

What Are Lifting Eye Nuts Used For?

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[Nuts · DIN 582 · Application guide](#)

Typical applications, the industries that specify lifting eye nuts, and how to choose the right size, material and finish for the joint.

Lifting Eye Nuts are used for providing a rated lifting or anchoring point on a threaded hole or stud, within a stated working load limit. They are manufactured to DIN 582, and selection is driven by the working load limit required, the applicable safety factor and the service environment.

Primary duty

Providing a rated lifting or anchoring point on a threaded hole or stud, within a stated working load limit

Governing standard

DIN 582

Thread size range

M6 to M36

Category

Nuts

Application notes are general engineering guidance. Verify the property class and any approval requirement against your own design calculation.



Application guide for Lifting Eye Nuts to DIN 582. The core duty of the type is providing a rated lifting or anchoring point on a threaded hole or stud, within a stated working load limit. The typical industries, the how-to-specify checklist, assembly practice and the exclusion cases are set out below. Stocked across roughly M6 to M36, they cover general to heavy-duty work.

Typical Applications for Lifting Eye Nuts

The most common settings where these are specified:

- **Frames & weldments:** captive or welded options for repeatable assembly.
- **Overhead lifting:** threaded lifting points on studs and shafts.
- **Tensioning:** anchor points for turnbuckles and tie rods.
- **General machine building:** fastening covers, brackets, motors and sub-assemblies on production equipment.
- **Maintenance & repair (MRO):** a stocked size for servicing existing plant where the original fastener spec must be matched.

How to Specify Lifting Eye Nuts for Your Application

- **Size:** Match the nominal size to the mating thread or hole. This product spans M6-M36; check the full table below for the exact dimensions of each size.

- **Locking & grade:** Match the strength grade to the bolt, and choose a locking style (nyloc, all-metal, serrated flange) if the joint sees vibration.
- **Environment:** For damp, coastal or chemical exposure prefer A4/316 stainless or a suitable coating; indoors, plated steel or A2 is usually sufficient.
- **Standard:** This product is supplied to DIN 582. Quoting the standard on your order guarantees interchangeable dimensions between suppliers.

Installation & Assembly Practice

- Run the nut down by hand before applying the wrench to catch cross-threading early.
- Tighten the nut rather than the bolt head where access allows — the torque-to-preload relation is more consistent.
- For locking styles, note that nyloc inserts are single-use in critical joints and lose grip above roughly 120 °C.

Common Selection Mistakes with Lifting Eye Nuts

- Pairing a high-class bolt with a lower-class nut — the nut strips before the bolt reaches proof load; the nut class must meet or exceed the bolt class.
- Using a plain nut with a spring washer in severe vibration instead of a prevailing-torque locking nut.
- Re-using nyloc nuts in critical joints.

Where Lifting Eye Nuts Are Not the Right Choice

Not on their own — they need a matching bolt or stud — and a plain nut is not a substitute for a locking type under heavy vibration.

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.

Sends the selected values to the quote form below.

Request a Quote

The form below follows the current technical drawing configuration. Change the drawing values above and the request details update automatically.

Dimensions & Specifications (DIN 582)

Thread size	Pitch (mm)	Ring inside diameter d (mm)	Ring outside diameter (mm)	Total height (mm)	Max load vertical (kg)	Reference standard	Notes
M6	1.0	20	36	36	70	DIN 582 / WLL	Drop-forged lifting eye nut, vertical pull
M8	1.25	25	45	45	140	DIN 582 / WLL	Drop-forged lifting eye nut, vertical pull
M10	1.5	30	54	54	230	DIN 582 / WLL	Drop-forged lifting eye nut, vertical pull
M12	1.75	36	63	63	340	DIN 582 / WLL	Drop-forged lifting eye nut, vertical pull
M16	2.0	45	81	81	700	DIN 582 / WLL	Drop-forged lifting eye nut, vertical pull
M20	2.5	56	99	99	1200	DIN 582 / WLL	Drop-forged lifting eye nut, vertical pull
M24	3.0	63	117	117	1800	DIN 582 / WLL	Drop-forged lifting eye nut, vertical pull
M30	3.5	80	144	144	3200	DIN 582 / WLL	Drop-forged lifting eye nut, vertical pull
M36	4.0	95	171	171	4600	DIN 582 / WLL	Drop-forged lifting eye nut, vertical pull

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.



1.

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.



2.

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.

3.



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.

4.



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

Which industries use Lifting Eye Nuts?

They are commonly specified in bolted joints, vibration-prone equipment and frames & weldments, among other sectors.

How do I choose the right size of Lifting Eye Nuts?

Match the nominal size to the mating thread or hole. This product is available from M6 to M36; the full dimension table on this page lists each size.

Do Lifting Eye Nuts need a locking feature?

If the joint sees vibration or cyclic load, use a locking style (nyloc, all-metal lock, or serrated flange) or a thread-locking adhesive.

For static joints a standard nut tightened correctly is usually sufficient.

What material should Lifting Eye Nuts be for outdoor use?

For damp, coastal or chemical environments specify A4 (316) stainless or a suitably coated steel. For indoor or dry use, A2 (304) stainless or zinc-plated steel is normally adequate.

Can I get a quote for Lifting Eye Nuts in the size and material I need?

Yes. Use the technical drawing and quote form on this page to set the size and options, then send the exact configuration to our team for pricing and lead time.

Related Pages

Product page: [Lifting Eye Nuts — specifications & sizes](#)

Lifting Eye Nuts Specification Guides

- [M6 Lifting Eye Nuts size guide](#)
- [A4 stainless Lifting Eye Nuts](#)

Related Fastener Applications

- [All-Metal Lock Nuts applications](#)
- [All-Metal Prevailing Torque Hex Lock Nut \(Type 1\) — GB/T 6184 / ISO 7042 \(Series 047\) applications](#)
- [Cap \(Acorn\) Nuts applications](#)
- [Castellated Hex Nut — GB/T 6180 / ISO 7036 \(Series 048\) applications](#)
- [Custom Slotted Round Nut — GB/T 812 \(Series 070\) applications](#)
- [Hex Flange Nuts applications](#)