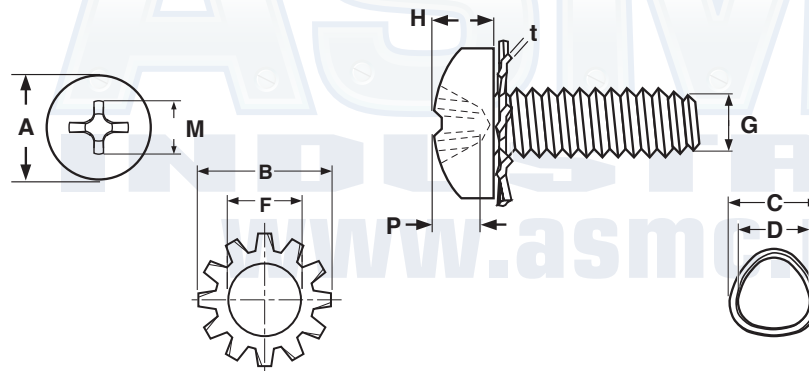


# Trilobular Pan External Tooth SEMS

## THREAD ROLLING



**TRILOBULAR THREAD ROLLING SCREW EXTERNAL TOOTH SEMS, PAN PHILLIPS**

Nominal Screw Size & Threads per Inch	A		H		B		F		t		C		D		G	M	P		Phillips Driver Size
	Head Diameter		Head Height		Washer Outside Diam		Washer Inside Diam		Washer Material Thickness		Circumscrib- ing Circle Diam		Measurement Across Center		Point Diam of Circumscrib- ing Circle	Drive Diam.	Gauge Penetration		
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Ref	Max	Min	
4-40	.219	.204	.080	.069	.230	.219	.104	.100	.018	.012	.114	.110	.110	.105	.090	.115	.071	.053	1
6-32	.270	.255	.097	.086	.287	.269	.126	.123	.022	.016	.141	.134	.135	.128	.111	.159	.080	.055	2
8-32	.321	.305	.115	.104	.319	.304	-	-	.023	.018	.167	.160	.161	.154	.137	.177	.097	.071	2
10-24	.372	.356	.133	.121	.380	.364	-	-	.024	.018	.194	.187	.185	.178	.152	.193	.113	.089	2
10-32	.372	.356	.133	.121	.380	.364	-	-	.024	.018	.193	.186	.187	.180	.163	.193	.113	.089	2
www.gsincl.net																			
Tolerance on Length							+ 0, -0.03												

<b>Description</b>	Trilobular thread rolling screw with a gently rounded top surface and a captive, free-spinning external tooth lockwasher manufactured as one assembly. As each lobe of the screw moves through the pilot hole in the nut material, it forms and work-hardens the nut thread metal, producing an uninterrupted grain flow.	
<b>Applications/ Advantages</b>	For drilled, punched or corrod holes in all ductile metals and punch extruded metals. Eliminates chips, requires low drive torque and provides excellent resistance to vibrational loosening. The washer/screw assembly makes this a locking screw with the washer providing the locking action. Machine pre-assembly provides cost savings to the end user.	
<b>Material</b>	<b>Screw</b>	<b>Washer</b>
	1022 or equivalent carbon steel	1050 or equivalent spring steel
<b>Heat Treatment</b>	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.	
<b>Case Hardness</b>	Rockwell C45 minimum	-
<b>Case Depth</b>	2-56 through 6-32 diameters: .002 - .007 8-32 through 10-32 diameters: .004 - .009	-
<b>Core Hardness (after tempering)</b>	Rockwell C28-38	Rockwell C40 - 50
<b>Plating</b>	See Appendix-A for information on the plating of trilobular thread rolling SEMS screws.	