



Westfield Fasteners Product Specification:

ASME B18.6.3 - UNC Slotted Round Head Machine Screws

This product guide contains the specification for UNC Slotted Round 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

These screws feature a rounded, domed head, a traditional slot drive, and a UNC thread. The height of the rounded head and the depth of the slot offers a more secure engagement with a flat screwdriver.

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 thread slotted round head machine screws and describes the form, dimensions and tolerances, starting from the thread diameter of gauge size 1, up to and including 3/4 inch.

The slot drive can have parallel or slightly tapered sides.

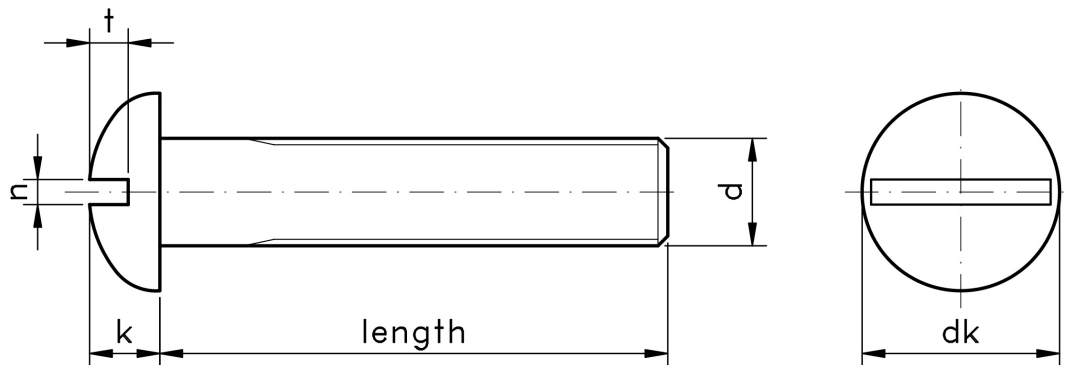


Figure 1: UNC Slotted Round Head Machine Screw

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

Nominal Size or Basic Screw Diameter		TPI	Head Diameter, dk		Head Height, k		Slot Width, n		Slot Depth, t	
			max	min	max	min	max	min	max	min
1	0.0730	64	0.138	0.122	0.061	0.051	0.026	0.019	0.044	0.033
2	0.0860	56	0.162	0.146	0.069	0.059	0.031	0.023	0.048	0.037
3	0.0990	48	0.187	0.169	0.078	0.067	0.035	0.027	0.053	0.040
4	0.1120	40	0.211	0.193	0.086	0.075	0.039	0.031	0.058	0.044
5	0.1250	40	0.236	0.217	0.095	0.083	0.043	0.035	0.063	0.047
6	0.1380	32	0.260	0.240	0.103	0.091	0.048	0.039	0.068	0.051
8	0.1640	32	0.309	0.287	0.120	0.107	0.054	0.045	0.077	0.058
10	0.1900	24	0.359	0.334	0.137	0.123	0.060	0.050	0.087	0.065
12	0.2160	24	0.408	0.382	0.153	0.139	0.067	0.056	0.096	0.073
1/4	0.2500	20	0.472	0.443	0.175	0.160	0.075	0.064	0.109	0.082
5/16	0.3125	18	0.590	0.557	0.216	0.198	0.084	0.072	0.132	0.099
3/8	0.3750	16	0.708	0.670	0.256	0.237	0.094	0.081	0.155	0.117
7/16	0.4375	14	0.750	0.707	0.328	0.307	0.094	0.081	0.196	0.148
1/2	0.5000	13	0.813	0.766	0.355	0.332	0.106	0.091	0.211	0.159
9/16	0.5625	12	0.938	0.887	0.410	0.385	0.118	0.102	0.242	0.183
5/8	0.6250	11	1.000	0.944	0.438	0.411	0.133	0.116	0.258	0.195
3/4	0.7500	10	1.250	1.185	0.547	0.516	0.149	0.131	0.320	0.242

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