

Factory-Verified Replacement

MERYDOM 10-16 0500/0-08040

Certified for interchange with IMO 10-16 0500/0-08040.  
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

10-16 0500/0-08040

REFERENCE

IMO 10-16 0500/0-08040

SERIES

116 Series

STRUCTURE

Four-point contact ball

OVERALL OD

580 mm

OVERALL ID

440 mm

OVERALL HEIGHT

mm

GEAR

Ungeared

Published Technical Drawing



imo-10160500008040-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                        | 10-16 0500/0-08040                     |
| Certified interchangeable with       | IMO 10-16 0500/0-08040                 |
| Verification status                  | Level 3 - MERYDOM Engineering Verified |
| Reviewed by                          | MERYDOM Engineering Department         |
| Public record UID                    | 5MPU73GX67GBTVYR6UN7L5DGY7             |
| 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                     | 116 Series                             |
| Reference model                      | 10-16 0500/0-08040                     |
| Bearing structure                    | Four-point contact ball                |
| Gear arrangement                     | Ungeared                               |
| DIMENSION                            |                                        |
| Overall outside diameter (Da)        | 580 mm                                 |
| Overall inside diameter (di)         | 440 mm                                 |
| Assembly weight (G)                  | 24 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)         | 540 mm                                                      |
| Outer ring mounting-hole count (na) | 28                                                          |
| Inner ring bolt circle (Li)         | 460 mm                                                      |
| Inner ring mounting-hole count (ni) | 28                                                          |
| PERFORMANCE                         |                                                             |
| Static radial load rating (Co_rad)  | 253 kN                                                      |
| Static axial load rating (Co_ax)    | 517 kN                                                      |
| Dynamic radial load rating (C_rad)  | 142 kN                                                      |
| Dynamic axial load rating (C_ax)    | 122 kN                                                      |
| PERFORMANCE RATINGS                 |                                                             |
| Co Rad                              | 253 kN   Not simultaneous with other listed dynamic ratings |
| Co Ax                               | 517 kN   Not simultaneous with other listed dynamic ratings |
| C Rad                               | 142 kN   Not simultaneous with other listed dynamic ratings |
| C Ax                                | 122 kN   Not simultaneous with other listed dynamic ratings |
| MOUNTING INTERFACES                 |                                                             |
| Outer ring mounting                 | 28 holes - See source drawing                               |
| Inner ring mounting                 | 28 holes - See source drawing                               |
| GEAR INTERFACE                      |                                                             |
| Integral gear                       | Not applicable - ungeared bearing                           |
| SOURCE TRACEABILITY                 |                                                             |

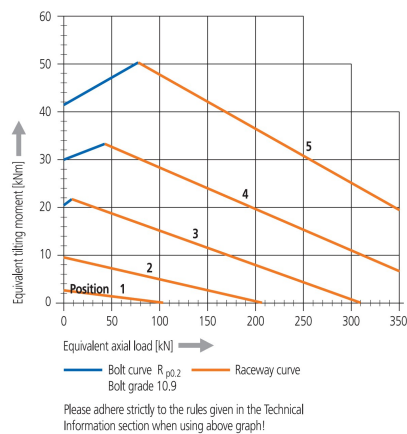
Complete Product Data

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

| SOURCE TRACEABILITY (CONTINUED) |                                                                                                                |
|---------------------------------|----------------------------------------------------------------------------------------------------------------|
| Source document code            | IMO_SINGLE_ROW_BALL_EN                                                                                         |
| Source file                     | imo_dkugeldrehverbindungen_einreihig-en.pdf                                                                    |
| PDF page                        | 3                                                                                                              |
| Printed page                    | Not published                                                                                                  |
| Source language                 | EN                                                                                                             |
| Original unit system            | Metric                                                                                                         |
| PUBLISHED TECHNICAL MEDIA       |                                                                                                                |
| Load Curve Chart                | imo-10160500008040-curve.webp   SHA-256:<br>3aee1c7d710dd16358622d99df1f600ee543a15a278637923fe4124098e28d4e   |
| Outline Drawing                 | imo-10160500008040-drawing.webp   SHA-256:<br>d5b2f01a45bf14fec3565624191f8126d7139a4078633a9cb241bb73a60297f0 |

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.



Radial clearance: 0 - 0.2 mm  
Axial tilting clearance: 0 - 0.4 mm  
Bearing ring material: C45N  
1 Taper type grease nipple, form C in filling plug  
Mounting holes equally spaced  
Raceway system supplied pre-lubricated  
Dimensions without tolerances DIN ISO 2768 coarse

imo-10160500008040-curve.webp | SHA-256: 3aee1c7d710dd16358622d99df1f600ee543a15a278637923fe4124098e28d4e

Engineering note: final approval must also consider mounting rigidity, bolt capacity, duty cycle, lubrication, temperature, environment and installation conditions.

Source and Verification Traceability

|                                                                               |                                                                               |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| <div>PUBLIC RECORD UID</div> <div>5MPU73GX67GBTVYR6UN7L5DGY7</div>            | <div>SOURCE DOCUMENT</div> <div>IMO_SINGLE_ROW_BALL_EN</div>                  |
| <div>SOURCE FILE</div> <div>imo_dkugeldrehverbindungen_einreihig-en.pdf</div> | <div>SOURCE LOCATION</div> <div>PDF page 3   Printed page Not published</div> |
| <div>VERIFICATION</div> <div>Level 3 - MERYDOM Engineering Verified</div>     | <div>REVIEWED BY</div> <div>MERYDOM Engineering Department</div>              |

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/10-16-0500-0-08040/>

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.