

# 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.

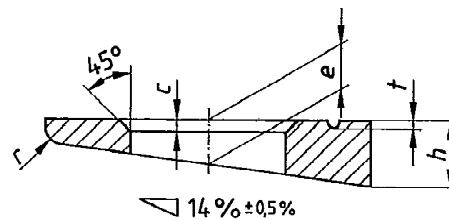
*In keeping with current practice in standards published by the International Organization for Standardization (ISO), a comma has been used throughout as the decimal marker.*

Dimensions in mm

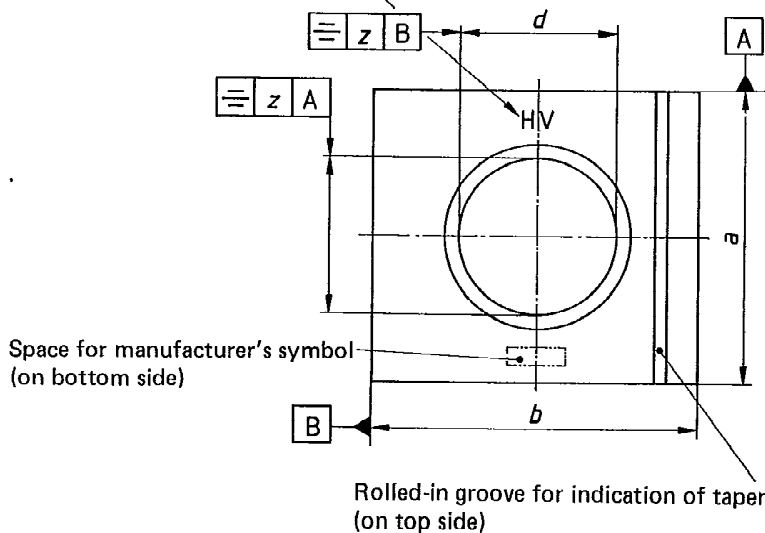
## 1 Scope and field of application

Washers as specified in this standard are intended for use in GV and SL structural bolting of steel I sections in accordance with DIN 18 800 Part 1, together with DIN 6914 screws and DIN 6915 nuts.

## 2 Dimensions



Symbol HV  
(on bottom side)



Continued on pages 2 and 3

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In case of doubt, the German-language original should be consulted as the authoritative text.

Table 1.

Nominal size <sup>2)</sup>	For thread size	d		a		b		c		e <sup>1)</sup>	h		r	t	z	Mass (7,85 kg/dm <sup>3</sup> ), in kg per 1000 units, ≈	
		min.= nominal size	max.	Nominal size	min.	max.	min.= nominal size	max.	Nominal size		min.	max.					
13	M12	13	13,43	26	24	28	30	29,35	30,65	1,6	1,9	5	7,4	1,6	0,7	1,68	20,4
17	M16	17	17,43	32	29,5	34,5	36	35,20	36,80	1,6	1,9	5	8,7	2	0,8	2	35,7
21	M20	21	21,52	40	37,5	42,5	44	43,20	44,80	2	2,5	6,1	8	2,4	0,9	2	66,5
23	M22	23	23,52	44	41,5	46,5	50	49,20	50,80	2	2,5	6,5	8,8	2,4	1	2	89,8
25	M24	25	25,52	56	53	59	56	55,05	56,95	2	2,5	6,9	9,3	2,4	1	3,8	142
28	M27	28	28,52	56	53	59	56	55,05	56,95	2,5	3	6,9	9,3	2,4	1	3,8	134
31	M30	31	32	62	59	65	62	61,05	62,95	2,5	3	7,5	10,2	2,4	1	3,8	174
37	M36	37	38	68	65	71	68	67,05	68,95	3	3,5	8	11	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.

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

### International Patent Classification

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