



Socket Head Cap Screw Information

Standard



Features a relatively high cylindrical head with a recessed hexagonal socket. Use where maximum tensile strength is essential. See page 2018, 2019, 2020, 2021, 2022.

Flat



Features an 82° countersunk flat head. Flush mounts so moving parts can pass over freely. Not ideal for applications that require optimal antifatigue properties. See page 2023.

Button



Dome-shaped head has wider hex socket and lower profile than standard. Ideal for lighter applications with low limited clearance where loading capacity is not critical. See page 2024.



Low

Head height is 50% lower than standard size; socket size is smaller. Used in thinner materials and where clearance is too limited to use a full-height cap screw. Cannot withstand the same preloads as standard socket-head cap screws. See page 2025.



Flange

Projecting collar around bottom of head acts like a washer, dispersing the load on the bearing surface. Use when a wider bearing surface or a more-finished appearance is desired, and with thinner materials. See page 2026.



Vented

A small hole drilled through the entire length of the cap screw allows gas and fluids to vent. See Grainger.com.

Partially threaded—minimum thread length is calculated using the screw's length. The formula is $\text{dia.} \times 2 + \frac{1}{4}"$. For example, $\frac{1}{4}" \times 4$: $\frac{1}{4} \times 2 = \frac{1}{2}"$. $\frac{1}{2}" + \frac{1}{4}" = \frac{3}{4}"$. This item would have at least $\frac{3}{4}"$ thread.

