



FL 1509
For technical personnel only!
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APPLICATION INFO

PERMAGLIDE® PLAIN BEARINGS BEARING IN RADIAL PISTON MACHINES

SECTOR: CONSTRUCTION MACHINES, HYDRAULICS

Product:

Permaglide® half-shell plain bearings,
design **PAX ... P203**

Function

Radial piston machines are used in construction machines for crane rotation, for example. Radial piston engines generate very high torques at low speeds. It's a straightforward principle: the pistons are moved radially by hydraulics. Rollers transfer the radial force to a cam track, thereby transforming it into a rotary motion.

Roller bearing in radial piston machines with Permaglide® P203 half-shell plain bearings

The rollers are supported in half-shells made from the Permaglide® P203 material. The sliding shells have a smooth surface and support the rollers in the piston base. They are subject to extremely high pressure while only mixed friction is present. The working fluid is hydraulic oil.

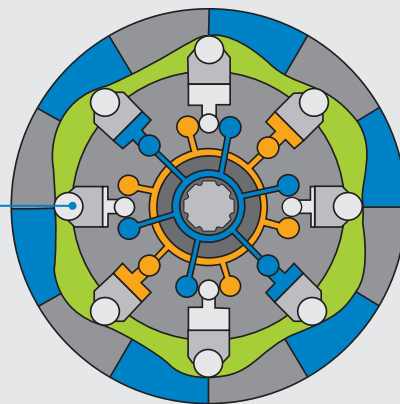
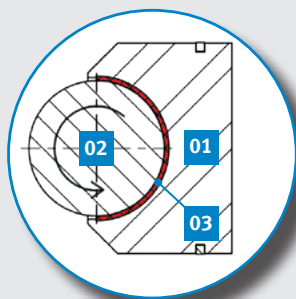
Advantage: reliable function of the bearing with Permaglide® P203 plain bearings

- Smooth sliding surface, ready to install
- Low wear
- Insensitive to edge loads
- Good damping characteristics
- Insensitive to impact loads
- Good chemical resistance
- Lead-free
- Compliant with Directive 2011/65/EU (RoHS II)



P203 is a special, high-performance sliding material. It is designed for low-maintenance, grease-lubricated or liquid-lubricated applications. The material P203 has a smooth sliding surface and can also be used in hydrodynamic conditions. The material P203 is available on request.

Application in radial piston system



- 01 Piston
- 02 Roller
- 03 Permaglide® half-shell plain bearings

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