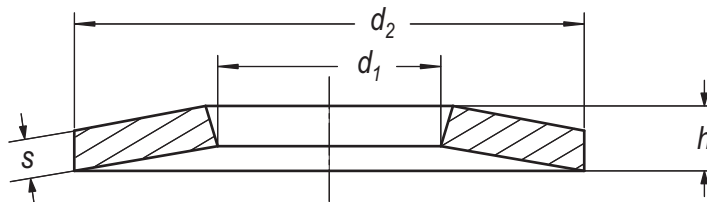


# DISC SPRINGS

## CONICAL SPRING WASHERS

Designed in accordance with DIN 6796 for use with high tensile bolts in Classes 8.8 to 10.9.

Since the spring force exerted is predictable, spring washers provide a simple effective means of determining bolt tension required to achieve a properly torqued assembly. In addition, tension, which would otherwise be lost to expansion, wear, or compression set, is maintained.



Nominal Size	$d_1$ H <sub>14</sub>	$d_2$ h <sub>14</sub>	s	h max <sup>1)</sup>	h min <sup>2)</sup>	Force N Test <sup>3)</sup>	Force N <sup>4)</sup>
2	2.2	5	0.4	0.6	0.5	920	628
2.5	2.7	6	0.5	0.72	0.61	1540	946
3	3.2	7	0.6	0.85	0.72	2350	1320
3.5	3.7	8	0.8	1.06	0.92	3160	2410
4	4.3	9	1	1.3	1.12	4050	3770
5	5.3	11	1.2	1.55	1.35	6700	5480
6	6.4	14	1.5	2	1.7	9400	8590
7	7.4	17	1.75	2.3	2	13700	11300
8	8.4	18	2	2.6	2.24	17200	14900
10	10.5	23	2.5	3.2	2.8	27500	22100
12	13	29	3	3.95	3.43	40000	34100
14	15	35	3.5	4.65	4.04	55000	46000
16	17	39	4	5.25	4.58	75000	59700
18	19	42	4.5	5.8	5.08	95000	74400
20	21	45	5	6.4	5.6	122000	93200
22	23	49	5.5	7.05	6.15	152000	113700
24	25	56	6	7.75	6.77	175000	131000
27	28	60	6.5	8.35	7.3	230000	154000
30	31	70	7	9.2	8	280000	172000

- 1) Maximum height at delivery
- 2) Minimum height after test for permanent set as specified in DIN 267 Part 26
- 3) Compression test load
- 4) Calculated spring force at deflection equals  $h_{min} - s$

**MATERIAL:** B Spring steel heat treated to VH 420-510

**FINISH:** K Plain (natural), oiled

TO ORDER: Product /  $d_2$  x  $d_1$  x t / material code / finish code

EXAMPLE: LWR 9 x 4.3 x 1 B K