

Shoulder Screw Information

Also called stripper bolts or shoulder bolts, shoulder screws are used frequently in pulleys and linkages. They also function as precision spacers or guide screws.

SHOULDER SCREW TYPES

Both types of shoulder screws are reusable and come in ISO metric and USS measurements.

Precision (Smooth Head)

Manufactured with more-exacting tolerances. Hex socket drive allows high-torque wrenching. Slotted drive permits deeper access in hard-to-reach places where a hex key can't reach. Phillips drive provides excellent torque control.

Standard (Knurled Head)

Dimensions meet ASME standards for inch sizes and ISO standards for metric sizes. Shoulder dia. tolerances: -0.002" to -0.004". Suitable for use in machinery and other critical mechanical applications. Screws feature a hex socket drive.

SPECIAL VARIATIONS

Hex Head

Allows easy tightening with an adjustable wrench.

Self-Locking

A nylon patch on screw threads bonds with the material being fastened to hold the screw firmly in place and prevent loosening from vibration. Not reusable.

SHOULDER SCREW DIMENSIONS

Standard		Metric	
Shoulder Dia.	1/8 in 3/16 in 1/4 in 5/16 in 3/8 in 1/2 in 5/8 in 3/4 in 1 in 1 1/4 in 1 1/2 in	Shoulder Dia.	3mm 4mm 5mm 6mm 8mm 10mm 12mm 16mm 20mm 24mm
Thread Size	#4 #6 #8 #10 #12 #14 #16 #18 #20 #22 #24 #28 #32	Thread Size	M2 x .40 M3 x .50 M4 x .70 M5 x .80 M6 x 1 M8 x 1.25 M10 x 1.5 M12 x 1.75 M16 x 2 M20 x 2.5
Drive Size	5/64 in 3/32 in 1/16 in 3/32 in 1/8 in 3/16 in 1/4 in 5/16 in 3/8 in 1 in 1 1/4 in 1 1/2 in	Drive Size	2mm 3mm 4mm 5mm 6mm 8mm 10mm 12mm 16mm 20mm 24mm 27mm
Thread Length	5/32 in 3/16 in 1/8 in 3/16 in 1/4 in 5/16 in 3/8 in 1/2 in 5/8 in 3/4 in 1 in 1 1/4 in 1 1/2 in	Thread Length	3.8mm 5mm 7mm 9.5mm 11mm 13mm 16mm 18mm 22mm 27mm
Head Dia.	1/4 in 3/8 in 1/2 in 5/8 in 3/4 in 1 in 1 1/4 in 1 1/2 in	Head Dia.	5mm 6mm 9mm 10mm 13mm 16mm 18mm 24mm 30mm 36mm
Head Height	1/8 in 3/16 in 1/4 in 5/16 in 3/8 in 1/2 in 5/8 in 3/4 in 1 in 1 1/4 in 1 1/2 in	Head Height	2mm 3mm 4mm 4.5mm 5.5mm 7mm 9mm 11mm 14mm 16mm

Shoulder Length	Item No.	Pkg. Qty.	Shoulder Length	Item No.	Pkg. Qty.
1/4 in Shoulder, #10-24 Thread			3/4 in	31KG30	10
1/4 in	1CA69	25	1/2 in	1CB16	10
3/8 in	4XY17	25	1/2 in	31KG31	10
1/2 in	4XY18	25	3/4 in	31KG32	10
3/4 in	1CA71	25	1 1/4 in	31KG33	10
1 in	4XY19	25	1 1/2 in	31KG34	10
1 1/4 in	1CA73	10	2 in	31KG35	10
1 1/2 in	31KG26	10	2 1/2 in	1CB18	5
1 3/4 in	1CA75	10	2 1/2 in	31KG36	5
2 in	1CA77	10	2 3/4 in	1CB20	5
2 1/2 in	1CA79	10	3 in	1CB22	5
2 3/4 in	1CA81	10	3 in	31KG37	5
3 in	1CA83	10	3 1/4 in	1CB24	5
3/8 in Shoulder, 1/4"-20 Thread			3 1/2 in	1CB25	5
1/4 in	1CA85	10	3 3/4 in	1CB28	5
1/2 in	4XY24	10	4 in	1CB30	5
3/4 in	1CA89	10	4 1/2 in	1CB32	5
1 1/2 in	1CA90	5	5 in	1CB34	5
1 3/4 in	1CA92	5	5 1/2 in	1CB36	5
2 in	1CA94	5	6 in	1CB38	5
2 1/4 in	1CA96	5	6 1/2 in	1CB40	5
2 1/2 in	1CA98	5	7 in	1CB42	5
3 in	1CB10	5	7 1/2 in	1CB44	5
3/8 in Shoulder, 5/16"-18 Thread			8 in	1CB46	5
1/4 in	1CB12	10	8 1/2 in	1CB48	5
3/8 in	31KG27	10	9 in	1CB50	5
1/2 in	31KG28	10	9 1/2 in	1CB52	5
3/4 in	31KG29	10	10 in	1CB54	5

