STANDARDS COMMITTEE FOR HI-LOK® PRODUCTS

2600 Skypark Drive, Torrance, California U.S.A. 90509

HI-SHEAR CORPORATION, U.S.A. ---------- (Patent Holder) ---------- CAGE No. 73197 Division of Hi-Shear Industries Inc., U.S.A.	HI-SHEAR FASTENERS EUROPE, LTD., U.K.----------(Licensee)--CAGE No. OLB68 Division of Hi-Shear Industries Inc., U.S.A.
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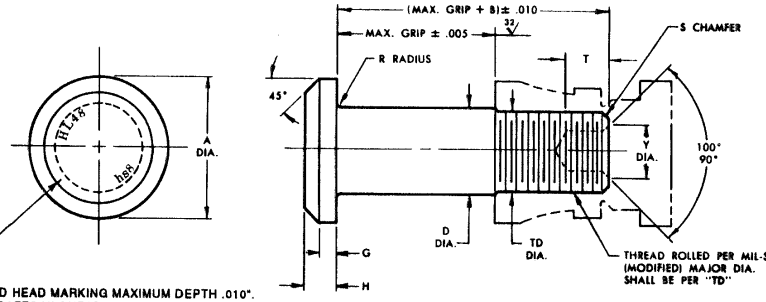

INDENTED HEAD MARKING MAXIMUM DEPTH .010".
"hs" INDICATES HI-SHEAR TRADEMARK.
THE NUMBER(S) FOLLOWING THE TRADEMARK INDICATE FIRST DASH NUMBER.
ARRANGEMENT OPTIONAL.

HI-LOK® PIN

HI-LOK® PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	NOM. DIA.	A DIA.	B REF.	D DIA [6] WITHOUT PLATING/ SOLID FILM LUBE	D DIA [6] AFTER PLATING/ SOLID FILM LUBE	TD DIA.	G REF.	H	R RAD.	S CHAMFER REF.	THREAD	SOCKET W HEX.	SOCKET T DEPTH	SOCKET Y DIA.	DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
5	5/32	.322 .306	.312	.1635 .1630	.1635 .1625	.1595 .1570	.030	.060 .055	.025 .015	1/32" x 45°	8-32UNJC-3A Modified	.0801 .0791	.135 .115	[7]	4,010	2,180
6	3/16	.377 .357	.325	.1895 .1890	.1895 .1885	.1840 .1810	.035	.074 .064	.025 .015	1/32" x45°	10-32UNJF-3A Modified	.0806 .0791	.135 .115	.119 .104	5,380	3,180
8	1/4	.440 .415	.395	.2495 .2490	.2495 .2485	.2440 .2410	.045	.090 .080	.025 .015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	9,300	5,820
10	5/16	.505 .472	.500	.3120 .3115	.3120 .3110	.3060 .3020	.055	.112 .102	.030 .020	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	14,600	9,200
12	3/8	.565 .530	.545	.3745 .3740	.3745 .3735	.3680 .3640	.065	.140 .130	.030 .020	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.200 .180	.217 .197	21,000	14,000
14	7/16	.627 .592	.635	.4370 .4365	.4370 .4360	.4310 .4260	.075	.160 .150	.030 .020	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	28,600	18,900
16	1/2	.752 .717	.685	.4995 .4990	.4995 .4985	.4930 .4880	.085	.188 .178	.030 .020	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	37,300	25,600
18	9/16	.877 .842	.770	.5615 .5610	.5615 .5605	.5550 .5500	.125	.210 .200	.040 .025	1/16" x 45°	9/16-18UNJF-3A Modified	.2555 .2520	.290 .270	.326 .306	47,200	32,400
20	5/8	.953 .918	.825	.6240 .6235	.6240 .6230	.6180 .6120	.140	.238 .228	.040 .025	1/16" x 45°	5/8-18UNJF-3A Modified	.2555 .2520	.330 .305	.326 .306	58,300	41,000
24	3/4	1.150 1.110	1.050	.7490 .7485	.7490 .7480	.7430 .7370	.200	.335 .320	.045 .030	1/16" x45°	3/4-16UNJF-3A Modified	.3185 .3150	.395 .365	.398 .378	83,900	59,500
28	7/8	1.330 1.290	1.210	.8740 .8735	.8740 .8730	.8680 .8610	.250	.385 .370	.050 .035	5/64" x 45°	7/8-14UNJF-3A Modified	.3820 .3780	.400 .370	.471 .451	114,000	81,500
32	1	1.510 1.470	1.390	.9990 .9985	.9990 .9980	.9930 .9860	.300	.435 .420	.060 .045	5/64" x 45°	1-12UNJF-3A Modified	.5100 .5040	.520 .490	.618 .598	149,000	106,000

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

GENERAL NOTES:

1. Concentricity: "A" to "D" diameter within .010 FIR.
2. Dimensions to be met after finish.
3. [3] Non-lubed pins must be used with lubed collars.
4. Surface texture per ANSI B46.1.
5. Hole preparation per NAS618.
6. [6] Maximum "D" diameter may be increased by .0002 to allow for solid film application.
7. [7] Evidence of broken edge across points.
8. Use HL248 for oversize replacement.
29. [9] Broach petals removed.

MATERIAL: A-286 high temperature alloy per AMS5737 or AMS5731.

HEAT TREAT: 160,000 psi tensile minimum (95,000 psi shear minimum) at 70°F.

FINISH:
- HL48-( )-( ) = Passivate per Hi-Shear Spec. 258 and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL48BC-( )-( ) = Passivate per Hi-Shear Spec. 258 with blue paint on top of head only and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL48DL-( )-( ) = Solid film lube per MIL-L-46010, Type I, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL48DS-( )-( ) = Solid film lubricant per "Lubeco" M390.
- HL48DU-( )-( ) = Solid film lube per MIL-L-46010, Type I.
- [3] HL48GU-( )-( ) = Silver plate per AMS2410.
- [9] HL48K-( )-( ) = Solid film lubricant per "Lubeco" 905.
- (29) [9] HL48MA-( )-( ) = Solid film lube per Kalgard RA.
- [3] HL48PY-( )-( ) = Passivate per Hi-Shear Spec. 258.
- HL48TF-( )-( ) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292.
- HL48V-( )-( ) = Solid film lubricant per "Lubeco" 2123, Type II.

SPECIFICATION: Hi-Lok Product Specification 342.

CODE: First dash number indicates nominal diameter in 1/32nds.
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
HL48-8-8
- 8/16 or 1/2 Maximum Grip Length
- 8/32 or 1/4 Nominal Diameter Pin
- Pin Part Number

Pin and Collar Assembly Part Number Combination
HL4886-8-8
- Size and Grip Length, See Above Example
- Collar Part Number
- Pin Part Number

"Hi-Lok" and "HL" are internationally registered trademarks of Hi-Shear Corporation.

DRAWN	DATE	TITLE
Brlej	4-2-63	HI-LOK® PIN PROTRUDING TENSION HEAD A-286 HIGH TEMPERATURE ALLOY 1/16" GRIP VARIATION
APPROVED	DATE	
M.C.	4-2-63	
REVISION	DATE	DRAWING NUMBER
(29)	J.F.Obispo 02-14-96	HL48

HL48

2-2255JFO

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