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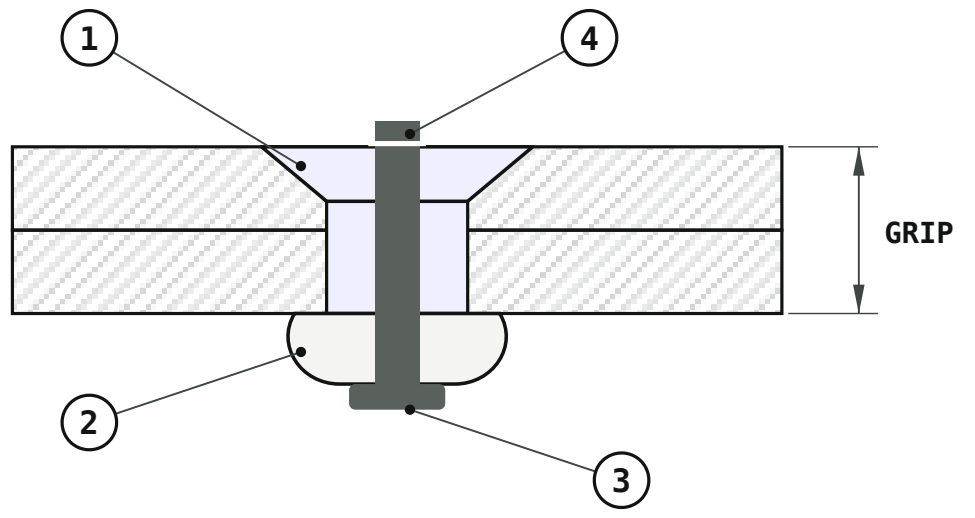
Jo-Bolt Holes and Drills: Diameter Codes, Grip and the Hole

Diameter codes · the hole by class · oversize · cross numbers · installation

REFERENCE DRAWING — NOT APPROVED DATA · THE SRM ALWAYS GOVERNS

JO-BOLT INSTALLED

SECTION · 100° FLUSH HEAD · SCHEMATIC



#	PART
1	Nut, with the head
2	Sleeve, formed on the blind side
3	Bolt, left-hand thread
4	Break groove; stem stub above

STANDARD HOLE BY CLASS

TM 1-1500-204-23-6 TABLE 2-7

CLASS	HOLE, IN	DRILL	CODE
.164	**0.164–0.168**	**#19**	**08**
.200	**0.199–0.203**	**#7**	**3**
.260	**0.261–0.265**	**G**	**4**
.312	**0.313–0.317**	**O**	**5**
.375	**Not in the table**	**—**	**6**

Drill: a standard size inside the limits (derived).
Gauge the hole; ream if the drill does not hold it.

READING NAS1669-3L4

SEGMENT	WHAT IT SAYS
NAS1669	Protruding head (NAS1670: 100° flush)
3	Diameter code: 3/16 class, .200 in
L	L or DL: letter confirmed, meaning not
4	Grip dash: .220 to .281 in

Grip dash n covers (n − 1/2)/16 to (n + 1/2)/16 in.

Choose the grip with the gauge for the fastener type after measuring the stack: the grip is critical (FAA-H-8083-31B p. 4-54).
The stem does not break flush with the head: shave it where a flush finish is required (FAA-H-8083-31B p. 4-55).
An oversize Jo-Bolt exists for a hole past the standard size (TM par. 2-2p(4)); its hole is not in a public table.

NOTES

1. Dimensions in inches. Do not scale: the SRM sets the values.
2. For reference. The applicable manual always governs.
3. Based on TM 1-1500-204-23-6 par. 2-2p, Table 2-7; FAA-H-8083-31B.

REVISIONS

REV	DESCRIPTION	YEAR
B	Revised	2026

The Aviation Point.	Structural repair reference		
TITLE: **Jo-Bolt holes and drills**			
DRAWING NO.: **TAP-DWG-F06**	REV: **B · 2026**	SCALE: **NTS**	SHEET: **1 OF 1**
APPLIES TO: NAS1669, NAS1670 Jo-Bolts			
DO NOT SCALE DRAWING			

Drive-nut blind bolt after FAA-H-8083-31B pp. 4-54 and 4-55; hole limits from TM 1-1500-204-23-6 Table 2-7, drills derived inside them.

Standard hole and drill by class

Class (code)	Hole, in	Drill inside the limits	Note
.164 (08)	0.164–0.168	#19 (0.166)	Derived
.200 (3)	0.199–0.203	#7 (0.201)	Derived
.260 (4)	0.261–0.265	G (0.261)	Derived; G sits on the minimum
.312 (5)	0.313–0.317	O (0.316)	Derived
.375 (6)	Not in Table 2-7	None	Hole on the drawing or in the maker's data

Diameter codes

Code	Class	Listed diameter, in	Shank in MIL-HDBK-5J, in
08	5/32 class	.164	.163
3	3/16 class	.200	.198
4	1/4 class	.260	.259
5	5/16 class	.312	.311
6	3/8 class	.375	.373

Key points

- **Diameter code is a class:** 08, 3, 4, 5, 6 = .164, .200, .260, .312, .375 in.
- **Grip dash n:** (n − 1/2)/16 to (n + 1/2)/16 in.
- **Close-tolerance holes:** drill inside the TM limits, gauge, ream if needed.
- **Oversize Jo-Bolt** exists (TM par. 2-2p(4)); its hole is not public.
- **Stem does not break flush:** shave it where flush is required.
- **NAS1669 = PLT210, NAS1670 = PLT110** in federal records (L type).

Step by step

1. Drill to the class limits; gauge; ream if needed.
2. Measure the stack with the grip gauge.
3. Insert; tool over the screw and nut.
4. Hold the nut, turn the screw until it breaks.
5. Shave the stem where flush is required.

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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SOURCES · TM 1-1500-204-23-6 · FAA-H-8083-31B, Aviation Maintenance Technician Handbook, Airframe, chapter 4 · T.O. 1-1A-1 · MIL-HDBK-5J, Table 8.1.3.2.3 · US federal item records · ASNA0081 and ASNA0082 standard sheets

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