TIMKEN

Engineered Marine Solutions

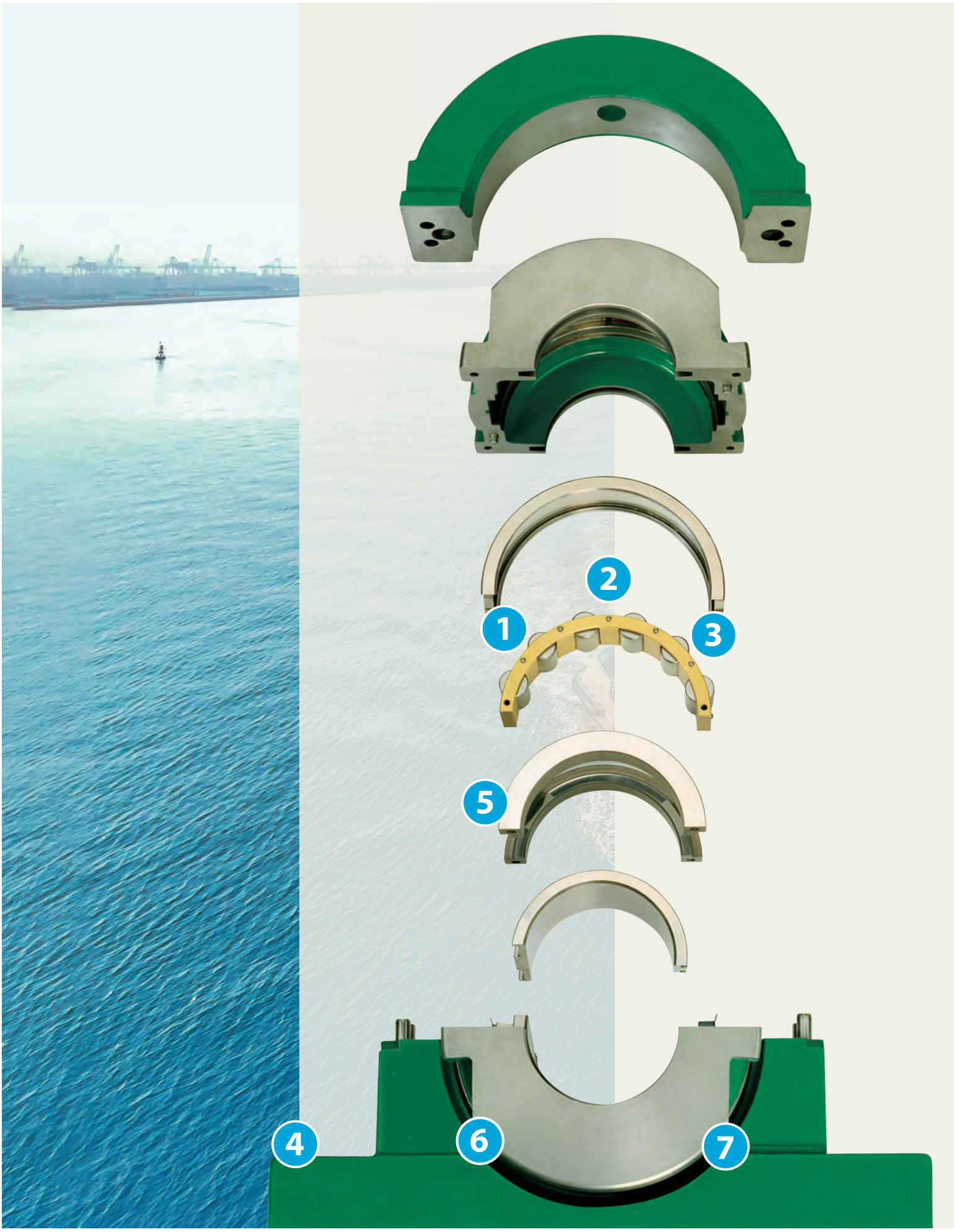




TIMKEN SPLIT CYLINDRICAL ROLLER BEARINGS

FOR MARINE PROPULSION

Stronger. By Design.


