

Factory-Verified Replacement

MERYDOM VSI 200414 N

Certified for interchange with INA VSI 200414 N. 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

VSI 200414 N

SERIES

VSI 20 Series

OVERALL OD

486 mm

OVERALL HEIGHT

mm

REFERENCE

INA VSI 200414 N

STRUCTURE

Four-point contact ball

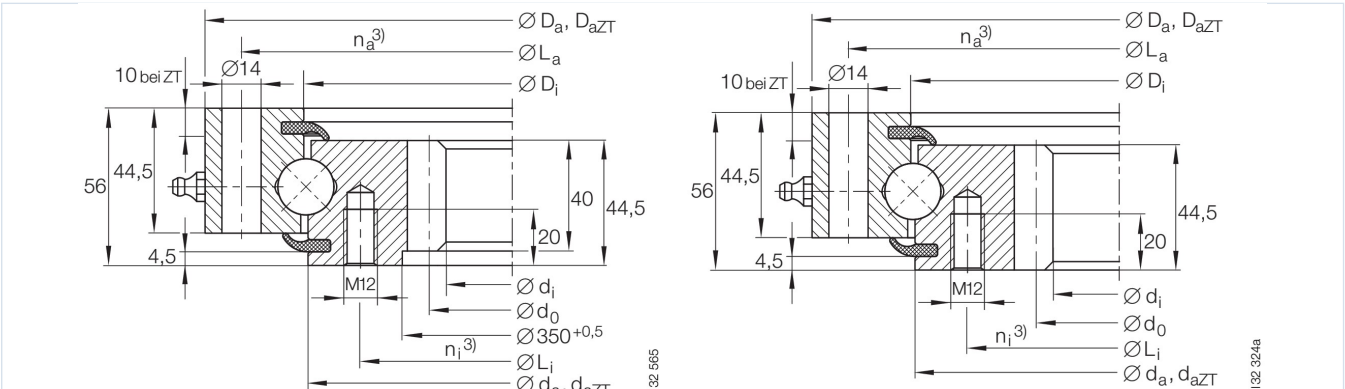
OVERALL ID

325 mm

GEAR

Internal gear

Published Technical Drawing



ina-g05-drawing.webp

132 324a

## 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                        | VSI 200414 N                           |
| Certified interchangeable with       | INA VSI 200414 N                       |
| Verification status                  | Level 3 - MERYDOM Engineering Verified |
| Reviewed by                          | MERYDOM Engineering Department         |
| Public record UID                    | T3JU6MDVG626XDT7JF5VU2EYQU             |
| MATERIALS                            |                                        |
| Configurable ring material options   | 42CrMo / 50Mn                          |
| Seal material                        | NBR - Nitrile rubber                   |
| Configurable spacer material options | Engineering nylon / Brass              |
| IDENTIFICATION                       |                                        |
| Reference brand                      | INA                                    |
| Reference series                     | VSI 20 Series                          |
| Reference model                      | VSI 200414 N                           |
| Bearing structure                    | Four-point contact ball                |
| Gear arrangement                     | Internal gear                          |
| DIMENSION                            |                                        |
| Mass (Mass)                          | 31 kg                                  |
| Overall outside diameter (Da)        | 486-0,5 mm                             |
| Outside centring diameter (DaZT)     | 484 mm                                 |

## Complete Product Data

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| DIMENSION (CONTINUED)                     |              |
|-------------------------------------------|--------------|
| Overall inside diameter (di)              | 325 mm       |
| Catalog diameter Di (Di)                  | 415,5+0,5 mm |
| Catalog diameter da (da)                  | 412,5-0,5 mm |
| Catalog centring diameter daZT (daZT)     | 411 mm       |
| MOUNTING                                  |              |
| Outer ring bolt circle (La)               | 460 mm       |
| Outer ring mounting-hole count (na)       | 24           |
| Inner ring bolt circle (Li)               | 375 mm       |
| Inner ring mounting-hole count (ni)       | 24           |
| GEAR                                      |              |
| Gear pitch diameter (d0)                  | 335 mm       |
| Gear module (m)                           | 5 mm         |
| Gear tooth count (z)                      | 67           |
| PERFORMANCE                               |              |
| Maximum permissible radial load (Fr perm) | 99.1 kN      |
| Normal tooth force (Fznorm)               | 17.7 kN      |
| Maximum tooth force (Fzmax)               | 26.2 kN      |
| Basic dynamic axial load rating (Ca)      | 169 kN       |
| Basic static axial load rating (C0a)      | 560 kN       |
| Basic dynamic radial load rating (Cr)     | 111 kN       |

