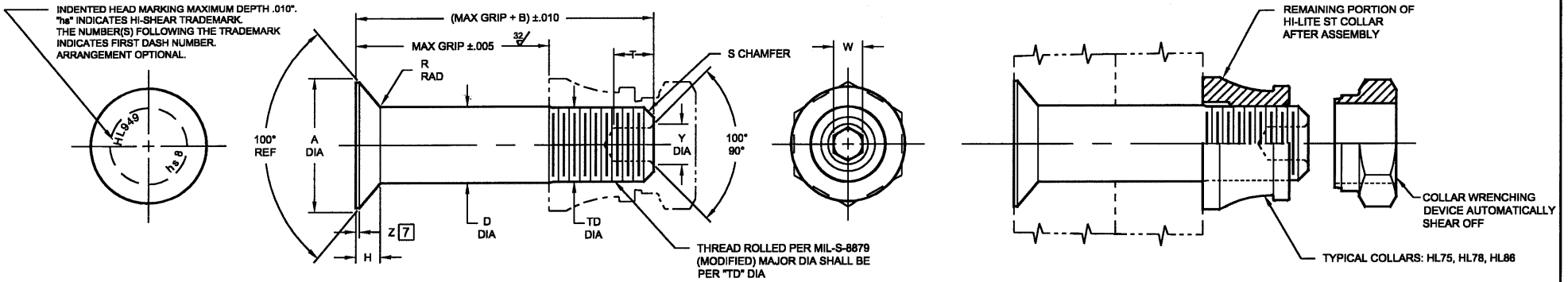


# STANDARDS COMMITTEE FOR HI-LOK® PRODUCTS

2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509 U.S.A.

HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE No. 73197	HI-SHEAR FASTENERS EUROPE, LTD., U.K. (Licensee) CAGE No. 0LB88
a GFI AEROSPACE Company	a GFI AEROSPACE Company
AR INDUSTRIES CO., INC., U.S.A. (Licensee - U.S.A. & Canada) CAGE No. 06725	HUCK S.A. France (Licensee - ECC Countries)
HUCK INTERNATIONAL, INC., U.S.A. (Licensee) CAGE No. 97928	BLANC AERO S.A. France (Licensee - ECC Countries)
SPS TECHNOLOGIES, U.S.A. (Licensee) CAGE No. 56878	a GFI AEROSPACE Company
FAIRCHILD Aerospace Fastener Division (Licensee) CAGE No. 92215	TOKYO SCREW COMPANY, Japan (Licensee - Japan)
WEST COAST AEROSPACE INC., U.S.A. (Licensee) CAGE No. 60518	
(Pine & Steel Collars)	



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	H	R RAD	Z MAX	S CHAMFER REF	THREAD	SOCKET			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT COATING OR PLATING	WITH COATING OR PLATING								W HEX	T DEPTH	Y DIA		
5	5/32																
NOTE: USE HL731-6(-).																	
6	7/32	.3813 .3765	.325	.2182 .2177	.2182 .2172	.1840 .1810	.005	.0684 .0664	.030 .020	.015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.135 .115	.119 .104	9,400	4,350
8	9/32	.5066 .5018	.395	.2807 .2802	.2807 .2797	.2440 .2410	.006	.0948 .0928	.030 .020	.015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	15,500	7,750
10	11/32	.6335 .6287	.500	.3432 .3427	.3432 .3422	.3060 .3020	.007	.1218 .1198	.040 .030	.015	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	23,200	12,300
12	13/32	.7604 .7556	.545	.4057 .4052	.4057 .4047	.3680 .3640	.008	.1488 .1468	.030 .030	.015	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.200 .180	.217 .197	32,400	19,100
14	15/32	.8884 .8812	.635	.4682 .4677	.4682 .4672	.4310 .4260	.009	.1763 .1733	.050 .040	.022	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	43,100	25,800
16	17/32	1.0139 1.0068	.685	.5307 .5302	.5307 .5297	.4930 .4880	.010	.2027 .1997	.050 .040	.022	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	55,400	34,300

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

- GENERAL NOTES:**
- Head edge out of roundness shall not exceed "F".
  - Concentricity: Conical surface of head to "D" diameter within .005 FIM.
  - "H" is dimensioned from maximum "D" diameter.
  - Dimensions to be met after finish.
  - Surface texture per ANSI B46.1.
  - Hole preparation per NAS618.
  - Curved or flat edge manufacturer's option.
  - Oversize replacement for HL731 and HL939 pins.
  - Non-lubed pin must be used with wet sealant or with lubed collars.

**CODE:** First dash number indicates nominal diameter in 1/32nds of the pin which HL949 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 Only  
HL949-8-8  
8/16 or 1/2 Maximum Grip Length  
Replaces 8/32 or 1/4 Nominal Diameter Pin  
Pin Part Number

Pin and Collar Assembly Part Number Combination  
HL94986-8-8  
Size and Grip Length, See Above Example  
Collar Part Number  
Pin Part Number

**MATERIAL:** Nickel base alloy per AMS5662.

**HEAT TREAT:** 125,000 psi shear minimum (210,000 psi tensile minimum).

- FINISH:**
- HL949-(-)(-) = Passivate per Hi-Shear Spec. 258 and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HL949AP(-)(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294 and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HL949JT(-)(-) = Passivate per Hi-Shear Spec. 258, with light blue identification on top of head, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HL949PB(-)(-) = Cadmium plate per QQ-P-416, Type II, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HL949PY(-)(-) = Passivate per Hi-Shear Spec. 258.

**SPECIFICATION:** Hi-Lok Product Specification 342.

"Hi-Lok" and "HL" are internationally registered trademark of Hi-Shear Corporation.		
DRAWN JFObispo	DATE 6-5-00	TITLE <b>HI-LOK® PIN</b>
APPROVED <i>D. K. ...</i>	DATE 6/5/00	100° FLUSH MS24694 TENSION HEAD NICKEL BASE ALLOY (INCONEL 718) 1/16" GRIP VARIATION, 1/32" OVERSIZE
REVISION -	DATE -	DRAWING NUMBER <b>HL949</b>

HL949