

Factory-Verified Replacement

MERYDOM 12-20 0541/1-02223

Certified for interchange with IMO 12-20 0541/1-02223.
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

12-20 0541/1-02223

REFERENCE

IMO 12-20 0541/1-02223

SERIES

120 Series

STRUCTURE

Esferas de contato de quatro pontos

OVERALL OD

616 mm

OVERALL ID

444 mm

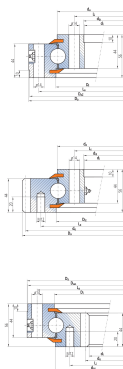
OVERALL HEIGHT

mm

GEAR

Engrenagem interna

Published Technical Drawing



imo-12200541102223-drawing.webp

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	12-20 0541/1-02223
Certified interchangeable with	IMO 12-20 0541/1-02223
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	SIYVZHI6D3CH2VIT7SQ3GLKFYL
MATERIALS	
Configurable ring material options	42CrMo / 50Mn
Seal material	NBR - Nitrile rubber
Configurable spacer material options	Engineering nylon / Brass
IDENTIFICATION	
Reference brand	IMO
Reference series	120 Series
Reference model	12-20 0541/1-02223
Bearing structure	Esferas de contato de quatro pontos
Gear arrangement	Engrenagem interna
DIMENSION	
Overall outside diameter (Da)	616 mm
Overall inside diameter (di)	444 mm
MOUNTING	
Outer ring bolt circle (La)	43 mm

Complete Product Data

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MOUNTING (CONTINUED)	
Outer ring mounting-hole count (na)	590
Common mounting-hole diameter (B)	32 mm
Inner ring bolt circle (Li)	505 mm
Inner ring mounting-hole count (ni)	32
GEAR	
Gear pitch diameter (d)	456 mm
Gear module (m)	6 mm
Gear tooth count (z)	76
PERFORMANCE	
Permitted circumferential force, normal (fz_norm)	17,5 kN
Permitted circumferential force, maximum (fz_max)	32,9 kN
Static radial load rating (Co_rad)	334 kN
Static axial load rating (Co_ax)	780 kN
Dynamic radial load rating (C_rad)	173 kN
Dynamic axial load rating (C_ax)	174 kN
PERFORMANCE RATINGS	
Fz Norm	17,5 kN Not simultaneous with other listed dynamic ratings
Fz Max	32,9 kN Not simultaneous with other listed dynamic ratings
Co Rad	334 kN Not simultaneous with other listed dynamic ratings
Co Ax	780 kN Not simultaneous with other listed dynamic ratings

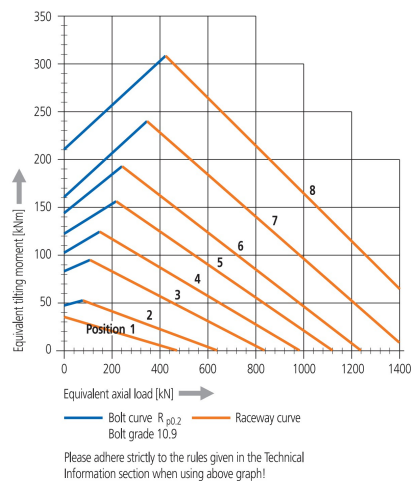
Complete Product Data

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

PERFORMANCE RATINGS (CONTINUED)	
C Rad	173 kN Not simultaneous with other listed dynamic ratings
C Ax	174 kN Not simultaneous with other listed dynamic ratings
MOUNTING INTERFACES	
Outer ring mounting	590 holes - B 32 mm
Inner ring mounting	32 holes - B 32 mm
GEAR INTERFACE	
Pitch system	module
Module reference	6 mm
Number of teeth	76
SOURCE TRACEABILITY	
Source document code	IMO_SINGLE_ROW_BALL_EN
Source file	imo_dkugeldrehverbindungen_einreihig-en.pdf
PDF page	9
Printed page	Not published
Source language	EN
Original unit system	Metric
PUBLISHED TECHNICAL MEDIA	
Load Curve Chart	imo-12200541102223-curve.webp SHA-256: 0260cea44a56711e11de91c16ce1fe6ebf2ae9a66b01549c7456878a2c0e7c02
Outline Drawing	imo-12200541102223-drawing.webp SHA-256: cd90951201cc25f94d902bd39f73a0b149bfaa777bae09d714ed2cd82fd30b8c

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.



Bearing ring material: C45N
4 Taper type grease nipples on circumference
Mounting holes equally spaced
Raceway system supplied pre-lubricated
Dimensions without tolerances DIN ISO 2768 coarse

Clearance of precision version

Position	Radial Clearance	Axial Clearance
1	max. 0.03	max. 0.03
2	max. 0.03	max. 0.03
3	max. 0.03	max. 0.03
4	max. 0.04	max. 0.04
5	max. 0.04	max. 0.04
6	max. 0.05	max. 0.05
7	max. 0.05	max. 0.05
8	max. 0.06	max. 0.06

imo-12200541102223-curve.webp | SHA-256: 0260cea44a56711e11de91c16ce1fe6ebf2ae9a66b01549c7456878a2c0e7c02

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

SIYVZHI6D3CH2VIT7SQ3GLKFYL

SOURCE DOCUMENT

IMO_SINGLE_ROW_BALL_EN

SOURCE FILE

imo_dkugeldrehverbindungen_einreihig-en.pdf

SOURCE LOCATION

PDF page 9 | Printed page Not published

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/pt/produtos/rolamentos-de-giro-de-substituicao/imo/12-20-0541-1-02223/>

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