

METRIC - ISO 7045 PAN PHIL SPLIT LOCKWASHER SEMS										ISO 7045				
Machine Screw Dimensions							Split Lockwasher Dimensions							
Nominal Size	Thread Pitch	A Head Diameter		H1 Height of Head		M Recess Diameter	D Outside Diameter		T Free Height		R Section Thickness		Phillips Driver Size	
M3	0.5	5.6	5.3	2.40	2.26	3	5.6	5.3	1.3	1.1	0.80	0.60	1	
M4	0.7	8.00	7.64	3.10	2.92	4.4							2	
			-		-	-			-	-	-		-	
over 3mm to 6r							mm	mm ± 0.24						
Tolerance on Length over 6mm to 10 over 10mm to 18						Omm	nm ± 0.29							
						10mm to 18 mm			±0.35					

Description	A cross-recessed, pan head machine screw with a free-spinning, captive, helical split lockwasher.							
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 split lockwasher variety is preferred for use with hardened bearing surfaces.							
Component	Screw	Helical Split Lockwasher						
Material	C1008 or equivalent carbon steel	Spring Steel						
Hardness	Rockwell B 67 minimum	HV 430 - 530						
Tensile Strength	400 N/mm $^2$ (applies to screws with a minimum nominal length of 2.5 $d$ (where $d$ is the nominal diameter of the screw)	-						
Plating	Sems are available in a clear zinc finish and baked after plating.							