

# TIMKEN

Where You Turn



Timken<sup>®</sup> Fafnir<sup>®</sup> Ball Bearing Housed Units

Since introducing the wide inner ring bearing design in the early 1900s, the Fafnir brand has been a leading name in ball bearing housed units. Today, the Timken® Fafnir® names can be found on a wide array of housed units.



Every product is designed with the same idea in mind – to maximize performance. The Timken Fafnir difference is the ability to understand the demands of the application and provide the right product at the right time. You can see the difference in our advances in the bearing, sealing, locking systems and housings. And it's in our manufacturing processes that implement improvements and instill quality.

The ability to combine this distinguished history with a dedication to innovate in the future provides us with the expertise, product breadth and drive for continuous improvement to welcome your most difficult challenges. That's what makes us different. We've been there. Yet, we proactively pursue new paths as required by the needs of your equipment and company.

#### **The Fafnir Difference**

Buying Fafnir means more than just a bearing. The product inside each box represents decades of experience. The lessons learned and engineering applied result in reliable performance.

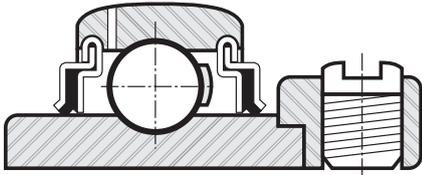
## A Range of Products to Suit Your Technical and Commercial Demands

The Timken Fafnir portfolio has been designed to provide the right solutions for all of your needs. We have four standard series of housed units, each with distinct characteristics and levels of service, allowing appropriate bearing selection.



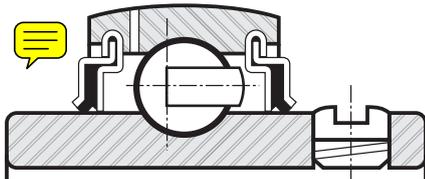
*At the Pulaski, Tenn. plant, Timken associates complete quality checks on inner and outer rings, as well as other components, prior to assembly. All housed units are manufactured to exacting specifications, to improve performance and extend bearing life.*

## Industrial Duty



*"R" Series*

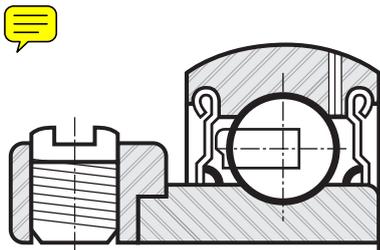
FEATURE	BENEFIT
Full width	More tolerant of static misalignment and accepts a more aggressive seal.
Three-piece R-seal with fiber	Longer sealing integrity provided by outboard and inboard caps.
Eccentric locking collar	Self-tightens in application with no shaft damage.



*"Y" Series*

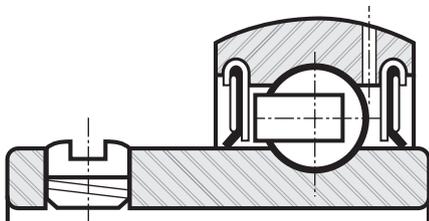
FEATURE	BENEFIT
Full width	More tolerant of static misalignment and accepts a more aggressive seal.
Three-piece R-seal with fiber	Longer sealing integrity resulting from outboard and inboard caps.
Set screw locking with Shaft Guard technology	Easy to install, well suited for reversing applications, and protects shaft from set screw damage.

## Standard Duty



*"V" Series*

FEATURE	BENEFIT
Narrow width	Ideal where space is limited.
Model R-seal	Buna-N rubber contact. Shroud to protect seal and rabbet to prevent seal lip inversion.
Eccentric locking collar	Self-tightens in application with no shaft damage.



*"S" Series*

FEATURE	BENEFIT
Narrow width	Ideal where space is limited.
Three-piece seal	Buna-N rubber contact. Shroud to protect seal and inner cap to prevent seal lip inversion.
Set screw locking	Easy to install and ideal for reversing applications.

