

Factory-Verified Replacement

MERYDOM 81-50 3747/2-06960

Certified for interchange with IMO 81-50 3747/2-06960.
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 3747/2-06960

REFERENCE

IMO 81-50 3747/2-06960

SERIES

850 Series

STRUCTURE

Sfere a doppio contatto assiale

OVERALL OD

4,046.4 mm

OVERALL ID

3,580 mm

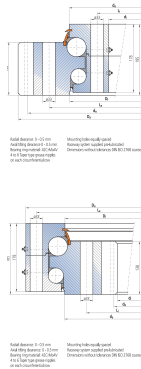
OVERALL HEIGHT

mm

GEAR

Dentatura esterna

Published Technical Drawing



imo-81503747206960-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 3747/2-06960
Certified interchangeable with	IMO 81-50 3747/2-06960
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	S7GZMTOVJM7V3Z7FL5IPNOD7QI
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 3747/2-06960
Bearing structure	Sfere a doppio contatto assiale
Gear arrangement	Dentatura esterna
DIMENSION	
Overall outside diameter (Da)	4.046,4 mm
Overall inside diameter (di)	3.580 mm
Assembly weight (G)	2.837 kg

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MOUNTING	
Outer ring bolt circle (La)	3.890 mm
Inner ring bolt circle (Li)	3.640 mm
Outer ring mounting-hole count (na)	84
GEAR	
Gear pitch diameter (d)	3.996 mm
Gear module (m)	18 mm
Gear tooth count (z)	222
Addendum modification coefficient (x)	0,5
PERFORMANCE	
Permitted circumferential force, normal (fz_norm)	227 kN
Permitted circumferential force, maximum (fz_max)	403 kN
Static radial load rating (Co_rad)	4.298 kN
Static axial load rating, tension (Co_ax_T)	21.349 kN
Static axial load rating, compression (Co_ax_H)	17.651 kN
Dynamic radial load rating (C_rad)	814 kN
Dynamic axial load rating, tension (C_ax_T)	1.932 kN
Dynamic axial load rating, compression (C_ax_H)	1.530 kN
PERFORMANCE RATINGS	
Fz Norm	227 kN Not simultaneous with other listed dynamic ratings
Fz Max	403 kN Not simultaneous with other listed dynamic ratings

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PERFORMANCE RATINGS (CONTINUED)	
Co Rad	4.298 kN Not simultaneous with other listed dynamic ratings
Co Ax T	21.349 kN Not simultaneous with other listed dynamic ratings
Co Ax H	17.651 kN Not simultaneous with other listed dynamic ratings
C Rad	814 kN Not simultaneous with other listed dynamic ratings
C Ax T	1.932 kN Not simultaneous with other listed dynamic ratings
C Ax H	1.530 kN Not simultaneous with other listed dynamic ratings
MOUNTING INTERFACES	
Outer ring mounting	84 holes - See source drawing
Inner ring mounting	holes - See source drawing
GEAR INTERFACE	
Pitch system	module
Module reference	18 mm
Number of teeth	222
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

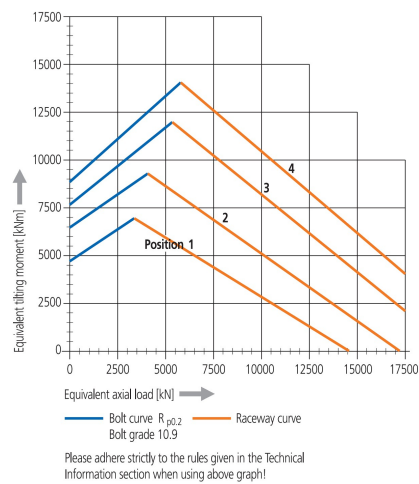
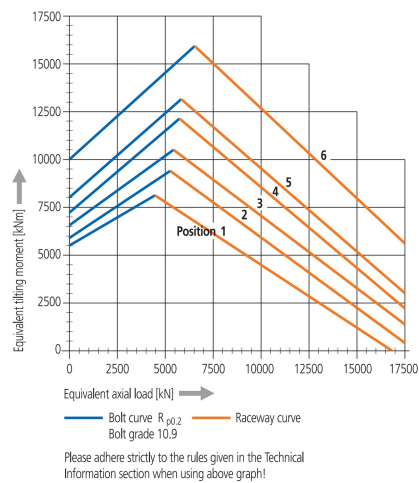
Complete Product Data

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PUBLISHED TECHNICAL MEDIA	
Load Curve Chart	imo-81503747206960-curve.webp SHA-256: b02cf5d77c4af528a88e30a88058b9a25031575a2fb240fd532db5fc4e d2d5b8
Outline Drawing	imo-81503747206960-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-81503747206960-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

S7GZMTOVJM7V3Z7FL5IPNOD7QI

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/it/prodotti/cuscinetti-di-rotazione-sostitutivi/imo/81-50-3747-2-06960/>

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