

C/ Bizkargi, 6 – POL. SARRIKOLA 48195 LARRABETZU (BISCAY) Tel. 944 123 199 Fax. 944 117 132

## Technical data sheet

Title	Square washer
Standard	DIN435

## 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.

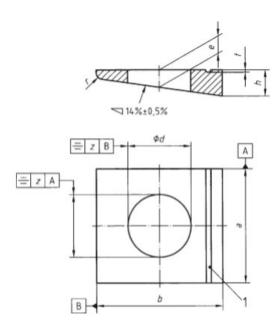
## 2- Application and classes of washers

DIN435 washers are designed to be used on steel structures fastened with screws with screws from class 5.6 or lower.

The type of steel used in manufacture will be at the manufacturer's discretion. The hardness of the washer will be 100HV to 250HV. The finish of these washers will be Plain.



## 3.- Dimensions of washers



METRIC	d	а	b	h	r	t	Z
M8	9	22	22	4.6	1.2	0.5	1.68
M10	11	22	22	4.6	1.2	0.5	1.68
M12	13.5	26	30	6.2	1.6	0.7	1.68
M16	17.5	32	36	7.5	2	0.8	2
M20	22	40	44	9.2	2.4	0.9	2
M22	24	44	50	10	2.4	1	2
M24	26	56	56	10.8	2.4	1	3.8
M27	30	56	56	10.8	2.4	1	3.8