Timken® Type E Tapered Roller Bearing Housed Units

TIMKEN

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Longer Life and Better Performance from the Bearing Expert

Timken engineers have applied more than 110 years of expertise in bearing technology – and leadership in tapered roller bearings – to bring you an optimized performance tapered roller bearing housed unit. We have improved our own design to create the new standard in performance.

Application testing has shown that our new Type E bearing yields a design life that is 55 percent higher than current industry leading designs which utilize standard Timken bearings.

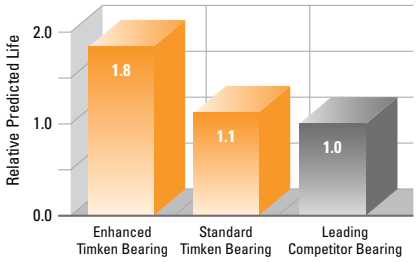
From the bearings, seals and grease to housings and collars, our innovative design incorporates features that can help withstand the most demanding application conditions – resulting in less downtime, reduced maintenance intervals and an overall lower cost of ownership. We have optimized the core components so that their performance is elevated to a level we consider as the next generation of roller housed units.

How do we do it? The answer is in our unique product design.

Enhanced-Performance Bearings

Timken® Type E roller bearings have a significantly higher load carrying capability. We have designed in enhanced surface textures and optimized profiles. This results in a 55 percent increase in life over industry-standard housed units equipped with standard Timken bearings. Our Type E bearings also experience lower internal contact stresses and frictional drag. Beyond bearing life, these bearings are designed to deliver the ability to manage up to three-times more misalignment than industry-standard designs.

Bearing Life Analysis Comparison

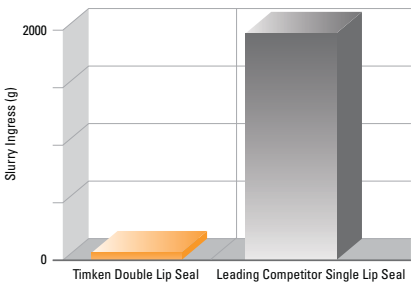


Comparison of the new, optimized Timken bearing with a standard Timken bearing (used widely by most Type E suppliers) and a new bearing from a leading industry competitor.
Note: Life tests of Timken tapered roller bearings verified by Germanischer Lloyd.

Double Lip Seals

By helping to keep debris and water out while retaining grease longer, maintenance intervals can be reduced, thereby contributing to lower maintenance costs. The seals in our Type E housed units optimize contact geometries that promote greater grease retention and significantly reduce contaminant ingress.

Seal Performance (Mud/Salt Slurry Ingress Test)



Slurry ingress test results of the Timken Type E seal compared with the R seal design of a leading competitor. Seal operating at 250 rpm in a salt and mud slurry mixture for 75 hours.

Premium Grease

Maintenance costs are further reduced due to the extra protection provided by Timken® premium all-purpose industrial grease. Our unique grease formulation contains extreme pressure and anti-wear additives as well as corrosion inhibitors. This grease works effectively in applications with operating temperatures ranging from -40°F to +300°F (-40°C to +149°C). It is compatible with calcium- and lithium- thickened greases.

Housings And Locking Collars

Our designs incorporate ASTM-A48 Grade 30 Cast Iron for the housing. Featuring better corrosion resistance than the industry-standard powder coating, our electro-disposition coating (e-coating) on the housing and locking collars helps reduce overall maintenance costs by protecting exposed surfaces.

In addition, our Type E roller housed units are dimensionally interchangeable with all other leading brands.

Timken® Type E Tapered Roller Bearing Housed Units

Timken® Type E tapered roller bearing housed units are available in a wide variety of sizes and configurations to meet the requirements of demanding applications. They are dimensionally interchangeable with current suppliers for all key characteristics, including the bolt hole and shaft centerline dimensions. Popular part numbers are in stock for immediate availability. Metric sizes also are available in shaft diameters ranging from 35 mm to 125 mm.

