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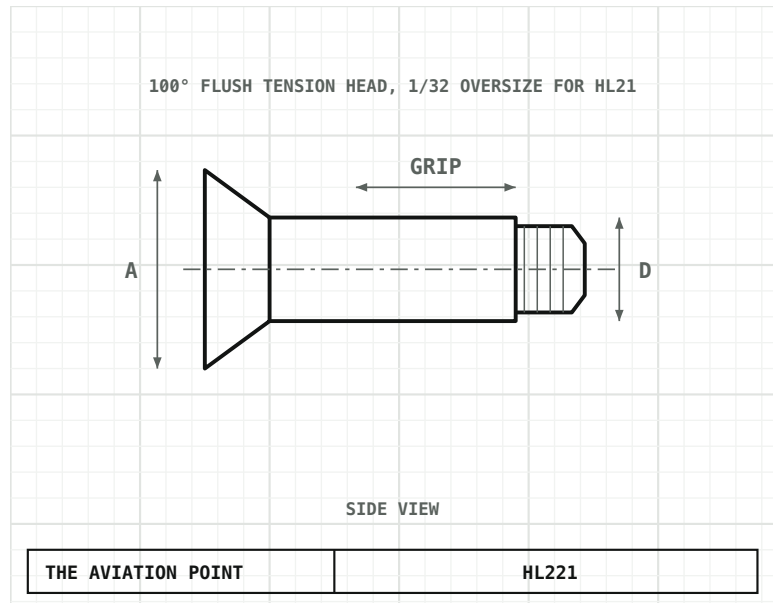
The Aviation Point

HL221 pin — 100° flush tension head, 1/32 oversize for HL21

Hi-Lok Pin, 100° Flush Tension Head, 1/32 Oversize for HL21, Alloy Steel: dimensions by size, strength and every listed part number.



HL221



Engineering drawing · dimensions in inches

Specification

Item	Value
Type	Hi-Lok pin, 100° flush tension head, 1/32 oversize
Material	Alloy steel
Strength	95,000 psi shear; 160,000-180,000 psi tensile
Status	Check the current issue before design use.

Dimensions by size

Dimension, in	10-32-UNJF-3A Modified	1/4-28UNJF-3A Modified
Nominal diameter	7/32	9/32
A — Head diameter (max / min)	.3813 - .3765	.5066 - .5018
B — Ref. (see drawing)	.325	.395
D — Shank diameter (max / min)	.2182 - .2172	.2807 - .2797
TD — Threaded-end diameter (max / min)	.1840 - .1810	.2440 - .2410
H — H (max / min, see drawing)	.0684 - .0664	.0948 - .0928
Thread	10-32-UNJF-3A Modified	1/4-28UNJF-3A Modified
Double shear, lb min	7,100	11,800
Tension, lb min	3,180	5,820

Dimensions as tabulated in the catalogue, by first dash number (nominal diameter). Max - min where a tolerance is shown.

Part numbers

7/32 10 part numbers

Part no.	Max grip, in
HL221-6-3	3/16
HL221-6-4	1/4
HL221-6-5	5/16
HL221-6-6	3/8
HL221-6-7	7/16
HL221-6-8	1/2
HL221-6-9	9/16
HL221-6-10	5/8
HL221-6-11	11/16
HL221-6-12	3/4

9/32 10 part numbers

Part no.	Max grip, in
HL221-8-3	3/16
HL221-8-4	1/4
HL221-8-5	5/16
HL221-8-6	3/8
HL221-8-7	7/16
HL221-8-8	1/2
HL221-8-9	9/16
HL221-8-10	5/8
HL221-8-11	11/16
HL221-8-12	3/4

How to read the part number

Part	Meaning
Format	HL221-<dash>
Example	HL221-6-3 — 7/32 nominal diameter, max grip 3/16 in

Notes

- The -5 size is not listed for this oversize pin: the catalogue says use HL65PB6.
- Approved data governs. Use the pin the drawing, SRM or IPC calls for.
- Grip: the number after the second dash is the max grip in 1/16 in (dash -2 = 1/8 in, -3 = 3/16 in, and so on). Maximum-minimum values are shown as max - min.
- Collars listed for this pin in the catalogue quick-reference chart: HL93.

SOURCES · HL221 — Hi-Lok Pin, 100° Flush Tension Head, 1/32 Oversize for HL21, Alloy Steel

SCAN · OPEN THIS DATA SHEET
theaviationpoint.com/parts/hi-lok/hl221/

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