

DIN 7984

Low Head Socket Cap Screw



Standard	DIN 7984		
Product Type	Hexagon socket head cap screws with low head, thread sizes M3 to M24; head height is about six tenths of a standard socket head cap screw.		
Material	Stainless Steel, Carbon Steel, Alloy Steel		
Property Class	A2-70, A4-80 (ISO 3506-1) · 8.8, 10.9, 12.9 (ISO 898-1)		
Surface Finish	Passivated, Plain, Zinc Plated, Dacromet, Blackened, Phosphate		
Size Range	M3 - M24	Length Range	5-100 mm
Thread	ISO metric coarse pitch		

BASIS OF SPECIFICATION

WHICH STANDARD GOVERNS WHAT

Carbon steel / Alloy steel mechanical properties to	DIN EN ISO 898-1
Stainless steel mechanical properties to	DIN EN ISO 3506-1
Dimensions edition	to be agreed
Length tolerance	to be agreed
Thread length	to be agreed
Minimum usable thread length	to be agreed

MECHANICAL PROPERTIES

REQUIRED VALUES PER ISO 3506-1

Class	Rm min.	Yield requirement	Elongation requirement	Hardness	Source
A2-70	700 MPa	Rp0.2 min. 450 MPa	0,4d mm	-	ISO 3506-1
A4-80	800 MPa	Rp0.2 min. 600 MPa	0,3d mm	-	ISO 3506-1

MECHANICAL PROPERTIES

REQUIRED VALUES PER ISO 898-1

Class	Rm min.	Yield requirement	Elongation requirement	Hardness	Source
8.8	800 MPa	Rp0.2 min. 640 MPa	A min. 12 %	250 - 320 HV	ISO 898-1 (d ≤ M16)
8.8	830 MPa	Rp0.2 min. 660 MPa	A min. 12 %	255 - 335 HV	ISO 898-1 (d > M16)
10.9	1040 MPa	Rp0.2 min. 940 MPa	A min. 9 %	320 - 380 HV	ISO 898-1
12.9	1220 MPa	Rp0.2 min. 1100 MPa	A min. 8 %	385 - 435 HV	ISO 898-1

DIMENSIONAL DATA - SIZES WE SUPPLY

ALL DIMENSIONS PER THE STANDARD

d Diameter - mm	P Thread Pitch - mm	s Hex Socket Size - mm	dk Head Diameter - mm	k Nominal Head Height - mm
M3	0.5	2	5.5	2
M4	0.7	2.5	7	2.8
M5	0.8	3	8.5	3.5
M6	1	4	10	4
M8	1.25	5	13	5
M10	1.5	7	16	6
M12	1.75	8	18	7
M16	2	12	24	9
M20	2.5	14	30	11

FURTHER SIZES IN THIS STANDARD

ALL DIMENSIONS PER THE STANDARD

Not held in stock. Available to order; minimum order quantity applies.

d Diameter - mm	P Thread Pitch - mm	s Hex Socket Size - mm	dk Head Diameter - mm	k Nominal Head Height - mm
M14	2	10	21	8
M18	2.5	12	27	10
M22	2.5	14	33	12
M24	3	17	36	13

MARKING

Carbon steel / Alloy steel Head marking to DIN EN ISO 898-1

Stainless steel Head marking to DIN EN ISO 3506-1

Marking requirements are set by the material standard named above, not by the product standard. Confirm the ordered property class before production.

INSPECTION DOCUMENTS WE CAN ISSUE

EN 10204 3.1 material certificate	Can be included when agreed in the order.
Dimensional inspection report	Can be provided for the agreed inspection scope.
Certificate of conformity	Can be issued against the confirmed order requirements.
Mechanical test report	Available when the required tests are agreed before production.
Chemical analysis report	Available when the material verification scope is agreed.
Coating inspection report	Can record the coating checks agreed for the order.

REFERENCES & NOTES

Note: Dimensional values follow the selected execution standard. Material properties and batch test results are included only when declared or supported by the applicable certificate or test report.