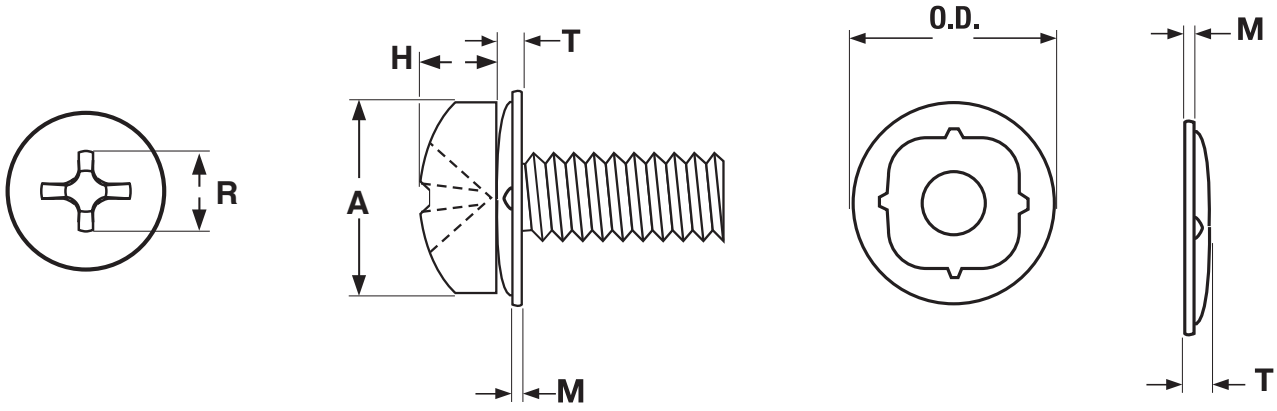
ISO 7045 Pan Phillips Conical L/W—Steel & Stainless

SEMS



METRIC - ISO 7045 Pan Phil Conical Washer SEMS

ISO 7045

Machine Screw Dimensions							Conical Lockwasher Dimensions					Phillips Driver Size
Nominal Size	Thread Pitch	A		H		R	O.D.		T		M	
		Head Diameter		Height of Head		Recess Diameter	Outside Diameter		Total Height		Material Thick-ness	
		Max	Min	Max	Min	Ref	Max	Min	Max	Min	Min	
• M3	0.5	5.60	5.31	2.39	2.21	3.0	7.82	7.52	1.55	0.99	0.64	1
M4	0.7	7.99	7.63	3.11	2.82	4.4	8.48	8.21	1.66	1.32	0.76	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

• The M3 nominal diameter Sems screw utilizes a conical washer that is wider, higher and thicker than the original standard. This provides greater toughness to withstand required installation torques.

Description	A cross-recessed, pan head machine screw with a free-spinning, conical captive lockwasher.			
Applications/ Advantages	The conical washer Sems offers a controlled tension with minimal torque while providing a higher retained clamp load than possible with other styles of lockwashers. The Sems can withstand a high tension load and still have the conical washer maintain its spring action. This style of Sems is preferred when fastening more fragile materials since its load is spread to the outermost diameter of the lockwasher.			
Component	*Screw*	*Conical Lockwasher*	*Screw*	*Conical Lockwasher*
Material	***Steel***		***Stainless***	
	C1008 or equivalent carbon steel	C1050 - 1065 or equivalent steel	Class 302 Stainless	410 Stainless
Hardness	Rockwell B 67 minimum	Rockwell C 40-48	-	Rockwell C 40-50
Tensile Strength	60,900 psi min.	-	72,500 - 101,500 psi	-
Plating	Sems are available in a clear zinc finish and baked after plating.		Stainless Sems are usually supplied without an additional finish.	

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