

Factory-Verified Replacement

MERYDOM 16294001

Certified for interchange with Kaydon 16294001. 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

16294001

REFERENCE

Kaydon 16294001

SERIES

XT Series

STRUCTURE

Four-point contact ball

OVERALL OD

654.05 mm

OVERALL ID

427.99 mm

OVERALL HEIGHT

69.85 mm

GEAR

Internal 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	16294001
Certified interchangeable with	Kaydon 16294001
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	56BVJLAX64ZX3PWQLCLFSDBDH4
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	16294001
Bearing structure	Four-point contact ball
Gear arrangement	Internal gear
DIMENSION	
Overall outside diameter (Do)	25.750 in Metric reference: approximately 654.1 mm
Overall inside diameter (di)	16.850 in Metric reference: approximately 428 mm
Overall height (H)	2.750 in Metric reference: approximately 69.9 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)	180 lb Metric reference: approximately 81.647 kg
MOUNTING	
Outer ring bolt circle (Lo)	24.500 in Metric reference: approximately 622 mm
Inner ring bolt circle (Li)	19.500 in Metric reference: approximately 495 mm
GEAR	
Gear pitch diameter (D2)	17.250 in Metric reference: approximately 438.2 mm
Diametral pitch (Pd)	4
Gear tooth count (z2)	69
PERFORMANCE	
Maximum gear tooth load (Fz)	12750 lbf Metric reference: approximately 56.71 kN
Moment load rating (Crm)	143000 ft lbf Metric reference: approximately 193.88 kN m
PERFORMANCE RATINGS	
Moment	143000.0000000000 ft lbf Metric reference: approximately 193.88 kN m
Gear Tooth	12750.0000000000 lbf Metric reference: approximately 56.71 kN
MOUNTING INTERFACES	
Outer ring mounting	18 holes - 0.688
Inner ring mounting	24 holes - 0.688
GEAR INTERFACE	
Pitch system	DP
Diametral pitch	4 DP
Module reference	6.35 mm

Complete Product Data

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GEAR INTERFACE (CONTINUED)	
Number of teeth	69
SOURCE TRACEABILITY	
Source document code	KAYDON-CAT390
Source file	Kaydon_Catalog_390.pdf
PDF page	80
Printed page	78
Source language	EN-US
Original unit system	Inch

Source and Verification Traceability

PUBLIC RECORD UID 56BVJLAX64ZX3PWQLCLFSDBDH4	SOURCE DOCUMENT KAYDON-CAT390
SOURCE FILE Kaydon_Catalog_390.pdf	SOURCE LOCATION PDF page 80 Printed page 78
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/16294001/>

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.