

Westfield Fasteners Product Specification:

ASME B18.6.3 - UNC Torx Countersunk Machine Screws

This product guide contains the specification for UNC Torx Countersunk Machine Screws, standard parts available from Westfield Fasteners. The basis of this specification is the ASME standard ASME B18.6.3.

Product Description

A popular machine screw with a 6 lobe, or torx drive. The countersunk head is typically used in conjunction with a countersunk hole providing a flush, snag free fit. These items are always fully threaded. Typically found on consumer electronics and other small machinery where high torque fasteners are not necessary.

Scope of the ASME Standard.

Unlike ISO standards, each ASME standard generally covers a range or family of product types. ASME B18.6.3 covers many machine screw types, including these UNC torx drive countersunk machine screws, and describes the form, dimensions and tolerances, starting from the diameter of gauge size 1, up to and including 3/4 inch. Figure 1 and table 1 below show these dimensions and tolerances.

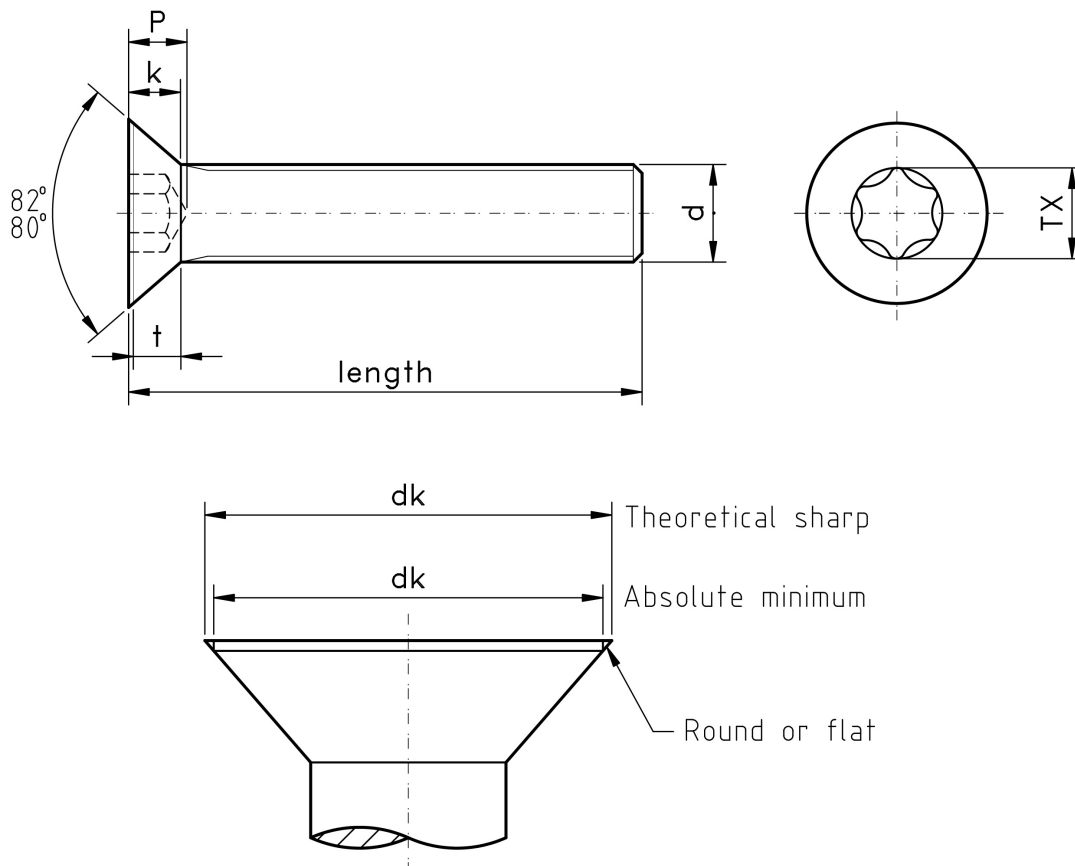


Figure 1: Torx Countersunk Machine Screw (UNC)

Table 1: Dimensions & Tolerances of UNC Torx Countersunk Machine Screws, according to AMSE B18.6.3 (inches)

Nominal Diameter		TPI	Recess Diameter, M	Drive Size, TX	Recess Penetration Gaging Depth, P		Fallaway
					max	min	
0	0.060	-	-	-	-	-	-
1	0.073	64	0.058	T5	0.017	0.012	0.010
2	0.086	56	0.069	T6	0.022	0.017	0.014
3	0.099	48	0.094	T8	0.025	0.020	0.019
4	0.112	40	0.094	T8	0.033	0.028	0.019
5	0.125	40	0.111	T10	0.045	0.035	0.022
6	0.138	32	0.111	T10	0.045	0.035	0.022
7	0.151	32	0.132	T15	0.045	0.035	0.022
8	0.164	32	0.132	T15	0.051	0.040	0.026
10	0.190	24	0.155	T20	0.065	0.050	0.031
12	0.216	24	0.178	T25	0.070	0.055	0.036
1/4	0.250	20	0.200	T27	0.090	0.075	0.040
5/16	0.313	18	0.266	T40	0.105	0.087	0.047
3/8	0.375	16	0.266	T40	0.135	0.115	0.047
7/16	0.438	14	0.352	T50	0.125	0.105	0.062
1/2	0.500	13	0.352	T50	0.135	0.120	0.062
9/16	0.563	12	0.446	T55	0.160	0.140	0.078
5/8	0.625	11	0.446	T55	0.160	0.140	0.078
3/4	0.750	10	0.529	T60	0.230	0.205	0.093

For verification of details and for further information please refer to the ASME standard document.
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