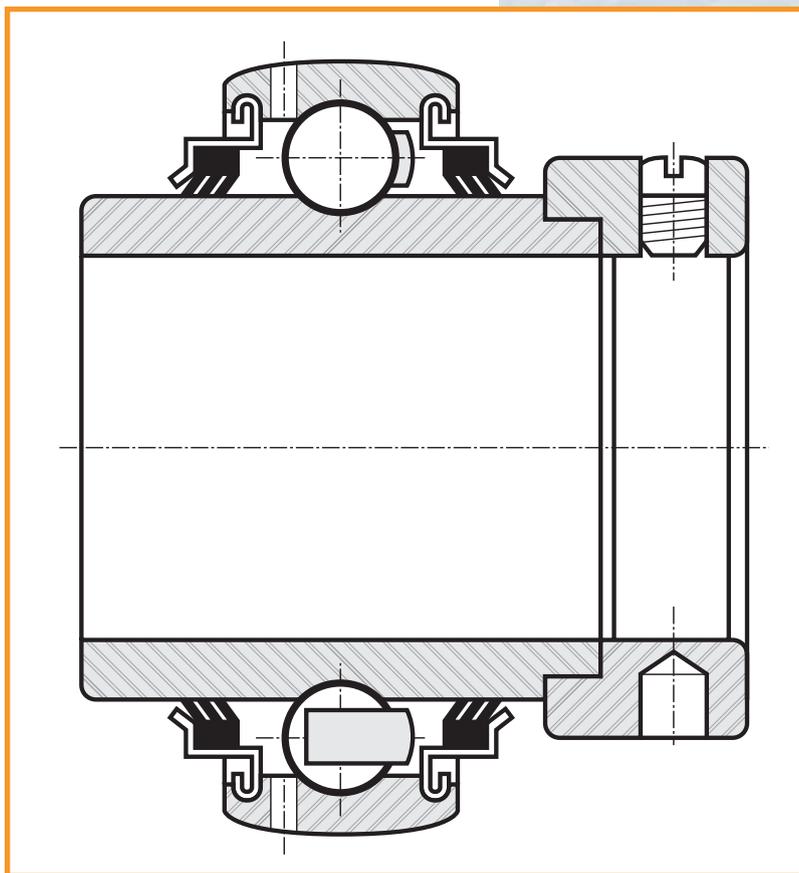
# Focused Solutions

In addition to our standard offering, Timken Fafnir housed units feature specialized product lines to solve specific application concerns. Our problem solver series helps prevent downtime by using superior technology to keep equipment running efficiently and improve your bottom line.



