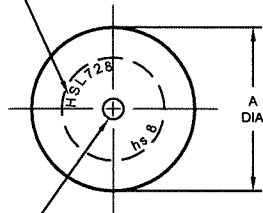
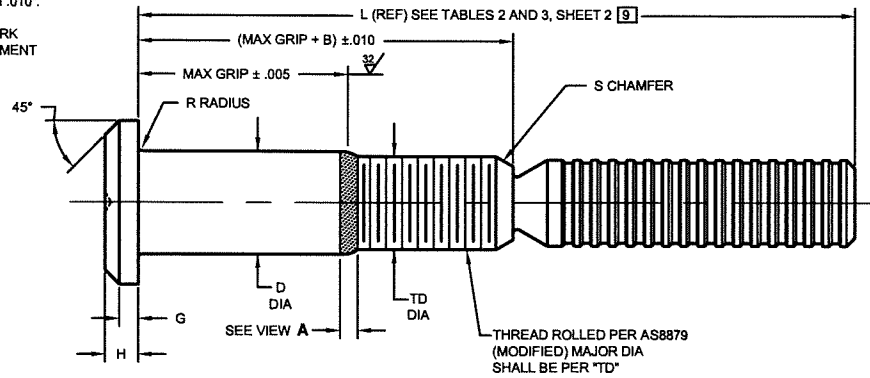


HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE No. 73197	BLANC AERO INDUSTRIES UK LIMITED (Licensee) CAGE No. OLB68
air INDUSTRIES CO., INC., U.S.A. (Licensee - U.S.A & Canada) CAGE No. 06725	BLANC AERO S.A. France (Licensee - ECC Countries)
SPS TECHNOLOGIES, U.S.A. (Licensee) CAGE No. 56878	air INDUSTRIES S.A. France (Licensee - Japan)
FAIRCHILD - SIMMONDS S.A. France (Licensee) CAGE No. 92215	

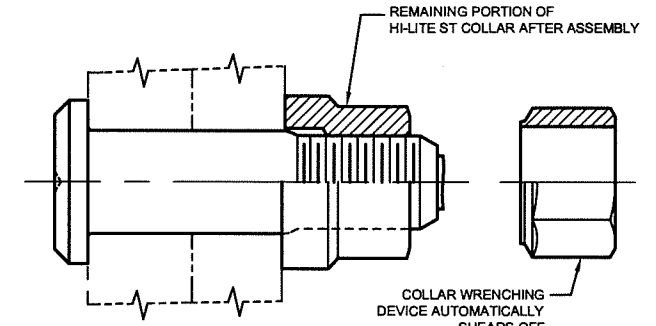
INDENTED HEAD MARKING MAXIMUM DEPTH .010".  
 "hs" INDICATES HI-SHEAR TRADEMARK.  
 THE NUMBER(S) FOLLOWING THE TRADEMARK  
 INDICATES FIRST DASH NUMBER. ARRANGEMENT  
 OPTIONAL.



INDENTATION .050-.060 DIAMETER  
 BY .020-.030 DEPTH.



HI-LITE® ST™ PIN



HI-LITE® ST™ PIN AND COLLAR AFTER ASSEMBLY

TABLE 1

FIRST DASH NO.	PIN NOM DIA	A	B	D DIA BEFORE FINISH	D1 DIA MAX	TD DIA	G REF	H	K MAX	R RAD	S CHAMFER REF	THREAD	DOUBLE SHEAR POUNDS	TENSION POUNDS MINIMUM
5	5/32													
NOTE: USE HSL628-6-( )														
6	7/32	.390 .370	.325	.2182 .2177	.212	.1840 .1810	.035	.074 .064	.016	.025 .015	1/32" x 37"	10-32UNJF-3A Modified	8,200 7,100	3,180
8	9/32	.460 .435	.395	.2807 .2802	.275	.2440 .2410	.045	.090 .080	.021	.025 .015	1/32" x 37"	1/4-28UNJF-3A Modified	13,500 11,800	5,820
10	11/32	.520 .490	.500	.3432 .3427	.337	.3060 .3020	.055	.112 .102	.026	.030 .020	3/64" x 37"	5/16-24UNJF-3A Modified	20,200 17,600	9,200
12	13/32	.620 .550	.545	.4057 .4052	.400	.3680 .3640	.075	.140 .130	.030	.030 .020	3/64" x 37"	3/8-24UNJF-3A Modified	28,200 24,600	14,000
14	15/32	.695 .615	.635	.4682 .4677	.462	.4310 .4260	.095	.160 .150	.035	.030 .020	3/64" x 37"	7/16-20UNJF-3A Modified	37,600 32,700	18,900
16	17/32	.790 .740	.685	.5307 .5302	.525	.4930 .4880	.095	.188 .178	.039	.030 .020	3/64" x 37"	1/2-20UNJF-3A Modified	48,250 42,000	25,500

