

Factory-Verified Replacement

MERYDOM 16278001

Certified for interchange with Kaydon 16278001. 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

16278001

REFERENCE

Kaydon 16278001

SERIES

DT Series

STRUCTURE

Eight-point contact ball

OVERALL OD

2,391.994 mm

OVERALL ID

1,956.003 mm

OVERALL HEIGHT

181 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	16278001
Certified interchangeable with	Kaydon 16278001
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	MBXEKXUUTMWKBNLM6CJF2364MS
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	DT Series
Reference model	16278001
Bearing structure	Eight-point contact ball
Gear arrangement	Internal gear
DIMENSION	
Overall outside diameter (Do)	94.173 in Metric reference: approximately 2,391.99 mm
Overall inside diameter (di)	77.008 in Metric reference: approximately 1,956 mm
Inner ring body ID (dr)	79.291 in Metric reference: approximately 2,013.99 mm

Complete Product Data

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DIMENSION (CONTINUED)	
Overall height (H)	7.126 in Metric reference: approximately 181 mm
Assembly weight (G)	3410 lb Metric reference: approximately 1,546.75 kg
MOUNTING	
Outer ring bolt circle (Lo)	90.787 in Metric reference: approximately 2,305.99 mm
Inner ring bolt circle (Li)	82.677 in Metric reference: approximately 2,100 mm
GEAR	
Gear pitch diameter (D2)	77.480 in Metric reference: approximately 1,968 mm
Gear tooth count (z2)	164
PERFORMANCE	
Maximum gear tooth load (Fz)	40770 lbf Metric reference: approximately 181.35 kN
Moment load rating (Crm)	3896200 ft lbf Metric reference: approximately 5,282.54 kN m
PERFORMANCE RATINGS	
Moment	3896200.0000000000 ft lbf Metric reference: approximately 5,282.54 kN m
Gear Tooth	40770.0000000000 lbf Metric reference: approximately 181.35 kN
MOUNTING INTERFACES	
Outer ring mounting	60 holes - 1.535
Inner ring mounting	60 holes - 1.535
GEAR INTERFACE	
Pitch system	MODULE
Module reference	12 mm
Number of teeth	164

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	
Source document code	KAYDON-CAT390
Source file	Kaydon_Catalog_390.pdf
PDF page	90
Printed page	88
Source language	EN-US
Original unit system	Inch

Source and Verification Traceability

PUBLIC RECORD UID MBXEKXUUTMWKBNLM6CJF2364MS	SOURCE DOCUMENT KAYDON-CAT390
SOURCE FILE Kaydon_Catalog_390.pdf	SOURCE LOCATION PDF page 90 Printed page 88
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/16278001/>

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.