

Technical data sheet

Title	Spring washer
Standard	DIN127

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.

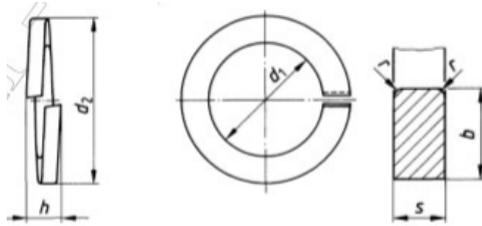
2- Application and classes of washers

DIN127 steel spring washers have a hardness of 430HV to 530HV.

This type of washer is recommended for use in screw/nut assemblies of class 5.8 or lower. They are also designed for use with short screws.

The washers are available in A2 and A4 stainless steel. Steel washers may have different surface finishes: Plain, Zinc coated and Hot galvanised.

3.- Dimensions of washers



METRIC	d1 min.	d2 max.	b	s	h min.
3	3.1	6.2	1.3	0.8	1.6
4	4.1	7.6	1.5	0.9	1.8
5	5.1	9.2	1.8	1.2	2.4
6	6.1	11.8	2.5	1.6	3.2
7	7.1	12.8	2.5	1.6	3.2
8	8.1	14.8	3	2	4
10	10.2	18.1	3.5	2.2	4.4
12	12.2	21.1	4	2.5	5
14	14.2	24.1	4.5	3	6
16	16.2	27.4	5	3.5	7
18	18.2	29.4	5	3.5	7
20	20.2	33.6	6	4	8
22	22.5	35.9	6	4	8
24	24.5	40	7	5	10
27	27.5	43	7	5	10
30	30.5	48.2	8	6	12
36	36.5	58.2	10	6	12
39	39.5	61.2	10	6	12
42	42.5	68.2	12	7	14
45	45.5	71.2	12	7	14
48	49	75	12	7	14