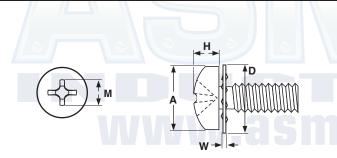


## **METRIC**

## JIS B1188 Internal Tooth SEMS



Screw Dimensions							Internal Tooth Washer					
Nominal Size	Thread Pitch	A Head Diameter		H Head Height		M Recess Diam	D Outside Diameter		W		Phillips Drive Size	
												Max
		M3	0.5	5.5	5	2.15	1.85	3.6	6.5	6.1	0.485	0.415
M4	0.7	7	6.5	2.75	2.45	4.2	8.5	8.1	0.485	0.415	2	
M5	0.8	9	8.4	3.45	3.15	4.9	10.0	9.6	0.640	0.560	2	
M6	1.0	10.5	9.8	4.1	3.7	6.3	11.0	10.5	0.640	0.560	3	
/							6	Nominal S	crew Lengt	hs		
Tolerance on Length			Nominal Screw Size			Up to 10 mm		Over 10 mm to 20 mm, incl.		Over 20 mm to 40 mm, incl.		
			M2.5			-0.4		-0.6		1	-0.8	
			M3 to M4			-0.6		-0.6		-0.8		
				M5 to M8		-0.	8	-	·1		-1	

Description	A cross-recessed, pan head machine screw with a free-spinning, captive washer. Directly below the pan head is an internal tooth lockwasher. The diameter and height of the pan head are between 5% and 20% smaller than a standard pan head.							
Applications/ Advantages	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 internal tooth sems is recommended when it is desireable to hide the teeth for appearance or to prevent snagging.							
Component	Screw	Tooth Lockwasher						
Material	Class 4.8 carbon steel	C1050 Carbon Steel						
Hardness	Rockwell B 71 minimum	410 - 490 HV 5						
Tensile Strength	420 N/mm <sup>2</sup> (applies to screws with a minimum nominal length of 2.5d (where <i>d</i> is the nominal diameter of the screw)							
Plating	Sems are available in zinc yellow and clear zinc finishes, and baked after plating.							