# **Insert bearings**

### Sealing and lubrication

Single-piece seals RSR seal the insert bearings on both sides. Additional outer flinger shields made from corrosion-resistant steel, material number 1.4301, protect the seals against mechanical damage.

Initial greasing is carried out with an aluminium complex soap grease with food applications approval to NSF-H1 that is sufficient in many case for the entire operating life of the bearings. For relubrication, the outer rings have lubrication holes on their circumference.

### Operating temperature

The insert bearings are suitable for operating temperatures from -35 °C to +100 °C.

# Insert bearings with Corrotect® coating

The series GRAE..-NPP-B-FA125.5 and GE..-KRR-B-FA125.5 are coated on all faces with  $Corrotect^{\otimes}$ .

The special coating Corrotect<sup>®</sup> is an economical alternative to insert bearings with conventional anti-corrosion protection. For a description of the Corrotect<sup>®</sup> coating, see page 19. Plastic cages made from polyamide PA66 retain and guide the rolling elements.

#### Location by locking collar

The bearings are located on the shaft by a locking collar. They are therefore particularly suitable for bearing arrangements with a constant direction of rotation or, under low speed and load, for an alternating direction of rotation.

The locking collar is preferably tightened in the direction of rotation and must be secured by means of a grub screw. This location method prevents damage to the shaft and can be easily loosened again.

# Sealing and lubrication

Three-piece seals P or R seal the bearings on both sides. The NBR part is protected against mechanical damage by zinc plated sheet steel shields. In seals P, the seal lip is axially preloaded, in seals R it is radially preloaded.

Initial greasing is carried out with GA47, a barium complex soap grease with a mineral oil base that is sufficient in many cases for the entire operating life of the bearings; for information on grease GA47 see Catalogue HR 1, Rolling Bearings.

In order to increase the grease quantity, insert bearings with seals R have sheet steel shields that are angled and extended outwards. This provides more space for the grease. This extends the bearing operating life and the relubrication intervals. For relubrication, the outer rings have lubrication holes on their circumference.

# Operating temperature

Corrosion-resistant insert bearings are suitable for operating temperatures from -20 °C to +120 °C.