

Factory-Verified Replacement

MERYDOM 91-20 0311/1-07103

Certified for interchange with IMO 91-20 0311/1-07103.
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

91-20 0311/1-07103

REFERENCE

IMO 91-20 0311/1-07103

SERIES

920 Series

STRUCTURE

Ball bearing with flange rings

OVERALL OD

404 mm

OVERALL ID

205 mm

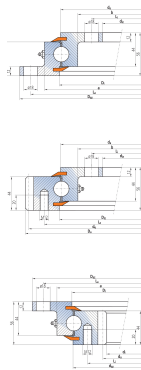
OVERALL HEIGHT

mm

GEAR

External gear

Published Technical Drawing



imo-91200311107103-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	91-20 0311/1-07103
Certified interchangeable with	IMO 91-20 0311/1-07103
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	CG4JFOPLJUWTRI6Z6FD6UFTAM7
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	920 Series
Reference model	91-20 0311/1-07103
Bearing structure	Ball bearing with flange rings
Gear arrangement	External gear
DIMENSION	
Overall outside diameter (Da)	404 mm
Overall inside diameter (di)	205 mm
Assembly weight (G)	23 kg

Complete Product Data

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MOUNTING	
Outer ring bolt circle (La)	355 mm
Outer ring mounting-hole count (na)	10
Inner ring bolt circle (Li)	232 mm
Inner ring mounting-hole count (ni)	12
GEAR	
Gear pitch diameter (d)	395 mm
Gear module (m)	5 mm
Gear tooth count (z)	79
PERFORMANCE	
Permitted circumferential force, normal (fz_norm)	11.75 kN
Permitted circumferential force, maximum (fz_max)	23.5 kN
Static radial load rating (Co_rad)	89 kN
Static axial load rating (Co_ax)	208 kN
Dynamic radial load rating (C_rad)	140 kN
Dynamic axial load rating (C_ax)	140 kN
PERFORMANCE RATINGS	
Fz Norm	11.75 kN Not simultaneous with other listed dynamic ratings
Fz Max	23.5 kN Not simultaneous with other listed dynamic ratings
Co Rad	89 kN Not simultaneous with other listed dynamic ratings
Co Ax	208 kN Not simultaneous with other listed dynamic ratings

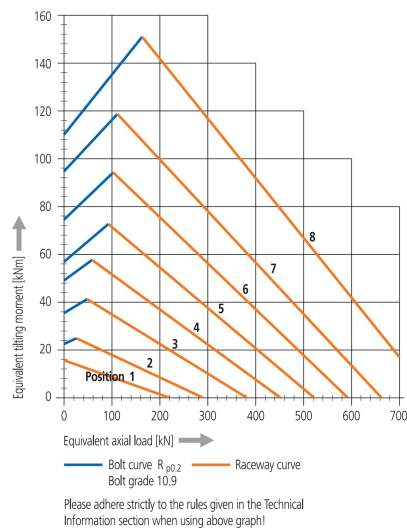
Complete Product Data

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	140 kN Not simultaneous with other listed dynamic ratings
C Ax	140 kN Not simultaneous with other listed dynamic ratings
MOUNTING INTERFACES	
Outer ring mounting	10 holes - See source drawing
Inner ring mounting	12 holes - See source drawing
GEAR INTERFACE	
Pitch system	module
Module reference	5 mm
Number of teeth	79
SOURCE TRACEABILITY	
Source document code	IMO_FLANGE_BALL_EN
Source file	imo_kugeldrehverbindung_mit_flanschring-en.pdf
PDF page	5
Printed page	Not published
Source language	EN
Original unit system	Metric
PUBLISHED TECHNICAL MEDIA	
Load Curve Chart	imo-91200311107103-curve.webp SHA-256: 19d2fe2a291fdb2526400e39b60e5ffe7a0367df12ae58e259f81caa4d5966f
Outline Drawing	imo-91200311107103-drawing.webp SHA-256: 9994aab92535c0bbe186166cc3049e209de39ef1dbfdd1df8785e382810a2749

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 the circumference
Mounting holes equally spaced
Raceway system supplied pre-lubricated
Dimensions without tolerances DIN ISO 2768 coarse

Clearance of precision version

Position	Radial	Axial
	Clearance	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-91200311107103-curve.webp | SHA-256: 19d2fe2a291fdb2526400e39b60e5ffe7a0367df12ae58e259f81caa4d5966f

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

CG4JFOPLJUWTRI6Z6FD6UFTAM7

SOURCE DOCUMENT

IMO_FLANGE_BALL_EN

SOURCE FILE

imo_kugeldrehverbindung_mit_flanschr
ing-en.pdf

SOURCE LOCATION

PDF page 5 | 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/products/slewing-bearing-replacements/imo/91-20-0311-1-07103/>

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