Standard Socket Head Cap Screws, Inch

Fastener Length	Head Height	Head Diameter	Thread Style*	Item No.	Pkg. Qty.	Fastener Length	Head Height	Head Diameter	Thread Style*	Item No.	Pkg. Qty.	Fastener Length	Head Height	Head Diameter	Thread Style*	Item No.	Pkg. Qty.
18-8 Stainless Steel						3 3/4 in	0.25 in	0.375 in	PT	22T194	25	1/4 in	0.437 in	0.656 in	FT	22TX58	25
#1-64 Thread Size, 1/16 in Drive						4 in	0.25 in	0.375 in	PT	22T195	25	1/2"-13 Thread Size, 3/8 in Drive					
3/16 in	0.073 in	0.125 in	FT	26KV16	100	4 1/2 in	0.25 in	0.375 in	PT	22T196	25	1/2 in	0.5 in	0.75 in	FT	22TU52	10
#4-40 Thread Size, 1/8 in Drive						5 in	0.25 in	0.375 in	PT	22T197	25	3/4 in	0.5 in	0.75 in	FT	22T805	10
1/4 in	0.112 in	0.183 in	FT	6XA41	100	1/4"-28 Thread Size, 1/4 in Drive						1 in	0.5 in	0.75 in	FT	6XB94	10
3/8 in	0.112 in	0.183 in	FT	5UGX4	100	1/2 in	0.25 in	0.375 in	FT	22TX13	100	1 1/4 in	0.5 in	0.75 in	FT	6XB95	10
1/2 in	0.112 in	0.183 in	FT	6XA45	100	3/4 in	0.25 in	0.375 in	FT	22TX14	100	1 1/2 in	0.5 in	0.75 in	FT	6XB96	10
2 in	0.112 in	0.183 in	PT	22T165	100	1 in	0.25 in	0.375 in	FT	22TX15	100	1 3/4 in	0.5 in	0.75 in	FT	6XB97	10
#6-32 Thread Size, 1/4 in Drive						1 1/4 in	0.25 in	0.375 in	FT	22TX16	100	2 in	0.5 in	0.75 in	PT	22TU53	10
1/4 in	0.138 in	0.226 in	FT	6XA54	100	1 1/2 in	0.25 in	0.375 in	FT	22TX17	100	2 1/4 in	0.5 in	0.75 in	PT	22TU54	10
3/8 in	0.138 in	0.226 in	FT	6XA56	100	1 3/4 in	0.25 in	0.375 in	PT	22TX18	100	2 1/2 in	0.5 in	0.75 in	PT	22TU55	10
1/2 in	0.138 in	0.226 in	FT	6XA58	100	2 in	0.25 in	0.375 in	PT	22TX19	100	3 in	0.5 in	0.75 in	PT	6XE12	5
3/4 in	0.138 in	0.226 in	FT	6XA61	100	2 1/2 in	0.25 in	0.375 in	PT	22TX20	100	3 1/4 in	0.5 in	0.75 in	PT	5WEE1	5
1 in	0.138 in	0.226 in	FT	6XA63	100	5/16"-18 Thread Size, 1/4 in Drive						3 1/2 in	0.5 in	0.75 in	PT	6XE14	5
1 1/4 in	0.138 in	0.226 in	PT	6XA64	100	3/8 in	0.312 in	0.469 in	FT	22T198	100	5 1/2 in	0.5 in	0.75 in	PT	6XE18	5
#8-32 Thread Size, 3/16 in Drive						1/2 in	0.312 in	0.469 in	FT	6XB56	100	6 in	0.5 in	0.75 in	PT	5WEE4	5
1/4 in	0.164 in	0.27 in	FT	6XA70	100	3/4 in	0.312 in	0.469 in	FT	22T199	100	6 1/2 in	0.5 in	0.75 in	PT	22TU57	5
3/8 in	0.164 in	0.27 in	FT	6XA72	100	1 in	0.312 in	0.469 in	FT	22TU01	100	1/2"-20 Thread Size, 3/8 in Drive					
1/2 in	0.164 in	0.27 in	FT	5UGX8	100	1 1/4 in	0.312 in	0.469 in	FT	22TU02	100	3/4 in	0.5 in	0.75 in	FT	22TX61	10
3/4 in	0.164 in	0.27 in	FT	6XA76	100	1 1/2 in	0.312 in	0.469 in	PT	22TU03	50	1 in	0.5 in	0.75 in	FT	22TX62	10
1 in	0.164 in	0.27 in	FT	6XA77	100	1 3/4 in	0.312 in	0.469 in	PT	22TU04	50	1 1/2 in	0.5 in	0.75 in	FT	22TX64	10
1 1/4 in	0.164 in	0.27 in	PT	5UGZ1	100	2 in	0.312 in	0.469 in	PT	22TU05	50	2 in	0.5 in	0.75 in	PT	22TX66	10
