

Factory-Verified Replacement

MERYDOM MTE-870

Certified for interchange with Kaydon MTE-870. 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

MTE-870

REFERENCE

Kaydon MTE-870

SERIES

MT Series

STRUCTURE

Four-point contact ball

OVERALL OD

1,205.078 mm

OVERALL ID

869.95 mm

OVERALL HEIGHT

107.95 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	MTE-870
Certified interchangeable with	Kaydon MTE-870
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	WYFIS3XAAMNJUDFKNIJ2M3SU5
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	MT Series
Reference model	MTE-870
Bearing structure	Four-point contact ball
Gear arrangement	External gear
DIMENSION	
Overall outside diameter (Do)	47.444 in Metric reference: approximately 1,205.08 mm
Overall inside diameter (di)	34.250 in Metric reference: approximately 870 mm
Overall height (H)	4.250 in Metric reference: approximately 108 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)	771 lb Metric reference: approximately 349.72 kg
MOUNTING	
Outer ring bolt circle (Lo)	43.875 in Metric reference: approximately 1,114.43 mm
Inner ring bolt circle (Li)	36.25 in Metric reference: approximately 920.8 mm
GEAR	
Gear pitch diameter (D2)	46.800 in Metric reference: approximately 1,189 mm
Diametral pitch (Pd)	2.5
Gear tooth count (z2)	117
PERFORMANCE	
Maximum gear tooth load (Fz)	31620 lbf Metric reference: approximately 140.65 kN
Moment load rating (Crm)	873800 ft lbf Metric reference: approximately 1,184.71 kN m
PERFORMANCE RATINGS	
Moment	873800.0000000000 ft lbf Metric reference: approximately 1,184.71 kN m
Gear Tooth	31620.0000000000 lbf Metric reference: approximately 140.65 kN
MOUNTING INTERFACES	
Outer ring mounting	24 holes - 1.188
Inner ring mounting	28 holes - 1.188
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	117
SOURCE TRACEABILITY	
Source document code	KAYDON-CAT390
Source file	Kaydon_Catalog_390.pdf
PDF page	68
Printed page	66
Source language	EN-US
Original unit system	Inch

Source and Verification Traceability

PUBLIC RECORD UID WYFIS3XAAMNJUDFKNIJ2M3SU5	SOURCE DOCUMENT KAYDON-CAT390
SOURCE FILE Kaydon_Catalog_390.pdf	SOURCE LOCATION PDF page 68 Printed page 66
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/mte-870/>

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.