



## Fafnir 7000 Series Angular Contact Pump Bearings

High-performance angular contact ball bearings with rugged bronze retainers provide maximum service life in demanding pump applications

Timken Fafnir® 7000 series angular contact ball bearings provide outstanding performance in the most demanding petrochemical and other pump applications. This reliable new bearing design helps achieve higher productivity and longer system life.

The rugged machined bronze retainer reduces the risk of sudden failure that can cause costly downtime. A combination of features provides the high thrust capacity required by today's pumps. ABEC 3 bore tolerance controls shaft fit to attain the specified preload and maximum service life. Cooler operating temperatures also serve to enhance system life.

### 7000 Series Benefits

Machined bronze retainer – Rugged construction provides longer life.

Land-riding retainer – allows better lubricant flow, higher speed and cooler operation.

40° contact angle – high thrust shoulders increase load capacity.

Extra-precision bore tolerance – extends service life by minimizing induced preload due to shaft fit.

WN bearing design – advanced internal geometry promotes optimal lubricant flow.

API610 standard – meets rigorous petrochemical industry requirements.

Reduced downtime – Rugged retainer and bearing design resists sudden failure, supporting predictive maintenance programs.

Universally ground faces – Allow flexibility in obtaining specified preload for duplex mounting.

Full size range – All features including machined bronze retainer are available across the entire product line.

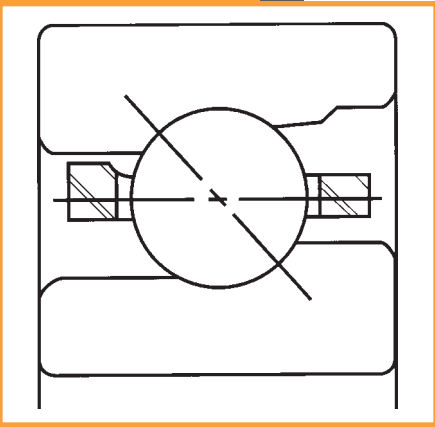
Design variations – Also available with standard brass retainer for less demanding applications.

### Applications

- Petrochemical pumps
- Wellhead pumps
- Cement pumps
- Paper mill pumps
- Maritime pumps
- Mining pumps
- Industrial pumps
- Gear drives
- Gearboxes
- Spindles
- Live centers

*Rugged bronze retainers help Timken Fafnir 7000 series ball bearings sets new performance standards in the toughest pump applications.*

- Higher load capacity
- Longer service life/reduced system downtime
- Wide range of applications



## Bearing Design

Fafnir 7000 series angular contact bearings are specifically designed to meet the most demanding pump requirements. Maximum thrust load capacity is obtained through the combination of a 40° contact angle with high thrust shoulders on both rings. Opposing shoulders are fully relieved to improve lubricant flow. Precision bore tolerances and universally ground faces act to control shaft fit and preload.

*The Fafnir 7000 series design provides maximum thrust capacity and extended service life.*

## Rugged Retainer

This new design provides a variety of key operating benefits. The strong, machined bronze construction resists catastrophic failures. The land-riding design allows higher speeds with less internally generated friction and heat. This enables the bearing to run cooler and extends service life.

## Predictive Maintenance

The proven dependability of Fafnir 7000 series angular contact bearings contributes to the success of today's predictive maintenance programs. Extended service life allows vibrational analysis to identify bearing replacement intervals without unexpected downtime.

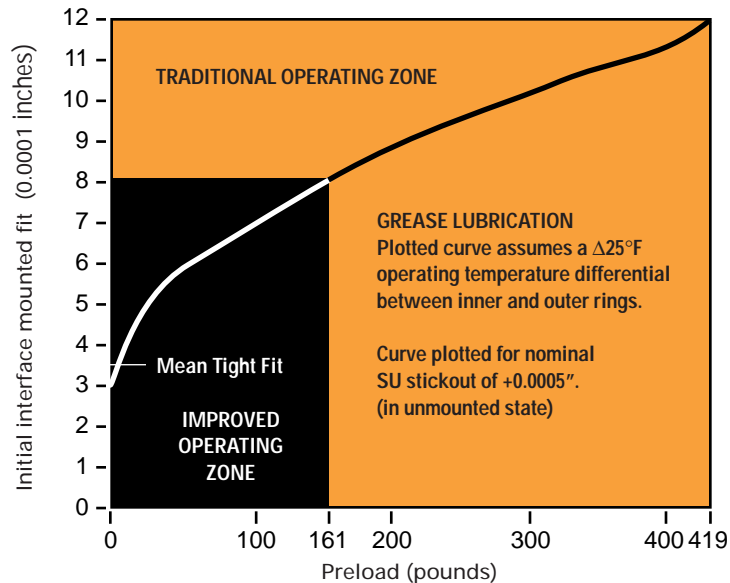
## Applications

Dedicated engineering results in an outstanding package of features for petrochemical and other pump applications. These include refinery systems, deep well units, vertical and horizontal pumps, gearboxes and drives, spindles and live centers. There are similar performance benefits for industrial, mining and maritime pump installations.

*Available in 7200, 7300 and 7400 series. Sizes through 150mm bore.*

## 7312 WN SU preload buildup curve with ABEC 3 bore and Fafnir recommended shaft size

Closely conforms to ANSI/AFBMA j5 shaft fit



*A significant extension in bearing life results from a substantial reduction in bearing preload buildup.*

For your nearest Timken sales representative, call (800) 223-1954. Outside the U.S. and Canada, call (330) 438-3000.

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