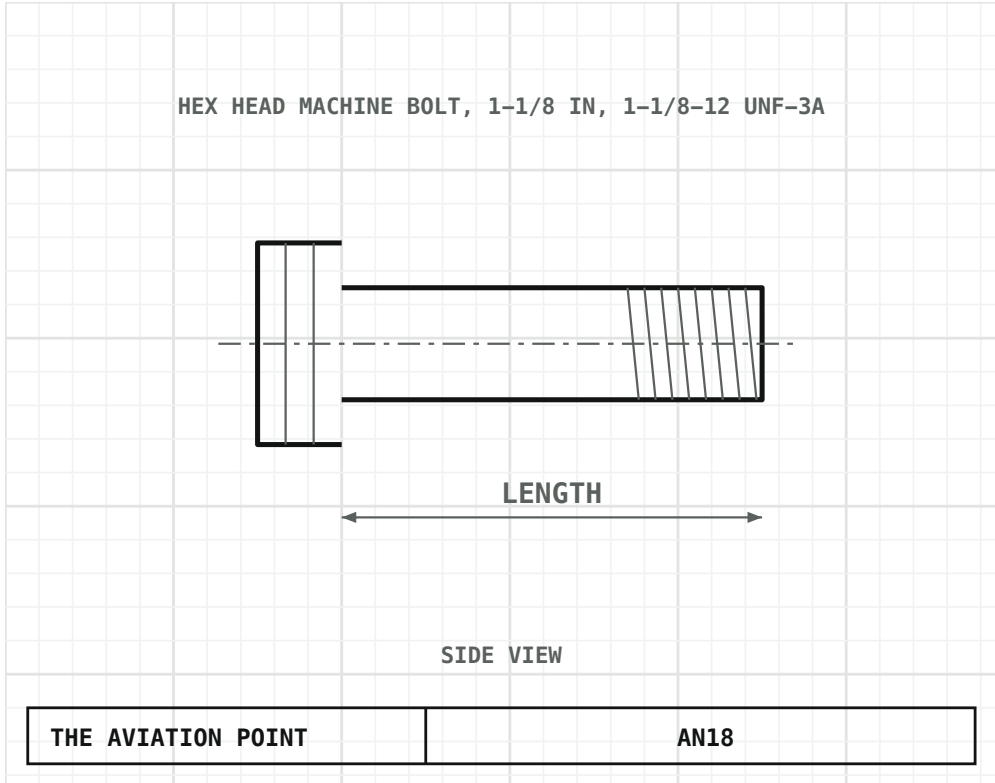
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# AN18 — hex head machine bolt, 1-1/8 in, 1-1/8-12 UNF-3A

AN18: 1-1/8 in hex head machine bolt with a 1-1/8-12 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 Cancelled by Notice 1 (Dec 1999) and superseded by NASM3 thru NASM20; the notice states the part numbers are identical.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 | 1-1/8-12 UNF-3A |
|---|---|
| Thread | 1-1/8-12 UNF-3A |
| A max — A dia, max | 1.124 |
| A min — A dia, min | 1.118 |
| B max — B, max (across flats) | 1.628 |
| B min — B, min (across flats) | 1.615 |
| C — C, ref (across corners) | 1.880 |
| D max — D, max (head height) | .610 |
| D min — D, min (head height) | .578 |
| H — H dia, min | 1.585 |
| 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

**1-1/8-12 UNF-3A** 55 part numbers

| Part no. | Grip, in | Length, in |
|---|---|---|
| AN18-13 | 1/16 | 1-9/16 |
| AN18-14 | 3/16 | 1-11/16 |
| AN18-15 | 5/16 | 1-13/16 |
| AN18-16 | 7/16 | 1-15/16 |
| AN18-17 | 9/16 | 2-1/16 |
| AN18-20 | 11/16 | 2-3/16 |
| AN18-21 | 13/16 | 2-5/16 |
| AN18-22 | 15/16 | 2-7/16 |
| AN18-23 | 1-1/16 | 2-9/16 |
| AN18-24 | 1-3/16 | 2-11/16 |
| AN18-25 | 1-5/16 | 2-13/16 |
| AN18-26 | 1-7/16 | 2-15/16 |
| AN18-27 | 1-9/16 | 3-1/16 |
| AN18-30 | 1-11/16 | 3-3/16 |
| AN18-31 | 1-13/16 | 3-5/16 |
| AN18-32 | 1-15/16 | 3-7/16 |
| AN18-33 | 2-1/16 | 3-9/16 |
| AN18-34 | 2-3/16 | 3-11/16 |

| Part no. | Grip, in | Length, in |
|---|---|---|
| AN18-35 | 2-5/16 | 3-13/16 |
| AN18-36 | 2-7/16 | 3-15/16 |
| AN18-37 | 2-9/16 | 4-1/16 |
| AN18-40 | 2-11/16 | 4-3/16 |
| AN18-41 | 2-13/16 | 4-5/16 |
| AN18-42 | 2-15/16 | 4-7/16 |
| AN18-43 | 3-1/16 | 4-9/16 |
| AN18-44 | 3-3/16 | 4-11/16 |
| AN18-45 | 3-5/16 | 4-13/16 |
| AN18-46 | 3-7/16 | 4-15/16 |
| AN18-47 | 3-9/16 | 5-1/16 |
| AN18-50 | 3-11/16 | 5-3/16 |
| AN18-51 | 3-13/16 | 5-5/16 |
| AN18-52 | 3-15/16 | 5-7/16 |
| AN18-53 | 4-1/16 | 5-9/16 |
| AN18-54 | 4-3/16 | 5-11/16 |
| AN18-55 | 4-5/16 | 5-13/16 |
| AN18-56 | 4-7/16 | 5-15/16 |
| AN18-57 | 4-9/16 | 6-1/16 |

| Part no. | Grip, in | Length, in |
|---|---|---|
| AN18-60 | 4-11/16 | 6-3/16 |
| AN18-61 | 4-13/16 | 6-5/16 |
| AN18-62 | 4-15/16 | 6-7/16 |
| AN18-63 | 5-1/16 | 6-9/16 |
| AN18-64 | 5-3/16 | 6-11/16 |
| AN18-65 | 5-5/16 | 6-13/16 |
| AN18-66 | 5-7/16 | 6-15/16 |
| AN18-67 | 5-9/16 | 7-1/16 |
| AN18-70 | 5-11/16 | 7-3/16 |
| AN18-71 | 5-13/16 | 7-5/16 |
| AN18-72 | 5-15/16 | 7-7/16 |
| AN18-73 | 6-1/16 | 7-9/16 |
| AN18-74 | 6-3/16 | 7-11/16 |
| AN18-75 | 6-5/16 | 7-13/16 |
| AN18-76 | 6-7/16 | 7-15/16 |
| AN18-77 | 6-9/16 | 8-1/16 |
| AN18-80 | 6-11/16 | 8-3/16 |
| AN18-81 | 6-13/16 | 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 | AN18-<dash> |
| Example | AN18-13 — Non-corrosion-resistant steel bolt, 1-1/8 in, grip 1/16, length 1-9/16, 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: AN18-10 is the non-corrosion-resistant steel bolt with a drilled shank only; AN18C10 is the corrosion-resistant steel bolt; AN18-10A 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/an18/



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