



2 Type

- C** male
- D** female $d_4 = d_3$
- G** female $d_4 > d_3$

1

1

d_1 H13 Type C	d_2 H13 Type D Type G	d_3	d_4 Type D Type G	d_5	d_6 Screw	h_1	h_2	h_3 Type D Type G	h_4 Type C Type D	r	Transferable static bolt force in kN max.	
6,4	7,1	12	12	17	M 6	0,7	2,3	2,8	4	4,2	9	9
8,4	9,6	17	17	24	M 8	0,6	3,2	3,5	5	5,6	12	17
10,5	12	21	21	30	M 10	0,8	4	4,2	5	6,5	15	26
13	14,2	24	24	36	M 12	1,1	4,6	5	6	8	17	38
15	16,5	28	28	-	M 14	1,2	5	5,6	-	8,5	22	53
17	19	30	30	44	M 16	1,3	5,3	6,2	7	9,6	22	73
21	23,2	36	36	50	M 20	2	6,3	7,5	8	11,7	27	117
25	28	44	44	60	M 24	2,4	8,2	9,5	10	15,2	32	168
31	35	56	56	68	M 30	3,6	11,2	12	12	19,2	41	269
37	42	68	68	-	M 36	4,6	14	15	-	23,5	50	394
43	49	78	78	-	M 42	6,5	17	18	-	29	58	542
50	56	92	92	-	M 48	8	21	22	-	35,5	67	714

Specification

- Type **C / D**
Case hardening steel
case hardened
all round depth 0,2 to 0,4 mm
hardness (550 + 100) HV 10
- Type **G**
Heat-treatable Steel
tempered
hardness (350 + 80) HV 30
- ISO-Fundamental Tolerances → Page 1132
- RoHS compliant

On request

- Not hardened spherical washers

Information

Spherical washers DIN 6319 are used for clamping on non-parallel surfaces.

Female washers Type G are mainly used on elongated holes.

When utilizing hexagon nuts with spherical seating DIN 6330 type B the male washer is redundant.

see also...

- Spherical levelling washers GN 350.3 (high loads) → Page 551

How to order (Spherical washer male)

DIN 6319-17-C	1	d_1
	2	Type

How to order (Spherical washer female)

DIN 6319-19-D	1	d_2
	2	Type