1
2
3
4
5
6
7





Maximize Service Life with Timken® Split Cylindrical Roller Bearings

In Marine Propulsion maximizing service life is critical due to maintenance cost and downtime. With Timken® split roller bearings, propulsion shafts don't have to be completely removed to replace or service the bearings, which significantly reduces maintenance time.

The complete range of Timken split roller bearings incorporate a number of innovative features that offer improved performance. From concept to production, throughout the life cycle of the unit, Timken's split roller bearing range has been designed to maximize the service life of every component.

Standard Marine Product Features

1

Machined-Brass Cage

- Accommodates higher speeds and temperatures
- Stands up to acceleration forces
- Reduces noise



2

Integrated Cage Clips

- Simplifies assembly
- Eliminates lost cage clips

3

Anti-Vibration Cage Features

- Cage peening ensures long-term cage reliability on high-vibration applications



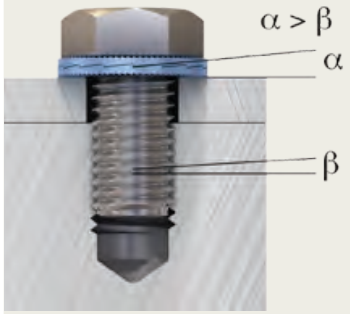


4

Jacking Screws

- Facilitates alignment during installation

5



Anti-Vibration Clamp Ring Bolts

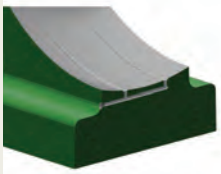
- Incorporates Nord-Lock® safety washers with wedge-locking technology
- Maintains clamping force, even in high-vibration applications

Nord-Lock® is a registered trademark of Nord-Lock International AB.

6

Spherical Lubrication Features (SLUB)*

- Spherical relubrication feature can be specified to allow bearing housing to move freely within pedestal support



7

Temperature and Vibration Probe Features (TEVB)*

- Allows for installation of monitoring equipment

**Non-standard features - available upon request.*







Benefits of Split Cylindrical Roller Bearings

At Timken, we have a detailed understanding of the marine industry's bearing requirements. This includes our innovative split cylindrical roller bearing range, which are essential components in a marine propulsion drive.

A desire to bring continuous improvement to this critical product line has led to the development of our new marine specification split roller bearing range.

Maintenance Friendly

- Split design minimizes replacement downtime
- Saves time and money compared to solid roller or sleeve bearings

Easy Installation

- Alignment challenges simplified
- Housing accepts up to 3 degrees of shaft misalignment

Simple In-Service Inspection

- All critical components can be easily inspected
- No need for realignment following inspection

Constant Alignment

- Optional spherical relubrication (SLUB) allows bearing housing to move within pedestal support
- Maintains shaft and bearing alignment during hull flexing

