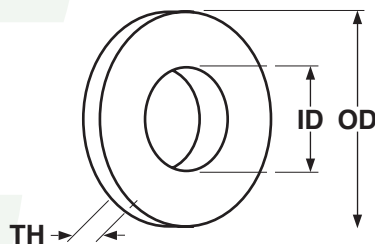


## METRIC FASTENERS

## WASHERS

## DIN 433 Flat



## METRIC - SMALL FLAT WASHERS

DIN 433

| Nominal Size | ID                |      | OD               |       | TH        |      |
|--------------|-------------------|------|------------------|-------|-----------|------|
|              | Internal Diameter |      | Outside Diameter |       | Thickness |      |
|              | Max               | Min  | Max              | Min   | Max       | Min  |
| 4            | 4.48              | 4.3  | 8                | 7.64  | 0.55      | 0.45 |
| 5            | 5.48              | 5.3  | 9                | 8.64  | 1.1       | 0.9  |
| 6            | 6.62              | 6.4  | 11               | 10.57 | 1.8       | 1.4  |
| 8            | 8.62              | 8.4  | 15               | 14.57 | 1.8       | 1.4  |
| 10           | 10.77             | 10.5 | 18               | 17.57 | 1.8       | 1.4  |

|                                     |  |
|-------------------------------------|--|
| <b>Description</b>                  | 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..   |
| <b>Applications/<br/>Advantages</b> | The DIN 433 flat washer is ideal for use with Cheese Head screws..<br><u>Class 140 HV &amp; Class 200 HV</u> metric washers meet the majority of industrial applications in manufacturing, maintenance and repair.<br><u>Class 300 HV</u> metric washers are best suited for use with through-hardened cap-screws, bolts and nuts. |
| <b>Material</b>                     | Low or medium carbon steel   |
| <b>Hardness</b>                     | <b>Class 140 HV:</b> HV 140 minimum (Rockwell B 75 minimum)<br><b>Class 200 HV:</b> HV 200-300 (Rockwell B 91.5 - C 29.8)<br><b>Class 300 HV:</b> HV 300-400 (Rockwell C 29.8 - 40.8)  |
| <b>Plating</b>                      | See Appendix-A for information about the plating of flat washers.  |