

Metallics

An **AMERICAN** Source For Premier
and Innovative Fasteners and Anchors

STOVE BOLTS

The following Specification Sheet applies to **Steel and Stainless Steel Stove Bolts** included in the **RSB series**.



ROUND HEADS FOR MACHINE SCREWS													ANSI B18.6.3
Nominal Size	A		H		J		T		M		G	N	Phillips Driver Size
	Head Diameter		Height of Head		Width of Slot		Depth of Slot		Dimensions of Recess				
									Diameter		Depth	Width	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
2	.162	.146	.069	.059	.031	.023	.048	.037	.100	.087	.053	.017	1
3	.187	.169	.078	.067	.035	.027	.053	.040	.109	.096	.062	.018	1
4	.211	.193	.086	.075	.039	.031	.058	.044	.118	.105	.072	.019	1
5	.236	.217	.095	.083	.043	.035	.063	.047	.154	.141	.074	.027	2
6	.260	.240	.103	.091	.048	.039	.068	.051	.162	.149	.084	.027	2
8	.309	.287	.120	.107	.054	.045	.077	.058	.178	.165	.101	.030	2
10	.359	.334	.137	.123	.060	.050	.087	.065	.195	.182	.119	.031	2
12	.408	.382	.153	.139	.067	.056	.096	.073	.249	.236	.125	.032	3
1/4	.472	.443	.175	.160	.075	.064	.109	.082	.268	.255	.147	.034	3
5/16	.590	.557	.216	.198	.084	.072	.132	.099	.308	.295	.187	.040	3
3/8	.708	.670	.256	.237	.094	.081	.155	.117	.387	.374	.228	.064	4
1/2	.813	.766	.355	.332	.106	.091	.211	.159	.416	.403	.256	.068	4

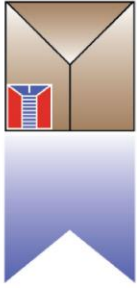
Metallics

229 Cross Street
Bristol, CT 06010

www.metallics.us

Phone: 860 589-4186 Toll Free: 800 243-8272

Fax: 860 584-1008 Toll Free Fax: 800 831-9358



Metallics

An **AMERICAN** Source For Premier
and Innovative Fasteners and Anchors

Description	A straight shank fastener with external threads designed to go through a hole or nut that is pre-tapped to form a mating thread for the screw.				
Applications/ Advantages	Machine screws form a fastening superior in strength to spaced thread screws.				
	<i>Steel</i>		<i>Stainless</i>		
	<p><i>Steel Zinc</i> is the most common and most popular variety of steel machine screws</p> <p><i>Steel Zinc yellow</i> screws are popular in electronics applications.</p> <p><i>Steel Zinc Black</i> and Black Oxide screws are used to blend in with black-colored components.</p>		<p><i>18-8 Stainless steel</i> machine screws are used in applications which require general atmospheric corrosion resistance, in food processing machinery and refrigeration equipment. Stainless is also superior to steel in withstanding some elevation in application operating temperature while maintaining its strength.</p> <p><i>316 Stainless steel</i> offers superior corrosion resistance to 18-8 and is superior at maintaining its strength at high temperatures.</p> <p><i>410 Stainless steel</i> is recommended in applications where greater tensile strength is needed such as control mechanisms or valves under high stress. 410 is not as corrosion resistant as are 18-8 or 316 stainless</p>		
Material	AISI 1006 - 1022 or equivalent steel.		SAE 18-8 stainless steel	316 stainless steel	410 stainless steel
Hardness	Rockwell B70 - B100.		Rockwell B85 - B95 (approximate)*	Rockwell B85 - B95 (approximate)*	Rockwell C34 (approximate)
Tensile Strength	60,000 psi. minimum.		80,000 psi. minimum (100,000 psi after cold working)*	85,000 - 140,000 psi.	180,000 psi.
	<p>Steel machine screws which have a nominal diameter smaller than #4 are not subject to tensile testing. No. 4 and No. 5 machine screws which are shorter than 1/2" are not subject to tensile testing. Steel machine screws of diameters No. 6 to 1/2" inclusive, which are shorter than either 1/2" or 3D (where D is the nominal screw size in inches) are not subject to tensile testing. Such steel machine screws of a size to be tested shall meet the tensile load requirements listed above.</p> <p>Tensile strength values for stainless screws are offered as approximations only; there is no single standard for the performance requirements of stainless machine screws.</p>				

