

Technical data sheet

Title	Washer for constructions made of steel.
Standard	DIN7989

1.- Functions of washers.

The main functions of washers are:

- 1.- To protect contact surfaces against scratches or wear that may be caused by screws or nuts by rubbing.
- 2.- To distribute the tightening force evenly to obtain local pressures that are close to the average pressure.
- 3.- To move the tightening force to different areas of the head of the screw or nut. Oversized or torn holes.
- 4.- To reduce the risks of loosening due to increase in the friction coefficient on the screw or nut (serrated or ribbed washers)
- 5.- To secure a possible loss of tightening torque due to deformation of the parts (elastic washers)
- 6.- To compensate for the lack of parallelism of the parts or uneven surfaces.
- 7.- Watertightness between the head or screw or nut and the part to be tightened (polyamide coated washer).
- 8.- Fastening of cables to the electrical connections.

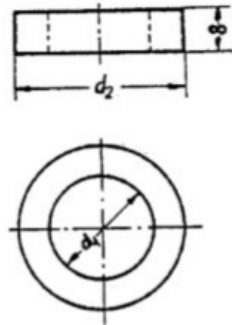
2- Application and classes of washers

DIN7989 washers are preferably used for hexagonal screws.

The steel used to manufacture them is at the manufacturer's discretion, with a hardness of 140HV.

These washers may have different surface finishes: Plain and Hot galvanised.

3.- Dimensions of washers



METRIC	d1	d2	H
10	11	21	8
12	14	24	8
16	18	30	8
20	22	37	8
22	24	39	8
24	26	44	8
27	30	50	8
30	33	56	8
33	36	60	8
36	39	66	8