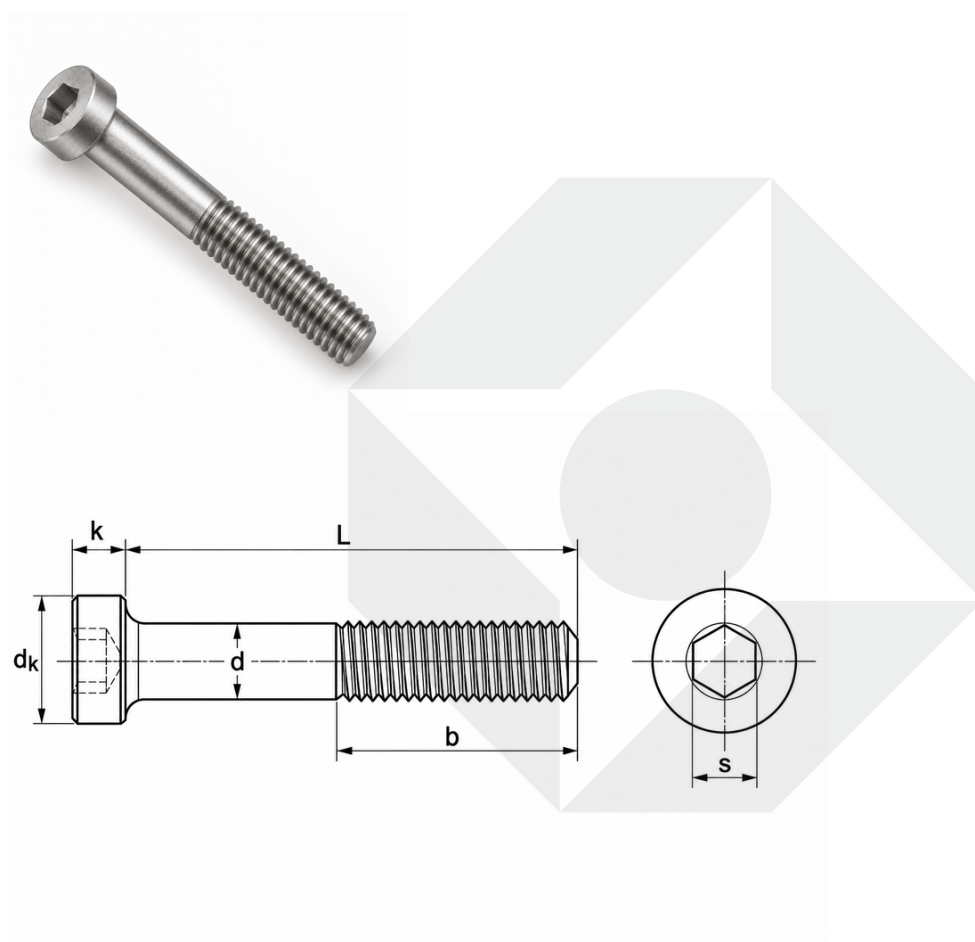


DIN 7984:2022-03

Low socket head cap screw

A low head for assemblies with restricted axial space. Head and socket geometry reduce loadability; this is not an automatic substitute for a regular socket head cap screw.

Commercial reference dimensions M4–M16 for the DIN 7984 family. For orders to the 2022 edition, confirm specification tolerances and conditions. Other sizes on request.



d: nominal diameter · dk: head diameter · k: head height · s: hexagon socket size · t: socket depth · L: underhead length · b: reference thread length

Identification drawing, not a manufacturing drawing.

Dimensional range

Dimensions in millimetres.

M	Pitch P	dk max.	k max.	s	t min.
4	0.7	7	2.8	2.5	1.1
5	0.8	8.5	3.5	3	1.9
6	1	10	4	4	2.4
8	1.25	13	5	5	3.2
10	1.5	16	6	7	3.8
12	1.75	18	7	8	4.4
16	2	24	9	12	5.8

Full or partial threading must be confirmed for the individual size and supply. Listed commercial lengths do not guarantee a plain-shank length; b remains ND where the configuration has not been confirmed.



Commercial lengths by diameter

The low head limits axial load compared with a full-loadability screw of the same property class. Marking may include a leading zero, such as 08.8 or 010.9; this does not designate a different alloy. Tightening and joint strength must be checked for the specified screw.

M	L (mm)
M4	6, 8, 10, 12, 14, 16, 18, 20, 25
M5	8, 10, 12, 14, 16, 18, 20, 25, 30
M6	10, 12, 14, 16, 18, 20, 25, 30, 35, 40
M8	12, 14, 16, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60
M10	16, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 70
M12	20, 25, 30, 35, 40, 45, 50, 55, 60, 70, 80
M16	30, 35, 40, 45, 50, 55, 60, 70, 80



Materials and classes

Material	Class / hardness	M	Supply
Steel to mechanical specification	8.8	M4–M16	On request
Steel to mechanical specification	10.9	M4–M16	On request

Finishes and treatments

Finish	Material	Class	M
Black oxide	Steel to mechanical specification	8.8	M4–M16
Black oxide	Steel to mechanical specification	10.9	M4–M16

Select the finish for the material/property-class combination. Hydrogen relief and lubrication are separate process requirements, not certificates and not implied by the coating name.



Standards, documents and enquiry

The low head limits axial load compared with a full-loadability screw of the same property class. Marking may include a leading zero, such as 08.8 or 010.9; this does not designate a different alloy. Tightening and joint strength must be checked for the specified screw.

For this reduced-loadability geometry, select the nut, washer and tightening conditions through a joint assessment. Do not automatically transfer mating-component or preload recommendations from a full-loadability screw of the same property class.

UNI 9327

Related low-head family reference; it does not establish identical requirements and tolerances.

Supply documentation

Declaration of conformity; Material certificate; EN 10204 2.2 test report; EN 10204 3.1 inspection certificate; Dimensional inspection report; Coating report; Other documentation

Documents are subject to order agreement; no batch certificate is automatically included.

Related components

ISO 4762, ISO 4017. Match nominal diameter, pitch, strength, material, finish and joint conditions.

Request a quote

Specify standard, diameter, pitch and length where applicable, material, property class or hardness, finish, quantity and documents. Other sizes and dedicated production can be assessed on request, with agreed minimum quantities.

Reference technical configurations: these do not represent stock quantities.

Other materials and specifications

For requirements beyond the tabulated combinations, enquire about aluminium, brass, nylon, duplex, superduplex or an ASTM specification. Alloy or grade, dimensions, mechanical requirements and finish are defined for the enquiry; the geometric reference does not automatically imply conformity with the product standard.