

Westfield Fasteners Product Specification:

ASME B18.6.3 - UNC Slotted Countersunk Head Machine Screws

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

Product Description

A countersunk head machine screw with a slot drive, designed to be tightened with a flat screwdriver. The countersunk head is typically used in conjunction with a countersunk hole providing a flush, snag free fit. Often used in consumer electronics and other small machinery where high torque fasteners are not needed.

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 slotted countersunk machine screws and describes the form, dimensions and tolerances, starting from the thread diameter of gauge size 0000, up to and including 3/4 inch.

The slot drive can have parallel or slightly tapered sides.

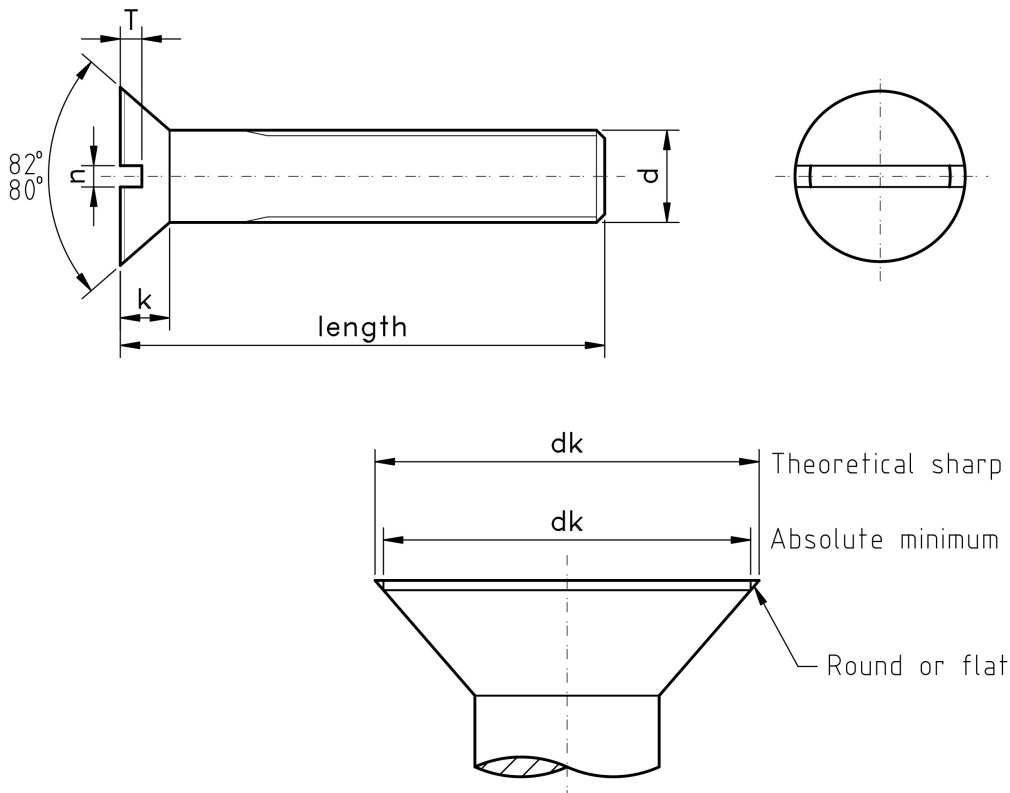


Figure 1: UNC Slotted Countersunk Head Machine Screw

Table 1: Dimensions & Tolerances of UNC Slotted Countersunk Machine Screws according to ASME B18.6.3 (inches)

Nominal Diameter		TPI	These Lengths or Shorter are Undercut	Head Diameter, dk		Head Height, k	Slot Width, n		Slot Depth, T	
				max	min		max	min	max	min
0000	0.0210	-	-	0.040	0.035	0.011	0.008	0.004	0.007	0.003
000	0.0340	-	-	0.060	0.055	0.016	0.011	0.007	0.009	0.005
00	0.0470	-	-	0.087	0.080	0.028	0.017	0.010	0.014	0.009
0	0.0600	-	1/8	0.112	0.096	0.035	0.023	0.016	0.015	0.010
1	0.0730	64	1/8	0.137	0.120	0.043	0.026	0.019	0.019	0.012
2	0.0860	56	1/8	1.162	0.144	0.051	0.031	0.023	0.023	0.015
3	0.0990	48	1/8	0.187	0.167	0.059	0.035	0.027	0.027	0.014
4	0.1120	40	3/16	0.212	0.191	0.067	0.039	0.031	0.030	0.020
5	0.1250	40	3/16	0.237	0.215	0.075	0.043	0.035	0.034	0.022
6	0.1380	32	3/16	0.252	0.238	0.083	0.048	0.039	0.038	0.024
8	0.1640	32	1/4	0.3112	0.285	0.100	0.054	0.045	0.045	0.029
10	0.1900	24	5/16	0.362	0.333	0.116	0.060	0.050	0.053	0.034
12	0.2160	24	3/8	0.412	0.380	0.132	0.067	0.056	0.060	0.039
1/4	0.2500	20	7/16	0.477	0.442	0.153	0.075	0.064	0.070	0.046
5/16	0.3125	18	1/2	0.597	0.556	0.191	0.084	0.072	0.088	0.058
3/8	0.3750	16	9/16	0.717	0.670	0.230	0.094	0.081	0.106	0.070
7/16	0.4375	14	5/8	0.760	0.715	0.223	0.094	0.081	0.103	0.066
1/2	0.5000	13	3/4	0.815	0.765	0.223	0.106	0.091	0.103	0.065
9/16	0.5625	12	-	0.932	0.878	0.260	0.118	0.102	0.120	0.077
5/8	0.6250	11	-	1.050	0.990	0.298	0.133	0.116	0.137	0.088
3/4	0.7500	10	-	1.285	1.215	0.372	0.149	0.131	0.171	0.111

For further details, please refer to the ASME standard document for this item.