1 1/2 in	0.164 in	0.27 in	PT	5UGZ7	100	2 1/4 in	0.312 in	0.469 in	PT	22TU06	50	2 1/2 in	0.5 in	0.75 in	PT	22TX67	10
2 1/2 in	0.164 in	0.27 in	PT	6XA83	100	2 1/2 in	0.312 in	0.469 in	PT	22TU07	50	5/16"-12 Thread Size, 1/2 in Drive					
2 3/4 in	0.164 in	0.312 in	PT	22T176	100	2 3/4 in	0.312 in	0.469 in	PT	22TU08	25	1 in	0.562 in	1 in	FT	29DP88	10
#10-24 Thread Size, 1/2 in Drive						2 1/2 in	0.312 in	0.469 in	PT	22TU09	25	3 in	0.562 in	1 in	PT	29DP92	5
3/8 in	0.19 in	0.312 in	FT	6XA91	100	2 3/4 in	0.312 in	0.469 in	PT	22TU10	25	3/4"-11 Thread Size, 1/2 in Drive					
1/2 in	0.19 in	0.312 in	FT	6XA93	100	3 in	0.312 in	0.469 in	PT	22TU11	25	1 in	0.625 in	0.938 in	FT	22TU61	10
3/4 in	0.19 in	0.312 in	FT	6XA94	100	3 1/2 in	0.312 in	0.469 in	PT	22TU12	25	1 1/2 in	0.625 in	0.938 in	FT	22TU63	10
1 in	0.19 in	0.312 in	FT	6XA95	100	3 3/4 in	0.312 in	0.469 in	PT	22TU13	25	1 3/4 in	0.625 in	0.938 in	FT	22TU64	10
1 1/4 in	0.19 in	0.312 in	FT	5UGY0	100	4 in	0.312 in	0.469 in	PT	22TU14	25	2 1/2 in	0.625 in	0.938 in	PT	6XE26	5
1 1/2 in	0.19 in	0.312 in	FT	6XA97	100	4 1/4 in	0.312 in	0.469 in	PT	22TU15	10	3 in	0.625 in	0.938 in	PT	6XE28	5
1 3/4 in	0.19 in	0.312 in	FT	6XA98	100	4 1/2 in	0.312 in	0.469 in	PT	22TU16	10	4 in	0.625 in	0.938 in	PT	6XE30	5
2 in	0.19 in	0.312 in	PT	6XB10	100	5/8"-24 Thread Size, 1/2 in Drive						5/8"-18 Thread Size, 1/2 in Drive					
2 1/4 in	0.19 in	0.312 in	PT	6XB11	100	1/2 in	0.312 in	0.469 in	FT	22TX28	100	2 in	0.625 in	0.938 in	FT	22TX76	5
3 in	0.19 in	0.312 in	PT	23NN78	100	3/4 in	0.312 in	0.469 in	FT	22TX29	100	3/4"-10 Thread Size, 3/8 in Drive					
3 1/2 in	0.19 in	0.312 in	PT	23NN80	100	1 in	0.312 in	0.469 in	FT	22TX31	50	1 in	0.75 in	1.125 in	FT	22TU67	5
4 in	0.19 in	0.312 in	PT	22T180	100	1 1/4 in	0.312 in	0.469 in	PT	22TX32	50	2 in	0.75 in	1.125 in	FT	5UGY8	5
#10-32 Thread Size, 1/2 in Drive						1 1/2 in	0.312 in	0.469 in	PT	22TX33	50	2 1/2 in	0.75 in	1.125 in	PT	5WEE7	5
1/4 in	0.19 in	0.312 in	FT	6XB17	100	2 in	0.312 in	0.469 in	PT	22TX35	50	3 in	0.75 in	1.125 in	PT	6XE42	5
3/8 in	0.19 in	0.312 in	FT	6XB19	100	2 1/4 in	0.312 in	0.469 in	PT	22TX36	50	3 1/2 in	0.75 in	1.125 in	PT	5WEE8	5
1/2 in	0.19 in	0.312 in	FT	6XB21	100	2 1/2 in	0.312 in	0.469 in	PT	22TX37	50	4 in	0.75 in	1.125 in	PT	5WEE9	5
3/4 in	0.19 in	0.312 in	FT	6XB22	100	3 in	0.312 in	0.469 in	PT	22TX38	50	6 in	0.75 in	1.125 in	PT	5WEE0	5
1 in	0.19 in	0.312 in	FT	6XB23	100	3 1/2 in	0.312 in	0.469 in	PT	22TX39	50	1"-9 Thread Size, 1/2 in Drive					
1 1/4 in	0.19 in	0.312 in	FT	6XB24	100	4 in	0.312 in	0.469 in	PT	22TX40	50	2 in	0.875 in	1.312 in	FT	26KV36	5
1 1/2 in	0.19 in	0.312 in	FT	5UGY1	100	4 1/4 in	0.312 in	0.469 in	PT	22TX41	50	1"-8 Thread Size, 3/4 in Drive					
