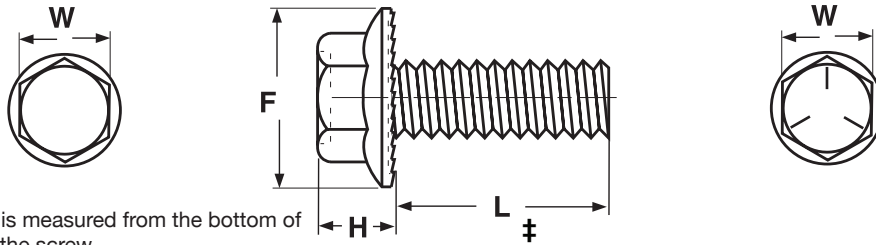


Cap Screws & Bolts

Serrated Hex Washer Flange Screws



‡Length of a serrated flange screw is measured from the bottom of the serration to the extreme end of the screw.

SERRATED HEX WASHER HEAD FLANGE SCREWS

Size (Diameter & Thread Pitch)	W		H		F	
	Width Across Flats		Thickness		Flange Diameter	
	Max	Min	Max	Min	Max	Min
4-40	.188	.181	.079	.060	.243	.225
6-32	.187	.181	.157	.132	.266	.254
8-32	.250	.244	.186	.161	.355	.341
10-24 & 10-32	.312	.305	.210	.185	.441	.425
12-24	.312	.305	.240	.161	.520	.398
1/4-20 & 1/4-28	.375	.367	.240	.216	.531	.513
1/4-20 (alt.) *	.375	.367	.280	.255	.560	.540
5/16-18 & 5/16-24	.500	.491	.298	.274	.706	.686
5/16-18 (alt.) *	.500	.489	.320	.295	.680	.650
3/8-16 & 3/8-24	.562	.552	.331	.307	.793	.771
7/16-14	.625	.612	.460	.365	.930	.856
1/2-13 & 1/2-20	.750	.736	.510	.470	1.070	1.020
5/8-11	.9375	.922	.620	.580	1.330	1.260
3/4-10	1.1250	1.100	.730	.680	1.590	1.490
Tolerance on Length (ASME B18.2.1 & ASME B18.6.3)	Nominal Screw Size	Nominal Screw Length				
		Up to 1/2 in., incl.	Over 1/2 in. to 1 in., incl.	Over 1 in. to 2 in., incl.	Over 2 in. to 4 in., incl.	Over 4 in. to 6 in., incl.
	No. 4 thru 12	-0.02	-0.03	-0.06	-0.09	-0.09
	1/4 thru 3/8	-0.03	-0.03	-0.06	-0.09	-0.10
	7/16 thru 1/2	-0.03	-0.03	-0.06	-0.09	-0.10
9/16 thru 3/4	-0.03	-0.08	-0.10	-0.10	

*Alternative set of dimensions is acceptable for 1/4" and 5/16" diameter stainless steel serrated flange screws.

Description	An unslotted hex head screw with unified thread pitch and a flange that has serrations on the bearing surface side.		
Applications/Advantages	Designed for use in applications where loosening forces are present, such as vibration. The serrations grip to the bearing surface so that significantly more torque is needed to loosen than to tighten the screw. Flange provides more strength than a standard machine screw. Eliminates need for a lockwasher or locknut in certain applications.		
Material	<i>Low Carbon Steel</i> AISI C1022 steel.	<i>Grade 5</i> Medium carbon steel	<i>Stainless Steel</i> 18-8 Stainless
Heat Treatment	Serrated flange screws shall be quenched and tempered at a minimum temperature of 650°F.	Screws shall be heat treated, oil or water quenched, at the option of the manufacturer, and tempered at a minimum tempering temperature of 800°F.	-
Case Hardness	Rockwell C 40 minimum	Rockwell 30N54 maximum	Base metal hardness: Rockwell B85 - B95 (approximate)
Core Hardness	Rockwell C26 - C34	Rockwell C25 - C34	
Proof Load	No. 6 through 3/4 in. diameter, all lengths: 85,000 psi.	1/4 through 3/4 in. diameter, all lengths: 85,000 psi.	-
Tensile Strength	No. 6 through 3/4 in. diameter, all lengths: 120,000 psi. minimum	1/4 through 3/4 in. diameter, all lengths: 120,000 psi. minimum	80,000 psi. minimum
Plating	See Appendix-A for plating information.	See Appendix-A for plating information.	Stainless serrated flange screws are usually supplied without an additional finish.