

M6 Wing Nuts Dimensions

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M6 Wing Nuts dimensions to DIN 315: nut height 22 mm, coarse thread pitch 1 mm.

Nut height

22 mm

Coarse thread pitch

1 mm

Figures are nominal values from the governing standard. Confirm against the tolerance class for your application before machining or ordering.



The M6 size of Wing Nuts is dimensioned by DIN 315. The table below gives the dimensional row from the standard, followed by the installation notes for this type.

Values are taken from the governing standard rather than from a general machine-thread table, because this type is not selected on one.

M6 Dimensional Row (DIN 315)

Size	Pitch (mm)	Wing span (mm)	Wing height (mm)	Body height (mm)	Reference
M6	1.0	37	22	12	DIN 315

Mating Parts for M6

Pair M6 with the matching M6 bolt or screw, plus a M6 flat washer where required to distribute load on softer materials.

Custom manufacturing · Made to drawing

Need wing nuts in a size this table does not list?

This page covers M6 wing nuts. Dimensions, material, finish and form are specified from the drawing — a nut outside the standard range is a variation on existing tooling rather than a new design. Made by cold heading or tapping.

Minimum order from 2,000 pieces; samples within 7 days of drawing approval.

Custom nut manufacturing (<https://engineeringhardware.com/custom/nuts/>)

Send a drawing (<https://engineeringhardware.com/custom/nuts/#rfq>)

Technical Drawing

Customize the parameters below — every spec field is editable, and the drawing redraws to match the values you choose. Changing the size will snap the other fields to that size's standard values; you can then override any individual value.



Dimensioned line drawing of M6 Wing Nuts to DIN 315. Side view and top view, drawn to the dimensions in the table below and redrawn for any size selected.

Opens a short step to confirm the exact specification before you enter contact details.

Request a Quote

Click “Request this configuration” under the drawing to confirm the exact specification, then add your contact details. You can also send the request without a specification — but only an accurate selection gets an accurate quote.

Dimensions & Specifications (DIN 315)

Size	Pitch (mm)	Wing span (mm)	Wing height (mm)	Body height (mm)	Reference
M4	0.7	28	17	9	DIN 315
M5	0.8	32	19	10	DIN 315
M6	1.0	37	22	12	DIN 315
M8	1.25	45	27	15	DIN 315
M10	1.5	55	33	18	DIN 315
M12	1.75	64	38	22	DIN 315

Materials & Grades

Select a material class to see the grades we supply it in. Each designation is listed with its ISO/EN, AISI/SAE, JIS and GB equivalents.

Stainless Steel

Carbon Steel66

Alloy Steel41

Bearing Steels5

Spring Steel25

Aluminum and Aluminum Alloys21

Brass17

Bronze11

Copper8

Titanium and Titanium Alloys18

Nickel and Nickel Alloys22

Iron-Nickel and High-Temperature Alloys10

Tool Steel and Specialty Hardened Steel9

Structural and Construction Steel9

Stainless Steel

Austenitic Stainless Steel

A1

AISI 303 · SAE 303 · SUS303 · EN 1.4305 · X8CrNiS18-9

A2

AISI 304 · SAE 304 · SUS304 · EN 1.4301 · X5CrNi18-10 · 06Cr19Ni10

304L

AISI 304L · SUS304L · EN 1.4307 · X2CrNi18-9 · 022Cr19Ni10

302

AISI 302 · SUS302 · EN 1.4310

305

AISI 305 · SUS305 · EN 1.4303

A4

AISI 316 · SAE 316 · SUS316 · EN 1.4401 · X5CrNiMo17-12-2 · 06Cr17Ni12Mo2

316L

AISI 316L · SUS316L · EN 1.4404 · X2CrNiMo17-12-2 · 022Cr17Ni12Mo2

321

AISI 321 · SUS321 · EN 1.4541 · X6CrNiTi18-10

310 / 310S

AISI 310 · AISI 310S · SUS310S · EN 1.4845

302HQ

AISI 302HQ

A3

A5

347

AISI 347 · SUS347 · EN 1.4550 · X6CrNiNb18-10

309 / 309S

AISI 309 · AISI 309S · SUS309S

Martensitic Stainless Steel

AISI 410

SUS410 · EN 1.4006 · X12Cr13 · 12Cr13

AISI 420

SUS420J1 · SUS420J2 · EN 1.4021 · EN 1.4028 · 20Cr13 · 30Cr13

AISI 431

SUS431 · EN 1.4057 · X17CrNi16-2

C1

C3

C4

AISI 440A

AISI 440B

AISI 440C

SUS440C · EN 1.4125

Ferritic Stainless Steel

AISI 430

SUS430 · EN 1.4016 · X6Cr17 · 10Cr17

F1

AISI 434

AISI 444

Precipitation-Hardening Stainless Steel

17-4 PH

AISI 630 · UNS S17400 · SUS630 · EN 1.4542 · X5CrNiCuNb16-4

15-5 PH

UNS S15500

17-7 PH

UNS S17700

Duplex and Super Duplex Stainless Steel

Duplex 2205

UNS S31803 · UNS S32205 · EN 1.4462

Super Duplex 2507

UNS S32750 · EN 1.4410

D2

D4

D6

D8

Lean Duplex 2101

UNS S32101

Super Duplex S32760

UNS S32760 · EN 1.4501

Carbon Steel

Low-Carbon Steel

SAE 1006**SAE 1008****SAE 1010****SAE 1018****SAE 1020****Q195****Q235****SAE 1012****SAE 1015****Q215****ML08****ML08AI****ML10****ML15****ML20****SWRCH6A****SWRCH8A****SWRCH10A****SWRCH12A****SWRCH15A****SWRCH18A**

