

Factory-Verified Replacement

MERYDOM 16309001

Certified for interchange with Kaydon 16309001. 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

16309001

REFERENCE

Kaydon 16309001

SERIES

XT Series

STRUCTURE

Four-point contact ball

OVERALL OD

1,428.496 mm

OVERALL ID

1,050.798 mm

OVERALL HEIGHT

120.65 mm

GEAR

External gear

No public model drawing is attached to this record. Submit the application and required interface format for final drawing confirmation.

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	16309001
Certified interchangeable with	Kaydon 16309001
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	IVX6QRLYOK344KBXA6SMQYPUPQ
MATERIALS	
Configurable ring material options	42CrMo / 50Mn
Seal material	NBR - Nitrile rubber
Configurable spacer material options	Engineering nylon / Brass
IDENTIFICATION	
Reference brand	Kaydon
Reference series	XT Series
Reference model	16309001
Bearing structure	Four-point contact ball
Gear arrangement	External gear
DIMENSION	
Overall outside diameter (Do)	56.240 in Metric reference: approximately 1,428.5 mm
Overall inside diameter (di)	41.370 in Metric reference: approximately 1,050.8 mm
Overall height (H)	4.750 in Metric reference: approximately 120.7 mm

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.

DIMENSION (CONTINUED)	
Assembly weight (G)	1133 lb Metric reference: approximately 513.92 kg
MOUNTING	
Outer ring bolt circle (Lo)	52.000 in Metric reference: approximately 1,321 mm
Inner ring bolt circle (Li)	44.000 in Metric reference: approximately 1,118 mm
GEAR	
Gear pitch diameter (D2)	55.600 in Metric reference: approximately 1,412 mm
Diametral pitch (Pd)	2.5
Gear tooth count (z2)	139
PERFORMANCE	
Maximum gear tooth load (Fz)	29300 lbf Metric reference: approximately 130.33 kN
Moment load rating (Crm)	1220000 ft lbf Metric reference: approximately 1,654.1 kN m
PERFORMANCE RATINGS	
Moment	1220000.0000000000 ft lbf Metric reference: approximately 1,654.1 kN m
Gear Tooth	29300.0000000000 lbf Metric reference: approximately 130.33 kN
MOUNTING INTERFACES	
Outer ring mounting	28 holes - 1.313
Inner ring mounting	28 holes - 1.313
GEAR INTERFACE	
Pitch system	DP
Diametral pitch	2.5 DP
Module reference	10.16 mm

Complete Product Data

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GEAR INTERFACE (CONTINUED)	
Number of teeth	139
SOURCE TRACEABILITY	
Source document code	KAYDON-CAT390
Source file	Kaydon_Catalog_390.pdf
PDF page	82
Printed page	80
Source language	EN-US
Original unit system	Inch

Source and Verification Traceability

PUBLIC RECORD UID IVX6QRLYOK344KBXA6SMQYPUPQ	SOURCE DOCUMENT KAYDON-CAT390
SOURCE FILE Kaydon_Catalog_390.pdf	SOURCE LOCATION PDF page 82 Printed page 80
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/kaydon/16309001/>

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.