

STANDARD EXECUTIONS

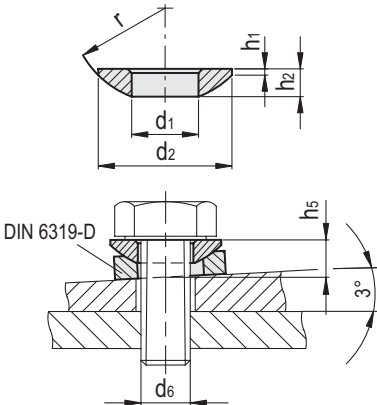
Case-hardened steel (hardening depth 0.2 - 0.4 mm), hardness (550 + 100) HV 10:
- **DIN 6319-C**: convex washer.
- **DIN 6319-D**: concave washer with d3 = d2.
Hardened and tempered steel, hardness (350 +80) HV 30:
- **DIN 6319-G**: concave washer with d4 > d2.

FEATURES AND APPLICATIONS

DIN 6319 concave and convex washers are suitable for locking mechanical parts on non-parallel surfaces.



Conversion Table	
1 mm = 0.039 inch	
d1	
mm	inch
6.4	0.25
8.4	0.33
10.5	0.41
13	0.51
15	0.59
17	0.66
21	0.82
25	0.98
31	1.21
37	1.44
43	1.68
50	1.95



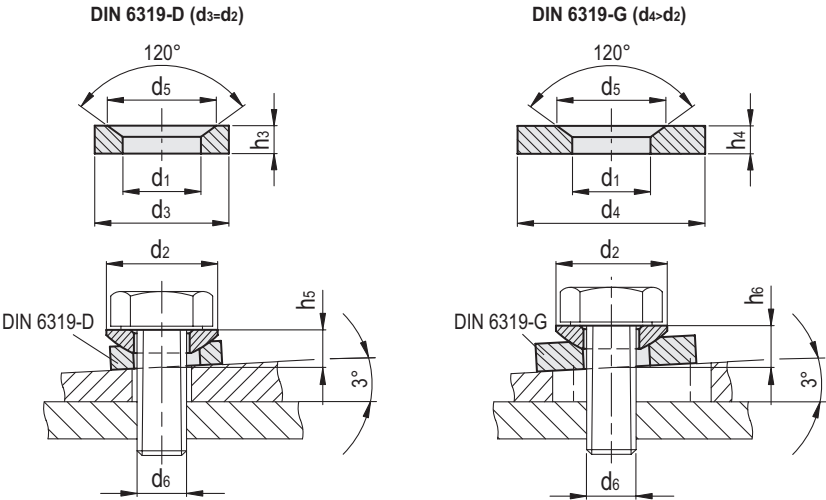
DIN 6319-C

METRIC

Code	Description	d1 H13	d2	d6 Screw	h1	h2	h5	r	Max static bolt force [kN]	⚖
GN.30831	DIN 6319-6,4-C	6.4	12	M 6	0.7	2.3	4.2	9	9	1
GN.30835	DIN 6319-8,4-C	8.4	17	M 8	0.6	3.2	5.6	12	17	3
GN.30841	DIN 6319-10,5-C	10.5	21	M 10	0.8	4	6.5	15	26	6
GN.30845	DIN 6319-13-C	13	24	M 12	1.1	4.6	8	17	38	8
GN.30851	DIN 6319-15-C	15	28	M 14	1.2	5	8.5	22	53	10
GN.30855	DIN 6319-17-C	17	30	M 16	1.3	5.3	9.6	22	73	12
GN.30861	DIN 6319-21-C	21	36	M 20	2	6.3	11.7	27	117	22
GN.30865	DIN 6319-25-C	25	44	M 24	2.4	8.2	15.2	32	168	18
GN.30871	DIN 6319-31-C	31	56	M 30	3.6	11.2	19.2	41	269	100
GN.30875	DIN 6319-37-C	37	68	M 36	4.6	14	23.5	50	394	180
GN.30881	DIN 6319-43-C	43	78	M 42	6.5	17	29	58	542	318
GN.30885	DIN 6319-50-C	50	92	M 48	8	21	35.5	67	714	540

Standard machine parts

Conversion Table	
1 mm = 0.039 inch	
d1	
mm	inch
7.1	0.28
9.6	0.37
12	0.47
14.2	0.55
16.5	0.64
19	0.74
23.2	0.90
28	1.09
35	1.37
42	1.64
49	1.91
56	2.18



DIN 6319-D

METRIC

Code	Description	d1 H13	d2	d3	d5	d6 Screw	h3	h5	Max static bolt force [kN]	⚖
GN.30901	DIN 6319-7,1-D	7.1	12	12	11	M 6	2.8	4.2	9	2
GN.30905	DIN 6319-9,6-D	9.6	17	17	14.5	M 8	3.5	5.6	17	4
GN.30911	DIN 6319-12-D	12	21	21	18.5	M 10	4.2	6.5	26	6
GN.30915	DIN 6319-14,2-D	14.2	24	24	20	M 12	5	8	38	10
GN.30921	DIN 6319-16,5-D	16.5	28	28	24.8	M 14	5.6	8.5	53	14
GN.30925	DIN 6319-19-D	19	30	30	26	M 16	6.2	9.6	73	17
GN.30931	DIN 6319-23,2-D	23.2	36	36	31	M 20	7.5	11.7	117	32
GN.30935	DIN 6319-28-D	28	44	44	37	M 24	9.5	15.2	168	61
GN.30941	DIN 6319-35-D	35	56	56	49	M 30	12	19.2	269	120
GN.30945	DIN 6319-42-D	42	68	68	60	M 36	15	23.5	394	250
GN.30951	DIN 6319-49-D	49	78	78	70	M 42	18	29	542	360
GN.30955	DIN 6319-56-D	56	92	92	82	M 48	22	35.5	714	640

DIN 6319-G

Code	Description	d1 H13	d2	d4	d5	d6 Screw	h4	h6	Max static bolt force [kN]	⚖
GN.31001	DIN 6319-7,1-G	7.1	12	17	11	M 6	4	5.4	9	6
GN.31005	DIN 6319-9,6-G	9.6	17	24	14.5	M 8	5	7.1	17	15
GN.31011	DIN 6319-12-G	12	21	30	18.5	M 10	5	7.3	26	20
GN.31015	DIN 6319-14,2-G	14.2	24	36	20	M 12	6	9	38	39
GN.31018	DIN 6319-16,5-G	16.5	28	40	24.8	M 14	6	9.5	53	65
GN.31021	DIN 6319-19-G	19	30	44	26	M 16	7	10.4	73	90
GN.31025	DIN 6319-23,2-G	23.2	36	50	31	M 20	8	12.2	117	162
GN.31031	DIN 6319-28-G	28	44	60	37	M 24	10	15.7	168	235
GN.31035	DIN 6319-35-G	35	56	68	49	M 30	12	19.7	269	45

