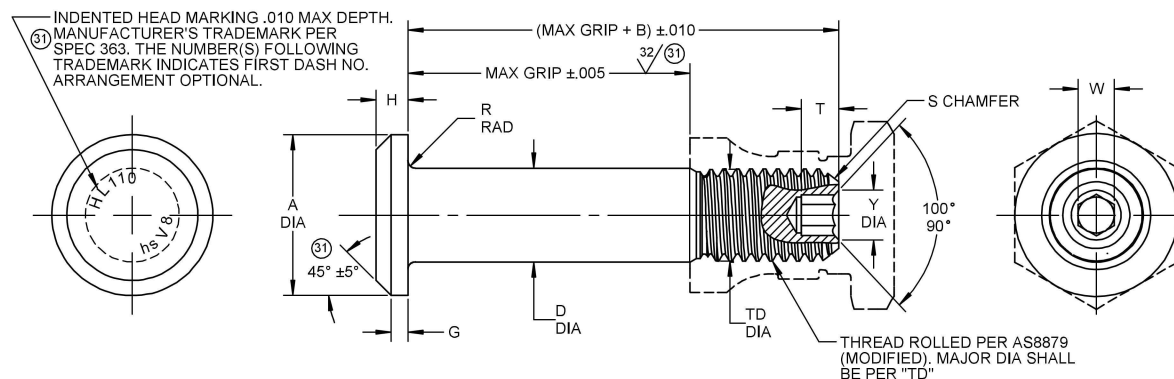
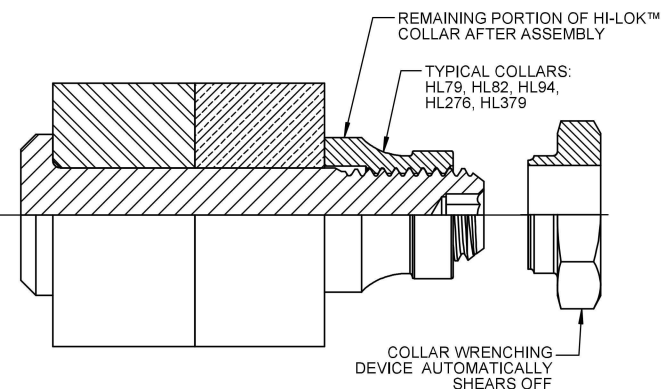


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HI-LOK™ PIN



HI-LOK™ PIN AND COLLAR AFTER ASSEMBLY

SEE COLLAR STANDARDS
FOR COLLAR STRENGTHS.
LOWER STRENGTH (PIN OR
COLLAR) DETERMINES
SYSTEM STRENGTH

5																
FIRST DASH NO.	PIN NOM DIA	A DIA	B REF	D DIA		TD DIA	G REF	H	R RAD	S CHAMFER REF	THREAD MODIFIED	SOCKET			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT COATING OR SOLID FILM	AFTER COATING OR SOLID FILM							W HEX	T DEPTH	Y DIA		
5							NOTE: USE HL10V()6(-)									
6	13/64	.315 .295	.325	.2026 .2021	.2026 .2016	.1840 .1810	.025	.055 .045	.025 .015	1/32 x 37°	.1900-32 UNJF-3A	.0806 .0791	.135 .115	.119 .104	6,130	2,500
8	17/64	.412 .387	.395	.2651 .2646	.2651 .2641	.2440 .2410	.030	.069 .059	.025 .015	1/32 x 37°	.2500-28 UNJF-3A	.0967 .0947	.150 .130	.142 .122	10,490	4,300
10	21/64	.505 .475	.500	.3276 .3271	.3276 .3266	.3060 .3020	.035	.078 .068	.030 .020	3/64 x 37°	.3125-24 UNJF-3A	.1295 .1270	.170 .150	.180 .160	16,000	6,300
12	25/64	.600 .565	.545	.3901 .3896	.3901 .3891	.3680 .3640	.040	.088 .078	.030 .020	3/64 x 37°	.3750-24 UNJF-3A	.1617 .1582	.200 .180	.217 .197	22,700	8,700
14	29/64	.676 .641	.635	.4526 .4521	.4526 .4516	.4310 .4260	.045	.105 .093	.030 .020	3/64 x 37°	.4375-20 UNJF-3A	.1930 .1895	.230 .210	.253 .233	30,600	12,100
16	33/64	.770 .735	.685	.5151 .5146	.5151 .5141	.4930 .4880	.050	.116 .103	.030 .020	3/64 x 37°	.5000-20 UNJF-3A	.2242 .2207	.260 .240	.289 .269	39,600	15,300
18	37/64	.864 .829	.770	.5771 .5766	.5771 .5761	.5550 .5500	.055	.127 .112	.040 .025	1/16 x 37°	.5625-18 UNJF-3A	.2555 .2520	.290 .270	.326 .306	49,700	19,000
20	41/64	.953 .918	.825	.6396 .6391	.6396 .6386	.6180 .6120	.060	.137 .122	.040 .025	1/16 x 37°	.6250-18 UNJF-3A	.2555 .2520	.330 .305	.326 .306	61,000	23,000
24	49/64	1.108 1.066	1.050	.7646 .7641	.7646 .7636	.7430 .7370	.070	.151 .136	.045 .030	1/16 x 37°	.7500-16 UNJF-3A	.3185 .3150	.395 .365	.398 .378	87,200	30,700
28	57/64	1.285 1.241	1.210	.8896 .8891	.8896 .8886	.8680 .8610	.090	.187 .172	.050 .035	5/64 x 37°	.8750-14 UNJF-3A	.3820 .3780	.455 .425	.471 .451	118,000	45,000
32	1-1/64	1.468 1.424	1.390	1.0146 1.0141	1.0146 1.1036	.9930 .9860	.110	.218 .203	.060 .045	5/64 x 37°	1.0000-12 UNJF-3A	.5100 .5040	.580 .550	.618 .598	154,000	60,900