1 3/4 in	0.19 in	0.312 in	FT	6XB26	100	4 1/2 in	0.312 in	0.469 in	PT	22TX42	50	2 in	1 in	1.5 in	FT	22TU70	5
2 in	0.19 in	0.312 in	PT	6XB27	100	5 in	0.312 in	0.469 in	PT	22TX43	50	2 1/2 in	1 in	1.5 in	FT	22TU71	5
2 1/4 in	0.19 in	0.312 in	PT	6XB29	100	5 1/4 in	0.312 in	0.469 in	PT	22TX44	50	3 in	1 in	1.5 in	FT	22TU72	5
2 1/2 in	0.19 in	0.312 in	PT	6XB30	100	5 1/2 in	0.312 in	0.469 in	PT	22TX45	50	4 in	1 in	1.5 in	PT	22TU73	5
2 3/4 in	0.19 in	0.312 in	PT	23NN89	100	6 in	0.312 in	0.469 in	PT	22TX46	50	4 1/2 in	1 in	1.5 in	PT	26KV52	5
3 in	0.19 in	0.312 in	PT	23NN90	100	1 1/4"-14 Thread Size, 1/2 in Drive						316 Stainless Steel					
3 1/2 in	0.19 in	0.312 in	PT	23NN92	100	1/2 in	0.375 in	0.562 in	FT	22TX47	25	#6-32 Thread Size, 1/4 in Drive					
1/4"-20 Thread Size, 3/8 in Drive						3/4 in	0.375 in	0.562 in	FT	22TX48	25	3/8 in	0.138 in	0.226 in	FT	22TU86	100
1/4 in	0.25 in	0.375 in	FT	5WEE7	50	1 in	0.375 in	0.562 in	FT	22TX49	25	1/2 in	0.138 in	0.226 in	FT	22TU87	100
3/8 in	0.25 in	0.375 in	FT	6XB37	100	1 1/4 in	0.375 in	0.562 in	FT	22TX50	25	1 1/4 in	0.138 in	0.226 in	PT	22TU92	100
1/2 in	0.25 in	0.375 in	FT	6XB39	100	1 1/2 in	0.375 in	0.562 in	FT	22TX51	25	#8-32 Thread Size, 3/16 in Drive					
3/4 in	0.25 in	0.375 in	FT	6XB40	100	2 in	0.375 in	0.562 in	FT	22TX52	25	1/4 in	0.164 in	0.27 in	FT	22TU93	100
1 in	0.25 in	0.375 in	FT	6XB41	100	2 1/4 in	0.375 in	0.562 in	FT	22TX53	25	1/2 in	0.164 in	0.27 in	FT	22TU95	100
1 1/4 in	0.25 in	0.375 in	FT	6XB42	100	2 1/2 in	0.375 in	0.562 in	FT	22TX54	25	3/8 in	0.164 in	0.27 in	FT	22TU96	100
1 1/2 in	0.25 in	0.375 in	FT	6XB43	100	3 in	0.375 in	0.562 in	FT	22TX55	25	1/2 in	0.164 in	0.27 in	FT	22TU97	100
1 3/4 in	0.25 in	0.375 in	FT	6XB44	100	3 1/4 in	0.375 in	0.562 in	FT	22TX56	25	#10-24 Thread Size, 1/2 in Drive					
2 in	0.25 in	0.375 in	PT	22T186	100	3 1/2 in	0.375 in	0.562 in	FT	22TX57	25	3/8 in	0.19 in	0.312 in	FT	22TV02	100
2 1/4 in	0.25 in	0.375 in	PT	22T187	100	4 in	0.375 in	0.562 in	FT	22TX58	25	1/2 in	0.19 in	0.312 in	FT	22TV03	100
2 1/2 in	0.25 in	0.375 in	PT	22T188	50	4 1/4 in	0.375 in	0.562 in	FT	22TX59	25	3/4 in	0.19 in	0.312 in	FT	22TV05	100
2 3/4 in	0.25 in	0.375 in	PT	22T189	50	4 1/2 in	0.375 in	0.562 in	FT	22TX60	25	1 in	0.19 in	0.312 in	PT	22TV06	100
3 in	0.25 in	0.375 in	PT	22T190	50	5 in	0.375 in	0.562 in	FT	22TX61	25	1 1/4 in	0.19 in	0.312 in	PT	22TV07	100
3 1/4 in	0.25 in	0.375 in	PT	23NN86	50	5 1/4 in	0.375 in	0.562 in	FT	22TX62	25	1 1/2 in	0.19 in	0.312 in	PT	22TV08	100
3 1/2 in	0.25 in	0.375 in	PT	22T191	25	5 1/2 in	0.375 in	0.562 in	FT	22TX63	25	2 in	0.19 in	0.312 in	PT	22TV09	100
3 3/4 in	0.25 in	0.375 in	PT	22T193	25	6 in	0.375 in	0.562 in	FT	22TX64	25	* FT = Fully Threaded, PT = Partially Threaded					

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