

Factory-Verified Replacement

MERYDOM HT10-54N1Z

Certified for interchange with Kaydon HT10-54N1Z. 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

HT10-54N1Z

REFERENCE

Kaydon HT10-54N1Z

SERIES

HT Series

STRUCTURE

Four-point contact ball

OVERALL OD

1,524 mm

OVERALL ID

1,223.264 mm

OVERALL HEIGHT

88.9 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	HT10-54N1Z
Certified interchangeable with	Kaydon HT10-54N1Z
Verification status	Level 3 - MERYDOM Engineering Verified
Reviewed by	MERYDOM Engineering Department
Public record UID	4JPS2XOAPZN647ASL4OPVAVZ63
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	HT Series
Reference model	HT10-54N1Z
Bearing structure	Four-point contact ball
Gear arrangement	Internal gear
DIMENSION	
Overall outside diameter (Do)	60.000 in Metric reference: approximately 1,524 mm
Overall inside diameter (di)	48.160 in Metric reference: approximately 1,223.3 mm
Overall height (H)	3.500 in Metric reference: approximately 89 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)	775 lb Metric reference: approximately 351.534 kg
MOUNTING	
Outer ring bolt circle (Lo)	57.250 in Metric reference: approximately 1,454.2 mm
Inner ring bolt circle (Li)	51.250 in Metric reference: approximately 1,301.8 mm
GEAR	
Gear pitch diameter (D2)	48.800 in Metric reference: approximately 1,240 mm
Diametral pitch (Pd)	2.5
Gear tooth count (z2)	122
PERFORMANCE	
Maximum gear tooth load (Fz)	20344 lbf Metric reference: approximately 90.49 kN
Moment load rating (Crm)	578400 ft lbf Metric reference: approximately 784.21 kN m
PERFORMANCE RATINGS	
Moment	578400.0000000000 ft lbf Metric reference: approximately 784.21 kN m
Gear Tooth	20344.0000000000 lbf Metric reference: approximately 90.49 kN
MOUNTING INTERFACES	
Outer ring mounting	40 holes - 0.813 through, equally spaced
Inner ring mounting	44 holes - 0.750-10 UNC-2B; 1.125 min full thread
GEAR INTERFACE	
Pitch system	DP
Diametral pitch	2.5 DP
Module reference	10.16 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.

GEAR INTERFACE (CONTINUED)	
Number of teeth	122
SOURCE TRACEABILITY	
Source document code	KAYDON-CAT390
Source file	Kaydon_Catalog_390.pdf
PDF page	61
Printed page	59
Source language	EN-US
Original unit system	Inch

Source and Verification Traceability

PUBLIC RECORD UID 4JPS2XOAPZN647ASL4OPVAVZ63	SOURCE DOCUMENT KAYDON-CAT390
SOURCE FILE Kaydon_Catalog_390.pdf	SOURCE LOCATION PDF page 61 Printed page 59
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/ht10-54n1z/>

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.