

TIMKEN

Aircraft Landing Wheel Bearings

Stronger. **By Design.**

AIRCRAFT CODE '629'

Wherever possible specify Timken Aircraft Code '629'

- Supplied only through authorised channels
- Superior bearing
- Enhanced quality control
- Hardness audit
- Heat Treated Cage
- Advanced manufacturing processes
- Improved traceability



Part marking general arrangement

✧ Part marking has 2 components –
base part number + inspection code

- Base part number

- Several styles

	Examples
• ABMA (Imperial / inch)	LM806649
• ISO (metric)	X32928M
• Timken	NP437694

LM806649-20629

- Timken Inspection code has 2 components – precision class + performance code
 - Always a standard precision class (4, 2, K, N)
 - Precision class 2 (Imperial) is most common
 - Always performance code 629 – for aircraft landing wheels

TRB TOLERANCE SYSTEMS – IMPERIAL & METRIC

- Standard Class bearings used for ALWs
 - Preferred for this industry (Ex 52400-20629)
- Standard bearing Classes:
 - Imperial (inch) 4 2 (most common)
 - Metric (ISO) K N ←
- Imperial (inch) system bearing Class 2 is used
 - Legacy Class 4 parts not available in this size range
- Metric (ISO) system bearing Classes K and N are used
- Examples - 52400-20629, JP10049-K0629, JLM820048-N0629

TRB Bearing
Classes

Imperial (inch)	4	2	3	0	00
Metric (ISO)	K	N	C	B	A

PART MARKING FORMAT

- Bearing part number must always be verified
- Timken part number markings include the basic part number followed by a five-digit inspection code. For example:
 - 13889-20629
 - JP13049-K0629
 - NP535579-20629
 - XC02638CB-20629
- Timken standardized its part marking in 2008 to meet ATA Spec2000 requirements
 - Part number ordering information consistent
 - No change to manufacture or design of the parts



CORRECT BEARING PART NUMBER?

Ensure the bearing part number is as in the CMM

- Timken bearing part numbers can be Alfa../Numeric/ Alfa example LM229140C
- Both the Alfa prefix and Alfa suffix are critical



One of these would be 0.125"(3,2mm) loose on axle

LANDING WHEEL BEARING PACKAGING

Timken® tapered roller bearings for landing wheels meet the stringent performance demands of aircraft wheels – whether in large commercial transports or small private airplanes.

Timken marks these bearings with “20629” (inch) or “N0629” (metric), signifying that they are designated and manufactured for Landing Wheel applications.

In most commercial applications, Timken holds Part Manufacturer Approval (PMA) from the FAA.

Landing wheel Size Range:

- 35 to 270 mm Outside Diameter
- 12 to 230 mm Cone bore



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