# TIMKEN

### Timken<sup>®</sup> Spherical Roller Bearing Solid-Block Housed Units

#### THE TOUGH CHOICE

Today's industrial operations depend on housed unit bearings to keep things moving – particularly in demanding conditions and highly contaminated environments.

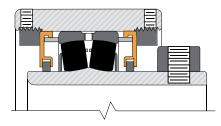
Timken offers a full-line of precision-made solid-block housings with shaft-locking options and seals. Of course, they come with Timken's high-performance spherical roller bearings.

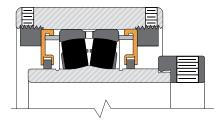
- Unrivaled multi-point seal design. Optimize performance in highly contaminated environments.
- Wide range of choices. Timken's comprehensive product offering interchanges with virtually all roller bearing housed units.
- Efficient built-to-order manufacturing. Quick delivery of customized configurations for specific applications.
- Increased uptime. Robust steel housing, wide variety of seal choices and a high-performance Timken roller bearing result in increased equipment uptime.
- Multidirectional shaft expansion. Double-nut housing allows in-field conversion from fixed to floating in either direction.
- **One-time shaft alignment** on all housing unit styles. Machined feet ends allow for precise installation and blocking for faster future unit replacement.
- Fewer misalignment issues. Bearings accept a total of 1.5 degrees misalignment. Additional misalignment can be accommodated for applications with lighter loads, contact your Timken engineer for details.
- Multiple available sizes accommodate shafts from 1<sup>7</sup>/<sub>6</sub> inches to 15 inches (35 mm to 380 mm).
- Protection against over-lubrication. Pressure relief valves come standard when unit is ordered with non-purgeable seals.

# **Customize to Your Application with**

#### LOCKING CONFIGURATIONS

Choose the housing configuration that fits your need. For your convenience, Timken offers interchange solutions for hundreds of other housed units that simply don't offer the strength of these solid-block designs.





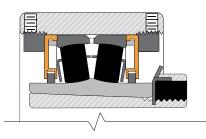
#### CL Series – Single Set Screw Lock

- Heavy-duty.
- Simple installation.
- Minimal runout.

- CL Series Double Set Screw Lock
- Extra heavy-duty.
- Simple installation.
- Increased holding power.

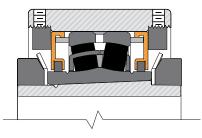
#### EC Series – Eccentric Lock

- Heavy-duty.
- Increased shaft holding power.
- Reduced shaft damage under extreme shock loads.
- Designed not to release in reversing applications.



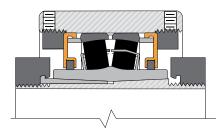
#### TA/DV Series – Tapered Adapter Lock

- Extra heavy-duty.
- 360 degrees shaft holding.
- Accommodates undersized shafting.



#### TAA/DAA – Double Nut Tapered Adapter Lock

- Extreme heavy-duty.
- Increased shaft contact.
- Accommodates undersized shafting.
- Easy to install without need to measure internal clearance.
- Mechanical withdrawal for easier removal.
- Larger bearings and higher load rating compared to competitive products having same bore size.



#### V-Lock Series – Double Taper Lock (U.S. Pat. No. 7344313)

- Extreme heavy-duty.
- 360 degrees shaft holding.
- Designed to eliminate over-tightening.
- Mechanical withdrawal for easier removal.
- Larger bearings and higher load rating compared to competitive products having same bore size.

# Locking, Housing and Sealing Options

HOUSING STYLES Solid steel housings by Timken are built to last, so you can keep your business operations running. Precise manufacturing methods with tighter tolerances and innovative designs are key to higher quality, stronger housings. Our steel housings feature machined feet and tapped extraction holes.



Cartridge Block



**Flange Block** 



**Piloted-Flange** Cartridge



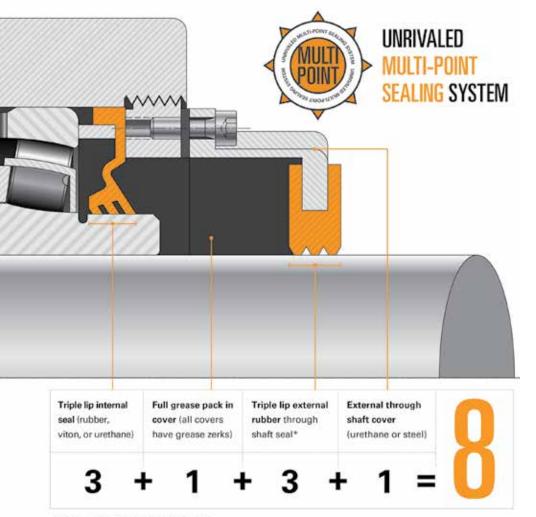
**Pillow Block** 

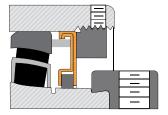


Wide Slot **Take-Up Block** 

#### SEALING OPTIONS

Timken experts can help you select the right locking style and seal for your needs. Contact your Timken sales engineer for assistance.

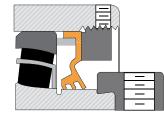




#### Labyrinth Seals – DuPont<sup>™</sup> Teflon<sup>®</sup>

- · High-speed applications.
- · Superior in heavily contaminated conditions.
- · Able to operate at high temperatures.
- · Resistant to most chemicals.
- Abrasion-resistant.

Top Pull **Take-Up Block** 



#### **Triple-Lip Seals – Nitrile**

- · Self-purging.
- Excellent in wet and dirty applications.
- · Chemical- and corrosion-resistant.

#### **Triple-Lip Seals – Urethane**

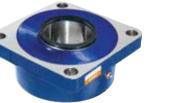
• All the benefits of Nitrile, plus more resistant to abrasion.

### **EXTERNAL AUXILIARY SEALS**

#### **Backing Plates**

Provides an extra barrier for any flange block or flange cartridge application requiring secondary sealing from the back side.





Urethane



Solid Steel

#### **Urethane Covers**

Ability to fill with grease for an extra barrier of protection to help prevent contamination from reaching the primary seal.



OPEN Available with triple lip contact seal



**CLOSED** Complete enclosure with grease cavity

#### **Steel Covers**

Made from Black Oxide treated steel for durable protection from hard particle contamination and corrosion. Also has the ability to fill with grease for an extra barrier of protection.



**OPEN** With Teflon labyrinth seal



CLOSED Complete enclosure with grease cavity

#### STANDS UP TO HARSH CONDITIONS

**Protects Bearing.** Harsh operating environments and lubrication issues often lead to housed unit bearing damage. Timken<sup>®</sup> solid-block housed units multiply protection with primary and secondary seal options, including steel covers in sizes to fit all Timken solid-block housed units. The space between the primary and secondary seal offers a fillable grease cavity for more protection.

Handles Misalignment. Without a properly aligned shaft, the life expectancy of housed units can decrease. However, Timken spherical roller bearing solid-block housed units run efficiently on misaligned shafts up to 1.5 degrees, thanks to their unique design and Timken<sup>®</sup> spherical roller 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 power transmission rebuild and repair services.

#### Stronger. By Design.