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Drill Size Chart: Number, Letter & Fraction

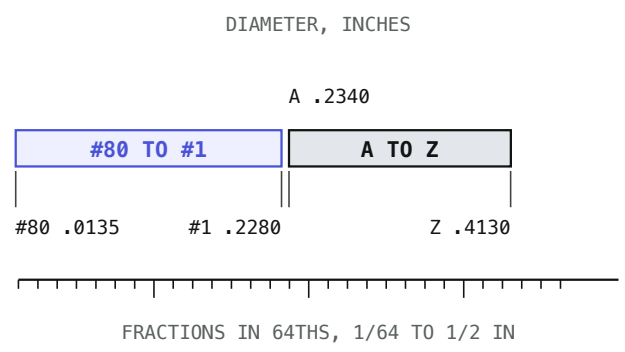
Always inches, never millimeters: mm are conversions. Pilot in fractions, Clecos, numbered drill last, deburr.

1 Identification

REFERENCE DRAWING — NOT APPROVED DATA · THE SRM ALWAYS GOVERNS

RANGES

WHERE EACH SERIES SITS



PARTS

PART	WHAT IT DOES
Number drills	#80 0.0135 in to #1 0.2280 in
Letter drills	A 0.2340 in to Z 0.4130 in

KEY DATA

SERIES
Number #80–#1, letters A–Z, fractions in 64ths.

RIVET HOLES
#40, #30, #21, #11 and F.

SOURCE
Decimals from the FAA Airframe Handbook; millimeters converted.

NOTES

1. Dimensions in inches. Do not scale: the SRM sets the values.
2. For reference. The applicable manual always governs.

REVISIONS

REV	DESCRIPTION	YEAR
A	First issue	2026

The Aviation Point.	Structural repair reference		
TITLE: Drill size series			
DRAWING NO.: TAP-DWG-093	REV: A · 2026	SCALE: NTS	SHEET: 1 OF 1
CODE: TAP-D-DRILL-SIZES			
DO NOT SCALE DRAWING			

Rivet pilot and final drills (FAA-H-8083-31, Figure 4-90)

Rivet	Rivet Ø	Pilot drill	Final drill	Final mm	Clearance
3/32"	0.0938"	3/32" (0.0937)	**#40** (0.0980")	2.49	+0.0042"
1/8"	0.1250"	1/8" (0.125)	**#30** (0.1285")	3.26	+0.0035"
5/32"	0.1563"	5/32" (0.1562)	**#21** (0.1590")	4.04	+0.0027"
3/16"	0.1875"	3/16" (0.1875)	**#11** (0.1910")	4.85	+0.0035"
1/4"	0.2500"	1/4" (0.250)	**F** (0.2570")	6.53	+0.0070"

Number drills, #1 to #40

Drill	Decimal (in)	mm
#1	0.2280"	5.79
#2	0.2210"	5.61
#3	0.2130"	5.41
#4	0.2090"	5.31
#5	0.2055"	5.22
#6	0.2040"	5.18
#7	0.2010"	5.11
#8	0.1990"	5.05
#9	0.1960"	4.98
#10	0.1935"	4.91
#11	0.1910"	4.85
#12	0.1890"	4.80
#13	0.1850"	4.70
#14	0.1820"	4.62
#15	0.1800"	4.57
#16	0.1770"	4.50
#17	0.1730"	4.39
#18	0.1695"	4.31
#19	0.1660"	4.22
#20	0.1610"	4.09
#21	0.1590"	4.04
#22	0.1570"	3.99
#23	0.1540"	3.91
#24	0.1520"	3.86
#25	0.1495"	3.80
#26	0.1470"	3.73

Number drills, #41 to #80

Drill	Decimal (in)	mm
#41	0.0960"	2.44
#42	0.0935"	2.37
#43	0.0890"	2.26
#44	0.0860"	2.18
#45	0.0820"	2.08
#46	0.0810"	2.06
#47	0.0785"	1.99
#48	0.0760"	1.93
#49	0.0730"	1.85
#50	0.0700"	1.78
#51	0.0670"	1.70
#52	0.0635"	1.61
#53	0.0595"	1.51
#54	0.0550"	1.40
#55	0.0520"	1.32
#56	0.0465"	1.18
#57	0.0430"	1.09
#58	0.0420"	1.07
#59	0.0410"	1.04
#60	0.0400"	1.02
#61	0.0390"	0.99
#62	0.0380"	0.97
#63	0.0370"	0.94
#64	0.0360"	0.91
#65	0.0350"	0.89
#66	0.0330"	0.84

Educational reference only, not approved data. Always consult the applicable SRM, AMM, or AC 43.13-1B and your certifying authority.

