

Square taper washers for use with I sections

DIN
435

Scheiben, vierkant, keilförmig, für I-Träger

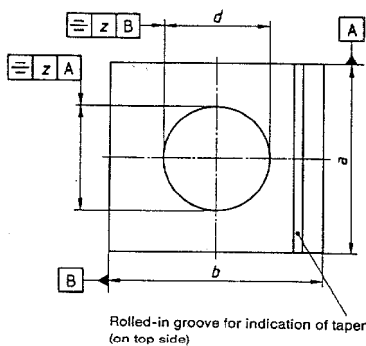
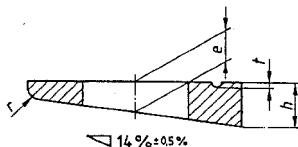
Supersedes November 1970 edition.

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 structural bolting of I sections using bolts up to property class 5.6.

2 Dimensions

Continued on page 2

Table 1.

Nominal size ²⁾	For thread size	<i>d</i>		<i>a</i>			<i>b</i>			<i>e</i> ¹⁾	<i>h</i>			<i>r</i>	<i>t</i>	<i>z</i>	Mass (7,85 kg/dm ³), in kg per 1000 units
		min. = nominal size	max.	Nominal size	min.	max.	Nominal size	min.	max.		Nominal size	min.	max.				
9	M 8	9	9,36	22	20	24	22	21,35	22,65	3,05	4,6	3,6	5,6	1,2	0,5	1,68	10,1
11	M 10	11	11,43	22	20	24	22	21,35	22,65	3,05	4,6	3,6	5,6	1,2	0,5	1,68	9,4
14	M 12	14	14,43	26	24	28	30	29,35	30,65	4,1	6,2	5	7,4	1,6	0,7	1,68	20,1
18	M 16	18	18,43	32	29,5	34,5	36	35,20	36,80	5	7,5	6,3	8,7	2	0,8	2	35,6
22	M 20	22	22,52	40	37,5	42,5	44	43,20	44,80	6,1	9,2	8	10,4	2,4	0,9	2	67
24	M 22	24	24,52	44	41,5	46,5	50	49,20	50,80	6,5	10	8,8	11,2	2,4	1	2	90
26	M 24	26	26,52	56	53	59	56	55,05	56,95	6,9	10,8	9,3	12,3	2,4	1	3,8	143
30	M 27	30	30,52	56	53	59	56	55,05	56,95	6,9	10,8	9,3	12,3	2,4	1	3,8	133

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, the steel grade being at the manufacturer's discretion. The hardness shall be 100 to 250 HV 10.

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.

DIN 267 Part 9 shall apply with regard to electroplating.

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).

Standards referred to

- DIN 267 Part 5 Fasteners; technical delivery conditions; acceptance inspection
DIN 267 Part 9 Fasteners; technical delivery conditions; electroplated fasteners
DIN 267 Part 10 Fasteners; technical delivery conditions; hot-dip galvanized fasteners

Previous editions

DIN 434 and DIN 435: 05.43, 02.61; DIN 435: 11.21, 04.24, 10.36, 11.70.

Amendments

The following amendments have been made to the November 1970 edition.

- Limits of size are now specified.
- The washer hardness is now specified.
- Washers are now to be electroplated as specified in DIN 267 Part 9.
- Washers are now to be hot-dip galvanized as specified in DIN 267 Part 10.
- Square taper washers are now to be subjected to acceptance inspection as specified in DIN 267 Part 5.
- The standard has been editorially revised.

International Patent Classification

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

Table 2.

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

4 Designation

Designation of a nominal size 14 washer for use with I sections:

Washer DIN 435 — 14