1 Description of Product and Range of Application

ERHARD Three-way Ball Valve   DN100- 350   Prod. No. 492. ....

With actuator according to separate instructions

ERHARD Three-way Ball Valves are mainly used in rolling mills. They are also field approved for contaminated water, cooling water, and oily emulsion.

2 Design Features – Technical Data

The ERHARD Three-way Ball Valve is a valve with completely unreduced bore. Its robust ball is centrally supported in the body and equipped with a sealing ring the type and material of which are selected according to the operating conditions.

3 Operation

The valve is operated by means of the actuator. It is not admissible to apply excessive forces or torques.
Inadmissible modes of operation

Avoid installation immediately upstream of elbows, T-pieces, butterfly or check valves.  
The temperature limits for the flow medium must not be exceeded.  
The nominal pressure is the maximum pressure to be applied on the closed valve.  
Extending the operating elements, e.g. by lever, is not allowed.

4 Installation into the Pipeline - Mounting

Remove all packing material from the valve. Prior to installation, check the pipeline for impurities and foreign matters and clean it if necessary. The valve can be mounted in any position.

Attention:
For valves with an arrow showing the flow direction, this direction must be observed!  
For valves with weight-loaded hydraulic actuator, observe actuator location!  
For valves with foot plate, this plate only serves as a support of the valve!

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. Steel-reinforced rubber seals are recommended for use as flange gaskets, for slip-on flanges they are absolutely necessary (consider resistance to flow medium and temperature).  
The mating pipe flanges must be plain-parallel and concentric.

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

5 Initial Operation

After installation and with no pressure in the pipeline, check the valve for ease of operation moving the actuator over the whole travel.
6 Maintenance

For inspection or maintenance work, protective equipment shall only be removed after the pipeline section in which the valve is installed has been isolated and pressure-relieved.

6.1 Maintenance

ERHARD Three-way Ball Valves are equipped with maintenance-free plain bearings. We recommend to move the ball valve over the whole travel at least four times a year.

6.2 Inspection

Check the external condition of valve and actuator.
Clean them and repair coating if necessary.
Check the flanges for tightness.
Make sure that valve and actuator are operating smoothly:
- by moving the valve manually over the whole travel.
Check for tightness on the closure.
Verify shaft bore tightness.