

Factory-Verified Replacement

MERYDOM 231.20.0900.503

Certified for interchange with Rothe Erde 231.20.0900.503. 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

231.20.0900.503

REFERENCE

Rothe Erde 231.20.0900.503

SERIES

23 Series

STRUCTURE

Cuscinetto profilato

OVERALL OD

1,046.4 mm

OVERALL ID

834 mm

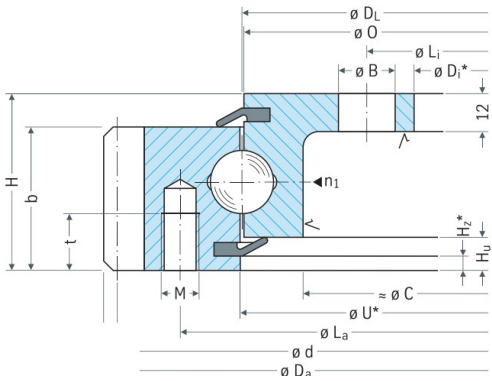
OVERALL HEIGHT

56 mm

GEAR

Dentatura esterna

Published Technical Drawing



page-048-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	231.20.0900.503
Certified interchangeable with	Rothe Erde 231.20.0900.503
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	7OKYJU23BCI3W7IMXHQXN4EMVQ
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	23 Series
Reference model	231.20.0900.503
Bearing structure	Cuscinetto profilato
Gear arrangement	Dentatura esterna
DIMENSION	
Raceway diameter (DL)	944 mm
Overall outside diameter (Da)	1.046,4 mm
Overall inside diameter (Di)	834 mm

Complete Product Data

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DIMENSION (CONTINUED)	
Overall height (H)	56 mm
Catalog diameter O (O)	942,5 mm
Catalog diameter U (U)	945,5 mm
Catalog diameter C (C)	905 mm
Lower ring offset Hu (Hu)	10,5 mm
Assembly weight (Weight)	69,1 kg
Axial bearing play (Y_axial)	0,5 mm
Radial bearing play (Y_radial)	0,5 mm
MOUNTING	
Outer ring bolt circle (La)	985 mm
Outer ring mounting-hole count (na)	20
Metric bolt nominal size (M)	12 mm
Thread depth (t)	20 mm
Inner ring bolt circle (Li)	862 mm
Inner ring mounting-hole count (ni)	40
Inner ring mounting-hole diameter (B_inner)	18 mm
GEAR	
Gear pitch diameter (d)	1.032 mm
Gear module (m)	8 mm
Gear tooth count (z)	129

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GEAR (CONTINUED)	
Tip-height modification product k m (k*m)	-0,8 mm
Minimum gear face width (bmin)	45,5 mm
PERFORMANCE	
Permitted circumferential force, normal (X1)	18,93 kN
Permitted circumferential force, maximum (X2)	37,86 kN
MISCELLANEOUS	
Grease nipple count (n1)	4
PERFORMANCE RATINGS	
Catalog Reference X1	18,93 kN Not simultaneous with other listed dynamic ratings
Catalog Reference X2	37,86 kN Not simultaneous with other listed dynamic ratings
MOUNTING INTERFACES	
Outer ring mounting	20 holes - M 12
Inner ring mounting	40 holes - B_inner 18
GEAR INTERFACE	
Pitch system	module
Module reference	8 mm
Number of teeth	129
SOURCE TRACEABILITY	
Source document code	ROTHERDE_CATALOG_2023
Source file	Rothe Erde.pdf
PDF page	48

