## **CAP SCREWS & BOLTS**

## FLANGE SCREWS, SERRATED HEX WASHER

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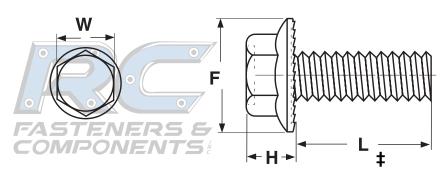
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 $\pm$ Length of a serrated flange screw is measured from the bottom of the serration to the extreme end of the screw.

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	Sef	RRATED HEX W	ASHER HEAD	FLANGE SCR	EWS	
Size (Diameter & Thread Pitch)	W Width Across Flats		H		F Flange Diameter	
	4-40	.188	.181	.079	.060	.243
6-32	POMBENT	<b>S</b> .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
5/16-18 & 5/16-24	.500	.491	.298	.274	.706	.686
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
	<u> </u>					
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

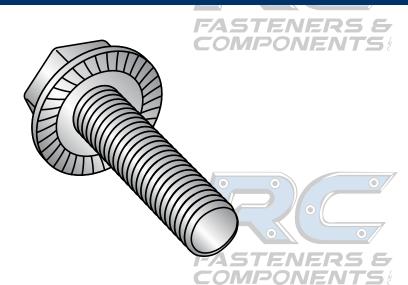
FASTENERS & COMPONENTS

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## **CAP SCREWS & BOLTS**

## FLANGE SCREWS, SERRATED HEX WASHER





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Description	An unsotted 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	Low Carbon Steel	Grade 5	Grade 8	Stainless Steel					
	AISI C1022 steel.	Medium carbon steel	Medium carbon alloy steel	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.	Grade-8 serrated flange screws shall be heat-treated, oil- quenched and tempered at a minimum temperature of 800°F.	-					
Case Hardness	Rockwell C 40 minimum	Rockwell 30N54 maximum	Rockwell 30N58.6 maximum	Base metal hardness:					
Core Hardness	Rockwell C26 - C34	Rockwell C25 - C34	Rockwell C33 - C39	Rockwell B85 - B95 (approximate)					
Proof Load	<b>NENTS</b>	1/4 through 3/4 in. diameter, all lengths: 85,000 psi.	120,000 psi.	-0					
Tensile Strength	_	1/4 through 3/4 in. diameter, all lengths: 120,000 psi. minimum	150,000 psi, minimum	80,000 psi. minimum					
Plating	See Appendix-A for plating information.	See Appendix-A for plating information.	See Appendix-A for plating information.	Stainless serrated flange screws are usually supplied without an additional finish.					

