

Square washers

for use in timber constructions

DIN
436

Scheiben, vierkant, vorwiegend für Holzkonstruktionen

Supersedes July 1974 edition.

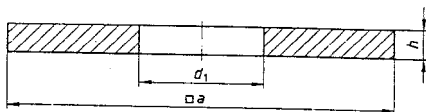
In keeping with current practice in standards published by the International Organization for Standardization (ISO), a comma has been used throughout as the decimal marker.

Dimensions in mm

1 Scope and field of application

This standard specifies requirements for product grade C washers. The preferred application of these washers is in bolt/nut assemblies in timber constructions.

2 Dimensions



Nominal size	For thread size	d_1		a		h			Approximate mass (7,85 kg/dm ³), per 1000 units, in kg
		min. = nominal size	max.	max. = nominal size	min.	Nominal size	max.	min.	
11	M10	11	11,43	30	28,7	3	3,6	2,4	20,0
13,5	M12	13,5	13,93	40	38,4	4	4,6	3,4	45,7
17,5	M16	17,5	18,2	50	48,4	5	6	4	88,7
22	M20	22	22,84	60	58,1	5	6	4	126
24	M22	24	24,84	70	68,1	6	7	5	209
26	M24	26	26,84	80	78,1	6	7	5	275
30	M27	30	30,84	90	87,8	6	7	5	348
33	M30	33	34	95	92,8	6	7	5	385
36	M33	36	37	100	97,8	6	7	5	423
39	M36	39	40	110	107,8	8	9,2	6,8	685
42	M39	42	43	125	122,5	8	9,2	6,8	895
45	M42	45	46	135	132,5	8	9,2	6,8	1050
48	M45	48	49	140	137,5	8	9,2	6,8	1120
52	M48	52	53,2	150	147,5	10	11,2	8,8	1600
56	M52	56	57,2	160	157,5	10	11,2	8,8	1820

Continued on page 2

3 Technical delivery conditions

Material		Steel
Mechanical properties	Hardness class	100 HV
	Hardness HV 10	100 to 250
Limit deviations and geometrical tolerances	Product grade	C
	As specified in	DIN 522.
Surface finish	Bright DIN 522 shall apply with regard to surface roughness. DIN 267 Part 9 shall apply with regard to electroplating. DIN 267 Part 10 shall apply with regard to hot-dip galvanizing, any other type of surface protection being subject to agreement.	
Acceptance inspection	DIN 522 shall apply with regard to acceptance inspection.	

4 Designation

Designation of a washer for use in timber constructions, of nominal size 22 and hardness class 100 HV¹⁾:

Washer DIN 436 – 22 – 100 HV

The DIN 4000-3-1 tabular layout of article characteristics shall apply for washers complying with this standard.

Standards referred to

DIN 267 Part 9	Fasteners; technical delivery conditions; electroplated fasteners
DIN 267 Part 10	Fasteners; technical delivery conditions; hot-dip galvanized components
DIN 522	Metal washers; technical delivery conditions
DIN 4000 Part 3	Tabular layout of article characteristics for washers

Previous editions

DIN 436: 09.21, 03.24, 10.36, 05.43, 07.74.

Amendments

The following amendments have been made to the July 1974 edition.

- Nominal sizes 14 and 18 have been changed to 13,5 and 17,5.
- Limits of size have been given on the basis of the tolerances specified.
- Hardness class 100 HV has been introduced.
- The technical delivery conditions have been revised.
- The standard has been editorially revised.

International Patent Classification

F 16 B 43/00

¹⁾ Hardness class 100 HV shall also be used where no material or only the symbol 'St' is specified in existing documentation.