METRIC FASTENERS

WASHERS

DIN 433 Flat



| | METRIC - SMALL FLAT WASHERS | | | | | |
|--------------|-----------------------------|------|------------------------|-------|-----------------|-----|
| Nominal Size | ID Internal Diameter | | OD Outside Diameter | | TH Thickness | |
| | | | | | | |
| | 4 | 4.48 | 4.3 | 9 | 8.64 | 0.9 |
| 5 | 5.48 | 5.3 | 10 | 9.64 | 1.1 | 0.9 |
| 6 | 6.62 | 6.4 | 12 | 11.57 | 1.8 | 1.4 |
| 8 | 8.62 | 8.4 | 16 | 15.57 | 1.8 | 1.4 |
| 10 | 10.77 | 10.5 | 20 | 19.48 | 2.2 | 1.8 |

| Description | A thin, flat circular part with a centrally located hole. The outside diameter of this variety washer is smaller than that of a like-sized standard flat washer. Only the ISO 7092 washer has a smaller OD | | | | | |
|-----------------------------|--|--|--|--|--|--|
| Applications/ Advantages | The DIN 433 flat washer is ideal for use with Cheese Head screws Class 140 HV & Class 200 HV metric washers meet the majority of industrial applications in manufacturing, maintenance and repair. Class 300 HV metric washers are best suited for use with through-hardened cap-screws, bolts and nuts. | | | | | |
| Material | Low or medium carbon steel | | | | | |
| Hardness | <i>Class 140 HV:</i> HV 140 minimum (Rockwell B 75 minimum) <i>Class 200 HV:</i> HV 200-300 (Rockwell B 91.5 - C 29.8) <i>Class 300 HV:</i> HV 300-400 (Rockwell C 29.8 - 40.8) | | | | | |
| Plating | See Appendix-A for information about the plating of flat washers. | | | | | |