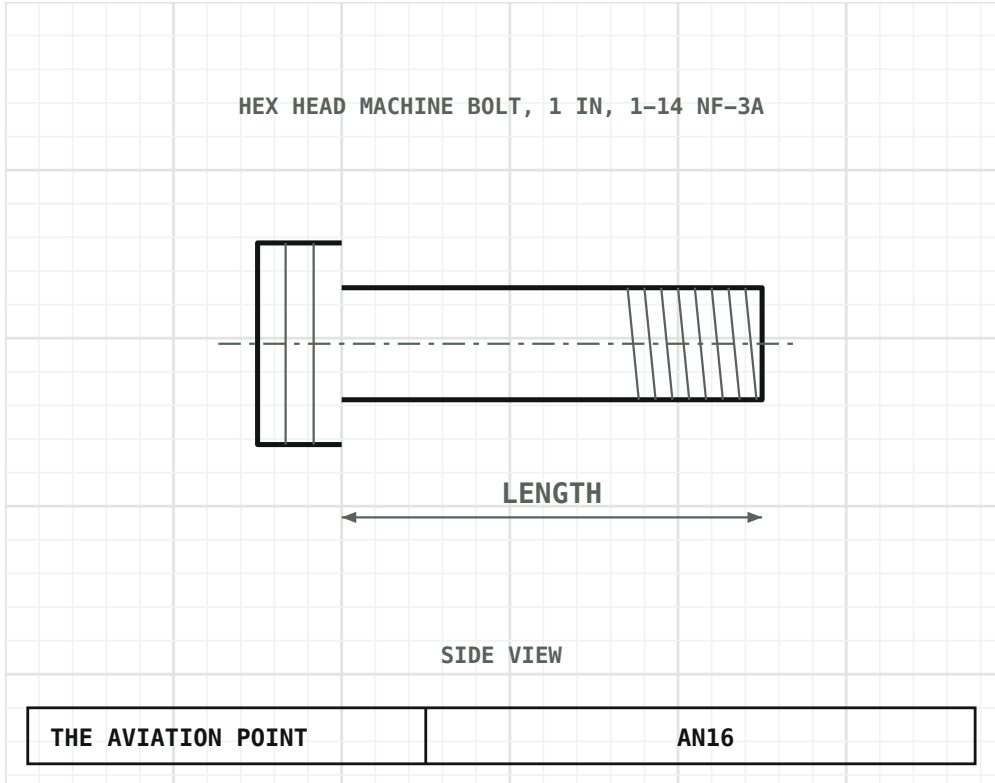
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AN16 — hex head machine bolt, 1 in, 1-14 NF-3A

AN16: 1 in hex head machine bolt with a 1-14 NF-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 Cancelled by Notice 1 (Dec 1999) and superseded by NASM3 thru NASM20; the notice states the part numbers are identical.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	1-14 NF-3A
Thread	1-14 NF-3A
A max — A dia, max	.999
A min — A dia, min	.993
B max — B, max (across flats)	1.441
B min — B, min (across flats)	1.428
C — C, ref (across corners)	1.660
D max — D, max (head height)	.547
D min — D, min (head height)	.515
H — H dia, min	1.398
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

1-14 NF-3A 57 part numbers

Part no.	Grip, in	Length, in
AN16-12	1/8	1-1/2
AN16-13	1/4	1-5/8
AN16-14	3/8	1-3/4
AN16-15	1/2	1-7/8
AN16-16	5/8	2
AN16-17	3/4	2-1/8
AN16-20	7/8	2-1/4
AN16-21	1	2-3/8
AN16-22	1-1/8	2-1/2
AN16-23	1-1/4	2-5/8
AN16-24	1-3/8	2-3/4
AN16-25	1-1/2	2-7/8
AN16-26	1-5/8	3
AN16-27	1-3/4	3-1/8
AN16-30	1-7/8	3-1/4
AN16-31	2	3-3/8
AN16-32	2-1/8	3-1/2
AN16-33	2-1/4	3-5/8
AN16-34	2-3/8	3-3/4

Part no.	Grip, in	Length, in
AN16-35	2-1/2	3-7/8
AN16-36	2-5/8	4
AN16-37	2-3/4	4-1/8
AN16-40	2-7/8	4-1/4
AN16-41	3	4-3/8
AN16-42	3-1/8	4-1/2
AN16-43	3-1/4	4-5/8
AN16-44	3-3/8	4-3/4
AN16-45	3-1/2	4-7/8
AN16-46	3-5/8	5
AN16-47	3-3/4	5-1/8
AN16-50	3-7/8	5-1/4
AN16-51	4	5-3/8
AN16-52	4-1/8	5-1/2
AN16-53	4-1/4	5-5/8
AN16-54	4-3/8	5-3/4
AN16-55	4-1/2	5-7/8
AN16-56	4-5/8	6
AN16-57	4-3/4	6-1/8

Part no.	Grip, in	Length, in
AN16-60	4-7/8	6-1/4
AN16-61	5	6-3/8
AN16-62	5-1/8	6-1/2
AN16-63	5-1/4	6-5/8
AN16-64	5-3/8	6-3/4
AN16-65	5-1/2	6-7/8
AN16-66	5-5/8	7
AN16-67	5-3/4	7-1/8
AN16-70	5-7/8	7-1/4
AN16-71	6	7-3/8
AN16-72	6-1/8	7-1/2
AN16-73	6-1/4	7-5/8
AN16-74	6-3/8	7-3/4
AN16-75	6-1/2	7-7/8
AN16-76	6-5/8	8
AN16-77	6-3/4	8-1/8
AN16-80	6-7/8	8-1/4
AN16-81	7	8-3/8
AN16-82	7-1/8	8-1/2

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

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How to read the part number

Part	Meaning
`Format`	AN16-<dash>
`Example`	AN16-12 — Non-corrosion-resistant steel bolt, 1 in, grip 1/8, length 1-1/2, 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: AN16-10 is the non-corrosion-resistant steel bolt with a drilled shank only; AN16C10 is the corrosion-resistant steel bolt; AN16-10A is undrilled.
- The 1-14 NF thread pitch is inactive for design after 15 June 1966; AN17 is the 1-12 UNF bolt of the same diameter.
- 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/an16/

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