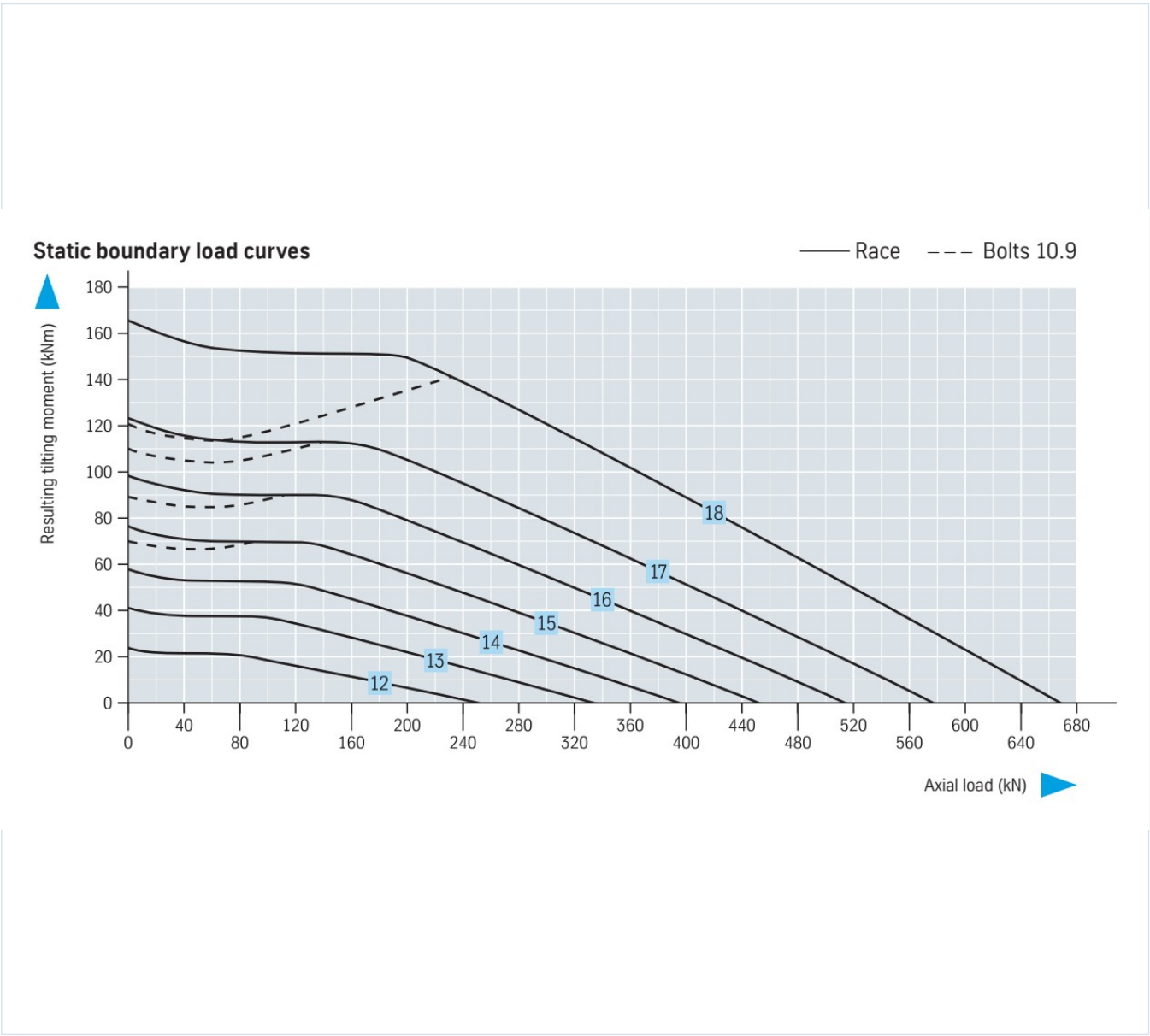
Complete Product Data

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SOURCE TRACEABILITY (CONTINUED)	
Printed page	90-91
Source language	EN
Original unit system	Metric
PUBLISHED TECHNICAL MEDIA	
Load Curve Chart	page-048-load-curves.png SHA-256: 7ce59d287fa9aa8d3c54f5ab4a2b17d39e93159962cfac9362dbe7700ce00bc1
Outline Drawing	page-048-outline.png SHA-256: 1f22dcafcf931ac4de0f5a8274b5423d529bbcd902159b479e32470bea4da3e5

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.



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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 7OKYJU23BCI3W7IMXHQXN4EMVQ	SOURCE DOCUMENT ROTHE_ERDE_CATALOG_2023
SOURCE FILE Rothe Erde.pdf	SOURCE LOCATION PDF page 48 Printed page 90-91
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/231-20-0900-503/>

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