

Washers



A washer is a thin plate (typically disk-shaped) with a hole (typically in the middle) that is normally used to distribute the load of a threaded fastener, such as a bolt or nut. Other uses are as a spacer, spring (Belleville washer, wave washer), wear pad, preload indicating device, locking device, and to reduce vibration (rubber washer). Washers often have an outer diameter (OD) about twice their inner diameter (ID), but this can vary quite widely.

Washers are usually metal or plastic. High-quality bolted joints require hardened steel washers to prevent the loss of pre-load due to Brinelling after the torque is applied.

Rubber or fiber gaskets used in taps (or faucets, or valves) to stop the flow of water are sometimes referred to colloquially as washers; but, while they may look similar, washers and gaskets are usually designed for different functions and made differently.

The origin of the word is unknown; the first recorded use of the word was in 1346, however, the first time its definition was recorded was in 1611.

Washers may also be used in rotating applications, as a bearing. A thrust washer is used when a rolling element bearing is not needed either from a cost-performance perspective or due to space restraints. Coatings can be used in attempt to reduce wear and friction either by hardening their surface, or providing a solid lubricant (i.e. a self-lubricating surface).

As per DIN 125 / ISO 7089, DIN 9021 / ISO 7093, DIN 436, DIN 7349, DIN 1271, DIN 6796, DIN 6798, DIN 128 are available in mild steel / stainless steel & in brass. Also washers in bumax 88 & 109 are available with us. sizes available form M3 to M52 (and Corresponding dia in UNC are available)