How to Measure a Bearing

3 Critical Dimensions to Identify Any Bearing (Metric or Imperial)

The Three Key Measurements:

ID x OD x W

Inside Diameter (Bore) x Outside Diameter x Width

Pro Tip: Before measuring, check the bearing for an etched number. This MPN (e.g., 6205) can be used to look up the exact specifications, which is more reliable than measuring. Double-checking measurements with MPN ensures you are ordering the correct replacement part.

The Tools You Need

Tool	Purpose
Vernier Caliper	Mandatory for precision. A tape measure is not accurate enough for bearing tolerances.*
Clean Cloth	To wipe away grease and debris that can skew measurements by fractions of a millimeter.

The Three Key Dimensions

To identify a bearing without a part number, you must measure in this specific order: **Inside Diameter (Bore) x Outside Diameter x Width.**

1 Inside Diameter (ID) / Bore

Place the internal large jaws of the caliper inside the center hole. Ensure the caliper is straight and centered to find the widest point.

2 Outside Diameter (OD)

Place the external jaws around the outer ring of the bearing. **Tip:** Do not measure the "housing" or the "flange" — measure only the bearing itself.

3 Width (W)

Measure the thickness of the inner and outer rings. Usually, these are the same, but in some bearings (like some Tapered Roller Bearings), they may differ.

Metric vs. Imperial (Standard)

System	How to Identify
Metric	If your measurement is a "clean" number (e.g., 25.00mm or 30.00mm), it is Metric.
Imperial	If your decimal converts to a clean fraction (e.g., .625" is 5/8"), it is an Imperial/Standard bearing. (Some call it "Fractional")

Important: Even a tiny difference matters. A 25mm bore is not the same as a 1" bore (25.4mm). Always record measurements in millimeters (most common) or inches to identify the replacement part.

Important Considerations

- **Rounding:** Bearings often conform to standard sizes, so if a measurement is slightly off (e.g., 16.78mm), it is likely the next whole number (17mm).
- **Cleanliness:** Ensure the bearing is free of grease and dirt for an accurate reading.

**Accuracy: If a caliper is unavailable, a high-quality, precise steel ruler can be used, though it is less accurate than a caliper.*

Note: For needle bearings, you may need to specifically measure the inner diameter, outer diameter, and width to determine the correct type.

Need help identifying your bearing? Send us your measurements.
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