve covered while not in use and remove the same before installation.
6. Take care not to damage the flanges with any kind of sharp objects while handling it. Once the flange surfaces are damaged it will affect the performance of the valve.

4. Safety and Precautions:

- To avoid serious injuries do not insert hands or any other objects in the valve body.
- While inspection/maintenance of the valve, make sure there is no leakage.

- Do not disassemble with bare hands. Use proper instruments and gloves while doing so.
- Avoid standing below a vertically suspended valve.

Failure to observe safety precautions can result in personal injury, equipment damage or malfunction.

5. Installation:-

1. Clean-machined surfaces of Valve Flanges and Check for any foreign materials entered in the Valve. Check whether Shaft (07) is freely moving.
2. Install the Valve after properly checking the in-let and out-let 'Arrow Mark' on the Valve Body. In case of jacketed valve connect the Steam Inlet and Outlet to respective Steam Connection.
3. Prevent air from being trapped within the body of Valve, which would interfere with the transfer of heat to the stuffing box housing. If stuffing box is not heated sufficiently, the shaft may freeze in position.
4. Do not tighten the bolts excessively as it may damage the threads.
5. One must ensure that the mating flanges are of the same standards.

6. Operation and Maintenance:-

- The Plug valves are Quarter turn ON/OFF position valves where Closing is in Clockwise direction and Opening is in Anti-clockwise direction.
- Clean the Valve as sometimes dirt or foreign particles may get entrapped. The Valve is to be removed and cleaned periodically i.e. once in 12 months and the metal to metal lapped surfaces are to be checked.

7. Servicing of Taper Plug Valve:

7.1. Disassembly:-

1. Loosen the Gland bolts and remove the Gland (Part No.04). Then remove the Cover (Part No.03) and the Gland Packing.
2. Remove the Plug (Part No.02) after removing the Gasket and Copper Packing.
3. Remove the Lubrication Bolts in the Plug and then remove the Check Valve.

7.2. Assembly:-

In order to assemble the Taper Plug Valve, first of all clean all the parts of the valve and check whether they can be reused. Taper Plug Valve assembly is done by following the below mentioned steps:

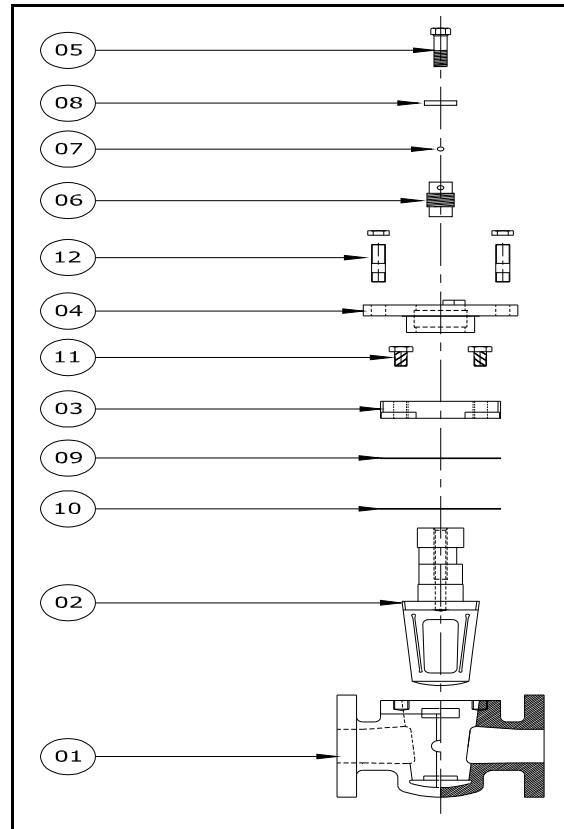
1. Take care that the tapered portion of the valve where lapping & finishing is done is thoroughly cleaned.

2. Fill the bottom portion of the of the valve body (Part No.01) with grease. Apply grease on the Lapped portion of the Plug (Part No.02) and then insert the Plug into the Valve Body.
3. Insert the Copper packing and the asbestos gasket sheet on the top face of the valve body. Put the cover on it and tighten the bolts.
4. Now insert the Gland Packing rings. Before tightening the Gland check the ON/OFF position and move the stopper to the correct side and then tighten the studs.
5. Tighten the Bottom Nuts to the cover (Part No.03). Gradually tighten the Pusher. Do not apply excessive pressure while tightening.
6. Lastly insert the Check Valve (Part No. 6) into the Plug and complete the assembly by tightening the lubrication bolt (Part No. 5)

8. Part List & Exploded Views of Taper Plug Valve:-

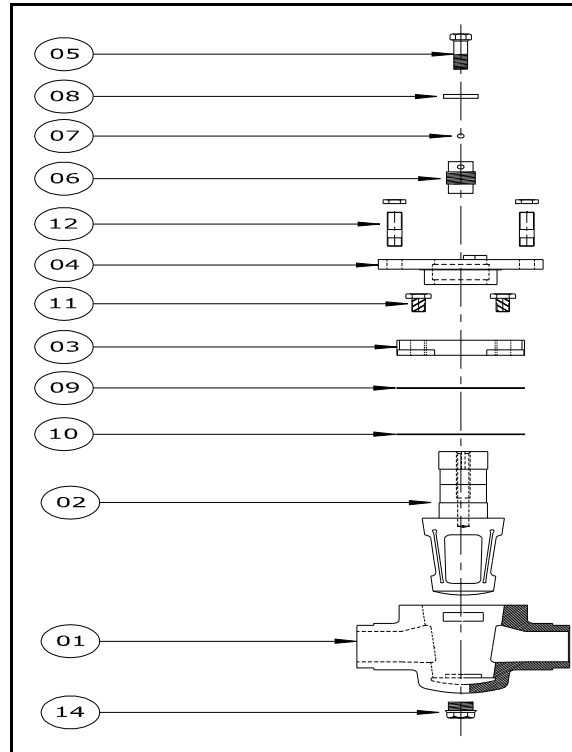
8.1. Standard Non-Jacketed Construction: -

Part Name	Part No.
Body	01
Plug	02
Cover	03
Gland	04
Lubricant Bolt	05
Check Valve Body	06
Ball	07
Check Valve Pin	08
Packing	09
Packing	10
Flange Bolt	11
Stud /Nuts	12
Gland Packing	13



8.2. Standard Jacketed Construction:-

Part Name	Part No.
Body	01
Cover	02
Plug	03
Gland	04
Lubricant Bolt	05
Check Valve Body	06
Ball	07
Check Valve Pin	08
Packing (Shim)	09
Packing	10
Flange Bolt	11
Stud /Nuts	12
Gland Packing	13
Plug (Drain)	14



9. CONTACT DETAILS:

For any clarifications / complaints regarding Valve please contact our nearest representative or Fax your queries to Our Head Office.

Head Office:-

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