

CATEGORY SELECTION GUIDE

Rotary Table Bearings Category Selection Guide

Rotary table bearings combine axial and radial roller arrangements to support axial load, radial load and tilting moment in a compact, preloaded rotary support. The catalog contains one Product Platform and eight SKUs. Select within the Product Platform by bore, outside diameter and height, then check axial and radial load ratings, limiting speed, friction torque, rotation accuracy and the exact mounting-hole arrangement.

CATEGORY SELECTION GUIDE

CATEGORY	CURRENT CATALOG	REVISION / ISSUE
Rotary Table Bearings	1 Product Platforms / 8 SKUs	R01 2026-09-04

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01 | Category Scope and Objective

Product catalog and suitable use

Item	Current category
Product catalog	1 Product Platform / 8 SKUs
Suitable use	Precision rotary tables, indexing and positioning mechanisms, chucks, measurement equipment and test fixtures requiring combined axial, radial and tilting-moment support.

02 | Construction and Typical Applications

Combined precision rotary support

The bearing arrangement combines two axial roller rows with one radial roller row. This supports axial and radial loads together with tilting moment, while the preloaded construction and integrated mounting holes suit compact precision rotary structures.

Typical applications

Machine-tool rotary tables Rotary and indexing tables where stiffness, combined-load capacity and repeatable rotational positioning are required.	Chucks and positioning mechanisms Compact rotating supports carrying axial, radial and overturning loads through an integrated bearing arrangement.	Measurement and test equipment Precision rotating fixtures where rotation accuracy, friction behavior and mounting accuracy must be evaluated together.
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03 | Selection Inputs

Application record checklist

01	Envelope and interfaces	Record shaft or through-bore requirement, housing diameter, available height and inner/outer ring mounting pattern.
02	Combined loads	Record axial load, radial load, tilting moment, load direction, duty and shock conditions.
03	Speed and friction	Record continuous and peak rotational speed, acceleration and permissible friction torque or drive reserve.
04	Accuracy and stiffness	Record required rotation accuracy and the stiffness and geometric accuracy of the surrounding shaft, housing and clamping faces.
05	Installation and environment	Record tightening method, lubrication, contamination, temperature, maintenance access and lifting or extraction requirements.

04 | Product Platform Catalog

Current Product Platform

	Rotary Table Bearing Product Platform 8 SKUs	
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05 | SKU Selection Path

01	Filter by bearing envelope Use Inner Ring Diameter, Body Outer Diameter and Bearing Height H to retain the SKUs that fit the shaft, housing and axial envelope.
02	Check combined-load requirements Compare axial and radial dynamic and static load ratings with the application load case, including tilting moment and duty assumptions.

03 Check speed and friction

Retain only SKUs whose Limiting Speed and Friction Torque are compatible with the motion profile and drive reserve.

04 Check rotation accuracy

Compare Rotation Accuracy P4 and Rotation Accuracy P2 with the required positioning or measurement performance.

05 Confirm mounting details

Confirm inner and outer ring hole counts and diameters, screw pattern, tightening torque, lifting holes and extraction provisions for the retained SKU.

06 | SKU Refinement

Size and load shortlist

SKU	Inner Ring Diameter	Body Outer Diameter	Bearing Height H	Axial Dynamic / Static	Radial Dynamic / Static
ES-BR-C2 9-S003-V 012	50	126	30	38 / 158	28.5 / 49.5
ES-BR-C2 9-S003-V 015	80	146	35	56 / 255	42.5 / 100
ES-BR-C2 9-S003-V 001	100	185	38	76.5 / 415	47.5 / 120
ES-BR-C2 9-S003-V 004	120	210	40	102 / 540	52 / 143
ES-BR-C2 9-S003-V 005	150	240	40	112 / 630	56 / 170
ES-BR-C2 9-S003-V 006	180	280	43	118 / 710	69.5 / 200
ES-BR-C2 9-S003-V 007	200	300	45	120 / 765	81.5 / 220
ES-BR-C2 9-S003-V 008	260	385	55	160 / 1060	93 / 290

Speed, friction and accuracy refinement

SKU	Limiting Speed	Friction Torque	Rotation Accuracy P4	Rotation Accuracy P2	Mass
ES-BR-C29-S 003-V012	600	2.5	2	1	1.6
ES-BR-C29-S 003-V015	530	3	3	1.5	2.4
ES-BR-C29-S 003-V001	430	3	3	1.5	4
ES-BR-C29-S 003-V004	340	7	3	1.5	5.3
ES-BR-C29-S 003-V005	320	10	3	1.5	6.2
ES-BR-C29-S 003-V006	280	12	4	2	7.7
ES-BR-C29-S 003-V007	260	14	4	2	9.7
ES-BR-C29-S 003-V008	200	20	6	3	18.3

07 | Installation Checklist

Before installation

01	Surrounding structure	Confirm shaft, housing and clamping-face dimensions, flatness, parallelism, perpendicularity and cleanliness.
02	Fasteners	Confirm the SKU-specific inner and outer ring hole pattern, mounting screw specification and Tightening Torque.
03	Tightening sequence	Use a crosswise, staged tightening sequence and rotate the bearing during tightening as required by the controlled installation information.
04	Handling and service	Confirm lifting holes, extraction threads, lubrication method, contamination control and maintenance access.
05	Post-installation checks	Verify smooth rotation, friction behavior and achieved accuracy before the surrounding assembly is released for use.

08 | Engineering Use and Verification Notice

Controlled engineering documents

01	Use the current SKU Product Datasheet for exact SKU load, speed, accuracy and configuration data.
02	Use the applicable Dimensional & Integration Guide and 2D drawing for fits, mounting holes, tolerances, tightening and installation details.
03	Request STEP or native CAD for the exact SKU through the controlled engineering-file process.

Final verification statement

This guide supports preliminary Product Platform and SKU selection. Before design freeze, procurement or use, verify the exact SKU, combined-load calculation, tilting moment, speed, lubrication, fits, mounting structure, tightening sequence, accuracy requirement and current controlled engineering documents. Do not derive missing load capacity, life, stiffness, accuracy or compatibility from a SKU code, adjacent size or a single rated value.