Shaft Size	TIMKEN® PN	DODGE® PN	SEALMASTER® PN	Browning® PN	ROYERSFORD™ PN	MOLINE PN
Pillow Block 2-Bolt Base						
1 3/16	E P2B TRB 1 3/16	023000 (P2B-E-103R)	RPB-103 -2 or -C2	PBE-920-1 3/16	20-02-0103	19321103
1 1/4	E P2B TRB 1 1/4	023001 (P2B-E-104R)	RPB-104 -2 or -C2	PBE-920-1 1/4	20-02-0104	19321104
1 3/8	E P2B TRB 1 3/8	023002 (P2B-E-106R)	RPB-106 -2 or -C2	PBE-920-1 3/8	20-02-0106	19321106
1 7/16	E P2B TRB 1 7/16	023003 (P2B-E-107R)	RPB-107 -2 or -C2	PBE-920-1 7/16	20-02-0107	19321107
1 1/2	E P2B TRB 1 1/2	023004 (P2B-E-108R)	RPB-108 -2 or -C2	PBE-920-1 1/2	20-02-0108	19321108
1 5/8	E P2B TRB 1 5/8	023005 (P2B-E-110R)	RPB-110 -2 or -C2	PBE-920-1 5/8	20-02-0110	19321110
1 11/16	E P2B TRB 1 11/16	023006 (P2B-E-111R)	RPB-111 -2 or -C2	PBE-920-1 11/16	20-02-0111	19321111
1 3/4	E P2B TRB 1 3/4	023007 (P2B-E-112R)	RPB-112 -2 or -C2	PBE-920-1 3/4	20-02-0112	19321112
1 7/8	E P2B TRB 1 7/8	023008 (P2B-E-114R)	N/A	N/A	20-02-0114	19321114
1 15/16	E P2B TRB 1 15/16	023009 (P2B-E-115R)	RPB-115 -2 or -C2	PBE-920-1 15/16	20-02-0115	19321115
2	E P2B TRB 2	023010 (P2B-E-200R)	RPB-200 -2 or -C2	PBE-920-2	20-02-0200	19321200
2 3/16	E P2B TRB 2 3/16	023011 (P2B-E-203R)	RPB-203 -2 or -C2	PBE-920-2 3/16	20-02-0203	19321203
2 1/4	E P2B TRB 2 1/4	023012 (P2B-E-204R)	RPB-204 -2 or -C2	PBE-920-2 1/4	20-02-0204	19321204
2 7/16	E P2B TRB 2 7/16	023013 (P2B-E-207R)	RPB-207 -2 or -C2	PBE-920-2 7/16	20-02-0207	19321207
2 1/2	E P2B TRB 2 1/2	023014 (P2B-E-208R)	RPB-208 -2 or -C2	PBE-920-2 1/2	20-02-0208	19321208
2 11/16	E P2B TRB 2 11/16	023015 (P2B-E-211R)	RPB-211 -2 or -C2	PBE-920-2 11/16	20-02-0211	19321211
2 3/4	E P2B TRB 2 3/4	023016 (P2B-E-212R)	RPB-212 -2 or -C2	PBE-920-2 3/4	20-02-0212	19321212
2 15/16	E P2B TRB 2 15/16	023017 (P2B-E-215R)	RPB-215 -2 or -C2	PBE-920-2 15/16	20-02-0215	19321215
3	E P2B TRB 3	023018 (P2B-E-300R)	RPB-300 -2 or -C2	PBE-920-3	20-02-0300	19321300
3 3/16	E P2B TRB 3 3/16	023019 (P2B-E-303R)	RPB-303 -2 or -C2	PBE-920-3 3/16	20-02-0303	19321303
3 1/4	E P2B TRB 3 1/4	023020 (P2B-E-304R)	N/A	N/A	20-02-0304	19321304
3 7/16	E P2B TRB 3 7/16	023021 (P2B-E-307R)	RPB-307 -2 or -C2	PBE-920-3 7/16	20-02-0307	19321307
3 1/2	E P2B TRB 3 1/2	023022 (P2B-E-308R)	RPB-308 -2 or -C2	PBE-920-3 1/2	20-02-0308	19321308
Pillow Block 4-Bolt Base						
2 1/4	E P4B TRB 2 1/4	023023 (P4B-E-204R)	RPB-204 -4 or -C4	PBE-920F-2 1/4	20-04-0204	19341204
2 7/16	E P4B TRB 2 7/16	023024 (P4B-E-207R)	RPB-207 -4 or -C4	PBE-920F-2 7/16	20-04-0207	19341207
2 1/2	E P4B TRB 2 1/2	023025 (P4B-E-208R)	RPB-208 -4 or -C4	PBE-920F-2 1/2	20-04-0208	19341208
2 11/16	E P4B TRB 2 11/16	023026 (P4B-E-211R)	RPB-211 -4 or -C4	PBE-920F-2 11/16	20-04-0211	19341211
2 3/4	E P4B TRB 2 3/4	023027 (P4B-E-212R)	RPB-212 -4 or -C4	PBE-920F-2 3/4	20-04-0212	19341212
2 15/16	E P4B TRB 2 15/16	023028 (P4B-E-215R)	RPB-215 -4 or -C4	PBE-920F-2 15/16	20-04-0215	19341215
3	E P4B TRB 3	023029 (P4B-E-300R)	RPB-300 -4 or -C4	PBE-920F-3	20-04-0300	19341300
3 3/16	E P4B TRB 3 3/16	023030 (P4B-E-303R)	RPB-303 -4 or -C4	PBE-920F-3 3/16	20-04-0303	19341303
3 1/4	E P4B TRB 3 1/4	023031 (P4B-E-304R)	N/A	N/A	20-04-0304	19341304
3 7/16	E P4B TRB 3 7/16	023032 (P4B-E-307R)	RPB-307 -4 or -C4	PBE-920F-3 7/16	20-04-0307	19341307
3 1/2	E P4B TRB 3 1/2	023033 (P4B-E-308R)	RPB-308 -4 or -C4	PBE-920F-3 1/2	20-04-0308	19341308
3 15/16	E P4B TRB 3 15/16	023690 (P4B-E-315R)	RPB-315 -4 or -C4	PBE-920F-3 15/16	20-04-0315	19341315
4	E P4B TRB 4	023691 (P4B-E-400R)	RPB-400 -4 or -C4	PBE-920F-4	20-04-0400	19341400
4 7/16	E P4B TRB 4 7/16	023692 (P4B-E-407R)	RPB-407 -4 or -C4	PBE-920F-4 7/16	20-04-0407	19341407
4 1/2	E P4B TRB 4 1/2	023693 (P4B-E-408R)	RPB-408 -4 or -C4	PBE-920F-4 1/2	20-04-0408	19341408
4 15/16	E P4B TRB 4 15/16	023694 (P4B-E-415R)	RPB-415 -4 or -C4	PBE-920F-4 15/16	20-04-0415	19341415
5	E P4B TRB 5	023695 (P4B-E-500R)	RPB-500 -4 or -C4	PBE-920F-5	20-04-0500	19341500

To learn more about our expanded series of Timken® roller bearing housed units and our extensive offering of other friction management products and services, contact your local Timken representative or visit www.timken.com.

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 high-performance mechanical components, including bearings, gears, belts, chain and related mechanical power transmission products and services.

Stronger. **Commitment.** Stronger. **Value.** Stronger. **Worldwide.** Stronger. **Together.** | **Stronger.** By Design.

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