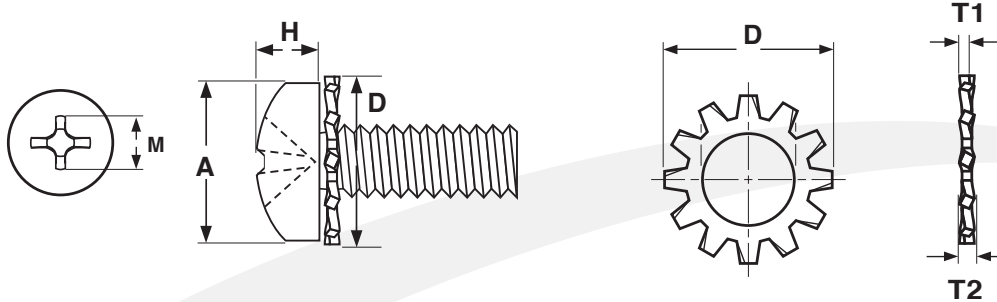


# METRIC FASTENERS

## SEMS

## ISO 7045 Pan Phillips External Tooth L/W



METRIC - ISO 7045 PAN PHIL EXTERNAL TOOTH SEMS												ISO 7045
Machine Screw Dimensions							External Tooth Lockwasher Dimensions					Phillips Driver Size
Nominal Size	Thread Pitch	A		H1		M	D		T1		T2	
		Head Diameter		Height of Head		Recess Diameter	Outside Diameter		Material Thickness		Free Height	
		Max	Min	Max	Min	Ref	Max	Min	Max	Min	Min	
M2	0.4	4.0	3.7	1.60	1.46	1.9	4.5	4.2	0.5	0.3	-	0
M2.5	0.45	5.00	4.70	2.10	1.96	2.70	5.84	5.59	0.51	0.36	-	1
M3	0.5	5.6	5.3	2.40	2.26	3	6.0	5.82	0.44	0.36	0.80	1
M4	0.7	8.00	7.64	3.10	2.92	4.4	7.35	7.15	0.68	0.58	0.80	2
M5	0.8	9.50	9.14	3.70	3.52	4.9	10.0	9.6	0.5	0.3	-	2
Tolerance on Length							over 3mm to 6mm		± 0.24			
							over 6mm to 10mm		± 0.29			
							over 10mm to 18 mm		±0.35			
							over 20mm to 30mm		±0.42			

<b>Description</b>	A cross-recessed, pan head machine screw with a free-spinning, external tooth captive lockwasher.	
<b>Applications/ Advantages</b>	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. The external tooth variety offers greater torsional resistance than an internal tooth SEMS.	
<b>Component</b>	<i>Screw</i>	<i>External Tooth Lockwasher</i>
<b>Material</b>	C1008 or equivalent carbon steel	C1050 Carbon Steel
<b>Hardness</b>	Rockwell B 67 minimum	410 - 490 HV 5
<b>Tensile Strength</b>	400 N/mm <sup>2</sup> (applies to screws with a minimum nominal length of 2.5d where d is the nominal diameter of the screw)	-
<b>Plating</b>	SEMS are available in a clear zinc finish and baked after plating.	