Factory-Verified Replacement

MERYDOM 81-50 4140/2-06965

Certified for interchange with IMO 81-50 4140/2-06965. 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
81-50 4140/2-06965

REFERENCE
IMO 81-50 4140/2-06965

SERIES
850 Series

STRUCTURE
Double axial ball

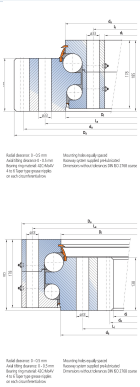
OVERALL OD
4,456 mm

OVERALL ID
3,970 mm

OVERALL HEIGHT
mm

GEAR
External gear

Published Technical Drawing



imo-81504140206965-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	81-50 4140/2-06965
Certified interchangeable with	IMO 81-50 4140/2-06965
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	D4IUELQNIRIF5QAJTSUXGDN7I6
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	81-50 4140/2-06965
Bearing structure	Double axial ball
Gear arrangement	External gear
DIMENSION	
Overall outside diameter (Da)	4,456 mm
Overall inside diameter (di)	3,970 mm
Assembly weight (G)	3,282 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)	4,285 mm
Inner ring bolt circle (Li)	4,030 mm
Outer ring mounting-hole count (na)	90
GEAR	
Gear pitch diameter (d)	4,400 mm
Gear module (m)	20 mm
Gear tooth count (z)	220
Addendum modification coefficient (x)	0.5
PERFORMANCE	
Permitted circumferential force, normal (fz_norm)	260 kN
Permitted circumferential force, maximum (fz_max)	465 kN
Static radial load rating (Co_rad)	4,750 kN
Static axial load rating, tension (Co_ax_T)	23,588 kN
Static axial load rating, compression (Co_ax_H)	19,508 kN
Dynamic radial load rating (C_rad)	844 kN
Dynamic axial load rating, tension (C_ax_T)	2,002 kN
Dynamic axial load rating, compression (C_ax_H)	1,587 kN
PERFORMANCE RATINGS	
Fz Norm	260 kN | Not simultaneous with other listed dynamic ratings
Fz Max	465 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	4,750 kN | Not simultaneous with other listed dynamic ratings
Co Ax T	23,588 kN | Not simultaneous with other listed dynamic ratings
Co Ax H	19,508 kN | Not simultaneous with other listed dynamic ratings
C Rad	844 kN | Not simultaneous with other listed dynamic ratings
C Ax T	2,002 kN | Not simultaneous with other listed dynamic ratings
C Ax H	1,587 kN | Not simultaneous with other listed dynamic ratings
MOUNTING INTERFACES	
Outer ring mounting	90 holes - See source drawing
Inner ring mounting	holes - See source drawing
GEAR INTERFACE	
Pitch system	module
Module reference	20 mm
Number of teeth	220
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

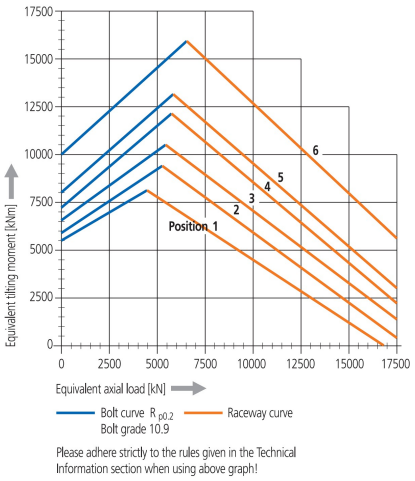
Complete Product Data

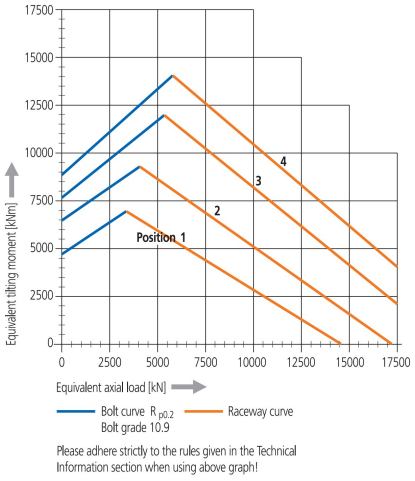
All values below are generated from the current public verified replacement record. Source values are retained and metric references are shown where available.

PUBLISHED TECHNICAL MEDIA	
Load Curve Chart	imo-81504140206965-curve.webp | SHA-256: b02cf5d77c4af528a88e30a88058b9a25031575a2fb240fd532db5fc4ed2d5b8
Outline Drawing	imo-81504140206965-drawing.webp | SHA-256: 3a1bf1fdbf1455a9d10af69fa982bbfd01657504183f55da42c28c6748f4534e

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-81504140206965-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

D4IUELQNIRIF5QAJTSUXGDN7I6

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

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Product page: https://rotnex.com/products/slewing-bearing-replacements/imo/81-50-4140-2-06965/