

Factory-Verified Replacement

MERYDOM 091.50.2644.990.41.1502

Certified for interchange with Rothe Erde 091.50.2644.990.41.1502. 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
091.50.2644.990.41.1502

REFERENCE
Rothe Erde 091.50.2644.990.41.1502

SERIES
09 Series

STRUCTURE
Sfere a quattro punti di contatto a due corone

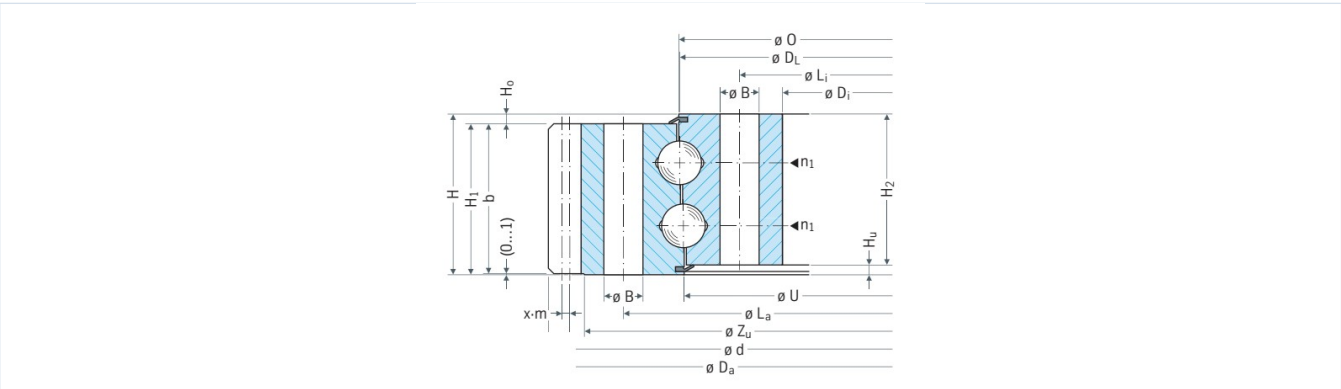
OVERALL OD
2,930.4 mm

OVERALL ID
2,442 mm

OVERALL HEIGHT
188 mm

GEAR
Dentatura esterna

Published Technical Drawing



page-093-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	091.50.2644.990.41.1502
Certified interchangeable with	Rothe Erde 091.50.2644.990.41.1502
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	RRC75CS2UV2RMQYIE4NOZN2LDL
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	091.50.2644.990.41.1502
Bearing structure	Sfere a quattro punti di contatto a due corone
Gear arrangement	Dentatura esterna
DIMENSION	
Raceway diameter (DL)	2.644 mm
Overall outside diameter (Da)	2.930,4 mm
Overall inside diameter (Di)	2.442 mm

Complete Product Data

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DIMENSION (CONTINUED)	
Overall height (H)	188 mm
Catalog diameter O (O)	2.655 mm
Catalog diameter U (U)	2.642 mm
Ring height H1 (H1)	179 mm
Ring height H2 (H2)	179 mm
Lower ring offset Hu (Hu)	9 mm
Upper ring offset Ho (Ho)	9 mm
Assembly weight (Weight)	2.357 kg
MOUNTING	
Outer ring bolt circle (La)	2.769 mm
Inner ring bolt circle (Li)	2.528 mm
Common mounting-hole count (n)	64
Common mounting-hole diameter (B)	39 mm
Metric bolt nominal size (M)	36 mm
GEAR	
Gear pitch diameter (d)	2.880 mm
Gear module (m)	18 mm
Gear tooth count (z)	160
Profile shift product x m (x*m)	9 mm
Tip-height modification product k m (k*m)	-1,8 mm

Complete Product Data

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GEAR (CONTINUED)	
Minimum gear face width (bmin)	178 mm
Root-neck diameter Zu (Zu)	2.847 mm
PERFORMANCE	
Permitted circumferential force, normal (X1)	278,61 kN
Permitted circumferential force, maximum (X2)	557,22 kN
MISCELLANEOUS	
Grease nipple count (n1)	8
PERFORMANCE RATINGS	
Catalog Reference X1	278,61 kN Not simultaneous with other listed dynamic ratings
Catalog Reference X2	557,22 kN Not simultaneous with other listed dynamic ratings
MOUNTING INTERFACES	
Outer ring mounting	64 holes - M 36
Inner ring mounting	64 holes - B 39
GEAR INTERFACE	
Pitch system	module
Module reference	18 mm
Number of teeth	160
SOURCE TRACEABILITY	
Source document code	ROTHERDE_CATALOG_2023
Source file	Rothe Erde.pdf
PDF page	93

Complete Product Data

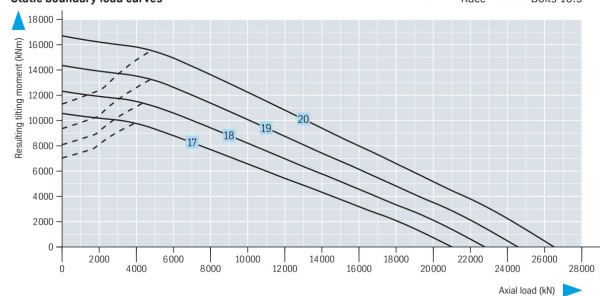
All values below are generated from the current public verified replacement record. Source values are retained and metric references are shown where available.

SOURCE TRACEABILITY (CONTINUED)	
Printed page	180-181
Source language	EN
Original unit system	Metric
PUBLISHED TECHNICAL MEDIA	
Load Curve Chart	page-093-load-curves.png SHA-256: 252e4bb025dd526b2a17ec8f96201411ca4a6ecd060196a96bd0509d362f99a6
Outline Drawing	page-093-outline.png SHA-256: eea1f2eaa62033b789c37ca7859ed6fe94a01141be3360d250c15dfec38bd1c0

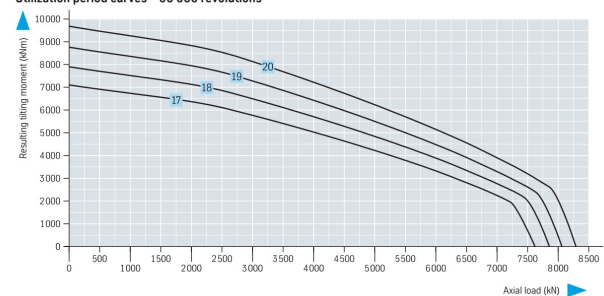
Published Load / Performance Chart

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-093-load-curves.png | SHA-256: 252e4bb025dd526b2a17ec8f96201411ca4a6ecd060196a96bd0509d362f99a6

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**RRC75CS2UV2RMQYIE4NOZN2LDL****SOURCE DOCUMENT****ROTHE_ERDE_CATALOG_2023****SOURCE FILE****Rothe Erde.pdf****SOURCE LOCATION****PDF page 93 | Printed page 180-181****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

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Product page:

<https://rotnex.com/it/prodotti/cuscinetti-di-rotazione-sostitutivi/rothe-erde/091-50-2644-990-41-1502/>

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