

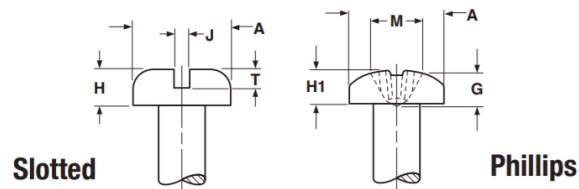


# Metallics

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

## PAN HEAD MACHINE SCREWS - STEEL AND STAINLESS STEEL

The following Specification Sheet applies to all **Steel and Stainless Steel Pan Head Machine Screws** including those in our **SPM, PMP, SPMP, and SPS** series of screws.



PAN HEADS FOR MACHINE SCREWS AND SEMS														ASME B18.6.3-2010
Nominal Size	A		H		H1		J		T		M	G		Phillips Driver Size
	Head Diameter		Height of Head				Width of Slot		Depth of Slot		Dimensions of Recess			
			Slotted		Recessed						Diameter	Recess Penetration Gaging Depth		
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min		Ref	Max	
4	.219	.205	.068	.058	.080	.070	.039	.031	.040	.030	.115	.071	.053	1
6	.270	.256	.082	.072	.097	.087	.048	.039	.050	.037	.159	.080	.055	2
8	.322	.306	.096	.085	.115	.105	.054	.045	.058	.045	.175	.097	.071	2
10	.373	.357	.110	.099	.133	.122	.060	.050	.068	.053	.192	.113	.089	2
12	.425	.407	.125	.112	.151	.139	.067	.056	.077	.061	.252	.124	.098	3
1/4	.492	.473	.144	.130	.175	.162	.075	.064	.087	.070	.274	.144	.118	3

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229 Cross Street  
Bristol, CT 06010

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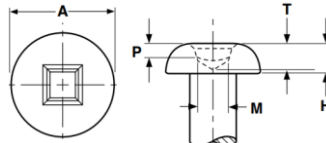
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Square Drive

SQUARE SOCKET PAN HEADS										ASME B18.6.3 2002
Nominal Size or Basic Screw Diameter	A		H		M	T	P		Driver Size	
	Head Diameter		Head Height		Recess Square	Recess Depth	Penetration Gaging Depth			
	Max	Min	Max	Min	Ref	Ref	Max	Min		
8	.1640	.322	.306	.120	.110	.112	.127	.075	.060	2

<b>Description</b>	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.				
<b>Applications/ Advantages</b>	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><b>18-8 Stainless steel</b> 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><b>316 Stainless steel</b> offers superior corrosion resistance to 18-8 and is superior at maintaining its strength at high temperatures.</p> <p><b>410 Stainless steel</b> 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>		
<b>Material</b>	AISI 1006 - 1022 or equivalent steel.		SAE 18-8 stainless steel	316 stainless steel	410 stainless steel
<b>Hardness</b>	Rockwell B70 - B100.		Rockwell B85 - B95 (approximate)*	Rockwell B85 - B95 (approximate)*	Rockwell C34 (approximate)
<b>Tensile Strength</b>	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>				

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