Medium-Carbon Steel

SAE 1035**SAE 1045**

S45C**C45****SAE 1030****SAE 1040****SAE 1050****30****35****40****45****50****S35C****S40C****S50C****C35****C40****High-Carbon Steel****SAE 1060****SAE 1070****65Mn****SAE 1065****SAE 1075****SAE 1080****SAE 1085****SAE 1090****SAE 1095****60****65**

70**75****80****85****Cold-Heading Steel****SWRCH22A****10B21****SWRCH22K****SWRCH25K****SWRCH30K****SWRCH35K****SWRCH40K****ML20Mn****ML25****ML30****ML35****ML40****15B25****Alloy Steel****Chromium Steel****40Cr****45Cr****AISI 5140****SAE 5140**

AISI 5120**SAE 5120****SCr420****SCr440****Chromium-Molybdenum Steel****35CrMo****42CrMo****AISI 4140****SCM435****SCM440****42CrMo4****30CrMo****AISI 4130****SAE 4130****SAE 4140****AISI 4142****AISI 4145****SCM415****SCM420****SCM445****EN 1.7220****EN 1.7225****25CrMo4****34CrMo4****Nickel-Chromium-Molybdenum Steel****AISI 4340**

SAE 4340**40CrNiMo****SNCM439****EN 1.6511****36CrNiMo4****Boron Alloy Steel****10B22****10B21****15B21****15B25****20MnTiB****20Mn2B****35VB****40MnB****Bearing Steel****Bearing Steel****GCr15****AISI 52100****SAE 52100 · UNS G52986****SUJ2****100Cr6****EN 1.3505****GCr15SiMn**

Spring Steel

Carbon Spring Steel

SAE 1065**SAE 1070****SAE 1075****SAE 1080****SAE 1095****65****70****75****80****65Mn**

Silicon-Manganese Spring Steel

60Si2Mn**60Si2MnA****SUP6****SUP7**

Chromium-Vanadium Spring Steel

50CrVA**SAE 6150****AISI 6150****SUP10**

Stainless Spring Steel

AISI 301**SUS301**

EN 1.4310**AISI 302****AISI 304****AISI 316****17-7 PH**

Aluminum and Aluminum Alloys

Commercially Pure Aluminum

1050**1060****1070****1100**

2xxx Series Aluminum

2024**2011****2014****2017**

5xxx Series Aluminum

5052**5083****5754**

6xxx Series Aluminum

6061**6061-T6**

6063**6082****6082-T6****7xxx Series Aluminum****7075****7075-T6****7005****7050****7075-T73****Brass****Free-Cutting Brass****C36000****H62****HPb59-1****C3601****C3602****C3604****CuZn36Pb3****CuZn39Pb3****EN CW614N****EN CW617N****H65****Lead-Free Brass****C69300**

C27450**CW510L****CW511L****Naval Brass****C46400****CuZn39Sn1****Bronze****Silicon Bronze****C65500****C65100****C65600****Phosphor Bronze****C51000****C52100****CuSn6****CuSn8****Aluminum Bronze****C95400****C95500****C63000****CuAl10Ni5Fe4**

Copper

Copper

C11000

T2

C10100

C10200

C12200

T1

TU1

TU2

Titanium and Titanium Alloys

Commercially Pure Titanium

Grade 2

Grade 1

Grade 3

Grade 4

TA1

TA2

TA3

Alpha-Beta Titanium Alloys

Grade 5

Ti-6Al-4V

TC4

UNS R56400

Low-Interstitial Grade

Grade 23

Ti-6Al-4V ELI

UNS R56407

Other Titanium Fastener Alloys

Ti-6Al-6V-2Sn

Ti-6Al-2Sn-4Zr-2Mo

Beta-C titanium

Ti-10V-2Fe-3Al

Nickel and Nickel Alloys

Commercially Pure Nickel

Nickel 200

UNS N02200

Nickel 201

UNS N02201

Inconel Alloys

Inconel 625

UNS N06625

Inconel 718

UNS N07718

Inconel 600

UNS N06600

Inconel 601

UNS N06601

Inconel 686

UNS N06686**Inconel X-750****UNS N07750****Monel Alloys****Monel 400****UNS N04400****Monel K-500****UNS N05500****Hastelloy Alloys****Hastelloy C-276****UNS N10276****Hastelloy C-22****UNS N06022****Hastelloy B-2****UNS N10665****Hastelloy B-3****UNS N10675****Hastelloy X****UNS N06002****Other Nickel Alloys****Alloy 20****UNS N08020****Alloy 625****Alloy 718****Alloy 825****UNS N08825****Alloy 925****UNS N09925**

