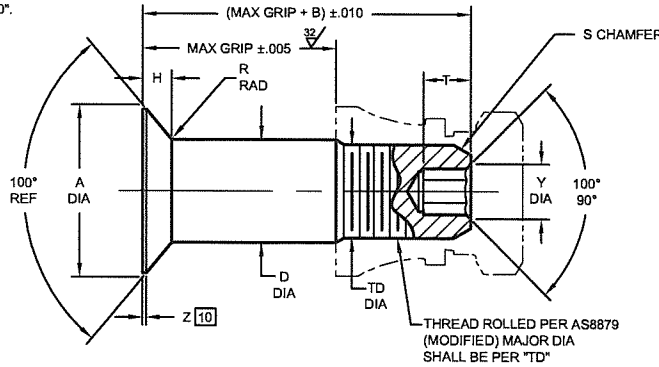
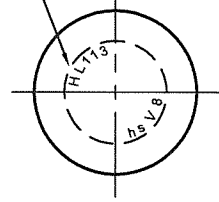
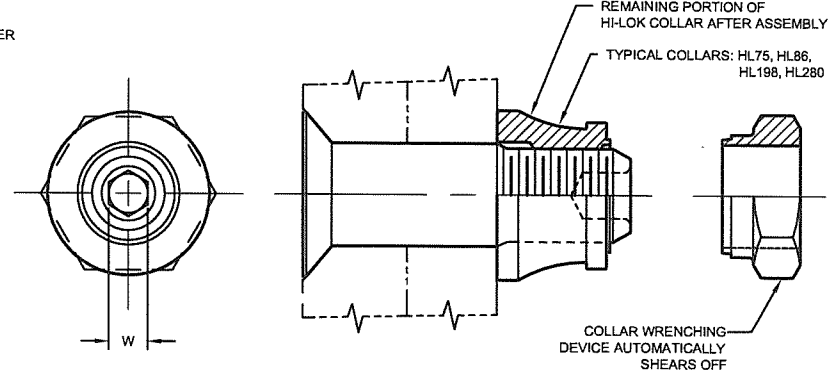


INDENTED HEAD MARKING MAXIMUM DEPTH .010".
 "hs" INDICATES HI-SHEAR TRADEMARK.
 THE NUMBER(S) FOLLOWING THE TRADEMARK
 INDICATES FIRST DASH NUMBER.
 ARRANGEMENT OPTIONAL.



HI-LOK® PIN



HI-LOK® PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	PIN NOM DIA	A DIA	B REF	D DIA		TD DIA	F REF	H	R RAD	Z MAX	S CHAMFER REF	THREAD	SOCKET			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM		
				WITHOUT COATING OR SOLID FILM	WITH COATING OR SOLID FILM								W HEX	T DEPTH	Y DIA				
5				NOTE: USE HL13V()6(-)															
6	13/64	.3813 .3765	.325	.2026 .2021	.2026 .2016	.1840 .1810	.005	.0750 .0730	.030 .020	.015	1/32" x 37"	10-32UNJF-3A Modified	.0806 .0791	.135 .115	.119 .104	6,130	3,180		
8	17/64	.5066 .5018	.395	.2651 .2646	.2651 .2641	.2440 .2410	.006	.1013 .0993	.030 .020	.015	1/32" x 37"	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	10,490	5,820		
10	21/64	.6335 .6287	.500	.3276 .3271	.3276 .3266	.3060 .3020	.007	.1283 .1263	.040 .030	.015	3/64" x 37"	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	16,000	9,200		
12	25/64	.7604 .7556	.545	.3901 .3896	.3901 .3891	.3680 .3640	.008	.1553 .1533	.040 .030	.015	3/64" x 37"	3/8-24UNJF-3A Modified	.1617 .1582	.200 .180	.217 .197	22,700	14,000		
14	29/64	.8884 .8812	.635	.4526 .4521	.4526 .4516	.4310 .4260	.009	.1828 .1798	.050 .040	.022	3/64" x 37"	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	30,600	18,900		
16	33/64	1.0139 1.0068	.685	.5151 .5146	.5151 .5141	.4930 .4880	.010	.2093 .2063	.050 .040	.022	3/64" x 37"	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	39,600	25,600		
18	37/64	1.1408 1.1337	.770	.5771 .5766	.5771 .5761	.5550 .5500	.010	.2365 .2335	.050 .040	.025	1/16" x 37"	9/16-18UNJF-3A Modified	.2555 .2520	.290 .270	.326 .306	49,700	32,400		
20	41/64	1.2723 1.2651	.825	.6396 .6391	.6396 .6386	.6180 .6120	.010	.2654 .2624	.050 .040	.025	1/16" x 37"	5/8-18UNJF-3A Modified	.2555 .2520	.330 .305	.326 .306	61,000	41,000		
24	49/64	1.5308 1.5236	1.050	.7646 .7641	.7646 .7636	.7430 .7370	.012	.3214 .3184	.050 .040	.025	1/16" x 37"	3/4-16UNJF-3A Modified	.3185 .3150	.330 .300	.398 .378	87,200	59,500		

