# **TIMKEN**

# **Aircraft Landing Wheel Bearings**

### 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) ISO (metric)

X32928M

NP437694

 Timken Inspection code has 2 components – precision class + performance code

LM806649-20629

- 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	С	В	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

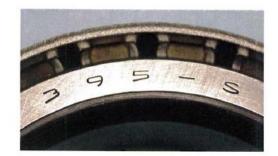


#### CORRECT BEARING PART NUMBER?

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

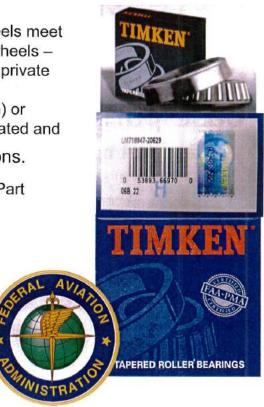
Timken® tapered roller bearings for landing wheels meet the stringent performance demands of aircraft wheels – whether in large commercial transports or small private airplanes.

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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