## Tri-Ply Series

*For Extra Protection  
Against Contaminants*

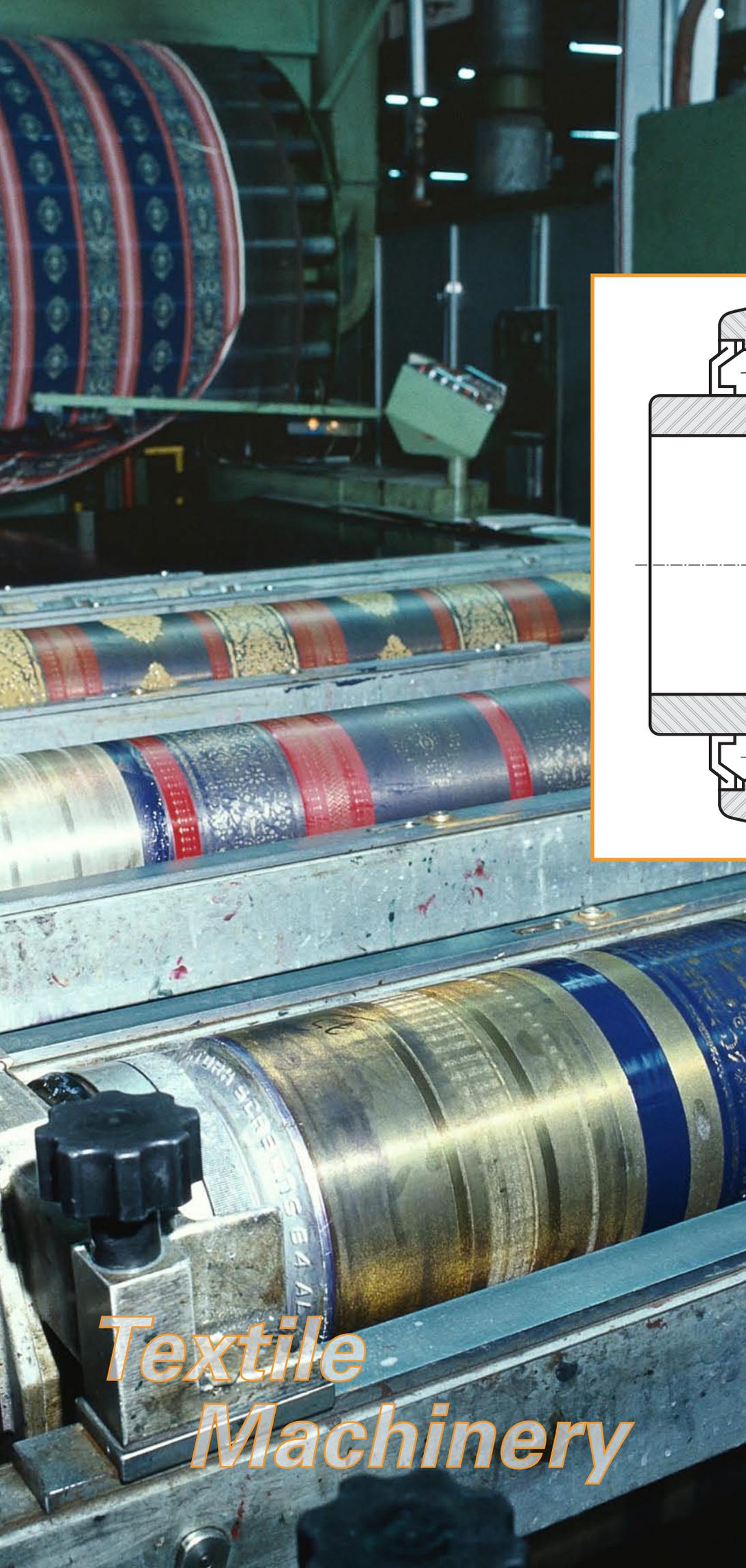


Tri-Ply Series products contain a “tri-ply” shroud seal, featuring an outboard cap to protect the seal from fiber wrap and abrasion, and three lips of rubber to prevent ingress of foreign materials. These features provide an extra layer of protection against moisture and contaminants. (Speed is limited to 500 rpm. For higher speeds, contact your Timken sales representative.)

*The Tri-Ply Series provides  
extra protection against  
moisture and contaminants.*

