

Factory-Verified Replacement

MERYDOM 092.40.2003.990.11.1502

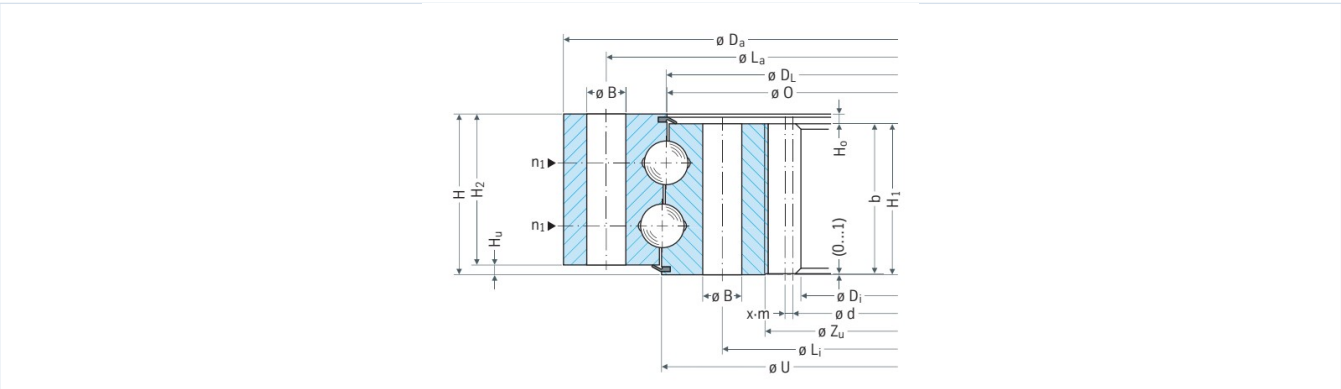
Certified for interchange with Rothe Erde 092.40.2003.990.11.1502. This document consolidates the public product record, complete published specifications, technical media, source traceability and engineering confirmation notes.

**LEVEL 3 - MERYDOM ENGINEERING VERIFIED**

Reviewed by MERYDOM Engineering Department. Final application approval must confirm loads, duty cycle, mounting rigidity, bolt capacity, lubrication and operating conditions.

|                         |                                    |
|-------------------------|------------------------------------|
| MERYDOM MODEL           | REFERENCE                          |
| 092.40.2003.990.11.1502 | Rothe Erde 092.40.2003.990.11.1502 |
| SERIES                  | STRUCTURE                          |
| 09 Series               | Double-row four-point contact ball |
| OVERALL OD              | OVERALL ID                         |
| 2,192 mm                | 1,750 mm                           |
| OVERALL HEIGHT          | GEAR                               |
| 148 mm                  | Internal gear                      |

Published Technical Drawing



page-092-outline.png

## Complete Product Data

All values below are generated from the current public verified replacement record. Source values are retained and metric references are shown where available.

| MERYDOM CERTIFIED PRODUCT            |                                        |
|--------------------------------------|----------------------------------------|
| Product brand                        | MERYDOM                                |
| MERYDOM model                        | 092.40.2003.990.11.1502                |
| Certified interchangeable with       | Rothe Erde 092.40.2003.990.11.1502     |
| Verification status                  | Level 3 - MERYDOM Engineering Verified |
| Reviewed by                          | MERYDOM Engineering Department         |
| Public record UID                    | DJZ2MOYBKJK4NKI2VBAG4JMGGR             |
| MATERIALS                            |                                        |
| Configurable ring material options   | 42CrMo / 50Mn                          |
| Seal material                        | NBR - Nitrile rubber                   |
| Configurable spacer material options | Engineering nylon / Brass              |
| IDENTIFICATION                       |                                        |
| Reference brand                      | Rothe Erde                             |
| Reference series                     | 09 Series                              |
| Reference model                      | 092.40.2003.990.11.1502                |
| Bearing structure                    | Double-row four-point contact ball     |
| Gear arrangement                     | Internal gear                          |
| DIMENSION                            |                                        |
| Raceway diameter (DL)                | 2,003 mm                               |
| Overall outside diameter (Da)        | 2,192 mm                               |
| Overall inside diameter (Di)         | 1,750 mm                               |

## Complete Product Data

All values below are generated from the current public verified replacement record. Source values are retained and metric references are shown where available.

| DIMENSION (CONTINUED)                     |          |
|-------------------------------------------|----------|
| Overall height (H)                        | 148 mm   |
| Catalog diameter O (O)                    | 2,001 mm |
| Catalog diameter U (U)                    | 2,011 mm |
| Ring height H1 (H1)                       | 139 mm   |
| Ring height H2 (H2)                       | 139 mm   |
| Lower ring offset Hu (Hu)                 | 9 mm     |
| Upper ring offset Ho (Ho)                 | 9 mm     |
| Assembly weight (Weight)                  | 1,221 kg |
| MOUNTING                                  |          |
| Outer ring bolt circle (La)               | 2,113 mm |
| Inner ring bolt circle (Li)               | 1,899 mm |
| Common mounting-hole count (n)            | 60       |
| Common mounting-hole diameter (B)         | 36 mm    |
| Metric bolt nominal size (M)              | 33 mm    |
| GEAR                                      |          |
| Gear pitch diameter (d)                   | 1,764 mm |
| Gear module (m)                           | 14 mm    |
| Gear tooth count (z)                      | 126      |
| Profile shift product x m (x*m)           | -7 mm    |
| Tip-height modification product k m (k*m) | 0 mm     |

Complete Product Data

All values below are generated from the current public verified replacement record. Source values are retained and metric references are shown where available.

