

ICS 21.060.20
CCS J 13



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 6187.1-2016

**Prevailing torque type all-metal hexagon nuts with flange, style
2
(English Translation)**

Issued on: February 24, 2016

Implemented on: June 1, 2016

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China**

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Foreword

This Part of GB/T 6187 belongs to a complete group of national standards "Prevailing Torque Type Hexagon Nuts". It comprises the following.

- GB/T 889.1 Prevailing Torque Type Hexagon Nuts (with Non-metallic Insert),
Style 1
- GB/T 889.2 Prevailing Torque Type Hexagon Nuts (with Non-metallic Insert),
Style 1--Fine Pitch Thread
- GB/T 6172.2 Prevailing Torque Type Hexagon Thin Nuts (with Non-metallic
Insert)
- GB/T 6182 Prevailing Torque Type Hexagon Nuts (with Non-metallic Insert),
Style 2
- GB/T 6183.1 Prevailing Torque Type Hexagon Nuts with Flange (with Non-
metallic Insert), Style 2
- GB/T 6183.2 Prevailing Torque Type Hexagon Nuts with Flange (with Non-
metallic Insert), Style 2 - Fine Pitch Thread
- GB/T 6184 Prevailing Torque Type All-metal Hexagon Nuts, Style 1
- GB/T 6185.1 Prevailing Torque Type Hexagon Nuts With Flange (with Non-
metallic Insert), Style 2
- GB/T 6185.2 Prevailing Torque Type All-metal Hexagon Nuts with Flange, Style

2 - Fine Pitch Thread

-- GB/T 6187.1 Prevailing Torque Type All-metal Hexagon Nuts with Flange,
Style 2

-- GB/T 6187.2 Prevailing Torque Type All-metal Hexagon Nuts with Flange,
Style 2 - Fine Pitch Thread

This Part is the 1st Part of GB/T 6187.

This Part was drafted in accordance with the rules given in GB/T 1.1-2009.

This Part replaces GB/T 6187.1-2000, Prevailing Torque Type All-metal Hexagon Nuts with Flange. Compared with GB/T 6187.1-2000, the main technical differences are as follows.

- it changes the name of the standard;
- it deletes "If, in special cases, specifications other than those listed in this
- it changes the name of the standard; and
- it deletes the Bibliography of ISO 7044.

This Part was proposed by China Machinery Industry Federation.

This Standard shall be under the jurisdiction of the National Standardization Technical Committee on Fasteners (SAC/TC 85).

The responsible drafting organization of this Part. China Productivity Center for Machinery.

The participating drafting organization of this Part. Dongfeng Commercial Vehicles Co Ltd. Dongfeng Commercial Vehicles Technology Centre.

This Part shall be interpreted by the Secretariat of National Standardization Technical Committee on Fasteners.

The previous editions replaced by this Part are as follows.

- GB/T 6187-1986; and
- GB/T 6187.1-2000.

Prevailing Torque Type All-metal Hexagon Nuts
with Flange, Style 2

1 Scope

This Part of GB/T 6187 specifies the dimensions, technical requirements and designation of prevailing torque type all-metal hexagon nuts with flange, style 2.

This Part applies to prevailing torque type all-metal hexagon nuts, style 2, product grades A and B, with thread M5 to M20, and of property class 8, 10 and 12. Product grade A is used for nuts with $D \leq 16$ mm; and product grade B is used for nuts with $D >$

16 mm.

Note: The dimensions of the nuts correspond to those given in GB/T 6177.1 plus prevailing torque feature.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition dated applies to this document. For undated references, the latest edition of the referenced document (including any amendments) applies to this Standard.

GB/T 90.1 Fasteners - Acceptance Inspection (GB/T 90.1-2002, ISO 3269.2000, IDT)

GB/T 90.2 Fasteners - Marking and Packaging

GB/T 193 General Purpose Metric Screw Threads - Diameters and Pitches (GB/T 193-2003, ISO 261.1998, MOD)

GB/T 1237 Designation System for Fasteners (GB/T 1237-2000, eqv. ISO 8991.1986)

GB/T 3098.2 Mechanical Properties of Fasteners - Nuts (GB/T 3098.2-2015, ISO 898-2.2012, MOD)

GB/T 3098.9 Mechanical Properties of Fasteners - Prevailing Torque Type Steel Nuts (GB/T 3098.9-2010, ISO 2320.2008, IDT)

GB/T 3103.1 Essential Oils and Aromatic Extracts - Determination of Residual Benzene Content (GB/T 3103.1-2002, ISO 4759-1.2000, IDT)

GB/T 5267.1 Fasteners - Electroplated Coatings (GB/T 5267.1-2002, ISO 4042.1999, IDT)

GB/T 5267.2 Fasteners - Non-electrolytically Applied Zinc Flake Coatings (GB/T 5267.2-2002, ISO 10683.2000, IDT)

GB/T 5276 Fasteners - Bolts, Screws, Studs and Nuts - Symbols and Description of Dimensions (GB/T 5276-2015, ISO 225.2010, MOD)

GB/T 5779.2 Fasteners - Surface Discontinuities - Nuts (GB/T 5779.2-2000, ISO 6157-2.1995, IDT)

GB/T 6177.2 Hexagon Nuts with Flange, Style 2 - Fine Pitch Thread (GB/T 6177.2-2016, ISO 10663.2012, MOD)

GB/T 9145 General Purpose Metric Screw Threads - Limits of Sizes for the Screw Threads of Medium Quality and Preferable Plan (GB/T 9145-2003, ISO 965-2.1998, MOD)

GB/T 16938 Fasteners - General Requirements for Bolts Screws Studs and Nuts (GB/T 16938-2008, ISO 8992.2005, IDT)

3 Dimensions

See Figure 1 and Table 1 for dimensions of nuts.

Symbols and descriptions of dimensions are specified in GB/T 5276.

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