



| DIMENSIONS AND FEATURES | | | | | | PACKAGING | | |
|-------------------------|-------------|-------------|-------------|--------------|----------------|-------------------------------|---------------------------|----------------------------|
| For screws of | d min.-max. | D min.-max. | s min.-max. | No. of teeth | Kg/1000 pieces | No. of pcs standard packaging | No. of pcs bulk packaging | No. of pcs micro packaging |
| M 2.0 | 2.20-2.34 | 4.20-4.50 | 0.27-0.33 | 6 | 0.025 | 5000 | 275000 | 1000 |
| M 2.3 | 2.50-2.64 | 4.70-5.00 | 0.36-0.44 | 6 | 0.032 | 5000 | 200000 | 1000 |
| M 2.5 | 2.70-2.84 | 5.20-5.50 | 0.36-0.44 | 6 | 0.040 | 5000 | 170000 | 1000 |
| M 3.0 | 3.20-3.38 | 5.70-6.00 | 0.36-0.44 | 6 | 0.047 | 2000 | 160000 | 500 |
| M 3.5 | 3.70-3.88 | 6.64-7.00 | 0.46-0.54 | 6 | 0.079 | 2000 | 80000 | 500 |
| M 4.0 | 4.30-4.48 | 7.64-8.00 | 0.46-0.54 | 8 | 0.103 | 2000 | 60000 | 500 |
| M 5.0 | 5.10-5.28 | 8.64-9.00 | 0.46-0.54 | 8 | 0.114 | 1000 | 50000 | 200 |
| M 5.0 | 5.30-5.48 | 9.64-10.00 | 0.55-0.65 | 8 | 0.198 | 1000 | 35000 | 200 |
| M 6.0 | 6.40-6.62 | 10.57-11.00 | 0.65-0.75 | 8 | 0.243 | 1000 | 25000 | 200 |
| M 7.0 | 7.40-7.62 | 12.07-12.50 | 0.75-0.85 | 8 | 0.361 | 1000 | 16000 | 200 |
| M 8.0 | 8.20-8.42 | 13.57-14.00 | 0.75-0.85 | 8 | 0.460 | 1000 | 12000 | 200 |
| M 8.0 | 8.40-8.62 | 14.57-15.00 | 0.75-0.85 | 8 | 0.560 | 1000 | 12000 | 200 |
| M 10.0 | 10.50-10.77 | 17.57-18.00 | 0.85-0.95 | 9 | 0.855 | 1000 | 6000 | 100 |
| M 12.0 | 13.00-13.27 | 19.98-20.50 | 0.94-1.06 | 10 | 0.950 | 1000 | 5000 | 100 |
| M 14.0 | 15.00-15.27 | 23.48-24.00 | 0.94-1.06 | 10 | 1.300 | 1000 | 3750 | 100 |
| M 16.0 | 17.00-17.27 | 25.48-26.00 | 1.14-1.26 | 12 | 1.910 | 500 | 2500 | 100 |
| M 18.0 | 19.00-19.33 | 29.48-30.00 | 1.34-1.46 | 12 | 3.480 | 500 | 1250 | |
| M 20.0 | 21.00-21.33 | 32.38-33.00 | 1.34-1.46 | 12 | 4.199 | 250 | 1200 | |
| M 22.0 | 23.00-23.33 | 35.38-36.00 | 1.42-1.58 | 14 | 4.916 | 250 | 950 | |
| M 24.0 | 25.00-25.33 | 37.38-38.00 | 1.42-1.58 | 14 | 5.800 | 250 | 850 | |
| M 27.0 | 28.00-28.33 | 43.38-44.00 | 1.52-1.68 | 14 | 8.100 | 150 | 500 | |
| M 30.0 | 31.00-31.39 | 47.38-48.00 | 1.52-1.68 | 14 | 9.400 | 150 | 400 | |

Dimensions in mm

Technical details:

Hardness: 350 - 425 Hv.
 Tightening torques: see table.
 Chemical analysis of raw material: see table.

Anticorrosion surface treatment:

Burnishing and light oiling.
 Electrozinc plating 6-8 cr6 free.
 Mechanical zinc plating 12 my cr6 free.
 Other coatings upon customer request.

Features and specific use:

Toothed washer for fasteners with limited tightening torques.
 In comparison with the external toothing type, this washer is recommended for not flat supporting surface.