



# APPLICATION INFO

## BEARING IN FLUID PUMPS

AREAS: AUTOMOTIVE, HYDRAULIC, PLANT ENGINEERING

### PRODUCT USED

KS Permaglide® plain bearing bush, flange bush, bush with groove or bush with bore made from the material P180

### FLUID PUMPS

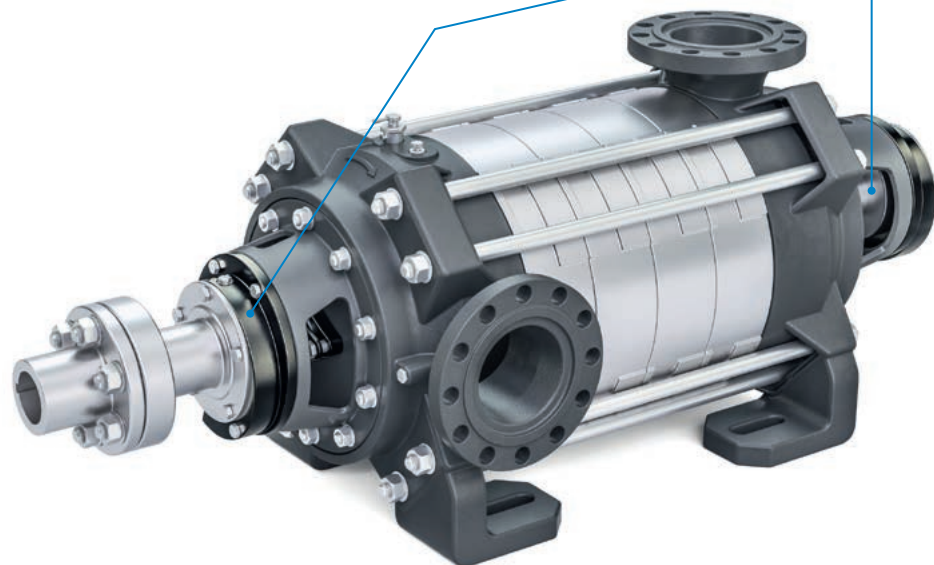
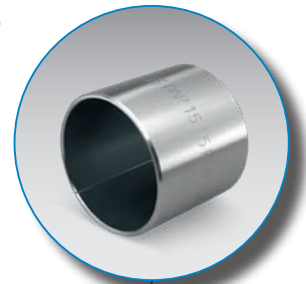
Fluid pumps, also called liquid pumps, are used for pumping liquids such as water or oils. Fluid pumps are designed with a large rotational speed range. A narrow bearing clearance is needed for the bearing. Good wear resistance, high load capacity and erosion resistance are also required. Depending on the medium, good chemical resistance is necessary as the bearings rest in the liquid.

### BEARING WITH KS PERMAGLIDE® P180 PLAIN BEARINGS

In fluid pumps, maintenance-free plain bearings, made from the lead-free, high-performance material KS Permaglide® P180, can be used for the housing and flange shaft bearings. Straight bushes, flange bushes, bushes with grooves or bushes with bores are used, depending on the model. Different lubricants can be used.

### ADVANTAGES OF THE KS PERMAGLIDE® P180 PLAIN BEARINGS FOR USE IN FLUID PUMPS

- Very good wear resistance
- Maximum load capacity
- High resistance to erosion
- Excellent chemical resistance
- Lead-free



**FURTHER ADVANTAGES OF THE MATERIAL KS PERMAGLIDE® P180**

- Compliant with Directive 2011/65/EU (RoHS II)
- Very low stick-slip tendency
- Low and constant friction value
- Universally applicable: suitable for rotary, oscillating and axial applications
- Largely resistant to swelling
- Compatible with all common dry-running steel shafts

**DESCRIPTION OF MATERIAL**

KS 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 KS Permaglide® plain bearings**  
KS Permaglide® catalogue, item no. 50003863-02

