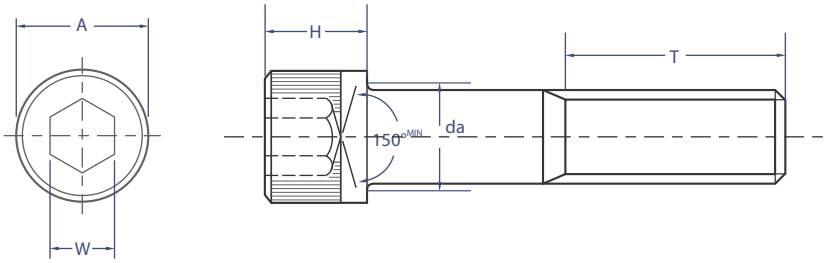
Socket Head Cap Screws
DIN 912 / ISO 4762

Metric

STAINLESS STEEL



Although stainless socket cap screws can have significantly less tensile and yield strength than alloy sockets, they have superior resistance to corrosion. They retain their mechanical and performance capabilities at higher than ambient temperatures.

Mechanical Properties

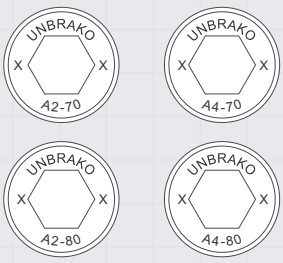
Property Class	Raw Material	Tensile Strength ,Rm Min. [N/mm2]
A2 70	AISI 304	700
A4 70	AISI 316/316L	
A2 80	AISI 304	800
A4 80	AISI 316/316L	

Property Class	Stress at 0.2% Permanent Strain Rp 0.2 Min. [N/mm2]	Elongation after Fracture A min2 [mm]
A2 70 A4 70	450	0.4d
A2 80 A4 80	600	0.3d

as per ISO 3506-1

A4-90, A4-100 available on request

Head Marking



'X' represents Lot Traceability E-CODE

Unbrako

Product Dimensions

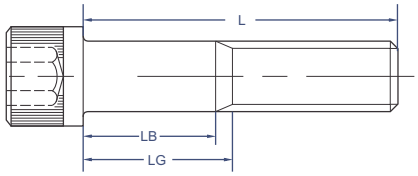
Thread Size nom.	Pitch	Head Diameter A max	Hex Socket Size W nom.	Head Height H max	da max	Thread Length T ref.
M1.6	0.35	3.0	1.50	1.6	2.00	15
M2	0.40	3.8	1.50	2.0	2.60	16
M2.5	0.45	4.5	2.00	2.5	3.10	17
M3	0.50	5.5	2.5	3.0	3.60	18
M4	0.70	7.0	3.0	4.0	4.70	20
M5	0.80	8.5	4.0	5.0	5.70	22
M6	1.00	10.0	5.0	6.0	6.80	24
M8	1.25	13.0	6.0	8.0	9.20	28
M10	1.50	16.0	8.0	10.0	11.20	32
M12	1.75	18.0	10.0	12.0	13.70	36
M14	2.00	21.0	12.0	14.0	15.70	40
M16	2.00	24.0	14.0	16.0	17.70	44
M18	2.50	27.0	14.0	18.0	20.20	48
M20	2.50	30.0	17.0	20.0	22.40	52
M22	2.50	33.0	17.0	22.0	24.40	56
M24	3.00	36.0	19.0	24.0	26.40	60
M27	3.00	40.0	19.0	27.0	30.40	66
M30	3.50	45.0	22.0	30.0	33.40	72
M33	3.50	50.0	24.0	33.0	36.40	78
M36	4.00	54.0	27.0	36.0	39.40	84

