



Westfield Fasteners Product Specification:

DIN 964 - Slotted Raised Countersunk Head screws

This product guide contains the specification for metric threaded slotted raised countersunk head screws as available from Westfield Fasteners. The basis of this specification is the DIN standard DIN 964.

Product Description

A raised countersunk headed screw offering an attractive finish. Always fully threaded, and includes a traditional slot drive for fitting.

Scope of the ISO standard.

DIN 964 defines the form and dimensional tolerances for pozi raised countersunk screws, with metric thread diameters of sizes M1 up to and including M10. Table 1 below defines the overall dimensions and tolerances of this screw type, and should be used in conjunction with the diagram in figure 1. Table 2 defines the tolerance on the screw length. As figure 1 illustrates, the length is taken from the end of the shank up to the point where the head would sit flush on the workpiece, and disregarding the dome on the head.

DIN 964 covers steel classes 4.8, 5.8 and high tensile 8.8, together with A2 and A4 stainless steel, and copper and zinc alloy (brass).

Although the DIN 964 standard has now been superseded by ISO 2010, off the shelf parts are generally still manufactured to the older specification. The ISO standard specifies some revised dimensions and tolerances.

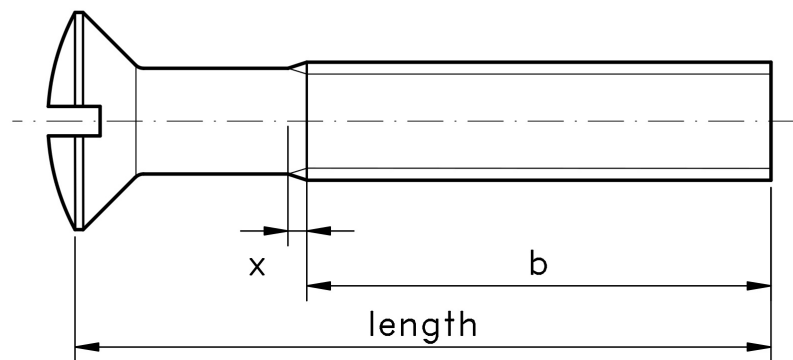
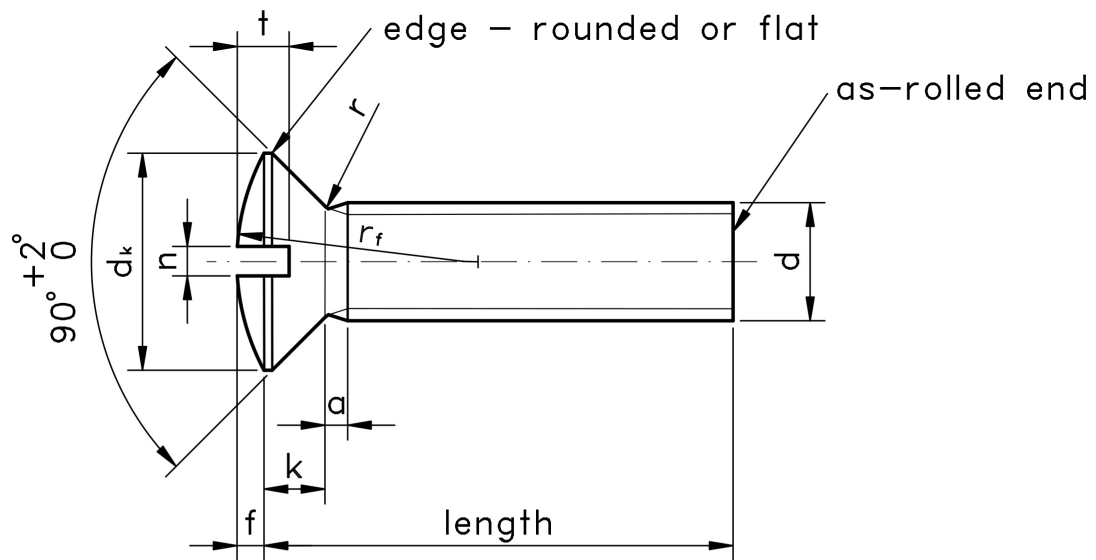


Figure 1: Slotted Raised Countersunk Head Machine Screw

Variations from DIN 964

The DIN standard allows for a partially threaded shank, but off the shelf slotted raised countersunk head machine screws are seldom seen with this variation. Although DIN 964 covers many thread diameters, this Westfield Fasteners specification only covers those diameters that are generally available off-the-shelf.

Table 1: Dimensions & Tolerances according to DIN 964

Thread, d		M1.6	M2	M2.5	M3	M3.5	M4	M5	M6	M8	M10
thread pitch (standard metric coarse)	P	0.35	0.40	0.45	0.50	0.60	0.70	0.80	1.00	1.25	1.50
thread runout	a max.	0.7	0.8	0.9	1	1.2	1.4	1.6	2	2.5	3
thread length	b min.	15	16	18	19	20	22	25	28	34	40
head diameter	d _k max. = nominal size	3.0	3.8	4.7	5.6	6.5	7.5	9.2	11.0	14.5	18.0
	d _k min.	2.86	3.5	4.4	5.3	6.14	7.14	8.84	10.57	14.07	17.5
dome height	f ≈ (approx.)	0.4	0.5	0.6	0.75	0.9	1.0	1.25	1.5	2.0	2.5
countersunk height	k max.	0.96	1.2	1.5	1.65	1.93	2.2	2.5	3.0	4.0	5.0
slot width	n nominal	0.4	0.5	0.6	0.8	0.8	1.0	1.2	1.6	2.0	2.5
	n min.	0.46	0.56	0.66	0.86	0.86	1.06	1.26	1.66	2.06	2.56
	n max.	0.6	0.7	0.8	1.0	1.0	1.2	1.51	1.91	2.31	2.81
neck radius	r max.	0.4	0.5	0.6	0.8	0.9	1	0.5	0.6	0.8	1.0
dome radius	r _f ≈ (approx.)	3.0	4.0	5.0	6.0	7.0	8.0	10.0	12.0	16.0	20.0
slot depth	t min.	0.65	0.8	1.0	1.2	1.4	1.6	2.0	2.4	3.2	4.0
	t max.	0.8	1.0	1.2	1.45	1.7	1.9	2.3	2.8	3.7	4.6
thread runout (part thread)	x max.	0.9	1.0	1.1	1.25	1.5	1.75	2.0	2.5	3.2	3.8

Table 2: Shank Length Tolerance according to DIN 964

shank length (mm)	+/- (mm)
2-3	0.2
4-6	0.25
8-10	0.3
12-18	0.35
20-30	0.4
35-50	0.5
55-80	1.0

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