UDC 621.882.443

October 1989

Square taper washers

for high-strength structural bolting of steel I sections

DIN 6917

Scheiben, vierkant, keilförmig, für HV-Schrauben an I-Profilen in Stahlkonstruktionen

Supersedes March 1979 edition.

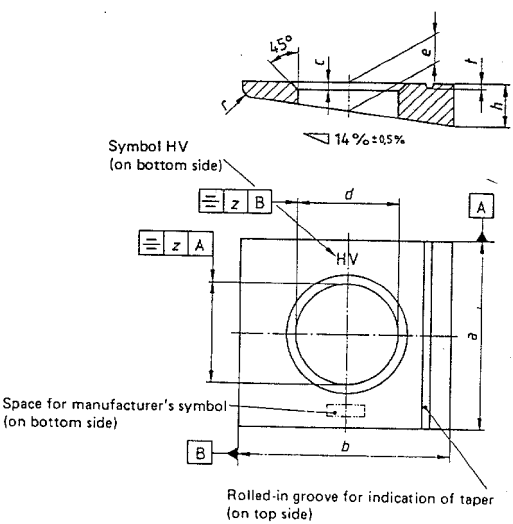
In keeping with current practice in standards published by the International Organization for Standardization (ISO), a comma has been used throughout as the decimal marker.

Dimensions in mm

1 Scope and field of application

Washers as specified in this standard are intended for use in GV and SL structural bolting of steel I sections in accordance with DIN 18800 Part 1, together with DIN 6914 screws and DIN 6915 nuts.

2 Dimensions



Continued on pages 2 and 3

Table 1.

Nominal size[2])	For thread size	d		a			b			c		e[1])	h			r	t	z	Mass (7,85 kg/dm³), in kg per 1000 units, ≈
		min. = nominal size	max.	Nominal size	min.	max.	Nominal size	min.	max.	min. = nominal size	max.		Nominal size	min.	max.	≈	≈		
13	M 12	13	13,43	26	24	28	30	29,35	30,65	1,6	1,9	4,1	6,2	5	7,4	1,6	0,7	1,68	20,4
17	M 16	17	17,43	32	29,5	34,5	36	35,20	36,80	1,6	1,9	5	7,5	6,3	8,7	2	0,8	2	35,7
21	M 20	21	21,52	40	37,5	42,5	44	43,20	44,80	2	2,5	6,1	9,2	8	10,4	2,4	0,9	2	66,5
23	M 22	23	23,52	44	41,5	46,5	50	49,20	50,80	2	2,5	6,5	10	8,8	11,2	2,4	1	2	89,8
25	M 24	25	25,52	56	53	59	56	55,05	56,95	2	2,5	6,9	10,8	9,3	12,3	2,4	1	3,8	142
28	M 27	28	28,52	56	53	59	56	55,05	56,95	2,5	3	6,9	10,8	9,3	12,3	2,4	1	3,8	134
31	M 30	31	32	62	59	65	62	61,05	62,95	2,5	3	7,5	11,7	10,2	13,2	2,4	1	3,8	174
37	M 36	37	38	68	65	71	68	67,05	68,95	3	3,5	8	12,5	11	14	2,4	1	3,8	210

1) $e = h$ (nominal size) − 0,07 b (nominal size).
2) Nominal size is equal to d_{min}.

3 Technical delivery conditions

3.1 Material

Washers shall be in steel as specified in DIN 17 200, quenched and tempered to a hardness of from 295 to 350 HV 10 (e.g. C 45 steel), at the manufacturer's discretion.

3.2 Surface finish

Washers shall have a bright surface finish, be free from burr, and be hot dip galvanized as specified in DIN 267 Part 10.

3.3 Acceptance inspection

Acceptance inspection shall be undertaken on the lines of DIN 267 Part 5.
The specifications given in table 2 shall apply for the major characteristics and the acceptable quality level (AQL).

Table 2.

Major characteristic	AQL value
Hole diameter	1,5
Concentricity	1,5
Taper angle	1,5

4 Designation

Designation of a nominal size 21 washer for use with steel I sections:

Washer DIN 6917 – 21

5 Marking

Washers shall be marked on their bottom side with the manufacturer's symbol and symbol HV.

Standards referred to

DIN	267 Part 5	Fasteners; technical delivery conditions; acceptance inspection (modified version of ISO 3269, 1984 edition)
DIN	267 Part 10	Fasteners; technical delivery conditions, hot-dip galvanized components
DIN	6914	High-strength hexagon head bolts with large widths across flats for structural steel bolting
DIN	6915	High-strength hexagon nuts with large widths across flats for structural steel bolting
DIN	17 200	Steels for quenching and tempering; technical delivery conditions
DIN	18 800 Part 1	Steel structures; design and construction

Previous editions

DIN 6917: 08.62, 12.70, 03.79.

Amendments

The following amendments have been made to the March 1979 edition.

a) Limits of size are now specified.
b) Use of materials as specified in DIN 17 200 that are comparable with C 45 has been permitted.
c) Washers are now to be quenched and tempered, as opposed to hardened (as specified before).
d) Washers are now to be hot dip galvanized as specified in DIN 267 Part 10.
e) Washers are now to be subjected to acceptance inspection as specified in DIN 267 Part 5 has been included.
f) A specification regarding marking with the manufacturer's symbol has been included.
g) The standard has been editorially revised.

International Patent Classification

E 04 B 1/38
F 16 B 43/00