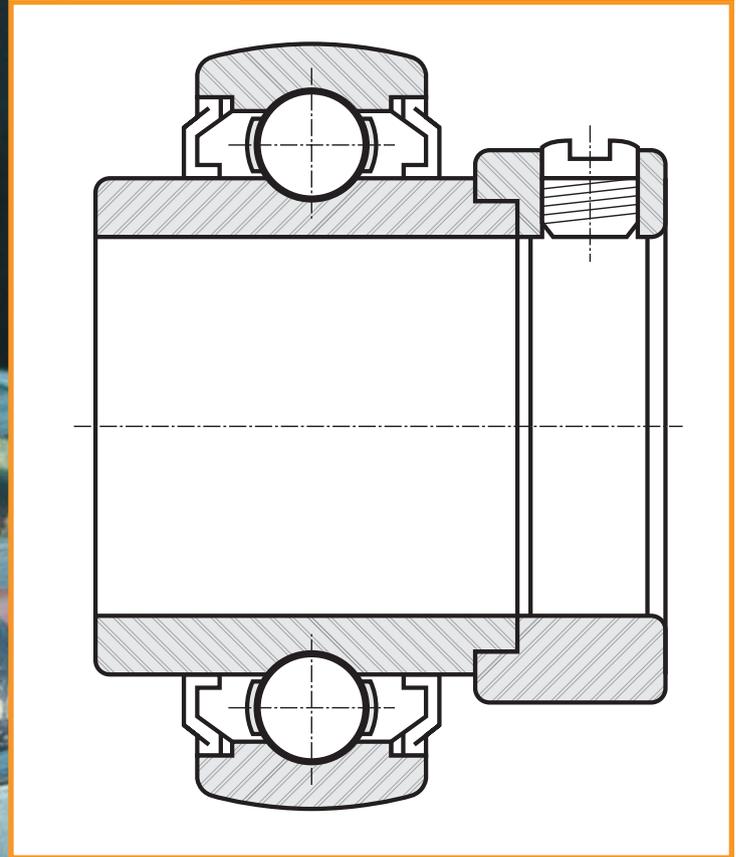


# *Harvesting Equipment*



## L Series

*For High-Speed and High-Temperature Environments*



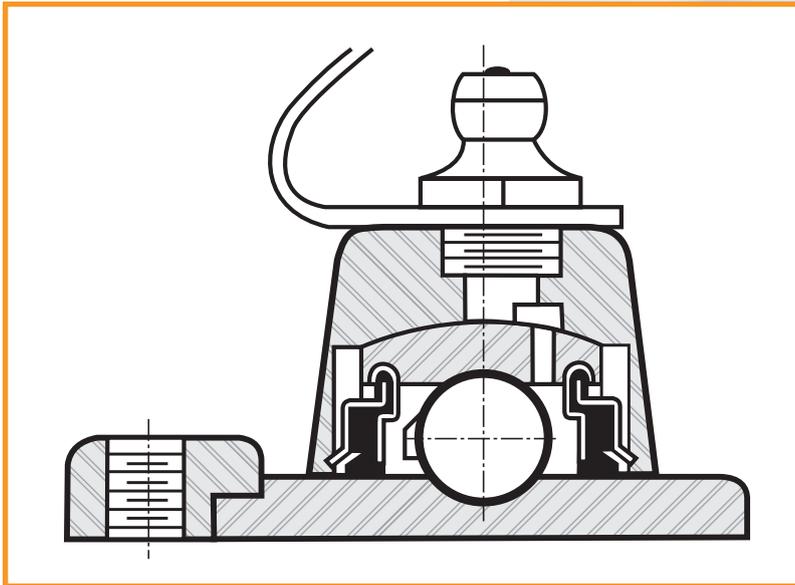
L Series products have a labyrinth-type Mechani-Seal with low rotational torque for higher speeds and/or higher temperatures. Frictionless Mechani-Seals and heat-stabilized components, including a steel retainer and high-temperature lubricant, help ensure a higher level of performance in extreme environments.

*Textile  
Machinery*

*The L Series features heat-stabilized components to enhance performance.*

## Timken® Survivor® Series

*For Highly Corrosive Applications*



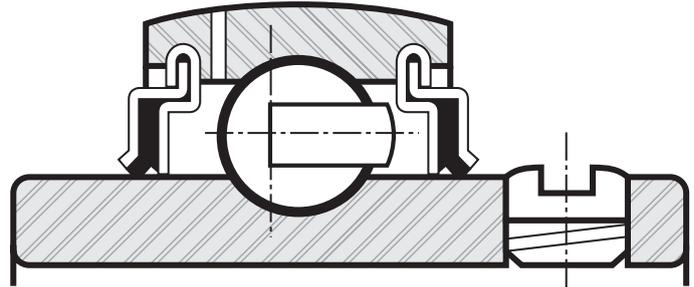
Timken® Survivor® Series pillow block and flanged units excel in highly corrosive environments. A proprietary thin-dense chrome (TDC) coating is applied to all bearing inserts for superior corrosion protection. The TDC coating is designed to not crack or peel under known application conditions. NT series Survivor units feature an electroless nickel-plated housing, stainless steel balls, a stainless steel self-locking collar and FDA/USDA-compliant grease to prevent contamination. PT series Survivor units afford all of the benefits of the NT series but feature corrosion-proof polymer housings. PS series Survivor units have polymer housings and a 300 series stainless steel insert to provide the highest possible corrosion resistance. Both the PT and PS series units have an engineered polymer housing that is FDA/USDA compliant.