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Drill	Decimal (in)	mm
#27	0.1440"	3.66
#28	0.1405"	3.57
#29	0.1360"	3.45
#30	0.1285"	3.26
#31	0.1200"	3.05
#32	0.1160"	2.95
#33	0.1130"	2.87
#34	0.1110"	2.82
#35	0.1100"	2.79
#36	0.1065"	2.71
#37	0.1040"	2.64
#38	0.1015"	2.58
#39	0.0995"	2.53
#40	0.0980"	2.49

Drill	Decimal (in)	mm
#67	0.0320"	0.81
#68	0.0310"	0.79
#69	0.0293"	0.74
#70	0.0280"	0.71
#71	0.0260"	0.66
#72	0.0250"	0.64
#73	0.0240"	0.61
#74	0.0225"	0.57
#75	0.0210"	0.53
#76	0.0200"	0.51
#77	0.0180"	0.46
#78	0.0160"	0.41
#79	0.0145"	0.37
#80	0.0135"	0.34

Letter drills, A to Z

Drill	Decimal (in)	mm
A	0.2340"	5.94
B	0.2380"	6.05
C	0.2420"	6.15
D	0.2460"	6.25
E	0.2500"	6.35
F	0.2570"	6.53
G	0.2610"	6.63
H	0.2660"	6.76
I	0.2720"	6.91
J	0.2770"	7.04
K	0.2810"	7.14
L	0.2900"	7.37
M	0.2950"	7.49
N	0.3020"	7.67
O	0.3160"	8.03
P	0.3230"	8.20
Q	0.3320"	8.43
R	0.3390"	8.61
S	0.3480"	8.84
T	0.3580"	9.09
U	0.3680"	9.35
V	0.3770"	9.58
W	0.3860"	9.80
X	0.3970"	10.08
Y	0.4040"	10.26
Z	0.4130"	10.49

Fractional drills, 1/64 to 1/2 in by 64ths

Drill	Decimal (in)	mm
1/64"	0.0156"	0.40
1/32"	0.0312"	0.79
3/64"	0.0468"	1.19
1/16"	0.0625"	1.59
5/64"	0.0781"	1.98
3/32"	0.0937"	2.38
7/64"	0.1093"	2.78
1/8"	0.1250"	3.18
9/64"	0.1406"	3.57
5/32"	0.1562"	3.97
11/64"	0.1718"	4.36
3/16"	0.1875"	4.76
13/64"	0.2031"	5.16
7/32"	0.2187"	5.55
15/64"	0.2343"	5.95
1/4"	0.2500"	6.35
17/64"	0.2656"	6.75
9/32"	0.2812"	7.14
19/64"	0.2968"	7.54
5/16"	0.3125"	7.94
21/64"	0.3281"	8.33
11/32"	0.3437"	8.73
23/64"	0.3593"	9.13
3/8"	0.3750"	9.53
25/64"	0.3906"	9.92
13/32"	0.4062"	10.32
27/64"	0.4219"	10.72
7/16"	0.4375"	11.11
29/64"	0.4531"	11.51
15/32"	0.4687"	11.90
31/64"	0.4844"	12.30
1/2"	0.5000"	12.70

2 Allowable damage

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3 Repair

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Key points

- **The drawing or SRM governs hole size.** The Handbook says hole sizes for other fasteners are found on work documents, prints or in manuals.
- **Blind rivets, Hi-Lok and lockbolts** have their own hole and reaming sizes. Do not take them from the rivet table.
- **Bolt holes** follow AC 43.13-1B par. 7-39, the first-lettered drill larger than the bolt, except in close-fit or reamed holes. Use the bolt hole calculator.
- **A worn bit cuts oversize.** Measure the hole, not the bit.
- **Metric drills** are nearest alternatives, not official drills. The mm columns convert the inch drill; the metric table names the nearest size, and the manual sets the tolerance.

MAIN SOURCES · FAA-H-8083-31, AMT Handbook — Airframe, Volume 1, Chapter 4, Figure 4-47 · FAA-H-8083-31, Airframe, Volume 1, Chapter 4, Figure 4-90 and p. 4-17 · FAA AC 43.13-1B CHG 1, Chapter 7, par. 7-39 · FAA AC 43.13-1B CHG 1, Acceptable Methods, Techniques, and Practices: Aircraft Inspection and Repair · MIL-R-47196A, Rivets, Buck Type, Preparation for and Installation · ASME B94.11M, Twist Drills · FAA-H-8083-31B, Aviation Maintenance Technician Handbook: Airframe, Chapter 4

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