

THOMSON SUPER8-CR

Thomson SUPER8-CR Ball Bushing Bearing Instruction Manual

PRODUCT OVERVIEW

The Thomson SUPER8-CR Super Ball Bushing Bearing is designed for linear motion applications requiring high load capacity and extended service life. This self-aligning bearing is corrosion resistant and suitable for use with 0.5 inch diameter shafts. It offers significant advantages over conventional linear bearings, including reduced friction and enhanced operational efficiency.

KEY FEATURES

- **Enhanced Load Capacity:** Provides three times the load capacity compared to conventional linear bearings.
- **Extended Travel Life:** Offers up to twenty-seven times the travel life of conventional linear bearings.
- **Self-Aligning Design:** Industry-standard self-aligning capability simplifies installation and minimizes wear caused by minor bore misalignment.
- **Low Friction Operation:** Features a coefficient of friction as low as 0.001, enabling smooth and efficient movement.
- **High Speed and Acceleration:** Capable of achieving speeds up to 10 ft/s and accelerations up to 450 ft/s² without derating factors.
- **Corrosion Resistant:** Designed for applications where resistance to corrosion is critical.
- **Lightweight and Quiet:** Wear-resistant, engineered-polymer retainers and outer sleeves reduce inertia and noise in high-speed applications.
- **Adjustable Fit-up:** Radially floating bearing plates allow for adjustment to a specific diametrical fit-up when installed in an adjustable housing, ensuring accurate and repeatable movement.

SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance and longevity of your Thomson SUPER8-CR Ball

Bushing Bearing. This bearing is designed for end-supported applications and is self-aligning to compensate for minor misalignments.

1. **Shaft Compatibility:** Ensure the shaft diameter is 0.5 inches for proper fit and function.
2. **Housing Preparation:** If using an adjustable housing, prepare it according to the manufacturer's instructions. The self-aligning feature of the SUPER8-CR bearing helps ease installation and minimize wear from minor bore misalignment.
3. **Bearing Insertion:** Carefully insert the bearing onto the shaft. Avoid forcing the bearing, which could damage the internal components.
4. **Alignment:** The self-aligning nature of the bearing will accommodate small misalignments. For best results, ensure the shaft and housing are as accurately aligned as possible.
5. **Adjustable Fit-up (Optional):** If your application requires precise diametrical fit-up, install the bearing in an adjustable housing. The radially floating bearing plates allow for fine-tuning to achieve the desired accuracy and repeatability of movement.
6. **Securing:** Secure the bearing in its housing using appropriate methods, ensuring it is firmly seated but not over-compressed.



Image 1: A close-up view of the Thomson SUPER8-CR Ball Bushing Bearing. The black cylindrical bearing features internal ball races and is marked with "THOMSON" and "SUPER". This image illustrates the product's physical appearance and

OPERATION GUIDELINES

The Thomson SUPER8-CR bearing is designed for high-performance linear motion. Adhering to operational guidelines will ensure its efficiency and lifespan.

- **Speed and Acceleration:** The bearing can operate at speeds up to 10 ft/s and accelerations up to 450 ft/s². Ensure your application's operational parameters remain within these limits.
- **Load Management:** While offering three times the load capacity of conventional bearings, it is essential not to exceed the specified load ratings for your specific application to prevent premature wear.
- **Low Friction Environment:** The bearing's low coefficient of friction (as low as 0.001) contributes to smooth operation. Maintain a clean environment to preserve this low friction characteristic.
- **Environmental Conditions:** As a corrosion-resistant bearing, it is suitable for environments where moisture or corrosive agents might be present. However, extreme conditions should still be avoided or mitigated where possible.

MAINTENANCE

Regular maintenance helps extend the life and maintain the performance of your SUPER8-CR Ball Bushing Bearing.

- **Cleaning:** Periodically inspect the bearing and shaft for debris, dust, or contaminants. Clean with a suitable solvent if necessary, ensuring no residue remains.
- **Lubrication:** While ball bushings generally require less lubrication than plain bearings, consult your system's specific requirements. If lubrication is needed, use a compatible lubricant recommended for linear bearings.
- **Inspection:** Regularly check for signs of wear, such as excessive play, unusual noise, or visible damage to the bearing or shaft.
- **Environmental Protection:** Ensure the operating environment remains as clean and free from abrasive particles as possible to prevent premature wear.

