

Fasteners By Design Inc.



EXTRA 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	0.434	0.068	0.112	
1/4	0.250	0.260	0.252	0.533	0.084	0.132	
5/16	0.312	0.322	0.314	0.619	0.108	0.143	
3/8	0.375	0.385	0.377	0.738	0.123	0.170	
7/16	0.438	0.450	0.440	0.836	0.143	0.186	
1/2	0.500	0.512	0.502	0.935	0.162	0.204	
9/16	0.562	0.574	0.564	1.035	0.182	0.223	
5/8	0.625	0.641	0.628	1.151	0.202	0.242	
3/4	0.750	0.766	0.753	1.355	0.241	0.279	
7/8	0.875	0.894	0.878	1.571	0.285	0.322	
1	1.000	1.024	1.003	1.794	0.330	0.366	

Description	Similar to a heavy split lock washer, but with a greater outside diameter and thickness.
Applications/ Advantages	The increased bearing area allows extra heavy splits to absorb greater tightening torques and maintain tension while under heavy loads.
Material	SAE 1055 - 1065 carbon steel.
Hardness	Rockwell C38 - 46
Twist Test	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.
Plating	See Appendix-A for information about plating heavy split lock washers.

Fasteners By Design Inc.