Iron-Nickel and High-Temperature Alloys

A286

A-286**UNS S66286****EN 1.4980**

Invar

Invar 36**Alloy 36****UNS K93600****FeNi36**

Alloy 42

Alloy 42**UNS K94100****FeNi42**

Tool Steel and Specialty Hardened Steel

Tool Steel and Specialty Hardened Steel

AISI D2**AISI H13****SKD11****Cr12MoV****AISI O1****AISI A2****AISI S7**

SKD61**9CrSi**

Structural and Construction Steel

Structural and Construction Steel

ASTM A36**Q235B****Q355B****S355JR****Q235C****Q355C****S235JR****S275JR****S355J2**

Applications & Industries for M6 Wing Nuts

Wing Nuts are bought for a small number of well-defined jobs. These are the ones we ship them for. Stocked from M4 to M12.

Industries that specify Wing Nuts

Consumer & sports equipment **Adjustments the end user makes themselves.**

Machine guarding & covers **Panels removed by hand for cleaning or access.**

Exhibition & temporary structures **Assemblies built and struck without tools.**

Typical applications

- **joints opened and closed many times a day**
- **tool-free assembly and adjustment**

Service conditions to specify against

Marine and coastal

Available in A4 (316) stainless for chloride exposure — coastal structures, pool halls, water treatment and deck hardware, where A2 will eventually pit.

Full application guide: where Wing Nuts are used, how to specify them, and the cases they are wrong for (<https://engineeringhardware.com/applications/wing-nuts/>)

Video: M6 Wing Nuts Dimensions



► Watch video: <https://www.youtube.com/watch?v=aAcXy0yGoc>(<https://www.youtube.com/watch?v=aAcXy0yGoc>)

[How to find bolt & nut size, metric or imperial. \(https://www.youtube.com/watch?v=aAAcXy0yGoc\)](https://www.youtube.com/watch?v=aAAcXy0yGoc)

Third-party video, selected automatically for this topic. It is not produced by Engineering Hardware and is not a specification source — use the tables on this page for dimensional data.

Inside the plant

Manufactured in our own plant

This part is cold-formed, threaded, heat-treated and finished in-house. The stages below are where its class and finish are actually decided.



01

Cold heading

Wire rod is drawn to size and cold-formed into blanks. Forming rather than cutting keeps the grain flow continuous around the head, which is where a bolt is most likely to fail.

Head dimensions and under-head radius checked at set-up and per shift.



02

Thread rolling

Threads are rolled between hardened dies rather than cut. Rolled threads are stronger in fatigue than cut threads and hold pitch and flank angle far more consistently across a batch.

Go / no-go ring gauges to ISO 965 tolerance class 6g.



03

Heat treatment

Quench-and-temper brings carbon and alloy steel to the property class ordered — 8.8, 10.9 or 12.9 — with the furnace charge tracked so a finished lot can be traced back to it.

Core hardness and tensile tested per lot to ISO 898-1.



04

Surface treatment

Zinc, zinc-nickel, hot-dip galvanizing, black oxide, phosphate and Dacromet, selected against the service environment rather than against the price list.

Coating thickness and neutral salt spray hours to ISO 9227.

Frequently Asked Questions

What clearance and tapping drill suit M6?

Use a 6.6 mm clearance hole (ISO 273 medium) for through-fixing, or a 5 mm tapping drill for a coarse M6 thread.

What is the height of an M6 nut?

The nominal height of a style-1 ISO 4032 M6 nut is in the spec table on this page. Style-2 (thick) is approximately 1.1× this height; thin (ISO 4035 / DIN 439) is approximately 0.5×.

What is the coarse-thread pitch of M6 for Wing Nuts?

For M6 the standard coarse pitch is 1 mm — this is the value used for Wing Nuts.

How do I request a quotation?

Use the technical drawing on this page to pick the exact configuration, then submit it with the quote form. We respond within one business day.

Related Pages

[View the full Wing Nuts page \(https://engineeringhardware.com/fastener/wing-nuts/\)](https://engineeringhardware.com/fastener/wing-nuts/)

More Wing Nuts Guides

- **M4 Wing Nuts** (<https://engineeringhardware.com/guide/size/m4-wing-nuts/>)
- **M5 Wing Nuts** (<https://engineeringhardware.com/guide/size/m5-wing-nuts/>)
- **M8 Wing Nuts** (<https://engineeringhardware.com/guide/size/m8-wing-nuts/>)

- **M10 Wing Nuts** (<https://engineeringhardware.com/guide/size/m10-wing-nuts/>)
- **M12 Wing Nuts** (<https://engineeringhardware.com/guide/size/m12-wing-nuts/>)