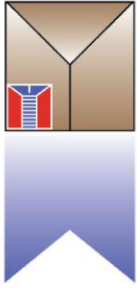
Metallics

229 Cross Street
Bristol, CT 06010

www.metallics.us

Phone: 860 589-4186 Toll Free: 800 243-8272

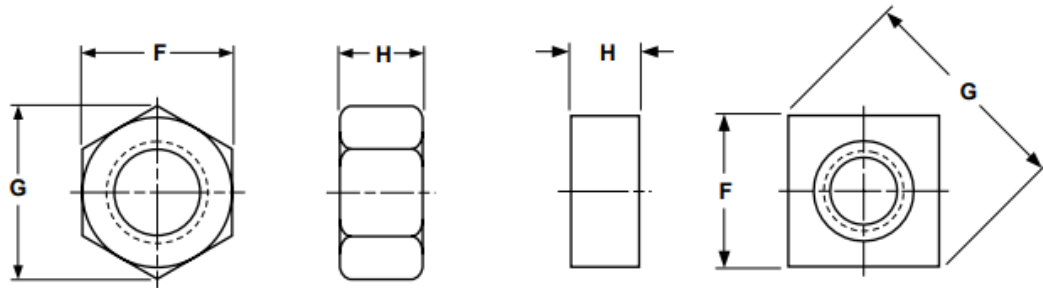
Fax: 860 584-1008 Toll Free Fax: 800 831-9358



Metallics

An **AMERICAN** Source For Premier
and Innovative Fasteners and Anchors

HEX NUTS



SQUARE AND HEX MACHINE SCREW NUTS											ANSI/ASME B18.6.3
Nominal Size or Basic Thread Diameter		F			G		G1		H		
		Width Across Flats			Width Across Corners				Thickness		
		Basic	Max	Min	Square		Hex				
					Max	Min	Max	Min	Max	Min	
0	0.0600	5/32	0.156	0.150	0.221	0.206	0.180	0.171	0.050	0.043	
1	0.0730	5/32	0.156	0.150	0.221	0.206	0.180	0.171	0.050	0.043	
2	0.0860	3/16	0.188	0.180	0.265	0.247	0.217	0.205	0.066	0.057	
3	0.0990	3/16	0.188	0.180	0.265	0.247	0.217	0.205	0.066	0.057	
4	0.1120	1/4	0.250	0.241	0.354	0.331	0.289	0.275	0.098	0.087	
5	0.1250	5/16	0.312	0.302	0.442	0.415	0.361	0.344	0.114	0.102	
6	0.1380	5/16	0.312	0.302	0.442	0.415	0.361	0.344	0.114	0.102	
8	0.1640	11/32	0.344	0.332	0.486	0.456	0.397	0.378	0.130	0.117	
10	0.1900	3/8	0.375	0.362	0.530	0.497	0.433	0.413	0.130	0.117	
12	0.2160	7/16	0.438	0.423	0.619	0.581	0.505	0.482	0.161	0.148	
1/4	0.2500	7/16	0.438	0.423	0.619	0.581	0.505	0.482	0.193	0.178	
5/16	0.3125	9/16	0.562	0.545	0.795	0.748	0.650	0.621	0.225	0.208	
3/8	0.3750	5/8	0.625	0.607	0.884	0.833	0.722	0.692	0.257	0.239	

Description	<p>Hex Machine Screw Nut: A six-sided internally threaded fastener with flat tops and chamfered corners. Threads shall be Unified Standard, Class 2B.</p> <p>Square Machine Screw Nut: A four-sided, internally threaded fastener, tops and bottoms flat, without chamfer. Threads shall be Unified coarse thread, Class 2B.</p>
Applications/Advantages	<p>Hex Machine Screw Nut: Designed to be used specifically with machine screws. Stainless nuts are used with stainless machine screws where parts are subject to corrosive conditions.</p> <p>Square Machine Screw Nut: Offers a greater bearing surface for wrenching.</p>
Material	<p>Steel: Any low carbon steel</p> <p>Stainless: 18-8 stainless steel</p>

Metallics

229 Cross Street
Bristol, CT 06010

www.metallics.us

Phone: 860 589-4186 Toll Free: 800 243-8272

Fax: 860 584-1008 Toll Free Fax: 800 831-9358