Thread Size nom.	Seating Torque* A2/A4 - 70 N-m	A2/A4 - 70 in-lbs.	A2/A4 - 80 N-m	A2/A4 - 80 in-lbs.
M1.6	0.1	1.2	0.2	1.6
M2	0.3	2.4	0.4	3.2
M2.5	0.6	5.0	0.7	6.6
M3	1.0	8.8	1.3	11.8
M4	2.3	20.6	3.1	27.4
M5	4.7	41.6	6.3	55.4
M6	8.0	70.6	10.6	94.1
M8	19.4	171.4	25.8	228.5
M10	38.4	339.5	51.2	452.7
M12	66.9	592.2	89.2	789.6
M14	106.5	942.5	142.0	1,256.7
M16	166.2	1,470.5	221.6	1,960.7
M18	228.6	2,023.1	304.8	2,697.5
M20	324.1	2,868.5	432.2	3,824.6
M22	441.0	3,902.3	587.9	5,203.0
M24	560.4	4,959.5	747.2	6,612.7
M27	819.8	7,254.8	1,093.1	9,673.1
M30	1,113.3	9,852.3	1,484.4	13,136.3
M33	1,515.0	13,406.8	2,020.0	17,875.7
M36	1,945.6	17,217.7	2,594.1	22,957.0
M39	2,517.9	22,282.6	3,357.2	29,710.1

* @70% Proof & 0.3 Nut Factor

Body and Grip Length Dimensions

- LG is the maximum grip length and is the distance from the bearing surface to the first complete thread.
- LB is the minimum body length and is the length of the unthreaded cylindrical portion of the shank (Excluding Angle).
- Dimensions for LB and LG are calculated from the following formula:
  T Ref = (2x Nominal Dia) plus 12mm.
  LG max = Nominal length "L" minus "T"
  LB min = Nominal length "L" minus (T + 5 pitches)



Dia	M3		M4		M5		M6		M8		M10		M12		M14		M16	
Length Nom.	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)
25	4.5	7																
30	9.5	12	6.5	10	4	8												
35			11.5	15	9	13	6	11										
40			16.5	20	14	18	11	16	5.75	12								
45					19	23	16	21	10.75	17	5.5	13						
50					24	28	21	26	15.75	22	10.5	18						
55							26	31	20.75	27	15.5	23	10.25	19				
60							31	36	25.75	32	20.5	28	15.25	24	10	20		
65									30.75	37	25.5	33	20.25	29	15	25	11	21
70									35.75	42	30.5	38	25.25	34	20	30	16	26
80									45.75	52	40.5	48	35.25	44	30	40	26	36
90											50.5	58	45.25	54	40	50	36	46
100											60.5	68	55.25	64	50	60	46	56
110													65.25	74	60	70	56	66
120													75.25	84	70	80	66	76
130															80	90	76	86
140															90	100	86	96
150																	96	106
160																	106	116
180																		

Dia	M18		M20		M22		M24		M27		M30		M33		M36		M42	
Length Nom.	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)	L_B (Min.)	L_G (Max.)
70	9.5	22																
80	19.5	32	15.5	28	11.5	24												
90	29.5	42	25.5	38	21.5	34	15	30										
100	39.5	52	35.5	48	31.5	44	25	40	19	34								
110	49.5	62	45.5	58	41.5	54	35	50	29	44	20.5	38	14.5	32				
120	59.5	72	55.5	68	51.5	64	45	60	39	54	30.5	48	24.5	42	16	36		
130	69.5	82	65.5	78	61.5	74	55	70	49	64	40.5	58	34.5	52	26	46		
140	79.5	92	75.5	88	71.5	84	65	80	59	74	50.5	68	44.5	62	36	56	21.5	44
150	89.5	102	85.5	98	81.5	94	75	90	69	84	60.5	78	54.5	72	46	66	31.5	54
160	99.5	112	95.5	108	91.5	104	85	100	79	94	70.5	88	64.5	82	56	76	41.5	64
180	119.5	132	115.5	128	111.5	124	105	120	99	114	90.5	108	84.5	102	76	96	61.5	84
200			135.5	148	131.5	144	125	140	119	134	110.5	128	104.5	122	96	116	81.5	104
220					151.5	164	145	160	139	154	130.5	148	124.5	142	116	136	101.5	124
240							165	180	159	174	150.5	168	144.5	162	136	156	121.5	144
260									179	194	170.5	188	164.5	182	156	176	141.5	164
280											190.5	208	184.5	202	176	196	161.5	184