Machine Screw Selection Guide

A machine screw is often described as a small diameter bolt, like a bolt or hex head cap screw; it features a straight, untampered shank and a blunt end, but is usually driven with a screwdriver instead of a wrench. External machine thread runs the entire length of shank.

Most commonly used to fasten metal to metal, a machine screw is designed to be inserted into a pre-threaded hole or mated with a nut. (in which case it would be called a stove bolt). Because application thread sizes vary, it is important to select the right machine screw to meet your specific requirements

When searching for the correct machine screw its best to know the screw size number or fractional size. Next select the head type needed or preferred to narrow down the selection.

Head Types

Screw Size Conversion Chart

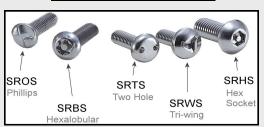


Screw Sizes					
Screw Size	Fractions	Decimals	Millimeter		
#1	1/16"	0.0625"	1.58750		
#2	5/64"	0.078125"	1.98437		_
#3	3/32"	0.09375"	2.38125	Stand	ard
#4	7/64"	0.109375"	2.77812		
#5	1/8"	0.125"	3.17500	Threads	
#6	9/64"	0.140625"	3.57187	1111 00	
#8	5/32"	0.15625"	3.96875	UNC	UNF
#9	11/64"	0.171875"	4.36562	1/4 x 20	1/4 x 28
#10	3/16"	0.1875"	4.76250	5/16 x 18	5/16 x 24
#11	13/64"	0.203125"	5.15937	3/8 x 16	3/8 x 24
#12	7/32"	0.21875"	5.55625	7/16 x 14	7/16 x 20
#13	15/64"	0.234375"	5.95312	1/2 x 13	1/2 x 20
#14	1/4"	0.250"	6.35000	5/8 x 11	5/8 x 18
#16	17/64"	0.265625"	6.74687		
#18	19/64"	0.296875"	7.54062	3/4 x 10	3/4 x 16
#20	5/16"	0.3125"	7.93750	7/8 x 9	7/8 x 14
#24	3/8"	0.375"	9.52500	1 x 8	1 x 14

Tamper Resistant Machine Screws

Security fasteners, as the name indicates, are fasteners that provide an added level of security by their drive design that prevents removal with ordinary screw drivers. We carry security fasteners in many head-styles, drives and matching tools for their installation and removal. Screws are available in sheet metal and machine threads.

Tamper Resistant Head Styles



Tamper Resistant Driver Heads





Information sources include (W. W. Grainger)

If you are still having difficulty choosing a Machine Screw please contact us at askzoro@zoro.com or 855-289-9676

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