

What Are Hex Keys (Allen Keys) Used For?

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Typical applications, the industries that specify hex keys (allen keys) and how to choose the right size, material and finish for the joint.

Hex Keys (Allen Keys) are used for installing, adjusting or servicing the assembly rather than forming part of it. They are manufactured to ISO 2936, and selection is driven by the nominal size, the fit and tolerance the assembly requires, and the service environment.

Primary duty

Installing, adjusting or servicing the assembly rather than forming part of it

Governing standard

ISO 2936

Nominal size range

0.7 mm to 60 mm

Category

Tools

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



The primary duty of Hex Keys (Allen Keys) is installing, adjusting or servicing the assembly rather than forming part of it. Below: the sectors that specify them in volume, the checklist used to select the right size and material for the application, installation notes, and the known limits of the type. Stocked across roughly 0.7 mm to 60 mm, they cover general to heavy-duty work.

Typical Applications for Hex Keys (Allen Keys)

The most common settings where these are specified:

- **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.
- **Fabrication & metalwork:** bench and on-site assembly of steel frames, enclosures and weldments.

How to Specify Hex Keys (Allen Keys) for Your Application

- **Size:** Select on nominal size, and confirm it against the mating feature in the assembly. This product spans 0.7 mm–60 mm; check the full table below for the exact dimensions of each size.
- **Material:** Choose the material and finish for the service environment — plated steel for general use, stainless for corrosion resistance.

- **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 ISO 2936. Quoting the standard on your order guarantees interchangeable dimensions between suppliers.

Where Hex Keys (Allen Keys) Are Not the Right Choice

Match the fastener to the load, environment and whether the joint must be reopened; the wrong class or style is the usual cause of joint failure.

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 (ISO 2936)

Wrench size s (mm)	Common bolt sizes	Short leg (mm)	Long leg (mm)	Reference standard
0.7	M1	28	51	ISO 2936 / DIN 911
0.9	M1.1	28	56	ISO 2936 / DIN 911
1.0	M1.2	32	56	ISO 2936 / DIN 911
1.3	M1.6	36	63	ISO 2936 / DIN 911
1.5	M2	40	71	ISO 2936 / DIN 911
2.0	M2.5	50	90	ISO 2936 / DIN 911
2.5	M3	56	100	ISO 2936 / DIN 911
3.0	M4	63	112	ISO 2936 / DIN 911
4.0	M5	71	125	ISO 2936 / DIN 911
5.0	M6	80	140	ISO 2936 / DIN 911
6.0	M8	90	160	ISO 2936 / DIN 911
7.0	---	100	180	ISO 2936 / DIN 911
8.0	M10	112	200	ISO 2936 / DIN 911
9.0	---	112	200	ISO 2936 / DIN 911
10.0	M12	125	224	ISO 2936 / DIN 911
12.0	M14	140	250	ISO 2936 / DIN 911
14.0	M16	160	280	ISO 2936 / DIN 911
17.0	M20	180	315	ISO 2936 / DIN 911
19.0	M22	200	355	ISO 2936 / DIN 911
22.0	M24	224	400	ISO 2936 / DIN 911
24.0	M27	250	450	ISO 2936 / DIN 911
27.0	M30	280	500	ISO 2936 / DIN 911
32.0	M36	315	560	ISO 2936 / DIN 911
36.0	M42	355	630	ISO 2936 / DIN 911

Wrench size s (mm)	Common bolt sizes	Short leg (mm)	Long leg (mm)	Reference standard
41.0	M48	400	710	ISO 2936 / DIN 911
46.0	---	450	800	ISO 2936 / DIN 911
50.0	---	500	900	ISO 2936 / DIN 911
55.0	---	500	900	ISO 2936 / DIN 911
60.0	---	560	1000	ISO 2936 / DIN 911

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

What are Hex Keys (Allen Keys) used for?

Installing, adjusting or servicing the assembly rather than forming part of it. They are supplied to ISO 2936.

Which industries use Hex Keys (Allen Keys)?

They are commonly specified in general machine building, maintenance & repair (mro) and fabrication & metalwork, among other sectors.

How do I choose the right size of Hex Keys (Allen Keys)?

Select on nominal size and on the fit the assembly requires. This product is available from 0.7 mm to 60 mm; the full dimension table on this page lists each size.

Are Hex Keys (Allen Keys) made to a recognized standard?

Yes — they are manufactured to ISO 2936, so dimensions are interchangeable between suppliers when you quote the standard on your order.

Can I get a quote for Hex Keys (Allen Keys) 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: [Hex Keys \(Allen Keys\) — specifications & sizes](#)

Hex Keys (Allen Keys) Specification Guides

- [A4 stainless Hex Keys \(Allen Keys\)](#)