

# WASHERS

## HEAVY SPLIT & EXTRA DUTY Steel Lockwashers



HEAVY SPLIT HELICAL SPRING LOCK WASHERS							ASME B18.21.1-2009
Nominal Washer Size	Max	A		B	$\frac{(T+t)}{2}$	W	
		Inside Diameter		Outside Diameter	Mean Section Thickness	Section Width	
		Max	Min	Max	Min	Min	
#10	0.190	0.200	0.193	0.350	0.056	0.070	
1/4	0.250	0.260	0.252	0.489	0.077	0.110	
5/16	0.312	0.322	0.314	0.593	0.097	0.130	
3/8	0.375	0.385	0.377	0.688	0.115	0.145	
7/16	0.438	0.450	0.440	0.784	0.133	0.160	
1/2	0.500	0.512	0.502	0.879	0.151	0.176	
9/16	0.562	0.574	0.564	0.975	0.170	0.193	
5/8	0.625	0.641	0.628	1.087	0.189	0.210	
3/4	0.750	0.766	0.753	1.285	0.226	0.244	
7/8	0.875	0.894	0.878	1.489	0.266	0.281	
1	1.000	1.024	1.003	1.700	0.306	0.319	
1-1/8	1.125	1.153	1.129	1.903	0.345	0.356	
1-1/4	1.250	1.280	1.254	2.104	0.384	0.393	
1-1/2	1.500	1.534	1.504	2.491	0.458	0.458	

  

EXTRA DUTY HELICAL SPLIT LOCKWASHERS						
3/8	0.375	0.385	0.377	0.738	0.123	0.170
5/8	0.625	0.641	0.628	1.151	0.202	0.242

<b>Description</b>	Similar to a regular split lock washer, but with a greater outside diameter and thickness.
<b>Applications/Advantages</b>	The increased bearing area makes this suitable for applications involving higher tightening torques.
<b>Material</b>	SAE 1055 - 1065 carbon steel.
<b>Hardness</b>	Rockwell C38 - 46
<b>Twist Test</b>	With the washer in a vice with the split ends free and straight above the vice jaws, a 90° segment of the free end is gripped with a wrench and bent. Washers are to withstand being twisted through a 90° angle without signs of fracture. When the washer ultimately fractures beyond the prescribed 90° limit, the structure at the breaking point shall show a fine grain.
<b>Plating</b>	See Appendix-A for information about plating heavy split lock washers.