

Factory-Verified Replacement

MERYDOM 091.35.2012.991.41.1502

Certified for interchange with Rothe Erde 091.35.2012.991.41.1502. 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

091.35.2012.991.41.1502

SERIES

09 Series

OVERALL OD

2,237.2 mm

OVERALL HEIGHT

133 mm

REFERENCE

Rothe Erde 091.35.2012.991.41.1502

STRUCTURE

Sfere a quattro punti di contatto a due corone

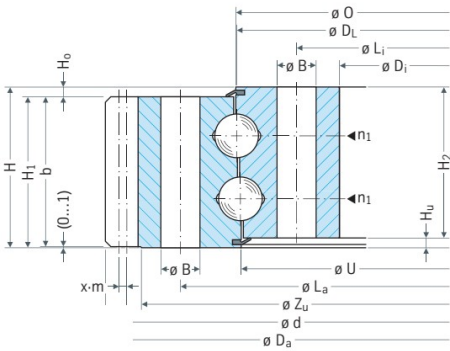
OVERALL ID

1,852 mm

GEAR

Dentatura esterna

Published Technical Drawing



page-089-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                        | 091.35.2012.991.41.1502                        |
| Certified interchangeable with       | Rothe Erde 091.35.2012.991.41.1502             |
| Verification status                  | Level 3 - MERYDOM Engineering Verified         |
| Reviewed by                          | MERYDOM Engineering Department                 |
| Public record UID                    | JTALVFAR4QA6NJK74UGZQVFDJ2                     |
| 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                      | 091.35.2012.991.41.1502                        |
| Bearing structure                    | Sfere a quattro punti di contatto a due corone |
| Gear arrangement                     | Dentatura esterna                              |
| DIMENSION                            |                                                |
| Raceway diameter (DL)                | 2.012 mm                                       |
| Overall outside diameter (Da)        | 2.237,2 mm                                     |
| Overall inside diameter (Di)         | 1.852 mm                                       |

## Complete Product Data

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| DIMENSION (CONTINUED)                     |          |
|-------------------------------------------|----------|
| Overall height (H)                        | 133 mm   |
| Catalog diameter O (O)                    | 2.020 mm |
| Catalog diameter U (U)                    | 2.010 mm |
| Ring height H1 (H1)                       | 124 mm   |
| Ring height H2 (H2)                       | 124 mm   |
| Lower ring offset Hu (Hu)                 | 9 mm     |
| Upper ring offset Ho (Ho)                 | 9 mm     |
| Assembly weight (Weight)                  | 954 kg   |
| MOUNTING                                  |          |
| Outer ring bolt circle (La)               | 2.105 mm |
| Inner ring bolt circle (Li)               | 1.925 mm |
| Common mounting-hole count (n)            | 72       |
| Common mounting-hole diameter (B)         | 33 mm    |
| Metric bolt nominal size (M)              | 30 mm    |
| GEAR                                      |          |
| Gear pitch diameter (d)                   | 2.198 mm |
| Gear module (m)                           | 14 mm    |
| Gear tooth count (z)                      | 157      |
| Profile shift product x m (x*m)           | 7 mm     |
| Tip-height modification product k m (k*m) | -1,4 mm  |

