

Factory-Verified Replacement

MERYDOM 092.20.1246.991.21.1503

Certified for interchange with Rothe Erde 092.20.1246.991.21.1503. 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

092.20.1246.991.21.1503

REFERENCE

Rothe Erde 092.20.1246.991.21.1503

SERIES

09 Series

STRUCTURE

Double-row four-point contact ball

OVERALL OD

1,364 mm

OVERALL ID

1,090 mm

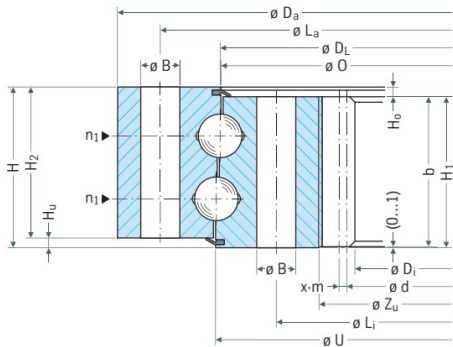
OVERALL HEIGHT

92 mm

GEAR

Internal gear

Published Technical Drawing



page-086-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	092.20.1246.991.21.1503
Certified interchangeable with	Rothe Erde 092.20.1246.991.21.1503
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	RUIN6B6BWPSTIEMVDFANZ6AWA
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	092.20.1246.991.21.1503
Bearing structure	Double-row four-point contact ball
Gear arrangement	Internal gear
DIMENSION	
Raceway diameter (DL)	1,246 mm
Overall outside diameter (Da)	1,364 mm
Overall inside diameter (Di)	1,090 mm

Complete Product Data

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DIMENSION (CONTINUED)	
Overall height (H)	92 mm
Catalog diameter O (O)	1,245 mm
Catalog diameter U (U)	1,252 mm
Ring height H1 (H1)	83 mm
Ring height H2 (H2)	83 mm
Lower ring offset Hu (Hu)	9 mm
Upper ring offset Ho (Ho)	9 mm
Assembly weight (Weight)	281 kg
MOUNTING	
Outer ring bolt circle (La)	1,315 mm
Inner ring bolt circle (Li)	1,182 mm
Common mounting-hole count (n)	64
Common mounting-hole diameter (B)	22 mm
Metric bolt nominal size (M)	20 mm
GEAR	
Gear pitch diameter (d)	1,100 mm
Gear module (m)	10 mm
Gear tooth count (z)	110
Profile shift product x m (x*m)	-5 mm
Tip-height modification product k m (k*m)	0 mm

Complete Product Data

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GEAR (CONTINUED)	
Minimum gear face width (bmin)	82 mm
Root-neck diameter Zu (Zu)	1,138 mm
PERFORMANCE	
Permitted circumferential force, normal (X1)	79.23 kN
Permitted circumferential force, maximum (X2)	158.45 kN
MISCELLANEOUS	
Grease nipple count (n1)	4
PERFORMANCE RATINGS	
Catalog Reference X1	79.23 kN Not simultaneous with other listed dynamic ratings
Catalog Reference X2	158.45 kN Not simultaneous with other listed dynamic ratings
MOUNTING INTERFACES	
Outer ring mounting	64 holes - B 22
Inner ring mounting	64 holes - M 20
GEAR INTERFACE	
Pitch system	module
Module reference	10 mm
Number of teeth	110
SOURCE TRACEABILITY	
Source document code	ROTHE_ERDE_CATALOG_2023
Source file	Rothe Erde.pdf
PDF page	86

Complete Product Data

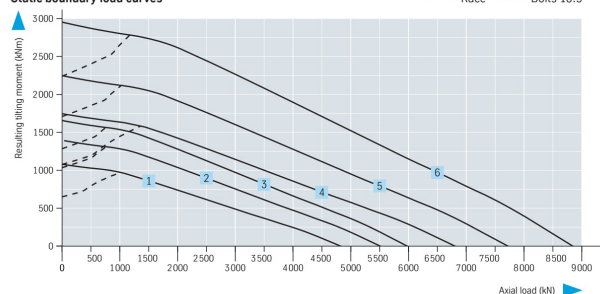
All values below are generated from the current public verified replacement record. Source values are retained and metric references are shown where available.

SOURCE TRACEABILITY (CONTINUED)	
Printed page	166-167
Source language	EN
Original unit system	Metric
PUBLISHED TECHNICAL MEDIA	
Load Curve Chart	page-086-load-curves.png SHA-256: e51365c7cd31738aaa3b594aa50cec15525cedbd9a332aa4c75e8a39db48929a
Outline Drawing	page-086-outline.png SHA-256: c025164dd9c380f3e04a3029b604345eb22e768de39b68c1bc72dbb242b3fc95

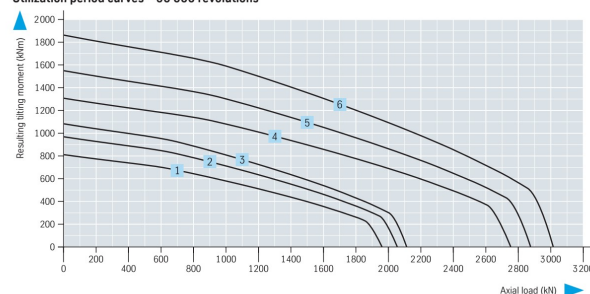
Published Load / Performance Chart

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-086-load-curves.png | SHA-256: e51365c7cd31738aaa3b594aa50cec15525cedbd9a332aa4c75e8a39db48929a

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 RUIN6B6BWPSTIEMVDLFANZ6AWA	SOURCE DOCUMENT ROTHE_ERDE_CATALOG_2023
SOURCE FILE Rothe Erde.pdf	SOURCE LOCATION PDF page 86 Printed page 166-167
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/products/slewing-bearing-replacements/rothe-erde/092-20-1246-991-21-1503/>

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