



GKN PM BEARINGS

Prod. Group No. 8000



Maintenance-free, self-lubricating bearings featuring exceptional fail-safe characteristics



- Self-lubricating
- Maintenance-free
- High precision
- Low noise
- Economical
- Flexible shape features
- Wide range of applications
- Heat-conductive
- Fail-safe characteristics

PM bearings are manufactured from iron or bronze base alloys. Pore volume of 15% to 30% functions as an oil reservoir. Mineral or synthetic oils are used as lubricants. Sintered bearings have fail-safe characteristics and frictional heat is dissipated by the alloy.

PM bearings provide excellent surface finish characteristics (right figure). Calibration guarantees close bore tolerances (IT6) as well as a smooth, quiet performance.

Lubricant is emitted from porosity to the friction surface by an equilibrium circuit. When the system is not in operation, the oil is reabsorbed into the pores. The low friction coefficient and hydrodynamic lubrication properties guarantee long service life.



stopped shaft:
oil depot
in pores



rotary shaft:
hydrodynamic
lubrication



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Standard geometrical shapes include:

- Cylindrical bearings (left figure)
- Spherical bearings (right) and
- Flange bearings

Manufactured to industry standards.
Special shapes available.

Typical automotive applications include:

- Windshield wipers bearings
- Dampener bearings

PM bearings in automotive systems are commonly incorporated into seat mechanisms, sunroof drive systems and fan motors. Applications also include a wide variety of electric motors and positioning drives for automotive applications, household appliances, consumer goods and industrial machinery.

Materials development:

- Lubricants