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

**GENERAL NOTES:**

- Concentricity: "A" to "D" diameter within .010 FIM.
- Dimensions to be met after finish, except as noted.
- Surface texture per ANSI B46.1.
- Hole preparation per NAS618.
- Lead radius must be tangent to "D" diameter within "K" distance and be continuous within this area.
- "D" diameter may increase by .0005" after application of solid film lube and .001" after application of aluminum coating.
- Oversize replacement for HSL528 and HSL628.
- Shorter or longer grips than those listed may be available as specials.
- Pin tails for "L" coded part shall be painted with white. See Table 3, Sheet 2 for "L" dimensions.

**MATERIAL:**

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

**HEAT TREAT:**

95,000 psi shear minimum.

**FINISH:**

HSL728DL( )-( ) = Kalgard FA or EM620C solid film lube per AS5272, Type I, and cetyl alcohol lube per Hi-Shear Spec. 305. [9]  
 HSL728AP( )-( ) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305. [9]

**SPECIFICATION:**

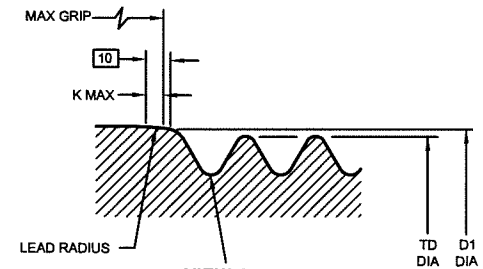
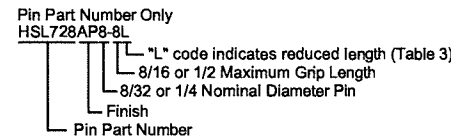
Hi-Lite Product Specification 380-2.

**CODE:**

First dash number indicates nominal diameter in 1/32ndS of the pin which HSL728 oversize pin replaces.  
 Second dash number indicates maximum grip in 1/16ths.  
 See "Finish" note for explanation of code letters.  
 "L" after second dash number indicates "L" reduced length, see Table 3.

**HOW TO ORDER**

**EXAMPLE:**



VIEW A  
 HI-LITE THREAD TRANSITION AREA.  
 THIS AREA OF SPECIAL CONFIGURATION  
 AND COLD WORKING TO MEET PHYSICAL  
 REQUIREMENTS. SEE SPECIFICATION  
 FOR INSPECTION.

U.S. Patents 4,326,825; 4,485,510 and 4,957,401. Other U.S. and international patents pending. "Hi-Lite" and "HST" are registered trademarks and "Hi-Lite ST" is a trademark of Hi-Shear Corporation.		TITLE <b>HI-LITE® ST™ PIN</b> PROTRUDING TENSION HEAD BREAK STEM, SPECIAL THREAD TITANIUM 1/16" GRIP VARIATION, 1/32" OVERSIZE	
DRAWN J.F.Obispo	DATE 11-29-91	APPROVED DAW	DATE 12-9-91
REVISION 4	DATE JFO 9-2-2008	DRAWING NUMBER <b>HSL728</b>	

