

Rexnord Duralon Filament Bearings Frequently Asked Questions





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To help you understand the features, benefits and applications of the Rexnord® Duralon® Filament Bearings product offering, read our frequently asked questions (FAQs) and their answers below. Don't see your questions? Contact your Rexnord Account Executive or call the Rexnord Bearing Technical Support team at 317-273-5781.



Questions

Answers

What are some of the typical, most common applications for Rexnord Duralon Filament Bearings?

Agricultural machinery, construction equipment, energy processing equipment, food & beverage processing equipment, forest product processing equipment, hydraulic and pneumatic cylinders, lift systems, material handling machinery, mining equipment, recreational vehicle clutches, sailboats, stern drives, and water management valves and actuators.

Can the bearings be customized?

Yes. To meet your specific needs, our experienced engineers offer customized designs, including 16 patents and more than 4,200 special designs, to optimize application performance and extend bearing life.

What material are the bearings made of?

They are constructed of a woven Teflon®* and polyester fiber self-lubricating liner supported by a filament-wound continuous fiberglass filament and epoxy resin matrix. The unique combination of fiberglass and resins offer a corrosion-resistant product that reduces downtime and improves productivity.

Does the product require lubrication?

Lubrication or complex lubrication systems are not required. They operate self-lubricated with Teflon* to 30,000 psi (207 MPa) dynamically.

What range of sizes are available?

The size options can range from 1/8- to 26-inch (3.18 to 660.40 millimeters) inside diameters, with wall sections up to 1 inch (25.40 millimeters).

What are the advantages of Rexnord Duralon Filament Bearings vs. others?

- Reduced product maintenance due to the self-lubricating feature.
- The bearings are corrosion- and moisture-resistant; they perform when submerged in fresh or salt water.
- Non metallic composite bearing material will not seize to the shaft.
- Bearings offer a high load capacity, with low sliding friction for oscillating, linear and full rotation applications.
- Interchanges are available for metallic and polymer bearings and thrust washers.
- These bearings are non metallic, so they are 77 percent lighter in weight than steel bearings and 30 percent lighter than aluminum bearings.
- The bearings are electrically insulating.
- Our product quality is backed by trusted engineering expertise.

*Teflon® is a registered trademark of E.I. DuPont DeNemours and Co.

Questions

Answers

What is the typical load capacity?	Typical dynamic loading is 4,000 to 30,000 psi (28 to 207 MPa). The ultimate strength is 77,000 psi (531 MPa) for a 1/8-inch (3.18 millimeters) wall section.
What is the temperature range within which Rexnord Duralon Filament Bearings can function?	Continuous: Cryogenic to 325 degrees Fahrenheit (F) (163 C) Intermittent: To 400 F (204 C). A special resin system is available for continuous up to 450 F (232 C), intermittent to 500 F (260 C).
What are filament bearings?	"Filament" is a generic term to designate filament wound non metallic composite bearings. In most cases, the structure of the filament bearing is reinforced with continuous filaments of fiberglass or some other material helically wound around a mandrel.
Are filament bearings and Rexnord Duralon Filament Bearings the same thing?	Yes. Rexnord Duralon Filament Bearings are commonly referred to as filament or composite bearings.
How long have the bearings been on the market?	Rexnord filament bearing material was originally developed for the aerospace industry in 1966. The Duralon brand has been available since 1972 for commercial applications.
How many configurations of Rexnord Duralon Filament Bearings are there?	They are available in seven configurations. All configurations have unique features and advantages in specific applications. The configurations include straight sleeve, hex and square bore, annular, linear, flanged sleeves, thrust washers and special designs.
Are certain configurations better for certain applications?	Yes. For example, straight sleeve configurations work well in oscillatory (pivoting), linear sliding and slow-speed full rotation applications like those found in recreational vehicle clutches, construction equipment, and water management butterfly valves. Hex and square bore configurations are used in applications such as agriculture and wood processing equipment, providing torque transmission or preventing shaft rotation while allowing linear motion. Linear configurations work well in harsh applications like contaminated or washdown environments, as well as food packaging machinery and factory-automated production lines. See our Rexnord Duralon Filament Bearings Overview Brochure (BR1-006) at www.rexnord.com/documentation for a full list of configurations and applications.
Does the Rexnord Bearing Mobile Pro™ app contain information on these bearings?	Yes. Features of the Rexnord Bearing Mobile Pro app include technical information for Rexnord Duralon Filament Bearings as well as Rexnord Roller, Ball and Cylindrical Bearings, interchange guides for competitive bearings, FAQs for critical job site questions, and more.
How can I download the Rexnord Bearing Mobile Pro app?	Visit www.rexnord.com , hover over "Products & Services" near the top of the site, click on "Bearings," then click on "What's New" near the left side of the page.
Where can I get more information?	Contact your Rexnord Account Representative or call the Rexnord Bearing Technical Support team at 317-273-5781.



866-REXNORD/866-739-6673 (Within the U.S.)
414-643-2366 (Outside the U.S.)
www.rexnord.com

Why Choose Rexnord?

When it comes to providing highly engineered products that improve productivity and efficiency for industrial applications worldwide, Rexnord is the most reliable in the industry. Commitment to customer satisfaction and superior value extend across every business function.

Delivering Lowest Total Cost of Ownership

The highest quality products are designed to help prevent equipment downtime and increase productivity and dependable operation.

Valuable Expertise

An extensive product offering is accompanied by global sales specialists, customer service and maintenance support teams, available anytime.

Solutions to Enhance Ease of Doing Business

Commitment to operational excellence ensures the right products at the right place at the right time.

REXNORD

Rexnord Company Overview

Rexnord is a growth-oriented, multi-platform industrial company with leading market shares and highly trusted brands that serve a diverse array of global end markets.

Process & Motion Control

The Rexnord Process & Motion Control platform designs, manufactures, markets and services specified, highly engineered mechanical components used within complex systems where our customers' reliability requirements and the cost of failure or downtime are extremely high.

Water Management

The Rexnord Water Management platform designs, procures, manufactures and markets products that provide and enhance water quality, safety, flow control and conservation.