



Westfield Fasteners Product Specification:

DIN 84 - Slotted Cheese Head Screws

This product guide contains the specification for metric threaded slotted cheese head screws as available from Westfield Fasteners. The basis of this specification is the DIN standard DIN 84.

Product Description

A machine screw with a traditional slot drive and a flat topped near cylindrical shaped head. These are generally fully threaded. The DIN standard includes details for a part threaded version, which we have not covered here.

Scope of the DIN standard.

DIN standard 84 specifies the characteristics, tolerances and variation in form of slotted cheese head machine screws, and covers metric thread diameters from M1.6 up to and including M10. Table 1 below defines the overall dimensions and tolerances of this screw type. Table 2 defines the tolerance on the shank length.

DIN 84 has specific provision for carbon steel, A2 stainless steel and non ferrous metals such as brass.

Although the DIN 84 standard has now been superceded by ISO 1207, off the shelf parts are generally still manufactured to the older specification. The ISO standard specifies new head heights for M1.6, M2 and M2.5.

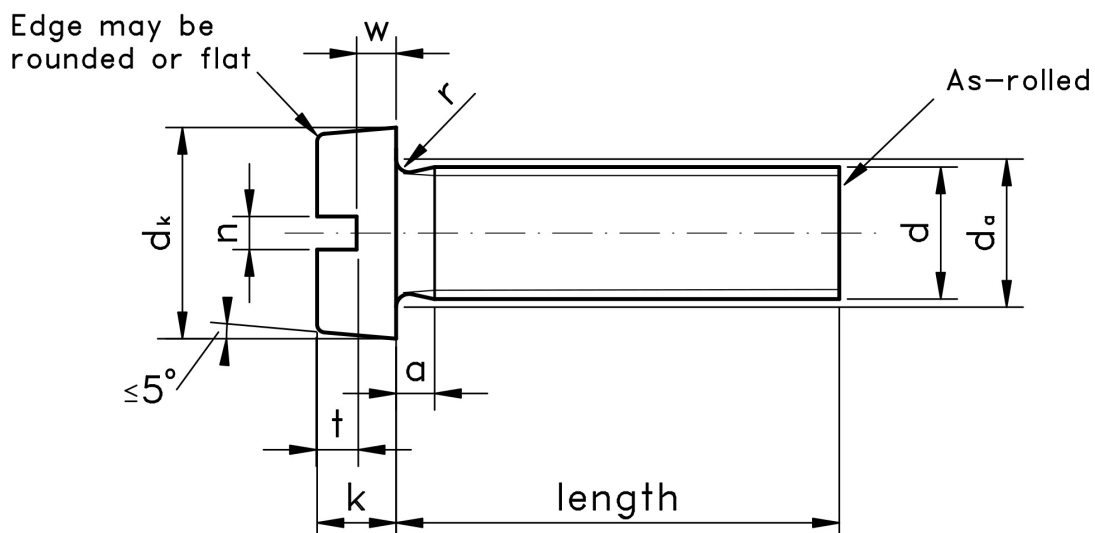


Figure 1: Slotted Cheese Head Machine Screw

Variations from DIN 84

The DIN standard allows for a partially threaded shank, but off the shelf slotted cheese head machine screws are seldom seen with this variation. Please note that due to manufacturing limitations, all nylon variants of these items are only "similar to" and not "in absolute accordance with" this standard.

Table 1: Dimensions & Tolerances according to DIN 84

Thread, d		M1.6	M2	M2.5	M3	M3.5	M4	M5	M6	M8	M10
p		0.35	0.4	0.45	0.5	0.6	0.7	0.8	1	1.25	1.5
a	max	0.7	0.8	0.9	1.0	1.2	1.4	1.6	2.0	2.5	3.0
b	min	25	25	25	25	38	38	38	38	38	38
d _a	max	2.0	2.6	3.1	3.6	4.1	4.7	5.7	6.8	9.2	11.2
d _k	nom=max	3.00	3.80	4.50	5.50	6.00	7.00	8.50	10.00	13.00	16.00
	min	2.86	3.62	4.32	5.32	5.82	6.78	8.28	9.78	12.73	15.73
k	nom=max	1.10	1.40	1.80	2.00	2.40	2.60	3.30	3.90	5.00	6.00
	min	0.96	1.26	1.66	1.86	2.26	2.46	3.12	3.60	4.70	5.70
n	nom	0.4	0.5	0.6	0.8	1	1.2	1.2	1.6	2	2.5
	max	0.60	0.70	0.80	1.00	1.20	1.51	1.51	1.91	2.31	2.81
	min	0.46	0.56	0.66	0.86	1.06	1.26	1.26	1.66	2.06	2.56
r	min	0.10	0.10	0.10	0.10	0.10	0.20	0.20	0.25	0.40	0.40
t	min	0.45	0.60	0.70	0.85	1.00	1.10	1.30	1.60	2.00	2.40
w	min	0.40	0.50	0.70	0.75	1.00	1.10	1.30	1.60	2.00	2.40

Table 2: Shank Length Tolerance according to DIN 84

shank length (mm)	+/- (mm)
2-3	0.2
4-6	0.24
8-10	0.29
12-16	0.35
20-30	0.42
35-50	0.50
55-80	0.95

For further details, please refer to the ISO/DIN standard document for this item.