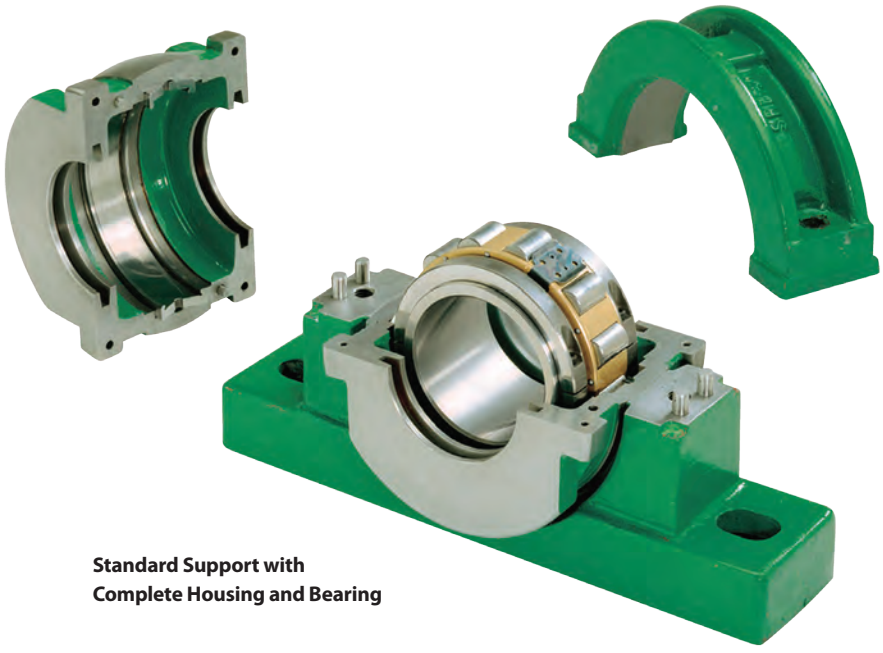
High-Performance Sealing Solutions

- Split cylindrical roller bearing seals are designed to be constantly concentric with the shaft for high performance, even with shaft misalignment
- All seals are designed to retain lubricant and resist exterior contamination and corrosive salt water



Multi-Vessel Applications

- Split roller propulsion bearings are used on a diverse range of marine vessels including ferries, offshore support vessels, tugs, workboats and ice-breakers
- Bearing are designed with either conventional propulsion shafts or waterjet drive stems



Standard Support with Complete Housing and Bearing



Flange Support







Support When You Need It

In addition to the heritage and proven performance of our Timken split cylindrical roller bearings, we also offer technical, logistical and after-sales support for both users and specifiers of marine propulsion bearings, including:

Cellular Manufacturing

- Ensures production flexibility for standard and customized products

Customized Design Service

- Supported by experienced design and bearing application engineers

Local Availability

- Improves product availability and reduces delivery times
- Local service and support through authorized distributor networks

Specialist and Customized Products

Timken products have been designed and developed to maximize service life and minimize maintenance effort.

Machined brass cages with unique single piece clips come standard, and the rolling elements are profiled to minimize damaging edge stresses while providing optimum rolling contact.

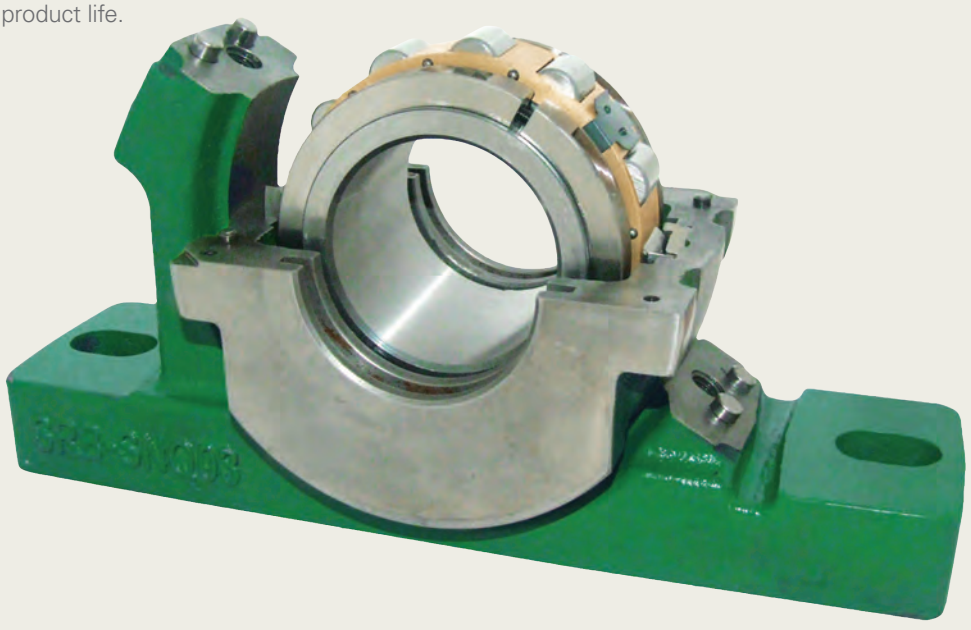
All supports and housings incorporate pry slots and doweled machined joints for easy separation. Supports are manufactured from high-strength cast iron and feature double webs and thick sections. The high rigidity and inherent strength enhances product life.

