

Socket sizes: metric and SAE

Which inch socket is nearest each metric one, and how far off it really is.

Metric	Nearest SAE	That is	Difference	Verdict
6 mm	1/4 in	6.35 mm	+0.35 mm	close, go careful
7 mm	1/4 in	6.35 mm	-0.65 mm	do not use
8 mm	5/16 in	7.94 mm	-0.06 mm	interchangeable
9 mm	3/8 in	9.52 mm	+0.52 mm	do not use
10 mm	3/8 in	9.52 mm	-0.48 mm	do not use
11 mm	7/16 in	11.11 mm	+0.11 mm	interchangeable
12 mm	1/2 in	12.70 mm	+0.70 mm	do not use
13 mm	1/2 in	12.70 mm	-0.30 mm	close, go careful
14 mm	9/16 in	14.29 mm	+0.29 mm	close, go careful
15 mm	9/16 in	14.29 mm	-0.71 mm	do not use
16 mm	5/8 in	15.88 mm	-0.12 mm	interchangeable
17 mm	11/16 in	17.46 mm	+0.46 mm	do not use
18 mm	11/16 in	17.46 mm	-0.54 mm	do not use
19 mm	3/4 in	19.05 mm	+0.05 mm	interchangeable
21 mm	13/16 in	20.64 mm	-0.36 mm	close, go careful
22 mm	7/8 in	22.22 mm	+0.22 mm	close, go careful
24 mm	15/16 in	23.81 mm	-0.19 mm	interchangeable

What the difference means

Under 0.2 mm the two sizes are near enough to swap. Most people never notice.

Between 0.2 and 0.45 mm it will go on, but it can round a tight or rusted fastener.

Over 0.45 mm it is loose. Use the right size or you will spoil the head.

A six point socket grips far better than a twelve point on anything stuck.

Figures are calculated from 1 inch = 25.4 mm, rounded to the nearest hundredth of a millimetre.