What Are Cylindrical Roller Bearing Used For?

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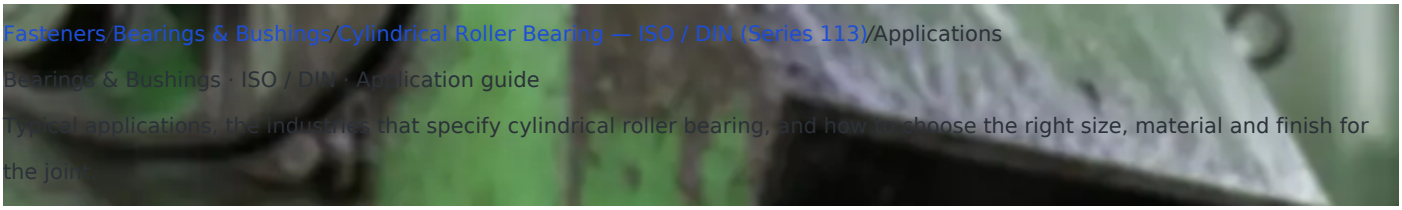

Fasteners/Bearings & Bushings/Cylindrical Roller Bearing — ISO / DIN (Series 113)/Applications

Bearings & Bushings · ISO / DIN · Application guide

Typical applications, the industries that specify cylindrical roller bearing, and how to choose the right size, material and finish for the joint.

Cylindrical Roller Bearings are used for supporting a rotating shaft and carrying its radial and axial loads with low friction. They are manufactured to ISO / DIN, and selection is driven by the bore diameter, the fit and tolerance the assembly requires, and the service environment.

Primary duty
: Supporting a rotating shaft and carrying its radial and axial loads with low friction

Governing standard
: ISO / DIN

Bore diameter range
: 20 mm to 90 mm

Category
: Bearings & Bushings

Application notes are general engineering guidance. Verify the property class and any approval requirement against your own design calculation.

Cylindrical Roller Bearings are used primarily for supporting a rotating shaft and carrying its radial and axial loads with low friction. This page lists the industries and assemblies where they are specified, the selection criteria that matter for each application, installation practice, and the cases where a different fastener type is the correct choice. Parts are supplied to ISO / DIN. Stocked across roughly 20 mm to 90 mm, they cover heavy and structural work.

Typical Applications for Cylindrical Roller Bearing — ISO / DIN (Series 113)

The most common settings where these are specified:

- **General machine building:** fastening covers, brackets, motors and sub-assemblies on production equipment.
- **Maintenance & repair (MRO):** a stocked size for servicing existing plant where the original fastener spec must be matched.
- **Fabrication & metalwork:** bench and on-site assembly of steel frames, enclosures and weldments.

How to Specify Cylindrical Roller Bearing — ISO / DIN (Series 113) for Your Application

- **Size:** Select on bore diameter, and confirm it against the mating feature in the assembly. This product spans 20 mm–90 mm; check the full table below for the exact dimensions of each size.

- **Material:** Choose the material and finish for the service environment — plated steel for general use, stainless for corrosion resistance.
- **Environment:** For damp, coastal or chemical exposure prefer A4/316 stainless or a suitable coating; indoors, plated steel or A2 is usually sufficient.
- **Standard:** This product is supplied to ISO / DIN. Quoting the standard on your order guarantees interchangeable dimensions between suppliers.

Where Cylindrical Roller Bearing — ISO / DIN (Series 113) Are Not the Right Choice

Match the fastener to the load, environment and whether the joint must be reopened; the wrong class or style is the usual cause of joint failure.

Technical Drawing

Customize the parameters below — every spec field is editable, and the drawing redraws to match the values you choose. Changing the size will snap the other fields to that size's standard values; you can then override any individual value.

Sends the selected values to the quote form below.

Request a Quote

The form below follows the current technical drawing configuration. Change the drawing values above and the request details update automatically.

Dimensions & Specifications (ISO / DIN)

Bore d (mm)	Outer diameter D (mm)	Width B (mm)	Dynamic load C (kN)	Limit speed (rpm)	Reference standard
20	47	14	28.4	11000	ISO 246 / GB/T 283
25	52	15	33.5	10000	ISO 246 / GB/T 283
30	62	16	49.5	8500	ISO 246 / GB/T 283
35	72	17	67.0	7500	ISO 246 / GB/T 283
40	80	18	78.0	6700	ISO 246 / GB/T 283
50	90	20	93.0	6000	ISO 246 / GB/T 283
60	110	22	138	5000	ISO 246 / GB/T 283
75	130	25	180	4300	ISO 246 / GB/T 283
90	160	30	238	3600	ISO 246 / GB/T 283

Inside the plant

Manufactured in our own plant

This part is cold-formed, threaded, heat-treated and finished in-house. The stages below are where its class and finish are actually decided.

1. 

01

Cold heading

Wire rod is drawn to size and cold-formed into blanks. Forming rather than cutting keeps the grain flow continuous around the head, which is where a bolt is most likely to fail.

Head dimensions and under-head radius checked at set-up and per shift.

2. 

02

Thread rolling

Threads are rolled between hardened dies rather than cut. Rolled threads are stronger in fatigue than cut threads and hold pitch and flank angle far more consistently across a batch.

Go / no-go ring gauges to ISO 965 tolerance class 6g.

3. 

03

Heat treatment

Quench-and-temper brings carbon and alloy steel to the property class ordered — 8.8, 10.9 or 12.9 — with the furnace charge tracked so a finished lot can be traced back to it.

Core hardness and tensile tested per lot to ISO 898-1.

4. 

04

Surface treatment

Zinc, zinc-nickel, hot-dip galvanizing, black oxide, phosphate and Dacromet, selected against the service environment rather than against the price list.

Coating thickness and neutral salt spray hours to ISO 9227.

Frequently Asked Questions

What are Cylindrical Roller Bearing — ISO / DIN (Series 113) used for?
Supporting a rotating shaft and carrying its radial and axial loads with low friction. They are supplied to ISO / DIN.

Which industries use Cylindrical Roller Bearing — ISO / DIN (Series 113)?
They are commonly specified in general machine building, maintenance & repair (mro) and fabrication & metalwork, among other sectors.

How do I choose the right size of Cylindrical Roller Bearing — ISO / DIN (Series 113)?
Select on bore diameter and on the fit the assembly requires. This product is available from 20 mm to 90 mm; the full dimension table on this page lists each size.

Are Cylindrical Roller Bearing — ISO / DIN (Series 113) made to a recognized standard?

Yes — they are manufactured to ISO / DIN, so dimensions are interchangeable between suppliers when you quote the standard on your order.

Can I get a quote for Cylindrical Roller Bearing — ISO / DIN (Series 113) in the size and material I need?
Yes. Use the technical drawing and quote form on this page to set the size and options, then send the exact configuration to our team for pricing and lead time.

Related Pages

Product page: Cylindrical Roller Bearing — ISO / DIN (Series 113) — specifications & sizes

Cylindrical Roller Bearing — ISO / DIN (Series 113) Specification Guides

- A4 stainless Cylindrical Roller Bearing — ISO / DIN (Series 113)

Related Fastener Applications

- Angular Contact Ball Bearing — ISO / DIN (Series 109) applications
- Angular Contact Ball Bearing — ISO / DIN (Series 111) applications
- Angular Contact Ball Bearing — ISO / DIN (Series 136) applications
- Angular Contact Ball Bearing — ISO / DIN (Series 137) applications
- Angular Contact Ball Bearing — ISO / DIN (Series 138) applications
- Cylindrical Roller Bearing — ISO / DIN (Series 112) applications