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| PERFORMANCE (CONTINUED)                            |                                                              |
|----------------------------------------------------|--------------------------------------------------------------|
| Basic static radial load rating (C <sub>0r</sub> ) | 248 kN                                                       |
| PERFORMANCE RATINGS                                |                                                              |
| Rating Radial Static                               | 248 kN   Not simultaneous with other listed dynamic ratings  |
| Rating Axial Static                                | 560 kN   Not simultaneous with other listed dynamic ratings  |
| Rating Radial Dynamic                              | 111 kN   Not simultaneous with other listed dynamic ratings  |
| Rating Axial Dynamic                               | 169 kN   Not simultaneous with other listed dynamic ratings  |
| Rating Tooth Force Max                             | 26.2 kN   Not simultaneous with other listed dynamic ratings |
| Rating Tooth Force Normal                          | 17.7 kN   Not simultaneous with other listed dynamic ratings |
| Rating Radial Load Max                             | 99.1 kN   Not simultaneous with other listed dynamic ratings |
| MOUNTING INTERFACES                                |                                                              |
| Outer ring mounting                                | 24 holes - See source drawing                                |
| Inner ring mounting                                | 24 holes - See source drawing                                |
| GEAR INTERFACE                                     |                                                              |
| Pitch system                                       | module                                                       |
| Module reference                                   | 5 mm                                                         |
| Number of teeth                                    | 67                                                           |
| SOURCE TRACEABILITY                                |                                                              |
| Source document code                               | INA-SLEWING-RINGS-CATALOGUE-404-2012                         |
| Source file                                        | 404_de_en_1.pdf                                              |
| PDF page                                           | 62                                                           |

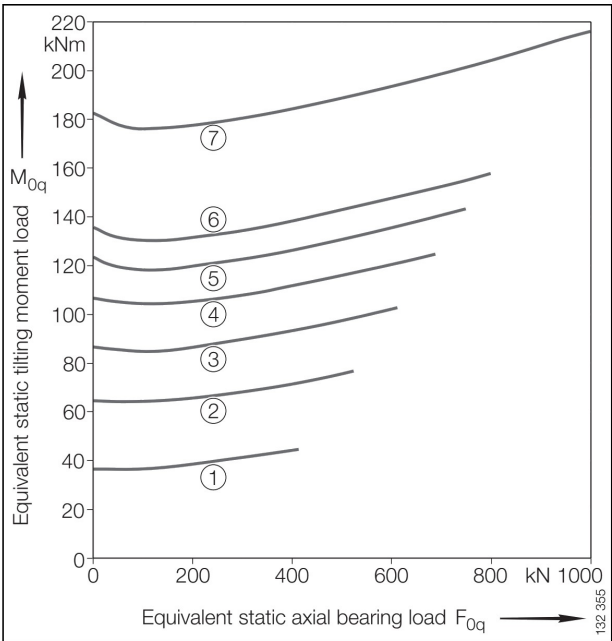
Complete Product Data

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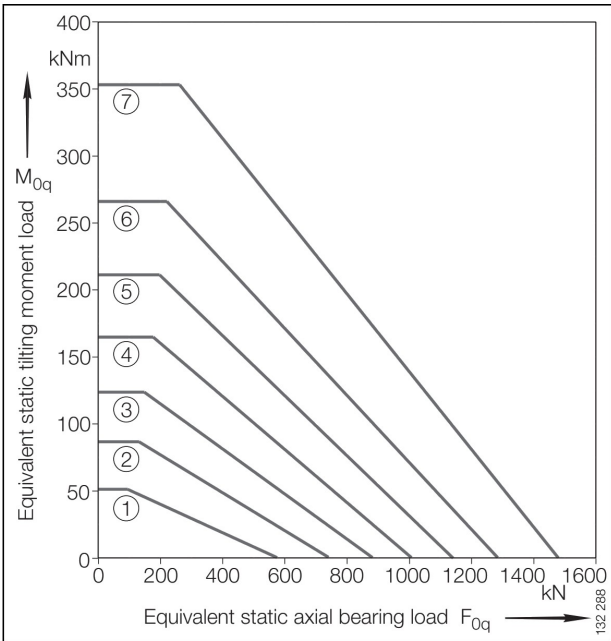
| SOURCE TRACEABILITY (CONTINUED) |                                                                                                     |
|---------------------------------|-----------------------------------------------------------------------------------------------------|
| Printed page                    | 60                                                                                                  |
| Source language                 | EN-DE                                                                                               |
| Original unit system            | Metric                                                                                              |
| PUBLISHED TECHNICAL MEDIA       |                                                                                                     |
| Load Curve Chart                | ina-g05-curve.webp   SHA-256:<br>fb0e0ce5a4e3d4bb75bd48bfd1e620139c351bb1cc03611c4a0b2c517182c12b   |
| Outline Drawing                 | ina-g05-drawing.webp   SHA-256:<br>292f24816a8315396ba35679ad20ed0cbe8ec267d4e1c171f7957a4aa33bd574 |

Published Load / Performance Chart

Use the published chart as a preliminary selection aid only. The model legend, curve family and source document must be reviewed together with the operating load case.



Static limiting load diagram



Static limiting load diagram

ina-g05-curve.webp | SHA-256: fb0e0ce5a4e3d4bb75bd48bfd1e620139c351bb1cc03611c4a0b2c517182c12b

Engineering note: final approval must also consider mounting rigidity, bolt capacity, duty cycle, lubrication, temperature, environment and installation conditions.

## Source and Verification Traceability

**PUBLIC RECORD UID****T3JU6MDVG626XDT7JF5VU2EYQU****SOURCE DOCUMENT****INA-SLEWING-RINGS-CATALOGUE-404-2012****SOURCE FILE****404\_de\_en\_1.pdf****SOURCE LOCATION****PDF page 62 | Printed page 60****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](mailto:jovi@merydom.com) | Email: [andi@merydom.com](mailto:andi@merydom.com) | WhatsApp: +86 17705201170Product page: <https://rotnex.com/products/slewing-bearing-replacements/ina/vsi-200414-n/>

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