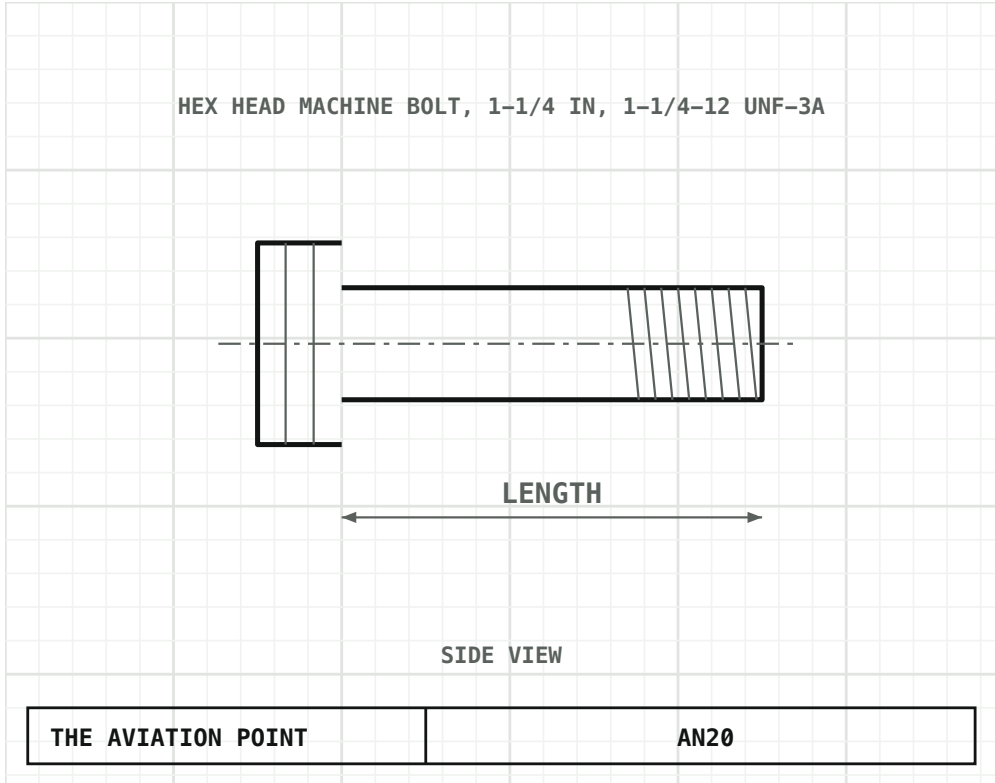
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AN20 — hex head machine bolt, 1-1/4 in, 1-1/4-12 UNF-3A

AN20: 1-1/4 in hex head machine bolt with a 1-1/4-12 UNF-3A thread.



Engineering drawing · dimensions in inches

Specification

Item	Value
Type	Hexagon head machine bolt
Material	Non-corrosion-resistant steel, corrosion-resistant steel or aluminum alloy; finish per the procurement specification
Status	Check the current issue before design use. Cancelled by Notice 1 (Dec 1999) and superseded by NASM3 thru NASM20; the notice states the part numbers are identical.

Dimensions by size

Dimension, in	1-1/4-12 UNF-3A
Thread	1-1/4-12 UNF-3A
A max — A dia, max	1.249
A min — A dia, min	1.243
B max — B, max (across flats)	1.815
B min — B, min (across flats)	1.802
C — C, ref (across corners)	2.090
D max — D, max (head height)	.672
D min — D, min (head height)	.640
H — H dia, min	1.772
J — J drill (shank hole), +.010 -.000	.141
K — K drill (head hole), +.010 -.000	.070

Dimensions in inches, as tabulated in the standard (letters as on its drawing).

Part numbers

1-1/4-12 UNF-3A 53 part numbers

Part no.	Grip, in	Length, in
AN20-15	1/8	1-13/16
AN20-16	1/4	1-15/16
AN20-17	3/8	2-1/16
AN20-20	1/2	2-3/16
AN20-21	5/8	2-5/16
AN20-22	3/4	2-7/16
AN20-23	7/8	2-9/16
AN20-24	1	2-11/16
AN20-25	1-1/8	2-13/16
AN20-26	1-1/4	2-15/16
AN20-27	1-3/8	3-1/16
AN20-30	1-1/2	3-3/16
AN20-31	1-5/8	3-5/16
AN20-32	1-3/4	3-7/16
AN20-33	1-7/8	3-9/16
AN20-34	2	3-11/16
AN20-35	2-1/8	3-13/16

Part no.	Grip, in	Length, in
AN20-36	2-1/4	3-15/16
AN20-37	2-3/8	4-1/16
AN20-40	2-1/2	4-3/16
AN20-41	2-5/8	4-5/16
AN20-42	2-3/4	4-7/16
AN20-43	2-7/8	4-9/16
AN20-44	3	4-11/16
AN20-45	3-1/8	4-13/16
AN20-46	3-1/4	4-15/16
AN20-47	3-3/8	5-1/16
AN20-50	3-1/2	5-3/16
AN20-51	3-5/8	5-5/16
AN20-52	3-3/4	5-7/16
AN20-53	3-7/8	5-9/16
AN20-54	4	5-11/16
AN20-55	4-1/8	5-13/16
AN20-56	4-1/4	5-15/16
AN20-57	4-3/8	6-1/16

Part no.	Grip, in	Length, in
AN20-60	4-1/2	6-3/16
AN20-61	4-5/8	6-5/16
AN20-62	4-3/4	6-7/16
AN20-63	4-7/8	6-9/16
AN20-64	5	6-11/16
AN20-65	5-1/8	6-13/16
AN20-66	5-1/4	6-15/16
AN20-67	5-3/8	7-1/16
AN20-70	5-1/2	7-3/16
AN20-71	5-5/8	7-5/16
AN20-72	5-3/4	7-7/16
AN20-73	5-7/8	7-9/16
AN20-74	6	7-11/16
AN20-75	6-1/8	7-13/16
AN20-76	6-1/4	7-15/16
AN20-77	6-3/8	8-1/16
AN20-80	6-1/2	8-3/16
AN20-81	6-5/8	8-5/16

Reference data. The aircraft manufacturer's documentation (SRM / IPC) takes precedence.

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How to read the part number

Part	Meaning
Format	AN20-<dash>
Example	AN20-15 — Non-corrosion-resistant steel bolt, 1-1/4 in, grip 1/8, length 1-13/16, drilled shank only

Notes

- Dash number sets the length and grip. Add C before the dash number for a corrosion-resistant steel bolt and DD for an aluminum alloy bolt; A after the dash number for an undrilled bolt; H before the dash number for a drilled head and shank; H before and A after for a drilled head only.
- Examples: AN20-10 is the non-corrosion-resistant steel bolt with a drilled shank only; AN20C10 is the corrosion-resistant steel bolt; AN20-10A is undrilled.
- Grip tolerance ±1/64 in; length tolerance +1/32 −1/64 in. Grip is measured from the underside of the head to the end of the full cylindrical portion of the shank; complete threads begin within two thread pitches at most.
- Part number format as commonly written; check the standard for the exact format.
- Approved data governs. Use the bolt the SRM, drawing or IPC calls for.

SOURCES · AN3 thru AN20 Rev. 12, 14 Jan 1991 — Bolt — Machine, Aircraft

SCAN · OPEN THIS DATA SHEET
theaviationpoint.com/parts/structural-bolts/an20/

Reference data. The aircraft manufacturer's documentation (SRM / IPC) takes precedence.