TROUBLESHOOTING

If you encounter issues with your Thomson SUPER8-CR Ball Bushing Bearing, consider the following common troubleshooting steps:

- **Excessive Noise or Vibration:**
 - Check for proper alignment of the shaft and housing. The self-aligning feature accommodates minor misalignments, but significant issues can still cause noise.
 - Inspect for contamination or debris within the bearing or on the shaft.
 - Verify that the bearing is securely mounted and not loose in its housing.

- **Sticking or Binding:**

- Ensure the shaft is clean and free from nicks or burrs.
- Check for proper lubrication if applicable to your system.
- Re-evaluate the load on the bearing to ensure it is within specified limits.

- **Premature Wear:**

- Review operating conditions for excessive loads, speeds, or accelerations.
- Inspect the environment for abrasive contaminants that could enter the bearing.
- Confirm proper installation and alignment.

If issues persist after troubleshooting, contact Thomson technical support for further assistance.

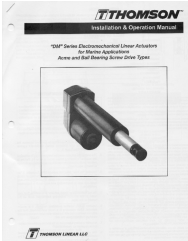


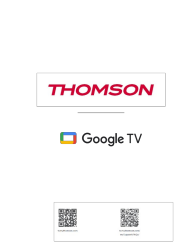


SPECIFICATIONS

Attribute	Value
Brand	THOMSON
Model Number	SUPER8-CR
Bearing Number	SUPER8-CR
Material	Alloy Steel, Plastic
Item Weight	0.05 Pounds (approx. 0.85 ounces)
Package Dimensions	1.8 x 1.4 x 1.3 inches
Date First Available	February 22, 2013
UPC	662486298571

WARRANTY AND SUPPORT

For specific warranty information regarding your Thomson SUPER8-CR Ball Bushing Bearing, please refer to the documentation provided with your purchase or visit the official Thomson website. For technical support, product inquiries, or assistance with troubleshooting beyond the scope of this manual, please contact Thomson customer service directly.

You can find more information and contact details on the [THOMSON Store](#).

	<p>Thomson DM Series Electromechanical Linear Actuators for Marine Applications - Installation and Repair Manual</p> <p>This manual provides comprehensive information for the installation, troubleshooting, and repair of Thomson DM Series electromechanical linear actuators, including Acme and Ball Bearing screw drive types. It details specifications, mounting instructions, electrical connections, and repair kit procedures.</p>
	<p>Thomson Precision Ball Splines: Robust Rotary and Linear Motion Integration</p> <p>Explore Thomson's Precision Ball Splines for high-precision applications. Learn about their multi-motion performance, customization options, technical specifications, sizing, and applications in robotics, packaging, and automation.</p>
	<p>Thomson Go Plus Pro Bruksanvisning</p> <p>Lär dig installera, konfigurera och använda din Thomson Go Plus Pro smarta display med denna omfattande användarmanual. Innehåller säkerhetsinformation, installationsanvisningar, knappfunktioner, inställningar och felsökning.</p>
	<p>Thomson Smart TV ar Google TV: Lietotāja rokasgrāmata</p> <p>Šī visaptverošā lietotāja rokasgrāmata sniedz būtisku informāciju jūsu jaunā Thomson Smart TV ar Google TV uzstādīšanai un lietošanai. Tā aptver visu, sākot no sākotnējās instalācijas un savienojumiem līdz funkciju, iestatījumu un problēmu novēršanas izpētei.</p>
	<p>Thomson Go Plus Pro: Navodila za uporabo in nastavitve</p> <p>Podroben uporabniški priročnik za Thomson Go Plus Pro pametni zaslon, ki zajema namestitev, nastavitve, uporabo funkcij, sistemske nastavitve in odpravljanje težav.</p>
	<p>Thomson Go Plus Pro - Uživatelská příručka</p> <p>Uživatelská příručka pro Thomson Go Plus Pro. Získejte podrobné pokyny k instalaci, nastavení, ovládání, bezpečnosti, řešení problémů a technickým specifikacím tohoto inteligentního displeje Thomson.</p>