Bolt Size Chart

Inch bolt sizes, 1/4 to 1-1/2 inch

Hex head width across flats and the wrench size that fits, with thread, tap drill and clearance drill for each diameter.

Bolt diameter	UNC threads per inch	UNF threads per inch	Hex width across flats (in)	Wrench size	Coarse tap drill	Close clearance drill	Free clearance drill
1/4	20	28	0.4375	7/16	#7	F	H
5/16	18	24	0.5000	1/2	F	P	Q
3/8	16	24	0.5625	9/16	5/16	W	X
7/16	14	20	0.6250	5/8	U	29/64	15/32
1/2	13	20	0.7500	3/4	27/64	33/64	17/32
5/8	11	18	0.9375	15/16	17/32	41/64	21/32
3/4	10	16	1.1250	1-1/8	21/32	49/64	25/32
7/8	9	14	1.3125	1-5/16	49/64	57/64	29/32
1	8	12	1.5000	1-1/2	7/8	1-1/64	1-1/32
1-1/8	7	12	1.6875	1-11/16	63/64	—	—
1-1/4	7	12	1.8750	1-7/8	1-7/64	—	—
1-3/8	6	12	2.0625	2-1/16	1-7/32	—	—
1-1/2	6	12	2.2500	2-1/4	1-11/32	—	—

Metric bolt sizes, M3 to M30

ISO 4014 / 4017 widths across flats. Where the older DIN width differs it is shown in brackets.

Bolt size	Coarse pitch (mm)	Hex width across flats / wrench (mm)	Tap drill (mm)	Close clearance (mm)	Medium clearance (mm)	Free clearance (mm)
M3	0.5	5.5	2.5	3.2	3.4	3.6
M4	0.7	7	3.3	4.3	4.5	4.8
M5	0.8	8	4.2	5.3	5.5	5.8
M6	1	10	5	6.4	6.6	7
M8	1.25	13	6.8	8.4	9	10
M10	1.5	16 (DIN 17)	8.5	10.5	11	12
M12	1.75	18 (DIN 19)	10.2	13	13.5	14.5
M14	2	21 (DIN 22)	12	15	15.5	16.5
M16	2	24	14	17	17.5	18.5

Bolt size	Coarse pitch (mm)	Hex width across flats / wrench (mm)	Tap drill (mm)	Close clearance (mm)	Medium clearance (mm)	Free clearance (mm)
M18	2.5	27	15.5	19	20	21
M20	2.5	30	17.5	21	22	24
M22	2.5	34 (DIN 32)	19.5	23	24	26
M24	3	36	21	25	26	28
M27	3	41	24	28	30	32
M30	3.5	46	26.5	31	33	35

Machine screw sizes, #4 to #12

Thread data only. Head sizes vary by screw style.

Screw size	Major dia. (in)	UNC threads per inch	UNC tap drill	UNF threads per inch	UNF tap drill	Close clearance drill	Free clearance drill
#4	0.112	40	#43	48	#42	32	30
#5	0.125	40	#38	44	#37	30	29
#6	0.138	32	#36	40	#33	27	25
#8	0.164	32	#29	36	#29	18	16
#10	0.190	24	#25	32	#21	9	7
#12	0.216	24	#16	28	#14	2	1

Disclaimer. Reference values for information only. Check the manufacturer's data for your part. Charts & Specs is an independent reference site. It is not affiliated with any manufacturer, standards body or code organization, and it uses brand and standard names only to identify what a value applies to.