

ANSI/ABMA 23.2:1988 (Stabilized Maintenance 2010)

AMERICAN NATIONAL STANDARD

*Accredited Standards
Committee B3*



Thrust Bearings of Tapered Roller Type Inch Design

Secretariat

American Bearing
Manufacturers Association

ANSI/ABMA 23.2:1988

Stabilized Maintenance 2010



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Thrust Bearings of Tapered Roller Type — Inch Design

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Thrust Bearings of Tapered Roller Type - Inch Design

1. SCOPE

This standard for thrust bearings of the tapered roller type of inch design covers:

Bearing Number and Type Identity
Symbols and Nomenclature
Boundary Dimensions
Tolerances
Mounting Dimensions

All bearings and components in this standard are not necessarily available. For availability, consult bearing manufacturers.

The following standards should be consulted for tolerance definitions, gaging practices and methods of evaluating load ratings:

ANSI/AFBMA Standard 1	Terminology for Anti-Friction Ball and Roller Bearings and Parts
ANSI/AFBMA Standard 4	Tolerance Definitions and Gaging Practices for Ball and Roller Bearings
ANSI/AFBMA Standard 11	Load Ratings and Fatigue Life for Roller Bearings

This standard only covers external dimensions. Functional interchangeability between different makes of standard bearings or components of the same size may depend on bearing features which are not standardized. Hence, the substitution of one make of standard bearing for another should only be made after careful comparison of their characteristics and consideration of the requirements of the particular application.

2. BEARING NUMBER and TYPE IDENTITY

The bearing number identifies each tapered roller thrust bearing on the basis of complete dimensional interchangeability. This bearing number establishes a universal language for identifying tapered roller thrust bearings of inch design in order to facilitate communications between the user and the manufacturer. These bearing numbers apply only to those tapered roller thrust bearings of inch design whose boundary dimensions and tolerances form this standard.

TABLE 1
BASIC BEARING NUMBER

Type	Bore
T T = Thrust Bearing	NNNN Up to 5 numerical digits stating the Approximate bore size in inches

The type identity is used in the bearing title and defines the particular type of tapered roller thrust bearing. This establishes a universal language for identifying the type or configuration of tapered roller thrust bearings of inch design to facilitate communications between the user and the manufacturer.

TABLE 2
TYPE IDENTITY

1st & 2nd Letters		3rd & 4th Letters	
Letters	Definition	Letters	Definition
TT	Tapered Roller Thrust Bearing	C	Cageless with cup form retainer band
		CS	Cageless with sleeve form retainer band
		HD	Heavy Duty
		SP	Steering Pivot

3. BOUNDARY DIMENSIONS

3.1 Symbols and Nomenclature

d = basic bore diameter of a shaft ring (or washer)

D = basic outside diameter of a housing ring (or washer)

T = bearing height (thrust bearing)

R_{smin} = smallest permissible shaft ring (or washer) chamfer dimension

r_{smin} = smallest permissible housing ring (or washer) chamfer dimension

The exact shape of a chamfer is not controlled by the chamfer dimensions R_{smin} and r_{smin} .