Fully threaded hexagon head screw

A metric thread along the shank for assemblies with a nut or tapped hole. Specify diameter, length, material, property class and finish to suit the joint.

DIN 933 · UNI 5739

Dimensional range

M3-M48

Thread

Metric · coarse pitch

Configuration

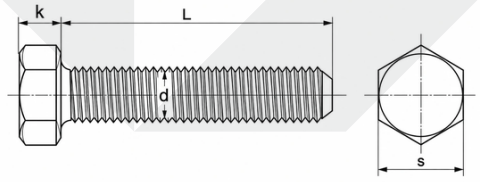
Fully threaded

References

DIN 933 · UNI 5739



Technical drawing



d

nominal diameter

k

head height

s

across flats

L

underhead length

Variants and dimensional data

Reference dimensions M3-M48, with commercial lengths selectable by diameter. Other diameters and lengths can be assessed on request, including dedicated production.

Dimensions in mm. Identification drawing, not a manufacturing drawing.

M	Pitch P	k	s
3	0.5	2	5.5
4	0.7	2.8	7
5	0.8	3.5	8
6	1	4	10
7	1	4.8	11
8	1.25	5.3	13
10	1.5	6.4	16
12	1.75	7.5	18
14	2	8.8	21
16	2	10	24
18	2.5	11.5	27
20	2.5	12.5	30
22	2.5	14	34
24	3	15	36
27	3	17	41
30	3.5	18.7	46
33	3.5	21	50
36	4	22.5	55
39	4	25	60
42	4.5	26	65
45	4.5	28	70
48	5	30	75

The thread extends close to the head, with an incomplete thread allowance defined by the standard. L is measured under the head; ISO 4014 thread-length formulas do not apply.

Listed lengths are commercial references, not stock declarations. ISO 4017:2022 has its own standard length limits; shorter or longer sizes outside that series require specific agreement. Incomplete thread under the head: u ≤ 2P.

Table dimensions refer to the stated execution. DIN/UNI, polymer and special variants require verification of their own dimensions; they do not automatically inherit reference geometry, weight or performance.

Materials, classes, finishes and treatments

Executions are distinguished by reference, material, class and finish. DIN, ISO and UNI references do not imply dimensional equivalence or availability of every size in each material. Supply and batch documents require quotation confirmation.

Execution reference	Material	Class / hardness	Documented finishes
DIN 933	Steel	8.8	Black zinc plated; GEOMET 321A; Geomet 321b; Geomet 500a; Hot-dip galvanized; Plain; Yellow zinc plated; Yellow zinc plated Cr III 12 µm with sealer; Zinc plated
DIN 933	Steel	10.9	GEOMET 321A; Hot-dip galvanized; Plain; Yellow zinc plated; Yellow zinc plated Cr III 12 µm with sealer; Zinc plated
DIN 933	Steel	4.8	Black zinc plated; Dacro 320a; GEOMET 321A; Hot-dip galvanized; Iridescent ≥8 µm; Plain; Yellow zinc plated; Yellow zinc plated ≥12 µm; Zinc plated; Zinc plated ≥12 µm; Zinc plated ≥8 µm; Zinc plated ≥9 µm
DIN 933	Steel	12.9	GEOMET 321A; Plain; Zinc plated
DIN 933	Stainless A2	To be specified	To be specified
DIN 933	Stainless A4	To be specified	To be specified
DIN 933	Brass	Not applicable	Plain; To be specified
DIN 933	Stainless A4	80	To be specified
DIN 933	Nylon (PA)	Not applicable	To be specified
UNI 5739	Steel	8.8	GEOMET 321A; Geomet 321b; Hot-dip galvanized; Zinc plated
UNI 5739	Steel	10.9	Zinc plated ≥8 µm
UNI 5739	Steel	12.9	GEOMET 321A
DIN 34810 ex DIN 933	Polyamide	Not applicable	Natural colour
DIN 933	Stainless A5 · 1.4571	To be specified	To be specified
DIN 933	Duplex · 1.4462	To be specified	To be specified
DIN 933	Stainless HCR · 1.4529	To be specified	To be specified
DIN 933	Nylon PA66	Not applicable	To be specified

“To be specified” is a requirement not established by this selection; it does not imply class 70/80, HV hardness or an automatic finish. Steel property classes do not apply to nylon/polyamide; PA6 and PA66 are distinguished only where stated. For nuts with non-metallic inserts, the material shown is the body material.

Documentation

Document	Status
Declaration of conformity	Subject to order agreement
Material certificate	Subject to order agreement
EN 10204 2.2 test report	Subject to order agreement
EN 10204 3.1 inspection certificate	Subject to order agreement
Dimensional inspection report	Subject to order agreement
Coating report	Subject to order agreement
Other documentation	Subject to order agreement

Batch documents are not automatically included: specify your requirements in the RFQ.

ISO, DIN and UNI: key differences

ISO 4017:2022

Main standard used for the dimensions in this data sheet.

DIN 933

Related commercial reference, not an exact equivalent. ISO widths across flats for M10, M12, M14 and M22 are 16, 18, 21 and 34 mm respectively; do not transfer DIN dimensions automatically.

UNI 5739

Historical family reference. Orders citing UNI require confirmation of the edition, dimensions and supply requirements.