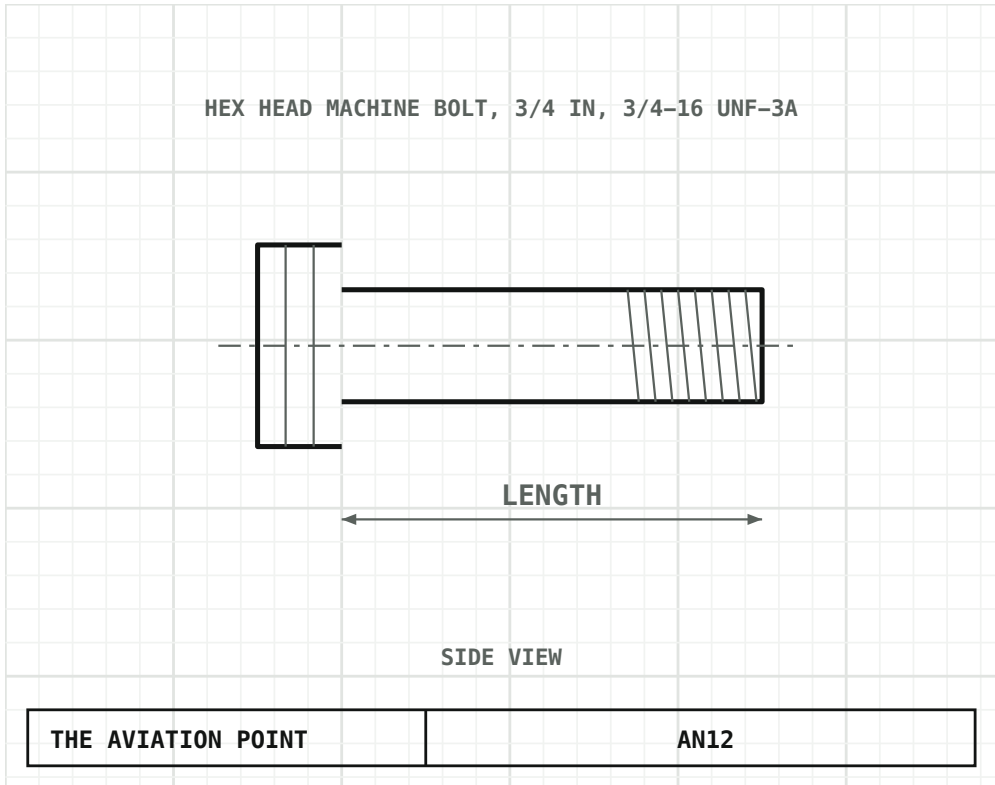
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AN12 — hex head machine bolt, 3/4 in, 3/4-16 UNF-3A

AN12: 3/4 in hex head machine bolt with a 3/4-16 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 Cancelled by Notice 1 (Dec 1999) and superseded by NASM3 thru NASM20; the notice states the part numbers are identical.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	3/4-16 UNF-3A
Thread	3/4-16 UNF-3A
A max — A dia, max	.749
A min — A dia, min	.744
B max — B, max (across flats)	1.066
B min — B, min (across flats)	1.053
C — C, ref (across corners)	1.230
D max — D, max (head height)	.422
D min — D, min (head height)	.390
H — H dia, min	1.023
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

3/4-16 UNF-3A 57 part numbers

Part no.	Grip, in	Length, in
AN12-10	1/16	1-5/32
AN12-11	3/16	1-9/32
AN12-12	5/16	1-13/32
AN12-13	7/16	1-17/32
AN12-14	9/16	1-21/32
AN12-15	11/16	1-25/32
AN12-16	13/16	1-29/32
AN12-17	15/16	2-1/32
AN12-20	1-1/16	2-5/32
AN12-21	1-3/16	2-9/32
AN12-22	1-5/16	2-13/32
AN12-23	1-7/16	2-17/32
AN12-24	1-9/16	2-21/32
AN12-25	1-11/16	2-25/32
AN12-26	1-13/16	2-29/32
AN12-27	1-15/16	3-1/32
AN12-30	2-1/16	3-5/32
AN12-31	2-3/16	3-9/32
AN12-32	2-5/16	3-13/32

Part no.	Grip, in	Length, in
AN12-33	2-7/16	3-17/32
AN12-34	2-9/16	3-21/32
AN12-35	2-11/16	3-25/32
AN12-36	2-13/16	3-29/32
AN12-37	2-15/16	4-1/32
AN12-40	3-1/16	4-5/32
AN12-41	3-3/16	4-9/32
AN12-42	3-5/16	4-13/32
AN12-43	3-7/16	4-17/32
AN12-44	3-9/16	4-21/32
AN12-45	3-11/16	4-25/32
AN12-46	3-13/16	4-29/32
AN12-47	3-15/16	5-1/32
AN12-50	4-1/16	5-5/32
AN12-51	4-3/16	5-9/32
AN12-52	4-5/16	5-13/32
AN12-53	4-7/16	5-17/32
AN12-54	4-9/16	5-21/32
AN12-55	4-11/16	5-25/32

Part no.	Grip, in	Length, in
AN12-56	4-13/16	5-29/32
AN12-57	4-15/16	6-1/32
AN12-60	5-1/16	6-5/32
AN12-61	5-3/16	6-9/32
AN12-62	5-5/16	6-13/32
AN12-63	5-7/16	6-17/32
AN12-64	5-9/16	6-21/32
AN12-65	5-11/16	6-25/32
AN12-66	5-13/16	6-29/32
AN12-67	5-15/16	7-1/32
AN12-70	6-1/16	7-5/32
AN12-71	6-3/16	7-9/32
AN12-72	6-5/16	7-13/32
AN12-73	6-7/16	7-17/32
AN12-74	6-9/16	7-21/32
AN12-75	6-11/16	7-25/32
AN12-76	6-13/16	7-29/32
AN12-77	6-15/16	8-1/32
AN12-80	7-1/16	8-5/32

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

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How to read the part number

Part	Meaning
Format	AN12-<dash>
Example	AN12-10 — Non-corrosion-resistant steel bolt, 3/4 in, grip 1/16, length 1-5/32, 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: AN12-10 is the non-corrosion-resistant steel bolt with a drilled shank only; AN12C10 is the corrosion-resistant steel bolt; AN12-10A 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/an12/

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