|                                               |                                                                |
|-----------------------------------------------|----------------------------------------------------------------|
| GEAR (CONTINUED)                              |                                                                |
| Minimum gear face width (bmin)                | 138 mm                                                         |
| Root-neck diameter Zu (Zu)                    | 1,819 mm                                                       |
| PERFORMANCE                                   |                                                                |
| Permitted circumferential force, normal (X1)  | 121.33 kN                                                      |
| Permitted circumferential force, maximum (X2) | 242.67 kN                                                      |
| MISCELLANEOUS                                 |                                                                |
| Grease nipple count (n1)                      | 10                                                             |
| PERFORMANCE RATINGS                           |                                                                |
| Catalog Reference X1                          | 121.33 kN   Not simultaneous with other listed dynamic ratings |
| Catalog Reference X2                          | 242.67 kN   Not simultaneous with other listed dynamic ratings |
| MOUNTING INTERFACES                           |                                                                |
| Outer ring mounting                           | 60 holes - B 36                                                |
| Inner ring mounting                           | 60 holes - M 33                                                |
| GEAR INTERFACE                                |                                                                |
| Pitch system                                  | module                                                         |
| Module reference                              | 14 mm                                                          |
| Number of teeth                               | 126                                                            |
| SOURCE TRACEABILITY                           |                                                                |
| Source document code                          | ROTHE_ERDE_CATALOG_2023                                        |
| Source file                                   | Rothe Erde.pdf                                                 |
| PDF page                                      | 92                                                             |

Complete Product Data

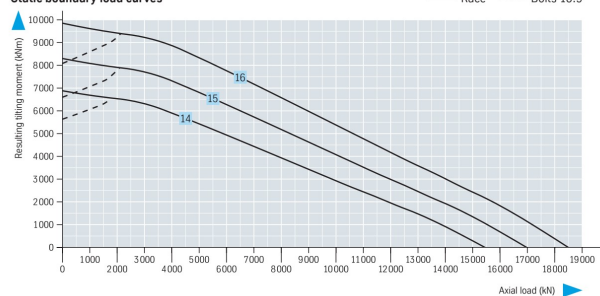
All values below are generated from the current public verified replacement record. Source values are retained and metric references are shown where available.

| SOURCE TRACEABILITY (CONTINUED) |                                                                                                         |
|---------------------------------|---------------------------------------------------------------------------------------------------------|
| Printed page                    | 178-179                                                                                                 |
| Source language                 | EN                                                                                                      |
| Original unit system            | Metric                                                                                                  |
| PUBLISHED TECHNICAL MEDIA       |                                                                                                         |
| Load Curve Chart                | page-092-load-curves.png   SHA-256:<br>4542dbf981be5d22df4700b44bf3c89b045395e558a7fc39dfc4ebcec7745d9b |
| Outline Drawing                 | page-092-outline.png   SHA-256:<br>c025164dd9c380f3e04a3029b604345eb22e768de39b68c1bc72dbb242b3fc95     |

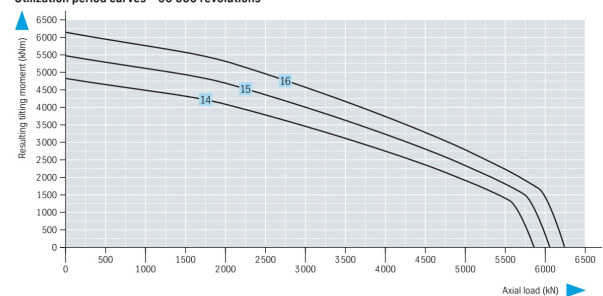
## Published Load / Performance Chart

Use the published chart as a preliminary selection aid only. The model legend, curve family and source document must be reviewed together with the operating load case.

Static boundary load curves



Utilization period curves – 30 000 revolutions



page-092-load-curves.png | SHA-256: 4542dbf981be5d22df4700b44bf3c89b045395e558a7fc39dfc4ebcec7745d9b

Engineering note: final approval must also consider mounting rigidity, bolt capacity, duty cycle, lubrication, temperature, environment and installation conditions.

Source and Verification Traceability

|                                                                               |                                                                          |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| <div>PUBLIC RECORD UID</div> <div>DJZ2MOYBKJK4NKI2VBAG4JMGGR</div>            | <div>SOURCE DOCUMENT</div> <div>ROTHE_ERDE_CATALOG_2023</div>            |
| <div>SOURCE FILE</div> <div>Rothe Erde.pdf</div>                              | <div>SOURCE LOCATION</div> <div>PDF page 92   Printed page 178-179</div> |
| <div>VERIFICATION</div> <div>Level 3 - MERYDOM Engineering<br/>Verified</div> | <div>REVIEWED BY</div> <div>MERYDOM Engineering Department</div>         |

Engineering Confirmation Boundary

- 1

Confirm the exact model designation and all installation-envelope dimensions.
- 2

Confirm mounting-hole quantity, bolt circle, hole specification, bolt grade and preload.
- 3

Confirm gear arrangement, pitch system, tooth count, backlash and mating-pinion data.
- 4

Confirm axial, radial and moment loads, load combinations, duty cycle and required life.
- 5

Confirm support flatness and stiffness, lubrication, sealing, temperature and environment.
- 6

Final drawing revision, manufacturing tolerances and documentation package are confirmed with the quotation.

Request Price, Delivery and Final Engineering Confirmation

Email: jovi@merydom.com | Email: andi@merydom.com | WhatsApp: +86 17705201170

Product page: <https://rotnex.com/products/slewing-bearing-replacements/rothe-erde/092-40-2003-990-11-1502/>

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