*Timken Survivor Series bearings deter corrosion resulting from exposure to water, which is common in food processing machines.*



# *Food Processing*

## Medium-Duty Series *For Heavier Loads*



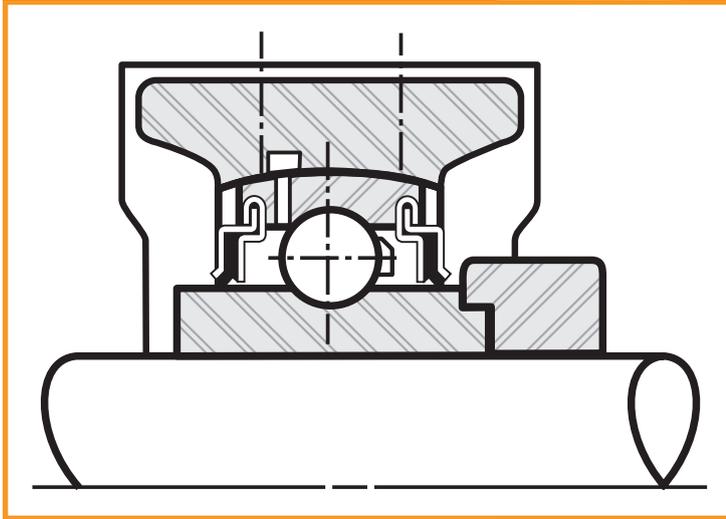
Medium-Duty Series housed units can provide reliable performance and extended life under heavier loads. A larger bearing insert provides 30 percent additional capacity for each shaft size. Super-finished raceways and grade 10 balls reduce vibration and noise. The full width inner ring, engineered nylon retainer and unique patch on the set screws, allows it to operate for extended periods with undersized shafts or misalignment conditions. An environmentally safe powder coating protects the housing while a three-piece R-seal keeps contaminants out of the bearing. The design offers extra storage capacity for double-filtered polyurea-based grease for maximum lubrication.

# *Saw Mills*

*Medium-Duty Series housed units accommodate higher loads and feature enhanced sealing technology.*

## Heavy-Duty Series

*For Continuous Heavy or Shock Loads*



*The RABR (above) and SAOL (below) housed units are specifically designed for HVAC operations.*



*Timken products help offer reliable protection, longer life and enhanced performance for HVAC machinery.*

# HVAC

# More than Pillow Blocks

Pillow blocks are the most common type of housed units, but the broad range of challenges in the industrial marketplace makes it impossible for one size, shape or function to meet all needs. The same Fafnir bearing inserts that drive superior pillow block performance are available in a wide range of housed units. Determine your type by application and mounting requirements. Within the basic type selected, variations allow for load factors, shaft sizes, mounting surface dimensions, base-to-shaft centerline heights and lubrication requirements.

## Flanged Units

Flanged units are used where a shaft passes through the machine frame at a right angle. A four-bolt mounting is the most common. Where mounting is restricted, two- and three-bolt versions are available. A piloted flanged unit can provide additional mounting accuracy and support. Flanged cartridges are supplied in multiple series (standard and heavy duty) and materials (iron and rubber). Also, a complete line of flangettes – pressed steel flanged units – provides an economical solution for light-duty applications.

