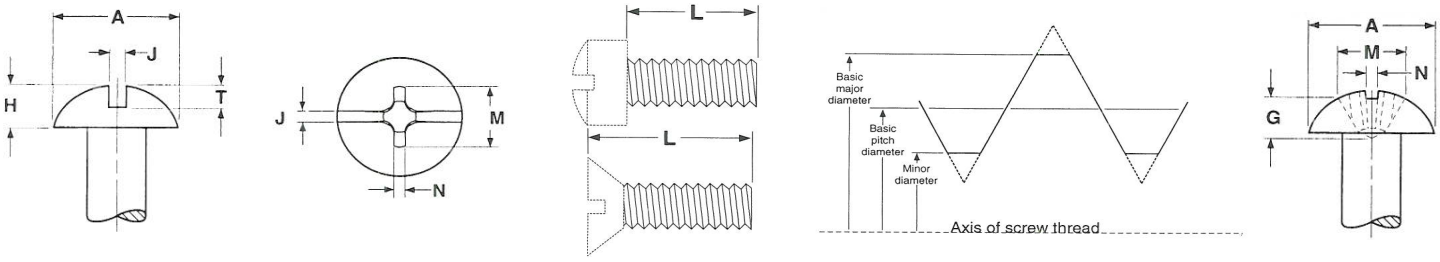
Atlanta, Georgia
Phone 800-521-7326 Fax 770-745-1333

Round Head Machine Screw



ASME B 1.1											A		H		J		T		M	G	N	
Size and Threads Per Inch		Series Designation	Allowance	Major Diameter		Pitch Diameter			Tensile Strength, lb. Min** Carbon Steel	Stress Area Inches²	Head Diameter		Head Height		Slot Width		Slot Depth		Dimension of Recess			Phillips Bit Size
																			Diameter	Depth	Width	
				Min	Max	Min	Max	Tolerance			Min	Max	Min	Max	Min	Max	Min	Max	Ref	Ref	Ref	
6-32	0.138	UNC	.0008	.1312	.1372	.1141	.1169	.002820	550	0.00909	.240	.260	.091	.103	.039	.048	.051	.068	.155	.070	.045	2
6-40	0.138	UNF	.0008	.1321	.1372	.1184	.1210	.002614	609	0.01015	.240	.260	.091	.103	.039	.048	.051	.068	.155	.070	.045	2
8-32	0.164	UNC	.0009	.1571	.1631	.1399	.1428	.002916	850	0.0140	.287	.309	.107	.120	.045	.054	.058	.077	.171	.088	.064	2
8-36	0.164	UNF	.0009	.1577	.1632	.1424	.1452	.002804	884	0.01474	.287	.309	.107	.120	.045	.054	.058	.077	.171	.088	.064	2
10-24	0.190	UNC	.0010	.1818	.1890	.1586	.1619	.003319	1050	0.0175	.334	.359	.123	.137	.050	.060	.065	.087	.188	.106	.082	2
10-32	0.190	UNF	.0009	.1831	.1891	.1658	.1688	.003004	1200	0.0200	.334	.359	.123	.137	.050	.060	.065	.087	.188	.106	.082	2
12-24	0.216	UNC	.0010	.2078	.2150	.1845	.1879	.003400	1450	0.0242	.382	.408	.139	.153	.056	.067	.073	.096	n/a	n/a	n/a	3
12-28	0.216	UNF	.0010	.2085	.2150	.1886	.1918	.003224	1548	0.0258	.382	.408	.139	.153	.056	.067	.073	.096	n/a	n/a	n/a	3
1/4-20	0.250	UNC	.0011	.2408	.2489	.2127	.2164	.003731	1900	0.0318	.443	.472	.160	.175	.064	.075	.082	.109	.261	.134	.104	3
1/4-28	0.250	UNF	.0010	.2425	.2490	.2225	.2258	.003322	2200	0.0364	.443	.472	.160	.175	.064	.075	.082	.109	.261	.134	.104	3
5/16-18	0.3125	UNC	.0012	.3026	.3113	.2712	.2752	.004041	3150	0.0524	.557	.590	.198	.216	.072	.084	.099	.132	.301	.174	.144	3
5/16-24	0.3125	UNF	.0011	.3042	.3114	.2806	.2843	.003660	3480	0.0580	.557	.590	.198	.216	.072	.084	.099	.132	.301	.174	.144	3
3/8-16	0.375	UNC	.0013	.3643	.3737	.3287	.3331	.004363	4650	0.0775	.670	.708	.237	.256	.081	.094	.117	.155	.380	.215	.182	4
3/8-24	0.375	UNF	.0011	.3667	.3739	.3430	.3468	.003804	5268	0.0878	.670	.708	.237	.256	.081	.094	.117	.155	.380	.215	.182	4

