

Operation Manuel

Plunger Valve (Needle Valve) DN150 - 1200



1. Description of Product
2. Design Features
3. Flange Informatios
4. Transportation
5. Installation
6. Operation
7. Maintenance

1. Description of Products

- The plunger valves use for control of flow rate, pressure and water level at the systems which have high pressure difference. The plunger valves have very high safety coefficient
- Max Temperature 50 °C
- Suitable for PN 10/16/25

2. Design Features

ON – OFF AND PROPORTIONAL CONTROL VALVE
NESTED SINGLE – PART BODY DESIGN
AXIAL MOVEMENT FOR PLUNGER
METALLIC SEALING, IN ADDITION EPDM SEALING RING
LINEAR REGULATION ABILITY
V – PORT RING FOR HIGH PRESSURE DIFFERENCE

- Body Ductine Iron EN-JS 1030 (GGG-40)
- Internal movement parts AISI 304
- Valve shaft stainless steel AISI 420
- Shaft bearing bronze
- Plunger sealing ring EPDM

3. Flanş Bilgileri

- Double Flanged
- Flanges DIN EN 1092

4. Taşıma İşlemi

The valve should be transported or stored, respectively, in a way, that it will not come in contact with harmful material. For protecting the functionality of the valve and its sealing elements, outdoor storage should be avoided. If a longer storage period is required, a storage place should be provided, which complies with following conditions: frost free, cool, dry, dust free and light protected. During transport and storage care should always be taken. The valve may be damaged in case of improper handling. These defects must be properly repaired prior to installation.



During transport, storage and mounting a stable stand has to be observed, if required support valve or fix with bolts.

5. Installation

Remove all packing material from the valve. Prior to installation, check the pipeline for impurities and foreign matters and clean it if necessary.

ATTENTION !



For valves with an arrow showing the flow direction, this direction must be observed! For valves with foot plate or foundation plate, this plate only serves as a support of the valve.

The valve has to be mounted in flow direction according to the embossed arrow. In exceptional cases short-term operation in the opposite arrow direction is permissible after consulting the supplier. It is important that all around the valve there is free access for operation and maintenance. For outdoor installation, the customer has to protect the valve against the direct effects of the weather. During installation of the valve, the distance between the pipe flanges should exceed the valve face-to-face dimension by at least 20 mm. Thus, the raised faces will not be damaged and the gaskets can be inserted.



CAUTION !

During transport or installation of the service saddle there might be a danger of crushing your fingers / hand.

Tighten the connecting bolts evenly (without distortion) and crosswise. The pipeline mustn't by any means be pulled up to the valve.

6. Çalıştırma Ve Uygulama

After installation, check the valve for ease of operation moving it over the whole travel by means of the handwheel.



CAUTION!

Do not put your hand or fingers into the inner part of the Needle Valve during open or close movement of the piston. There is the danger of crushing your fingers / hand.



**Danger of liquids
squirting out under
high pressure**

Attention!

**Check tightness of flange connections prior to
initial operation and after maintenance, check
bolt connections or replace gaskets.
The test pressure may not be exceeded.**

6.1 Çalışma İzni

The valve is operated by means of the handwheel at the electric actuator.
Do not apply excessive forces or torques. The valve closes when turning
into clockwise direction.
Valve should only be used for the specific operating conditions.

6.2 Inadmissible Modes of Operation

For smaller flow velocities up to 1.5 m/s the configuration of the pipeline
upstream of the Needle Valve (RKV) is not important. However, for flow
velocities exceeding 1.5 m/s no elbow or T-pieces should be installed directly
upstream of the Needle Valve,