Rexnord PSI Aerospace Bearing Offering

Rexnord PSI Aerospace Bearing Applications

For decades, Rexnord Aerospace has been engineering PSI Bearing solutions for customers' application needs. By continually enhancing the technology and design of our bearings, we are able to apply innovation to challenging new and existing applications, including:

- Military, fixed and rotary wing aerospace vehicles
- Airframes
- Landing gear
- Power plants
- And more!

Every bearing is the result of advanced computer-aided design, exhaustive and comprehensive in-house testing, and state-of-the-art manufacturing methods. Our focus on technology allows us to meet unique requirements with high-quality bearings at reasonable costs.

Choose Rexnord PSI Aerospace Bearings for your severe environment.

Rexnord® PSI® Aerospace Bearings are manufactured in a wide range of materials and styles to meet the impact, motion, loads, and severe environments encountered in commercial and military aircraft. Our focus on technology allows us to meet unique requirements with high-quality products at reasonable costs.

Preferred by OEMs

PSI Bearings are preferred by OEMs because they offer features that make them ideal for bearings requiring high vibration and dithering motion:

- Reduced bearing weight
- Wide temperature range
- Wide range of material, configuration and fit offerings to meet any application condition
- Increased bearing stiffness
- Lubrication flexibility
- Extended service life (due to ball/race conformity)
- "On-wing" replacement (with only ball and pin removal)
- Corrosion resistance

Slotted-entry bearings

The unique two-piece design of the slotted-entry bearing features a ball (inner ring) that has spherical race to accommodate misalignment. The outer ring/rod end has an entry window to allow insertion or removal of the ball. This design feature allows the ball to be fitted to the outer member after all manufacturing operations are completed. This yields a higher-strength outer race than formed designs and provides easy replacement without removing the entire assembly of the aircraft.

Split-ball bearings

The Rexnord PSI Aerospace split-ball bearing design involves an axial separation of the ball into two halves that allows the individual halves to be inserted axially into the outer race, and then rotated into alignment within the outer race to eliminate the need for the ball-entry window. The manufacturing expertise and precise machine control that Rexnord Aerospace provides is crucial for precisely matching the ball halves to ensure ball sphericity and uniform final assembly clearance are maintained, allowing the design to function properly in the application.

Split-race bearings

The Rexnord PSI Aerospace split-race bearing design involves an axial separation of the outer race, eliminating the need for the ball entry window found in the slotted entry design (circumferential split designs are also manufactured). The manufacturing expertise and precise machine control that Rexnord Aerospace provides is crucial for matching the outer race halves to retain the sphericity required, to allow the bearing design to function properly (i.e., accept ball motion and ball misalignment).

Engine and gearbox bearings

Rexnord Aerospace offers a variety of PSI Engine and Gearbox Bearings for your aerospace application, including:

- Nozzle linkage bearings — used in engine vane controls to provide multiple pivot points within an assembly
- Integral lever bearings — used in actuation and movements of vane guides and other engine components
- Blocker door bearings — used in high-impact loads and corrosive environments encountered in commercial and military aircrafts, as well as re-entry spacecraft
- Mount bearings — used to isolate radial motion to a concentrated part of the aircraft

Since 1946, Rexnord Aerospace has satisfied the needs and critical demands of the aerospace industry with exceptional, high-quality products and innovative engineering. Choose Rexnord Aerospace products and solutions for your designs. Speak with our engineering sales staff to address your questions and design inquiries.

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