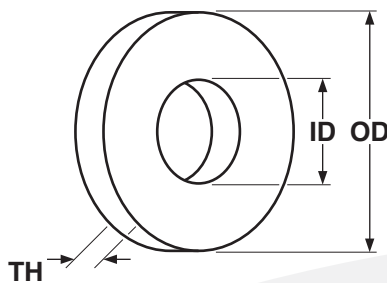


Regular Series,  
Steel & Stainless

TYPE-B FLAT



TYPE-B PLAIN WASHERS—REGULAR SERIES

ASME B18.21.1-  
-2009

Washer Size	Inside Diameter		Outside Diameter		Thickness	
	Max	Min	Max	Min	Max	Min
0	0.068	0.063	0.188	0.183	0.028	0.022
1	0.084	0.079	0.219	0.214	0.028	0.022
2	0.094	0.089	0.250	0.245	0.036	0.028
3	0.109	0.104	0.312	0.307	0.036	0.028
4	0.133	0.120	0.383	0.370	0.045	0.036
5	0.149	0.136	0.414	0.401	0.045	0.036
6	0.164	0.151	0.446	0.433	0.045	0.036
8	0.196	0.183	0.508	0.495	0.045	0.036
10	0.211	0.198	0.570	0.557	0.045	0.036
12	0.242	0.229	0.640	0.620	0.071	0.056
1/4	0.296	0.276	0.749	0.727	0.071	0.056
5/16	0.359	0.339	0.890	0.868	0.071	0.056
3/8	0.421	0.401	1.015	0.993	0.071	0.056
7/16	0.484	0.464	1.140	1.118	0.071	0.056
1/2	0.546	0.526	1.280	1.243	0.112	0.090
9/16	0.609	0.589	1.499	1.462	0.112	0.090
5/8	0.686	0.649	1.780	1.743	0.112	0.090
3/4	0.842	0.805	2.030	1.993	0.112	0.090
7/8	0.968	0.931	2.280	2.243	0.174	0.146
1	1.092	1.055	2.530	2.493	0.174	0.146
1 1/8	1.218	1.181	2.780	2.743	0.174	0.146

<b>Description</b>	A thin, flat, circular metal part with a centrally located hole. The tolerances of the thickness and outside diameter of Type-B washers are tighter than for USS and SAE flat washers. Regular Series are thicker and have greater outside diameter than Type-B Narrow Series washers.	
<b>Applications/ Advantages</b>	For use with low-carbon steel materials. Type-B washers distribute load over larger areas than the comparable USS or SAE washers of the same nominal size.	For use with stainless materials. Type-B washers distribute load over larger areas than the comparable USS or SAE washers of the same nominal size.
<b>Material</b>	<b>Steel</b>	<b>Stainless</b>
	Low Carbon steel	Class 300 stainless