Hexagon head bolt, partially threaded

A plain shank and coarse metric thread for mechanical joints with a nut or tapped hole. Thread length must be selected together with the bolt length.

DIN 931 · UNI 5737

Dimensional range

M4-M48

Thread

Metric · coarse pitch

Configuration

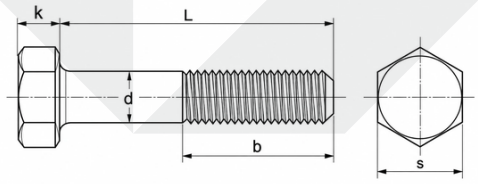
Partially threaded

References

DIN 931 · UNI 5737



Technical drawing



d

nominal diameter

k

head height

s

width across flats

L

underhead length

b

thread length

https://www.dueemmesidol.it/en/products/standard-fasteners/screws-bolts/iso-4014/

Variants and dimensional data

Reference dimensions M4-M48. Select commercial lengths by diameter; other sizes and dedicated production on request. The ISO scope also includes diameters outside this loaded range.

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

M	Pitch P	k	s
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

L ≤ 125	125 < L ≤ 200	L > 200
2d + 6	2d + 12	2d + 25

The rule applies only to lengths compatible with a partially threaded shank. The selector shows only recorded diameter/length pairs. Do not extend the formulas automatically to every orderable length.

L is the underhead length; b is the reference thread length. Listed lengths are commercial references: an ISO 4014:2022 order also requires confirmation of length range, tolerances and plain shank. Lengths outside the standard series require specific

agreement.

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 931	Steel	8.8	GEOMET 321A; Geomet 500b; Hot-dip galvanized; Plain; Yellow zinc plated; Yellow zinc plated Cr III 12 µm with sealer; Zinc plated
UNI 5737	Steel	8.8	Hot-dip galvanized; Plain; Zinc plated
DIN 931	Steel	12.9	Plain; Zinc plated
DIN 931	Stainless A2	To be specified	To be specified
DIN 931	Stainless A4	To be specified	To be specified
DIN 931	Stainless A4	80	To be specified
DIN 931	Steel	4.8	Plain; Zinc plated
DIN 931	Steel	10.9	Black acrylic electrocoating; GEOMET 321A; Hot-dip galvanized; Iridescent ≥8 µm; Plain; Trivalent iridescent zinc plated; Yellow zinc plated; Yellow zinc plated Cr III 12 µm with sealer; Yellow zinc plated and baked; Zinc plated
UNI 5737	Steel	10.9	Plain; Zinc plated
DIN 931	Steel	10.9	Zinc plated
DIN 34810 ex DIN 931	Polyamide	Not applicable	Natural colour
DIN 931	Stainless A5 · 1.4571	To be specified	To be specified
DIN 931	Duplex · 1.4462	To be specified	To be specified
DIN 931	Stainless HCR · 1.4529	To be specified	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 4014:2022

Main standard used for the dimensions in this data sheet.

DIN 931:1987

DIN 931-1 withdrawn. ISO/DIN widths across flats: M10 16/17; M12 18/19; M14 21/22; M22 34/32 mm. Also check lengths and product grade.

UNI 5737:1988

Withdrawn without replacement on 31 March 1995. Related historical reference, not an equivalence claim for ISO 4014:2022.