



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.

Rexnord PSI Aerospace Rexlon 2000 Self-Lubrication Liner Material

Get an excellent bearing surface with Rexlon 2000 Self-lubrication Liner Material.

Rexnord offers two types of Rexlon 2000® Self-Lubrication Liner Material surface treatments: Rexlon 2000 LF and Rexlon 2000 Type III. These surface treatments are designed to protect your surface areas, such as bearings and other load-carrying moving components, from corrosion, fretting and galling.

Rexlon 2000 Type III can be applied to most metallic and some non-metallic surfaces of varying shapes due to its ability to be sprayed or molded, providing an excellent bearing surface for complex surface profiles. It is machineable and honeable after application for ultimate customization and pin to wear surface fit.

Rexlon 2000 LF is ideal for surface areas requiring low friction and wear. It provides excellent wear properties at low temperature for track rollers, hinge pins, cruciforms and other load-carrying moving components requiring low friction and wear.

Rexlon 2000 LF and Rexlon 2000 Type III provide you with:

- Fully machinable
- Minimal wear at high loads
- Can be applied to irregular shapes and most materials
- Low friction at cold temperature
- Exceeds the performance requirements of current military specifications

Rexlon 2000 LF applications

- **Airframe** — fixed wing (actuators, control rods, flight control hinge pins and strut sleeves)
- **Cargo rollers** — track rollers
- **Energy systems** — steering linkage
- **Thrust bearings** — butterfly valves

Rexlon 2000 Type III applications

- **Airframe** — fixed wing (landing gear actuators, control rods), rotary wing (swash plates)
- **Jet engines** — engine controls
- **Industrial machinery** — toggle mechanisms, butterfly valves
- **Off-road vehicles** — steering linkages, thrust bearing
- **Cargo handling** — cargo rollers
- **Railroads** — hand brakes and couplers
- **Energy systems** — stationary engine controls
- **Exercise and leisure products** — pivot joint



Performance characteristics

	Rexlon 2000 LF	Rexlon 2000 Type III
Dynamic Load	25,000 PSI	50,000 PSI
Static Load	60,000 PSI	80,000 PSI
Static Ultimate	90,000 PSI	120,000 PSI
Surface Speed	Up to 30 FPM	Up to 24 FPM
Nominal Thickness	.010–.015 in	.010–.015 in
Maximum Thickness	.050 in	.050 in
Wear	<.002 @ 25,000 PSI load +/- 25 degrees of oscillation angle and 25,000 cycles	<.001 @ 50,000 PSI load +/- 25 degrees of oscillation angle and 25,000 cycles
Operating Temperature	—	-65 to +44 (depending on surface speed and load)
Coefficient of Friction	.03–.18 (ambient to -55 F, C and +250 F, C and under 1,500 to 15,000 PSI load)	.01–.10 (depending on load, motion, temperature and contaminant)

Typical product properties

	Rexlon 2000 LF	Rexlon 2000 Type III
Hardness (Rockwell M Scale)	80–100	100–110
Color and Appearance	Gray through green-brown	Dark gray through green-brown
Density	.5 lb/in ³	.54 lb/in ³
Specific Gravity	1.5	1.5

Rexlon 2000 LF and Rexlon 2000 Type III are resistant to:

- Skydrol B-4
- MIL-H-5606
- MIL-L-7808
- JP-4
- BMSS3-33
- MIL-H-83282
- MIL-A-8243
- Hyjet IVA+
- TT-S-735 (type VII)
- Water

Applicable product specifications:

- Meets and exceeds the requirements of AS8943 (Rexlon 2000 LF)
- Meets and exceeds the requirements of Track Roller Specification BPS-B-173 (Rexlon 2000 LF)
- SAE AS 81934 approved (Rexlon 2000 Type III)
- SAE AS 81820 approved (Rexlon 2000 Type III)
- Qualified to Boeing BMS 3-39 (Rexlon 2000 Type III)

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.