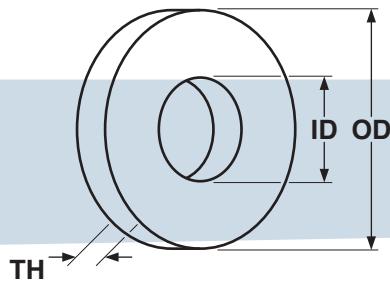


WASHERS

TYPE-B FLAT

Narrow Series,
Steel & Stainless



TYPE-B PLAIN WASHERS—NARROW SERIES

ASME B18.21.1-
2009

| Washer Size | Inside Diameter | | Outside Diameter | | Thickness | |
|-------------|-----------------|-------|------------------|-------|-----------|-------|
| | Max | Min | Max | Min | Max | Min |
| 0 | 0.068 | 0.063 | 0.125 | 0.120 | 0.028 | 0.022 |
| 1 | 0.084 | 0.079 | 0.156 | 0.151 | 0.028 | 0.022 |
| 2 | 0.094 | 0.089 | 0.188 | 0.183 | 0.028 | 0.022 |
| 3 | 0.109 | 0.104 | 0.219 | 0.214 | 0.028 | 0.022 |
| 4 | 0.125 | 0.120 | 0.250 | 0.245 | 0.036 | 0.028 |
| 5 | 0.141 | 0.136 | 0.281 | 0.276 | 0.036 | 0.028 |
| 6 | 0.156 | 0.151 | 0.312 | 0.307 | 0.036 | 0.028 |
| 8 | 0.196 | 0.183 | 0.383 | 0.370 | 0.045 | 0.036 |
| 10 | 0.211 | 0.198 | 0.414 | 0.401 | 0.045 | 0.036 |
| 12 | 0.242 | 0.229 | 0.446 | 0.433 | 0.045 | 0.036 |
| 1/4 | 0.296 | 0.276 | 0.515 | 0.495 | 0.071 | 0.056 |
| 5/16 | 0.359 | 0.339 | 0.640 | 0.620 | 0.071 | 0.056 |
| 3/8 | 0.421 | 0.401 | 0.749 | 0.727 | 0.071 | 0.056 |
| 7/16 | 0.484 | 0.464 | 0.890 | 0.868 | 0.071 | 0.056 |
| 1/2 | 0.546 | 0.526 | 1.015 | 0.993 | 0.071 | 0.056 |
| 5/8 | 0.686 | 0.649 | 1.280 | 1.243 | 0.112 | 0.090 |
| 3/4 | 0.842 | 0.805 | 1.405 | 1.368 | 0.112 | 0.090 |
| 7/8 | 0.968 | 0.931 | 1.499 | 1.439 | 0.112 | 0.090 |
| 1 | 1.092 | 1.055 | 1.780 | 1.743 | 0.112 | 0.090 |
| 1 1/8 | 1.218 | 1.181 | 2.030 | 1.993 | 0.112 | 0.090 |

| | | |
|--------------------------|--|---|
| Description | 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. | |
| Applications/ Advantages | 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. |
| Material | Steel | Stainless |
| | Low Carbon steel | Class 300 stainless |