



APPLICATION INFO

PERMAGLIDE® PLAIN BEARINGS BLADE ADJUSTMENT UNIT IN WIND TURBINE SYSTEMS

SECTOR: POWER ENGINEERING

Recommended product

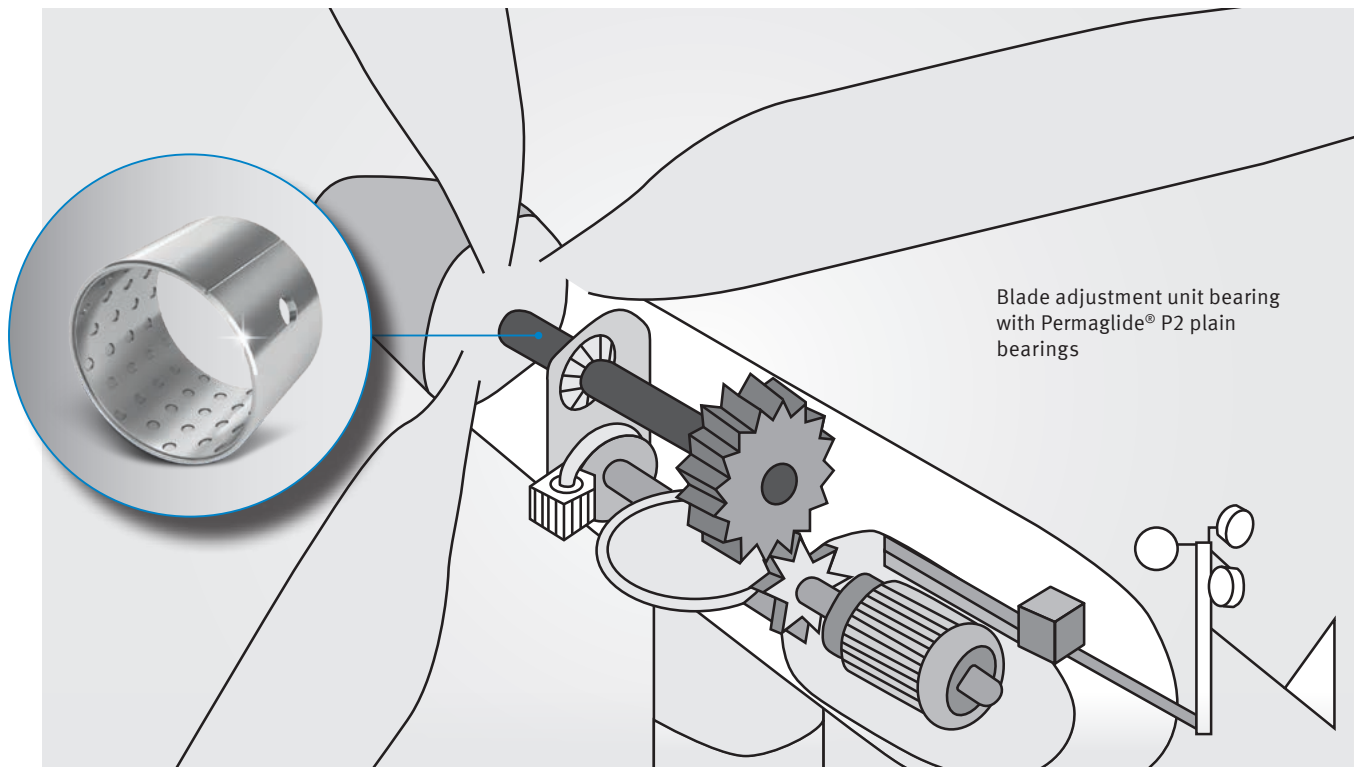
Permaglide® cylindrical plain bearing bush, design

PAP ... P200

Function

Most wind turbine systems have a horizontally-mounted 3-blade rotor. The wind causes the rotor to rotate. The rotary motion is transferred from the rotor hub to the rotor shaft and is converted by the gearbox for operation of the generator. In order to take full

advantage of the wind, the nacelle and rotor blades are continually adjusted. Rotor blades are mounted in the hub so that they are rotatable and are hydraulically adjusted using a push rod (so-called pitch control). The push rod must not be bent and must be guided using damping because of permanent vibrations.





Bearing with Permaglide® P2 plain bearing bushes

The linear spigot bearing of the push rod is implemented with two low-maintenance Permaglide® P2 plain bearings. The material Permaglide® P200 is recommended for this. The plain bearings are initially lubricated with grease, which ensures low adjusting forces and smooth guiding. Thanks to the high wear resistance of the Permaglide® P200 material, the bearing clearance hardly changes, meaning precise adjustment is constantly guaranteed.

Advantage: reliable function of the bearing with Permaglide® P200 plain bearings

- Low-maintenance operation with lubrication
- High wear resistance
- Constant and low friction coefficient
- Good damping characteristics
- Insensitivity to shocks and impacts
- Lead-free
- Compliant with Directive 2011/65/EU (RoHS II)



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

