

Helical Spring Lock Washers

Heavy Series

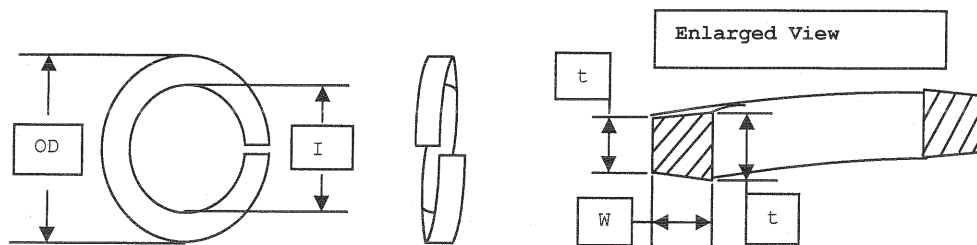
Earnest Machine Products line of “Heavy Series” Helical Spring Lock Washers are manufactured to the dimensional, material and hardness requirements specified by ASME B18.21.1 (Rev 1999).

Material – Medium Carbon Steel (1055 to 1065)
 Hardness – Rc 38/46

The Heavy Series is designed to handle the loads developed by high strength fasteners like SAE Grade 8, ASTM A490 and Alloy Steel Socket Head Cap Screw per ASTM A574.

The smaller outside diameter reduces the clearance that is needed for the regular series lock washers. The lower profile also reduces the clearance needed of the head of the assembly.

The “Heavy Series” Lock Washers are designed to increase the length of the assembly of the fastener and provide increased spring rate in the joint. The added thickness also helps to resist opening up when the higher torques needed to preload high strength and structural fasteners are used.



Nom. Size	Heavy Series			
	ID	OD	Thickness*	W
	Min	Max	Min	Nom
1/4	.252	.489	.077	.110
5/16	.314	.593	.097	.130
3/8	.377	.688	.115	.145
7/16	.440	.784	.133	.160
1/2	.502	.879	.151	.176
9/16	.564	.975	.170	.193
5/8	.628	1.087	.189	.210
3/4	.753	1.285	.226	.244
7/8	.878	1.489	.266	.281
1	1.003	1.700	.306	.319
1 1/8	1.129	1.903	.345	.356
1 1/4	1.254	2.104	.384	.393
1 3/8	1.379	2.301	.422	.427
1 1/2	1.504	2.491	.458	.458
1 5/8	1.633	2.694	.458	.491
1 3/4	1.758	2.820	.458	.491
2	2.008	3.144	.496	.526
2 1/4	2.262	3.398	.496	.526
2 1/2	2.512	3.648	.496	.526
2 3/4	2.762	3.910	.526	.532
3	3.012	4.160	.526	.532

* Thickness = $(t_0 + t_1)/2$