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

"Hi-Lok" and "HL" are internationally registered trademark of Hi-Shear Corporation.		
DRAWN	DATE	TITLE HI-LOK® PIN 100° FLUSH MS24694 TENSION HEAD TITANIUM 1/16" GRIP VARIATION, 1/64" OVRESIZE
D.P.S.	11-4-63	
APPROVED	DATE	DRAWING NUMBER HL113
M.C.	11-5-63	
REVISION	DATE	SHEET 1 OF 2
(21)	8-21-12	

21 GENERAL NOTES:

- 1 Head edge out of roundness shall not exceed "F".
2. Concentricity: Conical surface of head to "D" diameter within .005 FIM.
3. "H" is dimensioned from maximum "D" diameter.
4. Dimensions to be met after finish.
5. Surface texture per ANSI B46.1.
6. Hole preparation per NAS618.
7. Use HL413 for oversize replacement.
- 8 Maximum "D" diameter may be increased by .0002 to allow for solid film or aluminum coating application.
- 9 Non-lubed pins must be used with lubed collars or with wet sealant.
- 10 Curved or flat edge manufacturer's option.
- 11 Broach petals removed.

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

HEAT TREAT: 160,000 psi tensile minimum. (95,000 psi shear minimum).

21 FINISH:

- HL113V(-) = Cetyl alcohol lube per Hi-Shear Spec. 305.
- HL113VAP(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL113VAT(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294.
- HL113VAZ(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL113VB(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 9 HL113VBV(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, with color code blue on thread end.
- 11 HL113VDK(-) = Solid film lube per Kalgard FA.
- HL113VF(-) = Surface coating per Hi-Shear Spec. 306, Type I, color blue, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL113VLJ(-) = Surface coating per Hi-Shear Spec. 306, Type II, and solid film lube per AS5272.
- HL113VLV(-) = Phosphate fluoride treat and Esna-Lube No. 382 (Everlube Corp).
- HL113VR(-) = Surface coating per Hi-Shear Spec. 306, Type II, and solid film lube per "Electrofilm" 4396.
- HL113VRA(-) = Phosphate fluoride treat with color code red on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL113VSY(-) = Phosphate fluoride treat, solid film lube per AS5272, Type I, and color red on thread end.
- HL113VT(-) = Surface coating per Hi-Shear Spec. 306, Type I, color pink, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL113VTA(-) = 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.
- HL113VTB(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL113VTF(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292.
- 9 HL113VU(-) = Bare, no lubricant.
- HL113VUE(-) = Surface coating per Hi-Shear Spec. 306, Type II, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL113VV(-) = Solid film lube per "Lubeco" 2123, Type II.
- 9 HL113VVS(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292 on threads only.

SPECIFICATION: Hi-Lok Product Specification 342.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HL113 oversize pin replaces.
Second dash number indicates maximum grip in 1/16ths.
See Finish note for explanation of code letters.

HOW TO ORDER EXAMPLES:

Pin Part Number Only
HL113VTB8-8

