**SKF 25007**

# SKF 25007 LDS & Small Bore Seal Instruction Manual

Model: 25007

## Introduction

This manual provides essential information for the proper handling, installation, and maintenance of your SKF 25007 LDS & Small Bore Seal. Adhering to these instructions will help ensure optimal performance and longevity of the seal in its intended application. This seal is designed for specific shaft and bore diameters to prevent leakage and protect components from contaminants.

## Product Overview

The SKF 25007 is a high-quality lip seal designed for small bore applications. It features an R Lip Code and HM21 Style, indicating its specific design for effective sealing. Constructed from Nitrile Rubber, it offers good resistance to oils, fuels, and other common industrial fluids. Its primary function is to retain lubricants and exclude contaminants in rotating or reciprocating applications.

This image displays the SKF 25007 LDS & Small Bore Seal. It is a circular component with a dark gray inner ring and a turquoise outer ring, designed for sealing applications.

## Specifications

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| **Model Number** | 25007 |
| **Brand** | SKF |
| **Material** | Nitrile Rubber |
| **Shaft Diameter** | 2.5 inches (63.5 mm) |

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| **Bore Diameter** | 3.5 inches (88.9 mm) |
| **Width** | 0.25 inches (6.35 mm) |
| **Lip Code** | R |
| **Style** | HM21 |
| **Color** | Turquoise |
| **Item Weight** | 0.32 ounces (9.07 grams) |
| **Package Dimensions** | 9.144 cm (L) x 1.777 cm (H) x 9.398 cm (W) |
| **Package Weight** | 0.022 pounds (10 grams) |

## Installation (Setup)

Proper installation is crucial for the effective performance and lifespan of the seal. Follow these general guidelines:

1. **Preparation:** Ensure the shaft and bore surfaces are clean, free from burrs, scratches, or any contaminants. Lubricate the seal lips and the shaft with the system's operating fluid or a compatible lubricant before installation.
2. **Handling:** Handle the seal carefully to avoid damage to the sealing lips. Do not use sharp tools or excessive force.
3. **Insertion:** Use an appropriate installation tool or a smooth, chamfered sleeve to guide the seal over the shaft and into the bore. This prevents the sealing lip from being turned back or damaged by sharp edges.
4. **Alignment:** Ensure the seal is seated squarely and fully within the bore. The sealing lip should face the fluid to be sealed.
5. **Post-Installation Check:** After installation, visually inspect the seal for any signs of damage or improper seating.

*Note: For specific machinery, always refer to the equipment manufacturer's service manual for detailed installation procedures.*

## Function and Application

The SKF 25007 LDS & Small Bore Seal is designed to create a barrier between two environments, typically to retain lubricating oil or grease within a system while preventing the ingress of external contaminants such as dirt, dust, and moisture. Its HM21 style and R lip code are optimized for specific dynamic sealing conditions, providing reliable performance in various industrial and automotive applications where a 2.5-inch shaft and 3.5-inch bore are present.

## Maintenance

Seals are wear components and their lifespan depends heavily on operating conditions. While direct maintenance on the seal itself is limited, regular inspection and proper system maintenance are key:

- **Regular Inspection:** Periodically check the area around the seal for signs of leakage or excessive wear.
- **Lubrication:** Ensure adequate lubrication is maintained within the system, as dry running can significantly reduce seal life.
- **Environmental Factors:** Protect the seal from harsh chemicals, extreme temperatures, or abrasive particles that are outside its specified operating range.

- **Replacement:** Replace seals at recommended service intervals or at the first sign of leakage or damage.

## Troubleshooting and Inspection

If a seal fails prematurely or exhibits signs of leakage, consider the following:

- **Leakage:** This is the most common sign of seal failure. It can be caused by improper installation, shaft or bore damage, incorrect seal size, material incompatibility with the fluid, or simply end-of-life wear.
- **Excessive Wear:** Inspect the sealing lip for cracks, hardening, softening, or abrasion. This can indicate issues with lubrication, temperature, or abrasive contaminants.
- **Shaft Condition:** Check the shaft surface for grooves, pitting, or excessive runout, which can compromise sealing effectiveness.
- **Bore Condition:** Ensure the bore is not out-of-round or damaged, which could prevent proper seal seating.

*Always replace a damaged or leaking seal with a new one of the correct specifications.*

## Warranty Information

Specific warranty details for the SKF 25007 LDS & Small Bore Seal are not provided within the product information. For warranty inquiries, please contact SKF directly or refer to the terms and conditions of your purchase.

## Support

For further assistance, technical data, or to explore other SKF products, please visit the official SKF store or website.
Visit the SKF Store on Amazon

### Related Documents - 25007

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|   | SKF Изделия для Технического Обслуживания и Смазочные Материалы<br>Каталог SKF, посвященный изделиям и материалам для технического обслуживания подшипников. Охватывает монтаж, демонтаж, смазывание, выверку и мониторинг состояния для продления срока службы подшипников. |
|  | SKF TKSA 51 Shaft Alignment Tool - User Manual and Specifications<br>Comprehensive user manual for the SKF TKSA 51 shaft alignment tool, detailing its features, technical specifications, setup, operation, and maintenance. Learn how to perform precise shaft alignments for industrial machinery. |

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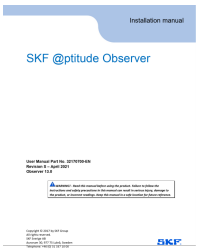
|  | SKF Automatic Lubricators: LAGD, TLSD, TLMR, TLMP Series - Product Guide<br>Comprehensive guide to SKF Automatic Lubricators, including LAGD, TLSD, TLMR, and TLMP series. Learn about features, benefits, applications, technical specifications, and accessories for improved safety, reliability, and maintenance. |
|  | SKF TKBA 40 Belt Alignment Tool User Manual<br>This user manual provides comprehensive instructions for operating the SKF TKBA 40 Belt Alignment Tool, detailing its technical specifications, application range, troubleshooting, and maintenance procedures. |
|  | SKF @ptitude Observer 13.0 Installation Manual<br>Comprehensive installation guide for SKF @ptitude Observer 13.0 software, detailing system requirements, software and SQL Server Express installation, database setup, monitor service configuration, and network settings for condition monitoring. |
|  | SKF Dynamic Motor Analyzer EXP4000 User Manual<br>User manual for the SKF Dynamic Motor Analyzer EXP4000, detailing its features, intended use, software license agreement, and support information. |