



INDUSTRIAL WORLD

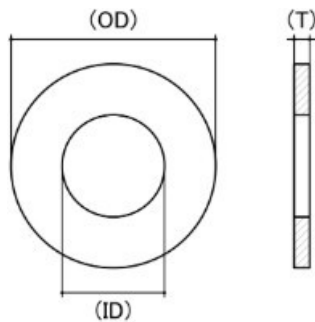


Washer selection – how to identify & measure

Selecting the appropriate washer for your application / special project can seem complicated, but the process is straight forward.

This quick reference guide shows the quick path first & then how to measure a loose washer if required.

Measurements are the inside diameter (ID), outside diameter (OD) and thickness, as shown in the illustration below.



1. **Match the bolt size (Fast way):** If you have the matching bolt or screw, choose a washer with the same nominal size. For example, an M5 bolt requires an M5 washer, an M8 bolt requires an M8 washer, and so forth. The washer size is usually shown at the beginning of the product name, such as *M5 Flat Washer*.
2. **Measure the inside diameter** If you only have an existing washer, measure its internal diameter (Across the hole) and select the nearest corresponding bolt size below that measurement. Washer holes are intentionally made slightly larger than the bolt diameter to allow easy fitting. For instance, an internal diameter of around 6.4 mm corresponds to an M6 washer, while a measurement of approximately 17.0 mm corresponds to an M16 washer.

(Guide Only below). Precise clearances can vary between manufacturing batches / series

Washer Size	Common Inside Diameter
M4	4.3mm +
M5	5.3mm +
M6	6.4mm +
M8	8.4mm +
M10	10.5 mm +
M12	13.0 mm +
M16	17.0 mm +
M20	21.0 mm +

3. **Outside diameter measurements** are taken from one outer edge to the opposite outer edge. (The outside diameter sets how far the load is spread).

- Standard flat washers suit general work.
- Mudguard (penny) washers feature a large outer diameter, making them suitable for use with soft or thin materials.
- Small outer-diameter (OD) washers are ideal for use in counterbored areas or confined spaces.
- Washers may vary slightly between manufacturing batches, as washers are typically not produced to precision-fastener tolerances.

If your old washer has an unusually large or small rim, match that type - not just the bolt size.

4. **Measure Thickness:** Measure flat across the face. (Per illustration). Thickness can vary slightly between batches.

Dimensions provided on this website are for general guidance only. Small variations in measurements may occur and should be considered normal.