For marine applications, we add features to accommodate high vibrations and initial alignment on an uneven mounting surface.

An Angle on Performance

Timken® Quick-Fit™ split cylindrical roller bearings are engineered for reliability and performance. They reduce downtime and service costs required to install, replace and maintain bearings in difficult-to-access or trapped locations.

Since 2011, the first-of-its-kind angled support pedestal of mounted Quick-Fit bearings makes installation even easier for applications with low clearance between the base and the center of the shaft. The angled pedestal allows the drive to stay connected during installation. There's no need to re-position or lift the shaft.



INTERCHANGE

Marine Complete Units Interchange		
Craft Part Number	Cooper Part Number	Timken Part Number
S1BCH515FL	01BCP515EXAT	LSE515BXHSATLE0302
S1BCH600FL	01BCP600EXAT	LSE600BXHSATLE0302
S1BCH700FL	01EBCP700EXAT	LSE700BXHSATLE0302
S1BCH800FL	01EBCP800EXAT	LSE800BXHSATLE0302
S1BCH808FL	01EBCP808EXAT	LSE808BXHSATLE0302
S1BCH900FL	01EBCP900EXAT	LSE900BXHSATLE0302
S1BCH908FL	01EBCP908EXAT	LSE908BXHSATLE0302
S1BCH1000FL	01EBCP1000EXAT	LSE1000BXHSATLE0302
S1BCH1008FL	01EBCP1008EXAT	LSE1008BXHSATLE0302
S1BCH1100FL	01EBCP1100EXAT	LSE1100BXHSATLE0302
S1BCH1108FL	01EBCP1108EXAT	LSE1108BXHSATLE0302
S1BCH1200FL	01EBCP1200EXAT	LSE1200BXHSATLE0302
S1BCH1300FL	01EBCP1300EXAT	LSE1300BXHSATLE0302

Bearing and Cartridge		
Craft Part Number	Cooper Part Number	Timken Part Number
S1BC515FL	01BC515EXAT	LSE515BXHATLE0302
S1BC600FL	01BC600EXAT	LSE600BXHATLE0302
S1BC700FL	01EBC700EXAT	LSE700BXHATLE0302
S1BC800FL	01EBC800EXAT	LSE800BXHATLE0302
S1BC808FL	01EBC808EXAT	LSE808BXHATLE0302
S1BC900FL	01EBC900EXAT	LSE900BXHATLE0302
S1BC908FL	01EBC908EXAT	LSE908BXHATLE0302
S1BC1000FL	01EBC1000EXAT	LSE1000BXHATLE0302
S1BC1008FL	01EBC1008EXAT	LSE1008BXHATLE0302
S1BC1100FL	01EBC1100EXAT	LSE1100BXHATLE0302
S1BC1108FL	01EBC1108EXAT	LSE1108BXHATLE0302
S1BC1200FL	01EBC1200EXAT	LSE1200BXHATLE0302

Bearing Only		
Craft Part Number	Cooper Part Number	Timken Part Number
S1B515FL	01B515EXAT	LSE515BXE0302
S1B600FL	01B600EXAT	LSE600BXE0302
S1B700FL	01EB700EXAT	LSE700BXE0302
S1B800FL	01EB800EXAT	LSE800BXE0302
S1B808FL	01EB808EXAT	LSE808BXE0302
S1B900FL	01EB900EXAT	LSE900BXE0302
S1B908FL	01EB908EXAT	LSE908BXE0302
S1B1000FL	01EB1000EXAT	LSE1000BXE0302
S1B1008FL	01EB1008EXAT	LSE1008BXE0302
S1B1100FL	01EB1100EXAT	LSE1100BXE0302
S1B1108FL	01EB1108EXAT	LSE1108BXE0302
S1B1200FL	01EB1200EXAT	LSE1200BXE0302
S1B1300FL	01EB1300EXAT	LSE1300BXE0302

NOMENCLATURE

LS | M | 100 | BX | ATL | E0302

Bearing Material
For most commonly used bearings this will be either:

LS Light Series
MS Medium Series
HS Heavy Series

Unit of Measure

E Imperial Sizes (English)
M Metric Sizes

Bearing Size (Shaft Size)
Imperial sizes are given in inches followed by 16ths.