Tolerance on Length L	Screw Size	Screw Length			
		Up To 1/2"	Over 1/2" to 1"	Over 1" to 2"	Over 2"
	6 - 12	-0.02	-0.03	-0.06	-0.09
	1/4 - 3/8	-0.03	-0.03	-0.06	-0.09

**Tensile strength is based off of 60,000 psi. and only apply to carbon steel screws. Hex and Hex Washer Head machine screws of adequate length may be wedge tensile tested. Other head styles can be axial tensile tested.

ANSI B18.6.3	Steel	SAE Stainless 18-8	Stainless 316	Stainless 410
Material	AISI 1006 - 1022 or equivalent Steel	Stainless SAE 18-8	Stainless SAE 316	Stainless SAE 410 Passivated
Hardness	Rockwell B70 - B100	Rockwell B85 - B95 (approximate)*	Rockwell B85 - B95 (approximate)*	Rockwell C34 (approximate)*
Tensile Strength	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. **Tensile strength values for stainless screws are offered as approximations only. There is no single standard for the performance requirements of stainless machine screws.			

* Hardness and tensile strength standards are offered as guides only for stainless machine screws. There is currenlty no national standard for these performance requirements for stainless machine screws.

Peco Fasteners specification sheets are a reference guide to help in the selection of fasteners. Peco has made every effort to ensure the accuracy of the information. However, Peco Fasteners is not responsible for any errors that may be contained within these sheets. Peco Fasteners makes no claim of warranty in the accuracy of this information. Users of this information are solely responsible for protecting themselves against liability. It is solely the responsibility of the purchasers and users of these fasteners to consult with Engineers that are experts in an applicable field. Peco Fasteners is not responsible for any loss, claim, or damage due to these specification sheets.

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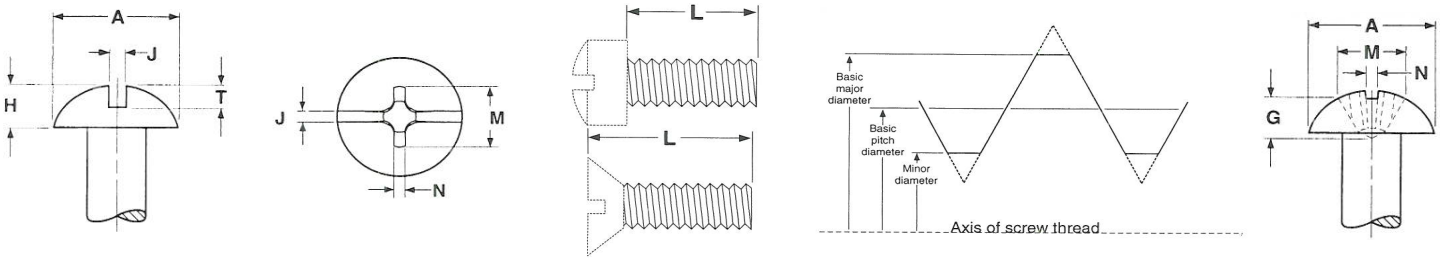

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