

Factory-Verified Replacement

MERYDOM MTE-590T

Certified for interchange with Kaydon MTE-590T. 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-590T

REFERENCE

Kaydon MTE-590T

SERIES

MT Series

STRUCTURE

Sfere a quattro punti di contatto

OVERALL OD

851.764 mm

OVERALL ID

587.375 mm

OVERALL HEIGHT

73.025 mm

GEAR

Dentatura esterna

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-590T                                      |
| Certified interchangeable with       | Kaydon MTE-590T                               |
| Verification status                  | Level 3 - MERYDOM Engineering Verified        |
| Reviewed by                          | MERYDOM Engineering Department                |
| Public record UID                    | A3TB5SLXQLH5UA5KJQMNY6DOGZ                    |
| 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-590T                                      |
| Bearing structure                    | Sfere a quattro punti di contatto             |
| Gear arrangement                     | Dentatura esterna                             |
| DIMENSION                            |                                               |
| Overall outside diameter (Do)        | 33.534 in   Metric reference: circa 851,76 mm |
| Overall inside diameter (di)         | 23.125 in   Metric reference: circa 587,38 mm |
| Overall height (H)                   | 2.875 in   Metric reference: circa 73,03 mm   |

Complete Product Data

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| DIMENSION (CONTINUED)        |                                                                |
|------------------------------|----------------------------------------------------------------|
| Assembly weight (G)          | 283 lb   Metric reference: circa 128,367 kg                    |
| MOUNTING                     |                                                                |
| Outer ring bolt circle (Lo)  | 30.625 in   Metric reference: circa 777,88 mm                  |
| Inner ring bolt circle (Li)  | 24.875 in   Metric reference: circa 631,83 mm                  |
| GEAR                         |                                                                |
| Gear pitch diameter (D2)     | 33.000 in   Metric reference: circa 838 mm                     |
| Diametral pitch (Pd)         | 3                                                              |
| Gear tooth count (z2)        | 99                                                             |
| PERFORMANCE                  |                                                                |
| Maximum gear tooth load (Fz) | 17290 lbf   Metric reference: circa 76,91 kN                   |
| Moment load rating (Crm)     | 338700 ft lbf   Metric reference: circa 459,22 kN m            |
| PERFORMANCE RATINGS          |                                                                |
| Moment                       | 338700.0000000000 ft lbf   Metric reference: circa 459,22 kN m |
| Gear Tooth                   | 17290.0000000000 lbf   Metric reference: circa 76,91 kN        |
| MOUNTING INTERFACES          |                                                                |
| Outer ring mounting          | 18 holes - 7/8-9                                               |
| Inner ring mounting          | 24 holes - 7/8-9                                               |
| GEAR INTERFACE               |                                                                |
| Pitch system                 | DP                                                             |
| Diametral pitch              | 3 DP                                                           |
| Module reference             | 8.466667 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            | 99                     |
| 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

|                                                                               |                                                                     |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <div>PUBLIC RECORD UID</div> <div>A3TB5SLXQLH5UA5KJQMNY6DOGZ</div>            | <div>SOURCE DOCUMENT</div> <div>KAYDON-CAT390</div>                 |
| <div>SOURCE FILE</div> <div>Kaydon_Catalog_390.pdf</div>                      | <div>SOURCE LOCATION</div> <div>PDF page 68   Printed page 66</div> |
| <div>VERIFICATION</div> <div>Level 3 - MERYDOM Engineering<br/>Verified</div> | <div>REVIEWED BY</div> <div>MERYDOM Engineering Department</div>    |

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

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Product page: <https://rotnex.com/it/prodotti/cuscinetti-di-rotazione-sostitutivi/kaydon/mte-590t/>

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