



FL 2100
For technical personnel only!
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APPLICATION INFO

BEARING IN SOLENOID VALVES

PRODUCT USED

Permagliding® plain bearing bush made from the material P180

SOLENOID VALVES

Solenoid valves are used for closing, opening, dosing, distributing or mixing the gas or liquid flow in a pipeline. The armature of the electromagnet generates the valve stroke, which can be between 0.2 mm and 4.0 mm. A high magnetic force ensures fast and precise actuation.

Good stick-slip behaviour, hysteresis and good chemical resistance are key requirements that the solenoid armature bearing has to meet.

BEARING WITH PERMAGLIDE® P180 PLAIN BEARINGS

The solenoid armature bearing can be provided using main-tenance-free plain bearing bushes made from the material Permagliding® P180.

ADVANTAGES OF THE PERMAGLIDE® P180 PLAIN BEARINGS FOR USE IN SOLENOID VALVES

- Low hysteresis through precise armature bearing
- Wear-resistant sliding layer
- Excellent coupling properties and high magnetic forces
- Excellent chemical resistance



Bearings in solenoid valves with Permagliding® plain bearing bushes P180



FURTHER ADVANTAGES OF THE MATERIAL PERMAGLIDE® P180

- Lead-free
- Compliant with Directive 2011/65/EU (RoHS II)
- Extremely resilient, especially with edge wear
- Low and constant friction value
- Very good wear resistance in dry running and wet running
- Universally applicable: suitable for rotary, oscillating and axial applications
- High resistance to erosion
- Largely resistant to swelling
- Compatible with all common dry-running steel shafts

DESCRIPTION OF MATERIAL

Permaglide® P180 is a lead-free, high-performance material with outstanding tribological performance. It is designed for maintenance-free applications under dry-running conditions. In addition, it can be used in both grease- and liquid-lubricated systems. P180 is a further development of the tried and tested P14 material with improved resilience and wear resistance whether in dry or lubricated applications. The material can also be used in tribological systems that were previously only operated with materials containing lead, such as P10.



Further information on Permaglide® plain bearings
Permaglide® catalogue, item no. 50003863-02

