

Factory-Verified Replacement

MERYDOM 82-50 3520/2-06980

Certified for interchange with IMO 82-50 3520/2-06980.
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

82-50 3520/2-06980

REFERENCE

IMO 82-50 3520/2-06980

SERIES

850 Series

STRUCTURE

Double axial ball

OVERALL OD

3,685 mm

OVERALL ID

3,200 mm

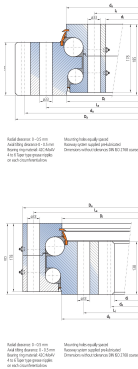
OVERALL HEIGHT

mm

GEAR

Internal gear

Published Technical Drawing



imo-82503520206980-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	82-50 3520/2-06980
Certified interchangeable with	IMO 82-50 3520/2-06980
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	Z5SIPXF4UKDMI3TQBHH7TXSRIK
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	850 Series
Reference model	82-50 3520/2-06980
Bearing structure	Double axial ball
Gear arrangement	Internal gear
DIMENSION	
Overall outside diameter (Da)	3,685 mm
Overall inside diameter (di)	3,200 mm
Assembly weight (G)	2,657 kg

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.

MOUNTING	
Outer ring bolt circle (La)	3,630 mm
Inner ring bolt circle (Li)	3,370 mm
Outer ring mounting-hole count (na)	78
GEAR	
Gear pitch diameter (d)	3,220 mm
Gear module (m)	20 mm
Gear tooth count (z)	161
Addendum modification coefficient (x)	-0.5
PERFORMANCE	
Permitted circumferential force, normal (fz_norm)	272 kN
Permitted circumferential force, maximum (fz_max)	495 kN
Static radial load rating (Co_rad)	4,060 kN
Static axial load rating, tension (Co_ax_T)	20,056 kN
Static axial load rating, compression (Co_ax_H)	16,674 kN
Dynamic radial load rating (C_rad)	798 kN
Dynamic axial load rating, tension (C_ax_T)	1,888 kN
Dynamic axial load rating, compression (C_ax_H)	1,501 kN
PERFORMANCE RATINGS	
Fz Norm	272 kN Not simultaneous with other listed dynamic ratings
Fz Max	495 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)	
Co Rad	4,060 kN Not simultaneous with other listed dynamic ratings
Co Ax T	20,056 kN Not simultaneous with other listed dynamic ratings
Co Ax H	16,674 kN Not simultaneous with other listed dynamic ratings
C Rad	798 kN Not simultaneous with other listed dynamic ratings
C Ax T	1,888 kN Not simultaneous with other listed dynamic ratings
C Ax H	1,501 kN Not simultaneous with other listed dynamic ratings
MOUNTING INTERFACES	
Outer ring mounting	78 holes - See source drawing
Inner ring mounting	holes - See source drawing
GEAR INTERFACE	
Pitch system	module
Module reference	20 mm
Number of teeth	161
SOURCE TRACEABILITY	
Source document code	IMO_DOUBLE_AXIAL_EN
Source file	imo_doppel-axial-drehverbindungen-en.pdf
PDF page	5
Printed page	Not published
Source language	EN
Original unit system	Metric

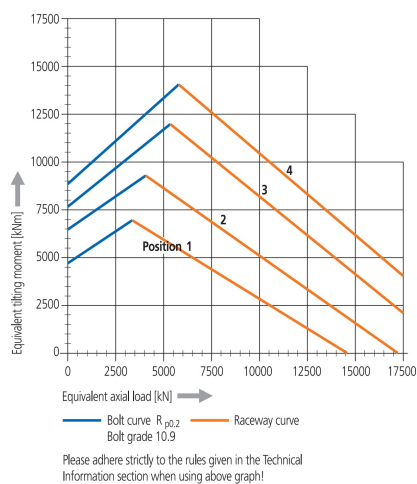
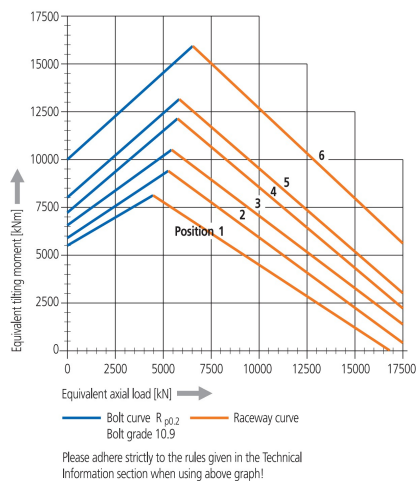
Complete Product Data

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

PUBLISHED TECHNICAL MEDIA	
Load Curve Chart	imo-82503520206980-curve.webp SHA-256: b02cf5d77c4af528a88e30a88058b9a25031575a2fb240fd532db5fc4e d2d5b8
Outline Drawing	imo-82503520206980-drawing.webp SHA-256: 3a1bf1fdbf1455a9d10af69fa982bbfd01657504183f55da42c28c6748 f4534e

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.



imo-82503520206980-curve.webp | SHA-256: b02cf5d77c4af528a88e30a88058b9a25031575a2fb240fd532db5fc4ed2d5b8

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 Z5SIPXF4UKDMI3TQBHH7TXSRIK	SOURCE DOCUMENT IMO_DOUBLE_AXIAL_EN
SOURCE FILE imo_doppel-axial-drehverbindungen-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

Email: jovi@merydom.com | Email: andi@merydom.com | WhatsApp: +86 17705201170

Product page: <https://rotnex.com/products/slewing-bearing-replacements/imo/82-50-3520-2-06980/>

Trademark and legal notice: referenced brand and model names are used only for identification and cross-reference. MERYDOM is an independent manufacturer and is not affiliated with or endorsed by the referenced brand unless expressly stated.