

Westfield Fasteners Product Specification:

DIN 653 - Knurled Thumb Screws (Low Type)

This product guide contains the specification for Knurled Thumb Screws (Low Type), a series of standard parts available from Westfield Fasteners. The basis of this specification is the internationally recognised DIN standard DIN 653.

Product Description

This is the thin type of knurled thumb screw, as it has no shoulder beneath the head, unlike the high type of thumb screws. The large head diameter allows these fasteners to be easily adjusted to a precise tightness by hand. They are frequently used in situations where routine maintenance is required, as they are quicker and easier to fit and adjust in comparison to fasteners which require a driver.

Scope of the DIN Standard

DIN 653 specifies the tolerances and the variation of detailing allowable for the knurled thumb screw, low type, for sizes M1 up to and including M10. Table 1 below defines the overall dimensions & tolerances of this screw type.

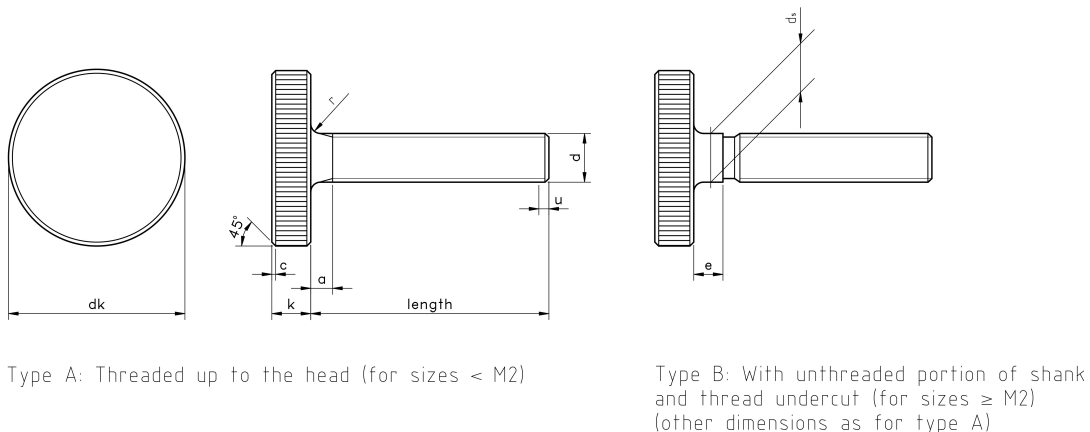


Figure 1: Knurled Thumb Screws (Low Type)

Notes to Figure 1:

- The knurling is type RAA straight knurl as in DIN 82.
- The top edge of the head of the screw can be chamfered at 45 degrees or just rounded.
- The tip of the screw thread is chamfered or rounded as in DIN EN ISO 4753.
- The thread under cut, between the shank and the threaded part is manufactured to DIN 76.
- The length of the incomplete thread at the tip of the screw (u) is the same or less than 1.5 times the thread pitch.

Table 1: Dimensions & Tolerances according to DIN 653

Thread Size, d	p	a	c	d _k			d _s		e	k		r	Knurl Pitch
		max		nom	max	min	nom=max	min		max	min		
M1	0.25	0.75	Edges chamfered	5.5	5.74	5.26	-	-	-	1.50	1.25	0.5	0.5
M1.2	0.25	0.75		6	6.24	5.76				1.50	1.25	0.5	0.5
M1.4	0.3	0.9		7	7.29	6.71				2.00	1.75	0.5	0.5
M1.6	0.35	1.05		7.5	7.79	7.29				2.00	1.75	0.5	0.5
M2	0.4	1.2		9	9.29	8.71	2.00	1.86	1.5	2.00	1.75	0.5	0.5
M2.5	0.45	1.35	0.3	11	11.35	10.65	2.50	2.36	2	2.50	2.25	0.5	0.6
M3	0.5	1.5	0.3	12	12.35	11.65	3.00	2.86	2	2.50	2.25	0.5	0.6
M4	0.7	2.1	0.4	16	16.35	15.65	4.00	3.82	3	3.50	3.2	0.5	0.6
M5	0.8	2.4	0.4	20	20.42	19.58	5.00	4.82	3	4.00	3.7	1	0.6
M6	1	3	0.5	24	24.42	23.58	6.00	5.82	4	5.00	4.7	1	0.6
M8	1.25	3.75	0.6	30	30.42	29.58	8.00	7.78	5	6.00	5.7	2	0.6
M10	1.5	4.5	0.8	36	36.50	35.50	10.00	9.78	6	8.00	7.64	2	0.8

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