



AMERICAN NATIONAL STANDARD

*Accredited Standards
Committee B3*

Ball And Roller Bearing Mounting Accessories Metric Design ANSI/ABMA 8.1:1986

Secretariat

**American Bearing
Manufacturers Association**

ANSI/ABMA 8.1:1986

Stabilized Maintenance 2010



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METRIC DESIGN BALL AND ROLLER BEARING MOUNTING ACCESSORIES

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Metric Design Ball and Roller Bearings Mounting Accessories

1. SCOPE

Mounting accessories covered in this standard are used for the location or fixing of ball and roller bearings to the shaft of a machine or mechanism. The purpose of the standard is to establish dimensions and minimum physical properties of these components consistent and compatible with ABMA, ANSI and ISO standards relating to ball and roller bearings. Products manufactured in accordance with this standard will fulfill the expected function when used with properly-designed shafts. This standard covers

1.1 Locknuts and Removal Nuts — Locknuts and removal nuts for ball bearings and cylindrical, spherical, and tapered roller bearings.

1.2 Locking Devices — Lockwashers and locking clamps for ball bearings and cylindrical, spherical, and tapered roller bearings.

1.3 Mounting Sleeves — Adapter sleeves and withdrawal sleeves for ball bearings and spherical roller bearings.

1.4 Shaft Dimensions — Recommended dimensions for threads, keyways, and reliefs for shafts.

1.5 General Information — Symbols, definitions, part numbers, materials, tolerances, and threads.

2. IDENTIFICATION CODE

2.1 DEFINITIONS

2.1.1. Locknuts and Removal Nuts

2.1.1.1 Bearing Locknut — A fastener with internal threads utilized to secure and/or position the inner ring of a rolling element bearing to a shaft or mounting sleeve. (Some sizes may be used as removal nuts.)

2.1.1.2 Removal Nut — A fastener with internal threads utilized to facilitate disassembly of a bearing from the withdrawal sleeve.

2.1.1.3 Face Runout — A dimensional characteristic denoting total indicator reading at the locknut face while locknut is rotated one revolution on the axis of the thread pitch diameter. Also denoted as squareness of the face with the thread.

2.1.1.4 Slot — Slots are provided on the outer diameter (O.D.) of locknuts and removal nuts. These slots aid in turning with a spanner wrench or other types of turning tools and permit locking of the lock nut in final position.

2.1.1.5 Chamfer Face — The nut face adjoining the large O.D. chamfer, the face normally positioned against the lockwasher or bearing.

2.1.1.6 Face Parallelism — A term defining the parallel relationship between the chamfer face of the locknut and the opposite face of the locknut.