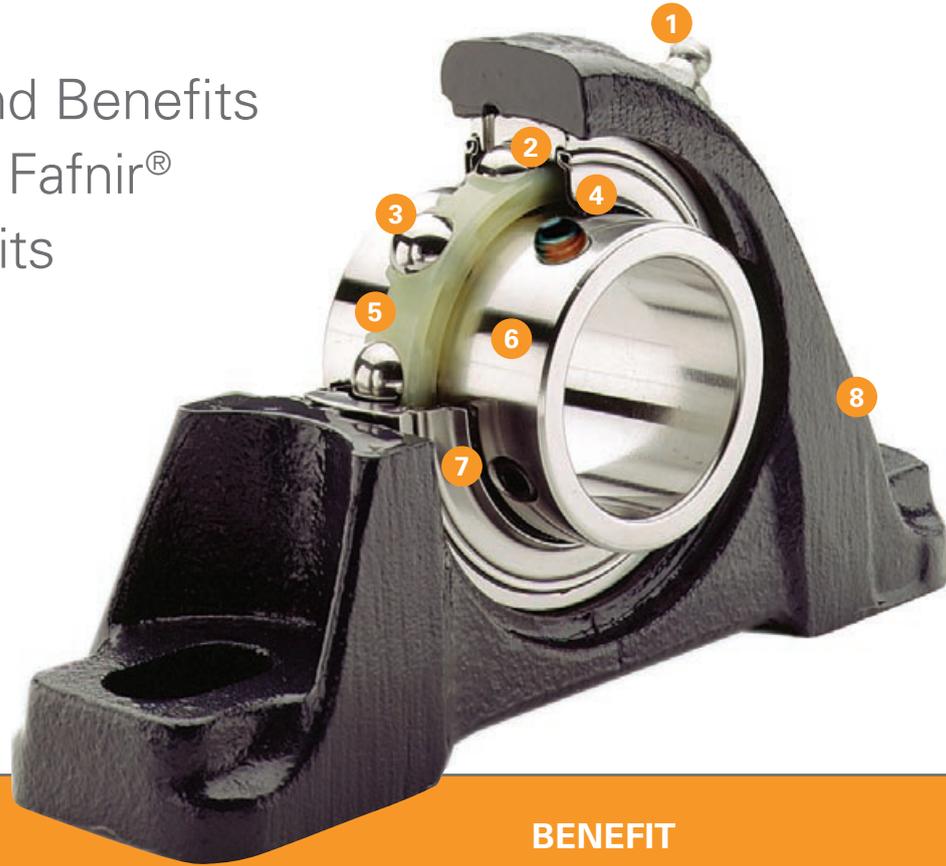


## Take-up Units

Take-up units are used where shaft alignment and belt tightening devices are required. The most common application is conveyors. Frames for take-up units provide side or top mounting.



# Features and Benefits of Timken® Fafnir® Housed Units



FEATURE	BENEFIT
1. Grease fitting offset	Minimized risk of accidental and side impact, while maintaining accessibility for single-point lubricators.
2. Fafnir curl	Mechanical attachment of seal is secure, resisting “pop-out” during re-lube and inhibiting spinning of the seal in the outer ring seal groove.
3. Grade 10 balls	Quiet and smoother-running bearings resulting from higher specification steel and improved roundness.
4. Buna-N seal material	Buna-N rubber has cotton fiber, embedded to wick oil, which enhances lubrication and improves sealing integrity.
5. 6/6 nylon heat stabilized retainer	Excellent misalignment capability. Resists size changes and moisture trapping. Non-corrosive and self-lubricating, as well as resistant to abrasion, wear and most solvents.
6. Super-finished raceways	Even surfaces reduce friction, leading to cooler, quieter running and longer life.
7. Hardened and ground seal land	Seal protected from inner ring abrasion, resulting in less wear (longer life) and prolonged seal integrity.
8. Powder coat finish	Chipping, scratching and subsequent exposure to parent metal is reduced, helping to prevent corrosion.
9. Special quality steel	Fewer carbides, inclusions and voids result in reduced risk of stress risers that can cause premature fatigue.
10. Double-filtered polyurea grease	Particles that can cause noise in application are removed. Improved lubrication cleanliness also leads to superior performance at higher speeds.
11. Housing tolerances	Better grease purge throughout the bearing due to reduced risk of grease purge at outer diameter.

# Friction Management Solutions<sup>SM</sup>

For more than 100 years, customers have turned to Timken for solutions. During that time, our knowledge has grown beyond bearings. Timken Fafnir housed units can be supplemented with other Timken products. Our comprehensive friction management and power transmission solutions are the reason that customers around the world turn to Timken.

Timken single-point lubricators, grease and condition monitoring equipment work with Timken Fafnir housed units to improve performance. Our expanding line of bearings and related products meet virtually all of your needs. Each product is made to the same exacting quality standards you've come to expect.

## First, the bearing. Then:

How do you monitor the health of your bearing? *You can use StatusCheck™, handheld devices or Timken Reliability Services.*



How do you plan to lubricate the bearing? *There are many advantages to using Timken lubricants.*



Do you need a simplified method of lubricating bearings? *Use Timken G-Power and M-Power single-point lubricators.*



Do you plan to protect machinery from contamination? *There are many advantages to using Timken's line of industrial seals.*



Are you OSHA compliant? *Timken safety end caps are designed for exposed stub shafts.*

**Less Friction.**  
**More Solutions**



**TIMKEN**  
Where You Turn

For more information on  
Timken Fafnir ball bearing  
housed units for your  
industrial applications,  
contact your local Timken  
sales representative or  
visit [www.timken.com](http://www.timken.com).



# TIMKEN

Where You Turn

Bearings • Steel •  
Precision Components • Lubrication •  
Seals • Remanufacture and Repair •  
Industrial Services

[www.timken.com](http://www.timken.com)

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