207 $2\ ^{7}/_{16}$ inches
508 $5\ ^{8}/_{16} – 5\ ^{1}/_{2}$ inches
1004 $10\ ^{4}/_{16} – 10\ ^{1}/_{4}$ inches

Metric sizes are given in millimeters (mm).

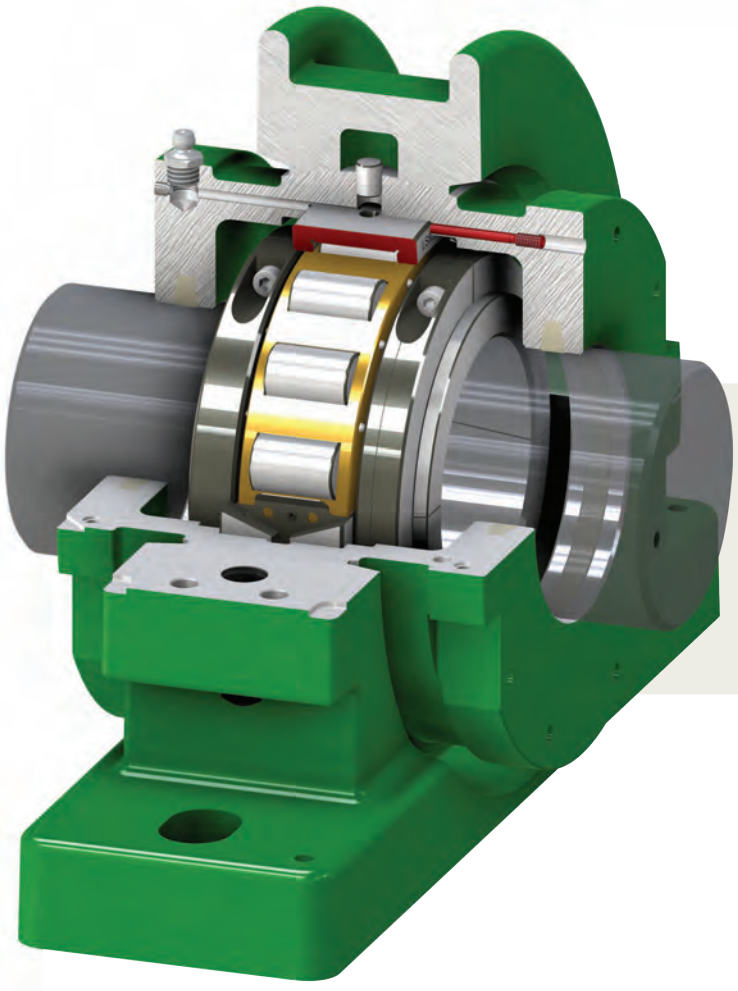
Seal
Aluminum Triple Labyrinth

Additional Suffixes*
For marine applications, add the suffix E0302 to the complete part number

Unit Type
These can indicate individual bearings, housings or combinations for assemblies.

BX	Bearing, expansion type
BR	Bearing, retained type
HXTL	Housing, expansion type
HRTL	Housing, retained type
BRHATL	Bearing, housing, retained type
BXHATL	Bearing, housing, expansion type
BXHSATL	Bearing, housing and support, expansion type
BRHSATL	Bearing, housing and support, retained type
BXHFATL	Bearing, housing, expansion type and flange support
BRHFATL	Bearing, housing, retained type and flange support

**See the split cylindrical roller bearing catalog (order number 10868) for additional suffix codes.*



Call on Timken

For your nearest Timken sales representative, visit www.timkenmarine.com.

APPROVED LR TYPE APPROVAL SCHEME

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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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