Complete Product Data

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|                                               |                                                                |
|-----------------------------------------------|----------------------------------------------------------------|
| GEAR (CONTINUED)                              |                                                                |
| Minimum gear face width (bmin)                | 123 mm                                                         |
| Root-neck diameter Zu (Zu)                    | 2.171 mm                                                       |
| PERFORMANCE                                   |                                                                |
| Permitted circumferential force, normal (X1)  | 158,06 kN                                                      |
| Permitted circumferential force, maximum (X2) | 316,12 kN                                                      |
| MISCELLANEOUS                                 |                                                                |
| Grease nipple count (n1)                      | 8                                                              |
| PERFORMANCE RATINGS                           |                                                                |
| Catalog Reference X1                          | 158,06 kN   Not simultaneous with other listed dynamic ratings |
| Catalog Reference X2                          | 316,12 kN   Not simultaneous with other listed dynamic ratings |
| MOUNTING INTERFACES                           |                                                                |
| Outer ring mounting                           | 72 holes - M 30                                                |
| Inner ring mounting                           | 72 holes - B 33                                                |
| GEAR INTERFACE                                |                                                                |
| Pitch system                                  | module                                                         |
| Module reference                              | 14 mm                                                          |
| Number of teeth                               | 157                                                            |
| SOURCE TRACEABILITY                           |                                                                |
| Source document code                          | ROTHE_ERDE_CATALOG_2023                                        |
| Source file                                   | Rothe Erde.pdf                                                 |
| PDF page                                      | 89                                                             |

Complete Product Data

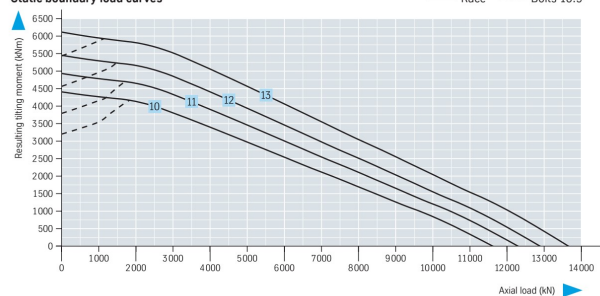
All values below are generated from the current public verified replacement record. Source values are retained and metric references are shown where available.

| SOURCE TRACEABILITY (CONTINUED) |                                                                                                         |
|---------------------------------|---------------------------------------------------------------------------------------------------------|
| Printed page                    | 172-173                                                                                                 |
| Source language                 | EN                                                                                                      |
| Original unit system            | Metric                                                                                                  |
| PUBLISHED TECHNICAL MEDIA       |                                                                                                         |
| Load Curve Chart                | page-089-load-curves.png   SHA-256:<br>8454ac0da605f4efeaf20abe8c31007e4ecb137e2cd309810a939f87d39ebb71 |
| Outline Drawing                 | page-089-outline.png   SHA-256:<br>eea1f2eaa62033b789c37ca7859ed6fe94a01141be3360d250c15dfec38bd1c0     |

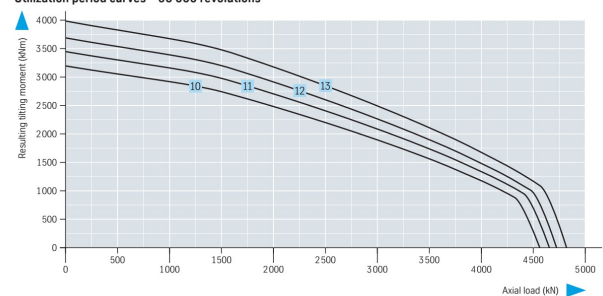
## Published Load / Performance Chart

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-089-load-curves.png | SHA-256: 8454ac0da605f4efeaf20abe8c31007e4ecb137e2cd309810a939f87d39ebb71

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

## Source and Verification Traceability

**PUBLIC RECORD UID****JTALVFAR4QA6NJK74UGZQVFDJ2****SOURCE DOCUMENT****ROTHE\_ERDE\_CATALOG\_2023****SOURCE FILE****Rothe Erde.pdf****SOURCE LOCATION****PDF page 89 | Printed page 172-173****VERIFICATION****Level 3 - MERYDOM Engineering  
Verified****REVIEWED BY****MERYDOM Engineering Department**

## 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](mailto:jovi@merydom.com) | Email: [andi@merydom.com](mailto:andi@merydom.com) | WhatsApp: +86 17705201170

Product page:

<https://rotnex.com/it/prodotti/cuscinetti-di-rotazione-sostitutivi/rothe-erde/091-35-2012-991-41-1502/>

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