"HI-LOK", "HL", AND "HI-KOTE",
ARE TRADEMARKS OF HI-SHEAR CORPORATION

DRAWN BY
D.P.S.
J.F.OBISPO

DATE
1983-11-04
2014-07-29

APPROVED
CESSNA

DATE
1983-11-05

REVISION
(31)

DATE
K. PHAM
2022-03-10

TITLE
HI-LOK™ PIN
PROTRUDING SHEAR HEAD
TITANIUM, 1/64 OVERSIZE
1/16 GRIP VARIATION

DRAWING NUMBER
HL110

1 OF 2

- GENERAL NOTES:**
1. Concentricity: "A" to "D" diameter within .010 FIM.
 2. Dimensions are in inches and to be met after finish.
 3. Surface texture per ASME B46.1.
 4. Hole preparation per NAS618.
 - 5 Maximum "D" diameter may be increased by .0002 to allow for solid film or aluminum coating application.
 - 6 Broach petals removed.
 - 7 Dimensions to be met before finish for "VY" code only.
 8. Use HL410 for oversize replacement.
 - 9 Non-lubed pins must be used with lubed collars or wet sealant.
 - 10 After February, 21st of 2015, HI-KOTE™ 1 aluminum pigmented coating will be replaced by REACH compliant HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on fasteners coated in UK and European Union.

MATERIAL: 6AL-4V titanium alloy per AMS4928 or AMS4967.

HEAT TREAT: 160,000 psi tensile minimum (95,000 psi shear minimum for sizes up to 3/4; 90,000 psi shear minimum for 7/8 and larger).

- FINISH:** HL110V(-)(-) = Cetyl alcohol lube per Hi-Shear Spec. 305.
- 31 10 HL110VAP(-)(-) = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 31 10 HL110VAZ(-)(-) = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL110VBJ(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL110VBR(-)(-) = Color code white on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 9 HL110VBU(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type I, Class 3, with color yellow on thread end.
- 9 HL110VBV(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, with color blue on thread end.
- HL110VCB(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type I, Class 3, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 6 HL110VDK(-)(-) = Solid film lube per "KalGard™" FA. "KALGARD" is a trademark of Metal Improvement Company.
- 31 HL110VF(-)(-) = Anodize per Hi-Shear Spec. 306, Type I, color blue, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL110VHD(-)(-) = I.V.D. aluminum coating per BAC5315, with color red on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 6 HL110VK(-)(-) = Solid film lube per Lubeco 905.
- 31 HL110VLJ(-)(-) = Anodize per Hi-Shear Spec 306, Type II, and solid film lube per AS5272.
- HL110VLV(-)(-) = Phosphate fluoride treat and Esna-Lube No. 382 (Everlube Corp).
- 31 HL110VR(-)(-) = Anodize per Hi-Shear Spec 306, Type II, and solid film lube per "Electrofilm" 4396.
- HL110VRA(-)(-) = Phosphate fluoride treat with color red on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL110VSY(-)(-) = Phosphate fluoride treat, solid film lube per AS5272, Type I, and color red on thread end.
- 31 HL110VT(-)(-) = Anodize per Hi-Shear Spec 306, Type I, color pink, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL110VTA(-)(-) = Anodize Ti-Shield III and HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL110VTB(-)(-) = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL110VTF(-)(-) = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292.
- HL110VTL(-)(-) = Anodize Ti-Shield III, solid film lube per DAG-258, and cetyl alcohol lube per Hi-Shear Spec. 305; or anodize per Tiodize Type II, solid film lube per TI-O-LUBE TAL-58, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL110VTT(-)(-) = Translube.
- 31 HL110VUE(-)(-) = Anodize per Hi-Shear Spec 306, Type II, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 31 HL110VUU(-)(-) = Anodize per Hi-Shear Spec 306, Type II, and solid film lube per "Lubeco" 2123, Type II.
- HL110VV(-)(-) = Solid film lube per "Lubeco" 2123, Type II.
- 31 7 HL110VY(-)(-) = Anodize per Hi-Shear Spec 306, Type I, color blue, and solid film lubricant per M88. (British Aircraft Corporation Spec. MP-1071).
- HL110VNKJ(-)(-) = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL110VNKK(-)(-) = Sulfuric acid anodizing per ISO8080 and HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL110VNKL(-)(-) = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL110VHK(-)(-) = HI-KOTE™ 4 NC aluminum coating per Hi-Shear Spec. 397.

SPECIFICATION: HI-LOK™ Product Specification 342.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HL110 oversize pin replaces.
 Second dash number indicates maximum grip in 1/16ths.
 See Finish note for explanation of code letters.

**HOW TO ORDER
 EXAMPLE:**

Pin Part Number
 HL110VAP8-8

8/16 or 1/2 Maximum Grip Length
 Replaces 8/32 or 1/4 Nominal Diameter Pin
 Finish Code
 Pin Basic Part Number

DRAWING NUMBER

HL110

2 OF 2