TIMKEN



TIMKEN® TYPE E MOUNTED TAPERED ROLLER BEARINGS

BEAT EXPECTATIONS.
EXCEED STANDARDS.

Manage high axial and radial loads and avoid contamination. Unlock premium performance with an unrivaled multi-point internal and external sealing solution (full range of end covers) to protect the bearing and improve grease retention.

Type E mounted tapered roller bearings feature industry-leading premium tapered roller bearings, high-performance seals, e-coated housings and locking collars. The enhanced core component design and materials improve the reliability and performance of applications in severely contaminated and wet application environments – resulting in superior performance, increased uptime, lower maintenance costs, and an overall lower cost of ownership.

FEATURES AND BENEFITS

High-Performance Seals
- Better grease retention
- Less contaminant ingress
- Better protection against water, mud and salt ingress

Collar
- Maximum corrosion resistance
- Better locking strength
- Cuts down set screw back-out, even in severe applications

Housing
- Superior corrosion resistance over black oxide or powder coating
- Interchangeable bolt holes and shaft centerline dimensions

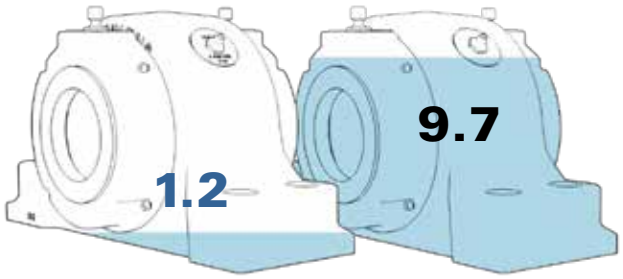
Premium Tapered Roller Bearing
- Longer bearing life
- Better performance
- Higher load capacity



SEAL PERFORMANCE COMPARISON

Compared to the leading competitor's seal, our triple-barrier internal seal is more effective, resulting in 7 times less water and 40% less mud/salt slurry contamination ingress.

WATER
INGRESS TEST (g)

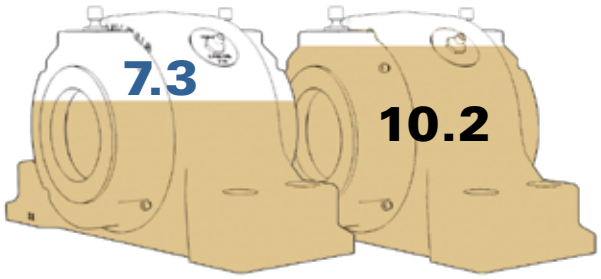


TIMKEN TYPE E High-Performance Seal
7x Less Water Ingress with Timken High-Performance Seal

LEADING COMPETITOR Triple-Lip Seal

Water ingress test results of the high-performance Timken Type E seal compared to the triple-lip seal design of a leading competitor. Seal operating at 250 rpm with three gallons of water per minute directed at the shaft-seal interface for four hours.

MUD/SALT SLURRY
INGRESS TEST (g)



TIMKEN TYPE E High-Performance Seal
40% Less Slurry Ingress with Timken High-Performance

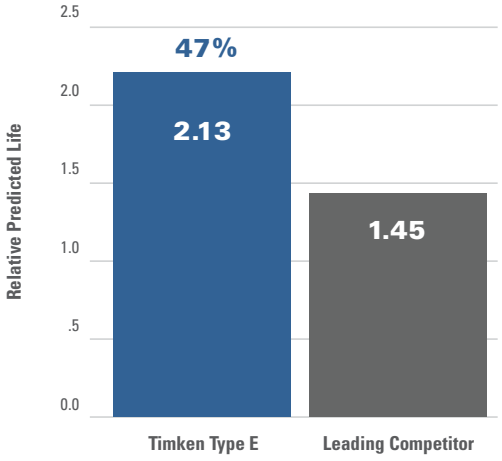
LEADING COMPETITOR Triple-Lip Seal

Slurry ingress test results of the high-performance Timken Type E seal compared to the triple-lip seal design of a leading competitor. Seal operating at 250 rpm in a salt and mud slurry mixture for 75 hours.

BEARING LIFE ANALYSIS COMPARISON

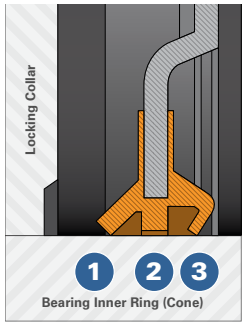
47% Longer Life with Optimized Timken Tapered Roller Bearings Versus Competition

Type E bearing yields a design life that is 47 percent higher than the current industry leading competitor.



Analysis of the optimized Timken bearing compared to the leading competitor's bearing and most other Type E competitors. Note: Life tests of Timken tapered roller bearings verified by Germanischer Lloyd.

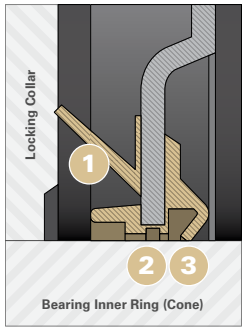
WHICH SEAL PROVIDES BETTER PROTECTION?



Timken® Type E High-Performance Seal*

1. Outboard contact lip provides initial protection from ingress
2. Labyrinth, non-contact rigid barrier
3. Inboard contact lip provides secondary protection from ingress

Double-lip and triple-barrier system optimizes sealing.



Leading Competitor Triple-Lip Seal*

1. Outboard lip contacts back of machined collar and will wear quickly, impacting effectiveness of the lip
2. Labyrinth, non-contact
3. Single-lip contact to protect the bearing from ingress

Essentially operates as a single-lip seal.

* Graphical representation of bearing inner ring and locking collar. 3D CAD and 2D drawings available at http://cad.timken.com/category/type-e-housed-unit-bearings

TIMKEN

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets bearings, gear drives, automated lubrication systems, belts, brakes, clutches, chain, couplings, linear motion products and related industrial motion rebuild and repair services.

Stronger. By Design.

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