FREE CALCULATOR

Wrench and socket size chart: SAE and metric

The wrench or socket size for every common inch and metric bolt, and an SAE to metric conversion chart with the nearest size in the other system.

CHART

Inch bolt wrench sizes (hex cap screws)

BOLT (HEX CAP SCREW)	WRENCH SIZE (IN)	WRENCH SIZE (DECIMAL)	IN MM
1/4 in	7/16 in	0.438	11.1
5/16 in	1/2 in	0.500	12.7
3/8 in	9/16 in	0.562	14.3
7/16 in	5/8 in	0.625	15.9
1/2 in	3/4 in	0.750	19.0
9/16 in	13/16 in	0.812	20.6
5/8 in	15/16 in	0.938	23.8
3/4 in	1-1/8 in	1.125	28.6
7/8 in	1-5/16 in	1.312	33.3
1 in	1-1/2 in	1.500	38.1
1-1/8 in	1-11/16 in	1.688	42.9
1-1/4 in	1-7/8 in	1.875	47.6
1-1/2 in	2-1/4 in	2.250	57.1

CHART

Metric bolt wrench sizes

BOLT	HEX HEAD WRENCH, ISO (MM)	HEX HEAD WRENCH, DIN (MM)	SOCKET HEAD CAP SCREW HEX KE
M3	5.5	5.5	2.5
M4	7	7	3
M5	8	8	4
M6	10	10	5
M8	13	13	6
M10	16	17	8
M12	18	19	10
M14	21	22	10
M16	24	24	14
M18	27	27	14
M20	30	30	17
M22	34	32	17
M24	36	36	19
M27	41	41	19
M30	46	46	22
M36	55	55	27

CHART

SAE to metric conversion chart

SAE SIZE	DECIMAL (IN)	EXACT MM	NEAREST METRIC	DIFFERENCE (MM)
1/4 in	0.2500	6.35	6 mm	-0.35
5/16 in	0.3125	7.94	8 mm	+0.06
3/8 in	0.3750	9.52	10 mm	+0.48
7/16 in	0.4375	11.11	11 mm	-0.11
1/2 in	0.5000	12.70	13 mm	+0.30
9/16 in	0.5625	14.29	14 mm	-0.29
5/8 in	0.6250	15.88	16 mm	+0.12
11/16 in	0.6875	17.46	17 mm	-0.46
3/4 in	0.7500	19.05	19 mm	-0.05
13/16 in	0.8125	20.64	21 mm	+0.36
7/8 in	0.8750	22.22	22 mm	-0.22
15/16 in	0.9375	23.81	24 mm	+0.19
1 in	1.0000	25.40	25 mm	-0.40
1-1/16 in	1.0625	26.99	27 mm	+0.01
1-1/8 in	1.1250	28.57	29 mm	+0.43
1-3/16 in	1.1875	30.16	30 mm	-0.16
1-1/4 in	1.2500	31.75	32 mm	+0.25
1-5/16 in	1.3125	33.34	33 mm	-0.34
1-3/8 in	1.3750	34.92	35 mm	+0.08
1-7/16 in	1.4375	36.51	37 mm	+0.49
1-1/2 in	1.5000	38.10	38 mm	-0.10

A difference under about 0.1 mm is close; anything larger, use the right wrench.

Free chart from fleetzap.com/tools/wrench-size-chart