Shoulder Length	Item No.	Pkg. Qty.	Shoulder Length	Item No.	Pkg. Qty.
1/2 in	31KG88	5	1 1/2 in	31KG90	5
5/8 in	1CB44	5	1 3/4 in	1CB66	1
3/4 in	31KG89	5	2 in	1CB70	1
7/8 in	1CB46	5	2 1/4 in	1CB72	1
1 in	1CB48	5	2 1/2 in	1CB74	1
1 1/4 in	1CB50	5	2 3/4 in	1CB76	1
1 1/2 in	1CB52	5	3 in	1CB78	1
1 3/4 in	1CB54	5	3 1/4 in	1CB80	1
2 in	1CB56	5	3 1/2 in	1CB82	1
2 1/4 in	1CB58	5	3 3/4 in	1CB84	1
2 1/2 in	1CB60	5	4 in	1CB86	1
2 3/4 in	1CB62	1	4 1/4 in	1CB88	1
3 in	1CB64	1	4 1/2 in	1CB90	1
3 1/4 in	1CB66	1	4 3/4 in	1CB92	1
3 1/2 in	1CB68	1	5 in	1CB94	1
3 3/4 in	1CB70	1			
4 in	1CB72	1			
4 1/4 in	1CB74	1			
4 1/2 in	1CB76	1			
4 3/4 in	1CB78	1			
5 in	1CB80	1			
5 1/4 in	1CB82	1			
5 1/2 in	1CB84	1			
5 3/4 in	1CB86	1			
6 in	1CB88	1			
6 1/4 in	1CB90	1			
6 1/2 in	1CB92	1			
6 3/4 in	1CB94	1			

Shoulder Length	Item No.	Pkg. Qty.	Shoulder Length	Item No.	Pkg. Qty.
5 1/2 in	1CB96	1	1 1/2 in	31KG99	1
6 in	1CB98	1	1 3/4 in	31KH01	1
6 1/4 in	1CB99	1	2 in	31KH02	1
6 1/2 in	1CB100	1	2 1/4 in	31KH03	1
6 3/4 in	1CB101	1	2 1/2 in	31KH04	1
7 in	1CB102	1	2 3/4 in	31KH05	1
7 1/4 in	1CB103	1	3 in	31KH06	1
7 1/2 in	1CB104	1	3 1/4 in	31KH07	1
7 3/4 in	1CB105	1	3 1/2 in	31KH08	1
8 in	1CB106	1	3 3/4 in	31KH09	1
8 1/4 in	1CB107	1	4 in	31KH10	1
8 1/2 in	1CB108	1			
8 3/4 in	1CB109	1			
9 in	1CB110	1			
9 1/4 in	1CB111	1			
9 1/2 in	1CB112	1			
9 3/4 in	1CB113	1			
10 in	1CB114	1			
10 1/4 in	1CB115	1			
10 1/2 in	1CB116	1			
10 3/4 in	1CB117	1			
11 in	1CB118	1			
11 1/4 in	1CB119	1			
11 1/2 in	1CB120	1			
11 3/4 in	1CB121	1			
12 in	1CB122	1			
12 1/4 in	1CB123	1			
12 1/2 in	1CB124	1			
12 3/4 in	1CB125	1			
13 in	1CB126	1			
13 1/4 in	1CB127	1			
13 1/2 in	1CB128	1			
13 3/4 in	1CB129	1			
14 in	1CB130	1			
14 1/4 in	1CB131	1			
14 1/2 in	1CB132	1			
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15 in	1CB134	1			
15 1/4 in	1CB135	1			
15 1/2 in	1CB136	1			
15 3/4 in	1CB137	1			
16 in	1CB138	1			
16 1/4 in	1CB139	1			
16 1/2 in	1CB140	1			
16 3/4 in	1CB141	1			
17 in	1CB142	1			
17 1/4 in	1CB143	1			
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19 in	1CB150	1			
19 1/4 in	1CB151	1			
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20 1/4 in	1CB155	1			
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21 1/4 in	1CB159	1			
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21 3/4 in	1CB161	1			
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22 1/4 in	1CB163	1			
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26 3/4 in	1CB181	1			
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27 1/4 in	1CB183	1			
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30 1/2 in	1CB196	1			
30 3/4 in	1CB197	1			
31 in	1CB198	1			
31 1/4 in	1CB199	1			
31 1/2 in	1CB200	1			
31 3/4 in	1CB201	1			
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32 1/2 in	1CB204	1			
32 3/4 in	1CB205	1			
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33 1/4 in	1CB207	1			
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33 3/4 in	1CB209	1			
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37 1/4 in	1CB223	1			
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37 3/4 in	1CB225	1			
38 in	1CB226	1			
38 1/4 in	1CB227	1			
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