



FL 1501

For technical personnel only!

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PRODUCT APPLICATION

PERMAGLIDE® PLAIN BEARINGS: BEARING OF THE SHAFT JOURNAL IN MAINTENANCE-FREE ISOLATING VALVES

SECTOR: CHEMICAL INDUSTRY, BUILDING TECHNOLOGY,
INDUSTRIAL AND PROCESS TECHNOLOGY

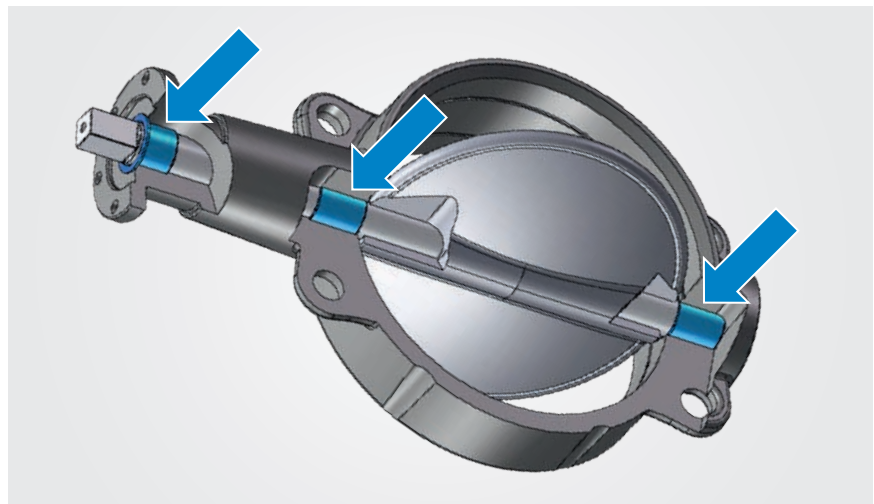
Product used

Permaglide® cylindrical plain bearing
bushing, type **PAP ... P180**.

Function

Isolating valves regulate by increasing and decreasing the flow of liquids and gases in pipelines. The installed plain bearings are constantly exposed to the influence of chemicals and high or extremely low temperatures. Liquids cause constant vibrations on the valve, amongst other things. The bearing must not become stuck due to corrosion or the influence of certain temperatures. If used frequently – or indeed rarely – the function of the isolating valve must not be impeded. The bearings are no longer accessible once installed, and so maintenance-free bearings are required.

Isolating valves act as safety switches: if the pressure is too high, the isolating valve opens. If a section of the pipeline is leaking, the isolating valve closes.



Isolating valve, bearing by means of Permaglide® P180 plain bearing bushes (arrows)

Bearing with Permaglide® P180 plain bearing bushes

The shaft journal and the valve disc are mounted with Permaglide® P180 plain bearing bushes. The P180 plain bearings do not become electrostatically charged, as they act as electrical conductors after running-in. The isolating valves can also be used in environments where there are explosive gases.

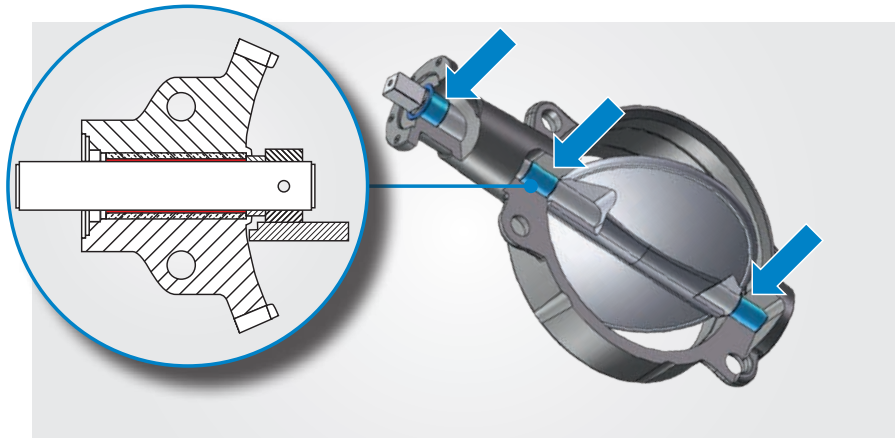


The maintenance-free Permaglide® P180 plain bearings guarantee permanent bearing, even in extreme operating conditions.





Permaglide® P180 plain bearing bush



Bearing of the shaft journal using Permaglide® P180 plain bearings

Advantage: Reliable function of the bearing thanks to Permaglide® P180 plain bearings

- Suitable for use with liquids and gases
- High chemical resistance
- Corrosion-resistant
- Minimal swelling tendency
- Temperature-resistant
- Dry running: No lubrication is necessary. The plain bearings are also used with aggressive media.
- Maintenance-free
- No static charging, also suitable for explosive media

DESCRIPTION OF MATERIAL

Permaglide® P180 – robust and reliable

- Universally usable plain bearing material for dry and lubricated applications
- High rigidity
- Durability
- High chemical resistance
- Good emergency running properties

The P180 sliding layer system provides sufficient protection even in damp environments. It is chemically inert and prevents fluid ingress into the material.

This effectively suppresses the swelling of the material. As a result, the material exhibits high dimensional stability during application.

APPLICATION DESCRIPTION

Use of various media in pipelines:

- Gases
- Liquids
- Vapours
- Acids
- Bases

Examples of isolating valve applications:

- Plants in the chemical industry
- Plants in the pharmaceutical industry
- Gas plants
- Landfill gas plants
- Sewage plants
- Drinking water plants
- Service water plants
- Sea water desalination plants
- Cooling water plants
- Heating systems
- Swimming pool technical systems
- Industrial fittings
- Pump systems
- Shipbuilding

Other designations for isolating valves:

- Butterfly valves
- Shut-off valves
- Throttle valves
- Regulating throttles
- Check valves
- Versions: Poppet valves, annular valves



Further information on Permaglide® P180 plain bearing bushes

- Permaglide® catalogue, item no. 50003863-02
- Permaglide® OnlineShop shop.permaglide.de