FOR HSL728( )(-) ONLY  
TABLE 2

SECOND DASH NUMBER	L (REF) 8						
	-5 DIA.	-6 DIA.	-8 DIA.	-10 DIA.	-12 DIA.	-14 DIA.	-16 DIA.
1	-	-	-	-	-	-	-
2	.875	1.000	1.000	-	-	-	-
3	1.000	1.125	1.125	1.250	-	-	-
4	1.125	1.250	1.250	1.375	1.375	-	-
5	1.250	1.375	1.375	1.500	1.500	1.625	-
6	1.375	1.500	1.500	1.625	1.625	1.750	1.750
7	1.500	1.625	1.625	1.750	1.750	1.875	1.875
8	1.625	1.750	1.750	1.875	1.875	2.000	2.000
9	1.750	1.875	1.875	2.000	2.000	2.125	2.125
10	1.875	2.000	2.000	2.125	2.125	2.250	2.250
11	2.000	2.125	2.125	2.250	2.250	2.375	2.375
12	2.125	2.250	2.250	2.375	2.375	2.500	2.500
13	2.250	2.375	2.375	2.500	2.500	2.625	2.625
14	2.375	2.500	2.500	2.625	2.625	2.750	2.750
15	2.500	2.625	2.625	2.750	2.750	2.875	2.875
16	2.625	2.750	2.750	2.875	2.875	3.000	3.000
17	2.750	2.875	2.875	3.000	3.000	3.125	3.125
18	2.875	3.000	3.000	3.125	3.125	3.250	3.250
19	3.000	3.125	3.125	3.250	3.250	3.375	3.375
20	3.125	3.250	3.250	3.375	3.375	3.500	3.500
21	-	3.375	3.375	3.500	3.500	3.625	3.625
22	-	3.500	3.500	3.625	3.625	3.750	3.750
23	-	3.625	3.625	3.750	3.750	3.875	3.875
24	-	3.750	3.750	3.875	3.875	4.000	4.000
25	-	-	-	4.000	4.000	4.125	4.125
26	-	-	-	4.125	4.125	4.250	4.250
27	-	-	-	4.250	4.250	4.375	4.375
28	-	-	-	4.375	4.375	4.500	4.500
29	-	-	-	-	4.500	4.625	4.625
30	-	-	-	-	4.625	4.750	4.750
31	-	-	-	-	4.750	4.875	4.875
32	-	-	-	-	4.875	5.000	5.000
33	-	-	-	-	5.000	5.125	5.125
34	-	-	-	-	5.125	5.250	5.250
35	-	-	-	-	5.250	5.375	5.375
36	-	-	-	-	5.375	5.500	5.500
37	-	-	-	-	5.500	5.625	5.625
38	-	-	-	-	5.625	5.750	5.750
39	-	-	-	-	5.750	5.875	5.875
40	-	-	-	-	5.875	6.000	6.000
41	-	-	-	-	6.000	6.125	6.125
42	-	-	-	-	6.125	6.250	6.250
43	-	-	-	-	6.250	6.375	6.375
44	-	-	-	-	6.375	6.500	6.500

FOR HSL728( )(-) L ONLY  
TABLE 3

SECOND DASH NUMBER	L (REF) 8						
	-5 DIA.	-6 DIA.	-8 DIA.	-10 DIA.	-12 DIA.	-14 DIA.	-16 DIA.
1	-	-	-	-	-	-	-
2	.563	.675	.605	-	-	-	-
3	.688	.800	.730	.750	-	-	-
4	.813	.925	.855	.875	.830	-	-
5	.938	1.050	.980	1.000	.955	.990	-
6	1.063	1.175	1.105	1.125	1.080	1.115	1.065
7	1.188	1.300	1.230	1.250	1.205	1.240	1.190
8	1.313	1.425	1.355	1.375	1.330	1.365	1.315
9	1.438	1.550	1.480	1.500	1.455	1.490	1.440
10	1.563	1.675	1.605	1.625	1.580	1.615	1.565
11	1.688	1.800	1.730	1.750	1.705	1.740	1.690
12	1.813	1.925	1.855	1.875	1.830	1.865	1.815
13	1.938	2.050	1.980	2.000	1.955	1.990	1.940
14	2.063	2.175	2.105	2.125	2.080	2.115	2.065
15	2.188	2.300	2.230	2.250	2.205	2.240	2.190
16	2.313	2.425	2.355	2.375	2.330	2.365	2.315
17	2.438	2.550	2.480	2.500	2.455	2.490	2.440
18	2.563	2.675	2.605	2.625	2.580	2.615	2.565
19	2.688	2.800	2.730	2.750	2.705	2.740	2.690
20	2.813	2.925	2.855	2.875	2.830	2.865	2.815
21	-	3.050	2.980	3.000	2.955	2.990	2.940
22	-	3.175	3.105	3.125	3.080	3.115	3.065
23	-	3.300	3.230	3.250	3.205	3.240	3.190
24	-	3.425	3.355	3.375	3.330	3.365	3.315
25	-	-	-	3.500	3.455	3.490	3.440
26	-	-	-	3.625	3.580	3.615	3.565
27	-	-	-	3.750	3.705	3.740	3.690
28	-	-	-	3.875	3.830	3.865	3.815
29	-	-	-	-	-	3.990	3.940
30	-	-	-	-	-	4.115	4.065
31	-	-	-	-	-	4.240	4.190
32	-	-	-	-	-	4.365	4.315

HSL728