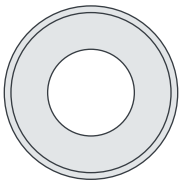
Disc spring

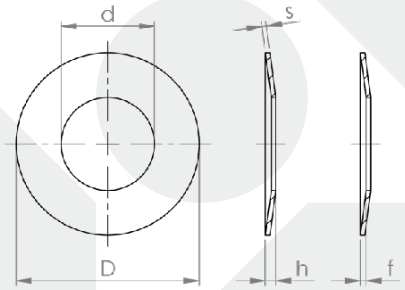
Disc spring for assemblies and replacement parts. Compare the required geometry and specify material, finish and supply requirements in your enquiry.

DIN 2093

Type: Disc spring · Reference: DIN 2093 · Dimensions: Dimensions in millimetres · Configuration: Material and finish to specification



Technical drawing



d1: bore diameter · d2: outside diameter · s: material thickness

Identification drawing, not a manufacturing drawing. Refer to the agreed drawing for construction details, tolerances and free heights.

Variants and dimensions

Dimensions in mm.

Different geometries may exist for the same nominal size: specify the required dimensions. Tolerances and omitted details must be defined in the specification.

d1	d2	s
3.2	8	0.4
3.2	8	0.5
3.2	10	0.3
4.2	8	0.3
4.2	8	0.4
4.2	10	0.4
4.2	10	0.5
4.2	10	0.6
5.2	10	0.25
5.2	10	0.5
5.2	12	0.5
5.2	12	0.6
5.2	12	0.8
5.2	15	0.7
6.2	12	0.5
6.2	12	0.6
6.2	12.5	0.35
6.2	12.5	0.5
6.2	12.5	0.7
6.2	14	0.9
6.2	15	0.5
6.2	18	0.4
6.2	18	0.5
6.2	18	0.7
6.2	18	0.8
7.2	14	0.5
7.2	14	0.8
8.2	15	0.7
8.2	15	0.8
8.2	16	0.4
8.2	16	0.6
8.2	16	0.9
8.2	18	0.5
8.2	18	0.7
8.2	18	0.8
8.2	18	1
8.2	20	0.6

https://www.dueemmesidol.it/en/products/standard-fasteners/washers-plates/din-2093/

d1	d2	s
8.2	20	0.8
8.2	20	0.9
8.2	23	0.8
8.2	23	0.9
9.2	18	0.7
9.2	18	1
10.2	18	0.35
10.2	18.8	0.35
10.2	20	0.4
10.2	20	0.5
10.2	20	0.8
10.2	20	0.9
10.2	20	1
10.2	20	1.1
10.2	20	1.25
10.2	20	1.5
10.2	22	1.25
10.2	23	0.9
10.2	23	1
10.2	28	0.8
10.2	28	1
10.2	28	1.25
10.2	28	1.5
11.2	22	1.25
11.2	22.5	0.8
12	22	1.75
12.2	23	1.25
12.2	23	1.5
12.2	25	0.7
12.2	25	0.9
12.2	25	1
12.2	25	1.25
12.2	25	1.5
12.2	28	1
12.2	28	1.25
12.2	28	1.5
12.2	31.5	1
12.3	21	0.35
12.3	34	1
12.3	34	1.25
12.3	34	1.5
14.2	28	0.8
14.2	28	1

d1	d2	s
14.2	28	1.25
14.2	28	1.5
14.3	23.7	0.4
14.3	34	1.5
14.3	40	1.5
14.3	40	2
16.3	31.5	0.8
16.3	31.5	1.25
16.3	31.5	1.5
16.3	31.5	1.75
16.3	31.5	2
16.3	34	1.5
16.3	34	1.75
16.3	34	2
16.3	40	1.5
16.3	40	2
17.3	27.7	0.4
18.3	35.5	0.9
18.3	35.5	1.25
18.3	35.5	2
18.3	40	2
18.3	50	2
18.4	50	1.5
18.4	50	2
20.4	31.7	0.4
20.4	34.6	0.4
20.4	36.6	0.5
20.4	40	1
20.4	40	1.5
20.4	40	2
20.4	40	2.25
20.4	40	2.5
20.4	50	2
20.4	50	2.5
20.5	60	2.5
22	45	2.2
22.4	45	1.25
22.4	45	1.75
22.4	45	2.5
22.4	50	2
22.4	50	2.5
25.4	50	1.25
25.4	50	1.5

d1	d2	s
25.4	50	2
25.4	50	2.5
25.4	50	3
25.5	39.6	0.5
25.5	41.6	0.5
25.5	60	2.5
28.5	56	1.5
28.5	56	2
28.5	56	2.5
28.5	56	3
30.5	46.5	0.6
30.5	60	2.5
30.5	60	2.75
30.5	60	3
30.5	60	3.5
31	63	1.8
31	63	2.5
31	63	3.5
31	80	2.5
35.5	51.5	0.6
35.5	70	3
35.5	70	3.5
35.5	70	4
36	71	2
36	71	2.5
36	71	4
36	80	3
40.5	54.5	0.6
40.5	61.5	0.7
40.5	70	4
41	80	2.25
41	80	3
41	80	4
41	80	5
41	100	4
41	100	5
46	90	2.5
46	90	3.5
46	90	5
50.5	71.5	0.7
51	100	2.7
51	100	3.5
51	100	4

d1	d2	s
51	100	5
51	100	6
51	125	4
55.5	74.5	0.8
57	112	6
60.5	89.9	0.9
64	125	3.5
64	125	5
64	125	8
65.5	89.5	0.9
71	125	6
75.5	94.5	1
81	150	8
92	180	10
250	127	6.5

Materials, classes, finishes and treatments

Material	Class / hardness	Finishes / treatments
Spring steel	To specify	To specify; DACROMET 320A; GEOMET 321A; Zinc plated
Carbon spring steel	HRC 42 - 48	To specify
Stainless steel A2	To specify	To specify

Material, hardness and treatment must be specified for the requested execution. A2 and A4 identify the stainless steel group and do not automatically imply 70/80 strength classes, hardness or passivation.

Dueemme confirms size, material and finish combinations and availability in its quotation.

Documentation

Document	Status
Declaration of conformity	Subject to order agreement
Material certificate	Subject to order agreement
EN 10204 2.2 test report	Subject to order agreement
EN 10204 3.1 inspection certificate	Subject to order agreement
Dimensional inspection report	Subject to order agreement
Coating report	Subject to order agreement
Other documentation	Subject to order agreement

Batch documents are not automatically included: specify your requirements in the RFQ.

Standards, types and application

DIN 2093

Free height, deflection and spring force must be defined on the spring drawing. The d1 × d2 × s dimensions alone do not identify its spring characteristic.

Suitability depends on bearing surfaces, preload and service conditions; washer geometry alone does not guarantee preload retention.

State the standard and edition or attach a drawing. Related DIN, ISO, UNI and NF references do not constitute a universal equivalence declaration for every execution.