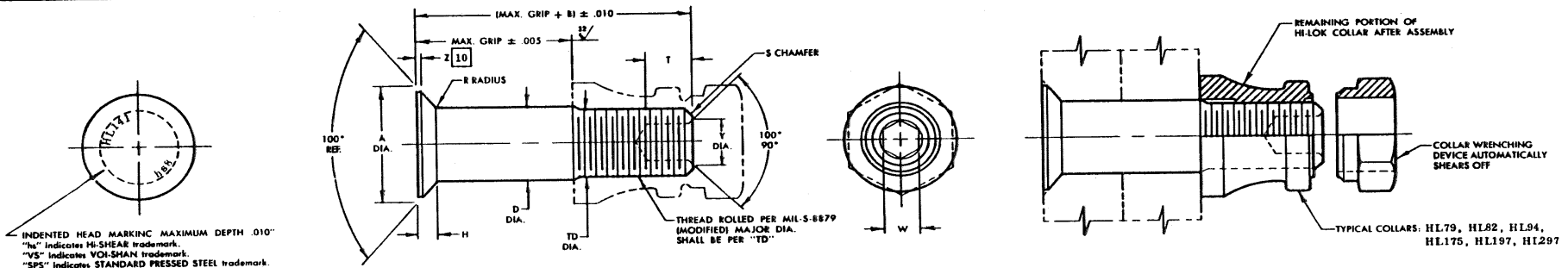


STANDARDS COMMITTEE FOR HI-LOK® PRODUCTS
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

HI-SHEAR CORPORATION, U.S.A. (Patent Holder) U.S. Federal Code No. 75197	HI-SHEAR FASTENERS EUROPE, LTD., U.K. (Licensee) Division of Hi-Shear Industries Inc., U.S.A.
AIR INDUSTRIES CO., INC. (Licensee - U.S. & Canada) U.S. Federal Code No. 94728	KAMAX-WERKE, GERMANY (Licensee - EEC Countries) Division of Hi-Shear Industries Inc., U.S.A.
DEUTSCH FASTERER CO., INC. (Licensee) U.S. Federal Code No. 97928	Rudolph Kollmann GmbH & Co. (Licensee - EEC Countries) Division of Hi-Shear Industries Inc., U.S.A.
SPS TECHNOLOGIES, U.S.A. (Licensee) U.S. Federal Code No. 94778	ST. CHAMOND ARMAT., S.A. France (Licensee - EEC Countries) Division of Hi-Shear Industries Inc., U.S.A.
VOL SHAM, Division of VSI Corp., U.S.A. (Licensee) U.S. Federal Code No. 98218	SIMMONDS, S.A. France (Licensee - EEC Countries) Division of Hi-Shear Industries Inc., U.S.A.
WEST COAST AEROSPACE INC., U.S.A. (Licensee) U.S. Federal Code No. 98616	Flux & Steel Coll. (Licensee - Japan) Division of Hi-Shear Industries Inc., U.S.A.



INDENTED HEAD MARKING MAXIMUM DEPTH .010"
"hs" indicates Hi-SHEAR trademark.
"VS" indicates VOL-SHAM trademark.
"SPS" indicates STANDARD PRESSED STEEL trademark.
The number or numbers following the trademark indicate first dash number. Arrangement optional.

FIRST DASH NO.	NOM. DIA.	A DIA.	B REF.	D DIA. [9]		TD DIA.	F	H	R RAD.	Z MAX.	S CHAMFER REF.	THREAD	SOCKET			** DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT COATING OR SOLID FILM LUBE	WITH COATING OR SOLID FILM LUBE								W HEX.	T DEPTH	Y DIA.		
-3	3/16			NOTE: Use HL41-6													
		.3016 .2966	.325	.2026 .2021	.2026 .2016	.1840 .1810	.005	.0415 .0394	.030 .020	.015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.135 .115	.119 .104	6,130	2,000
-4	13/64	.3948 .3898	.395	.2651 .2646	.2651 .2641	.2440 .2410	.006	.0544 .0523	.030 .020	.015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	10,490	3,700
-8	17/64	.4739 .4689	.500	.3276 .3271	.3276 .3266	.3060 .3020	.007	.0614 .0593	.040 .030	.015	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	16,000	5,000
-10	21/64	.5604 .5554	.545	.3901 .3896	.3901 .3891	.3680 .3640	.008	.0714 .0693	.040 .030	.015	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.200 .180	.217 .197	22,700	7,200
-12	25/64	.6680 .6620	.635	.4526 .4521	.4526 .4516	.4310 .4260	.009	.0904 .0879	.050 .040	.022	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	30,600	10,000
-14	29/64	.7540 .7490	.685	.5151 .5146	.5151 .5141	.4930 .4890	.010	.1002 .0977	.050 .040	.022	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	39,600	13,500
-16	33/64	.8390 .8310	.770	.5771 .5766	.5771 .5761	.5550 .5510	.010	.1094 .1065	.050 .040	.022	1/16" x 45°	9/16-18UNJF-3A Modified	.2555 .2520	.290 .270	.326 .306	49,700	17,000
-18	37/64	.9250 .9190	.825	.6396 .6391	.6396 .6386	.6180 .6120	.010	.1197 .1168	.050 .040	.022	1/16" x 45°	5/8-18UNJF-3A Modified	.2555 .2520	.330 .305	.326 .306	61,000	21,000
-20	41/64	1.0970 1.0850	1.050	.7646 .7641	.7646 .7636	.7430 .7370	.012	.1394 .1344	.050 .040	.022	1/16" x 45°	3/4-16UNJF-3A Modified	.3185 .3150	.395 .365	.398 .378	87,200	30,700

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

- GENERAL NOTES:**
- Head out of roundness shall not exceed "F".
 - Concentricity: Conical surface of head to "D" diameter within .005 FIR.
 - "H" dimensioned from maximum "D" diameter.
 - Dimensions to be met after finish.
 - Non-lubed pins must be used with lubed collars.
 - Surface texture per ANSI B46.1.
 - Hole preparation per NAS818.
 - Use HL241 for oversize replacement.
 - Maximum "D" diameter may be increased by .0002 to allow for solid film or coating application.
 - Curved or flat edge manufacturer's option.

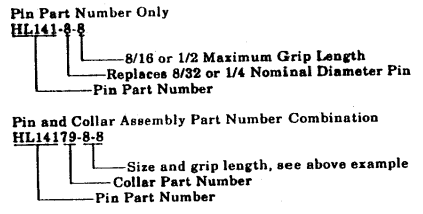
MATERIAL: A-286 high temperature alloy per Spec. AMS5737 or AMS5731.
HEAT TREAT: 95,000 psi shear minimum at 70°F.

- FINISH:**
- HL141(-)(-) = Passivate per Hi-Shear Spec. 258, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL140AZ(-)(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, with color code black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL141D(-)(-) = Solid film lube per MIL-L-46010, Type I.
 - HL141PY(-)(-) = Passivate per Hi-Shear Spec. 258.
 - HL141V(-)(-) = Solid film lube per "Lubeco" 2123, Type II.

SPECIFICATION: Hi-Lok Product Specification 342.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HL141 oversize pin replaces. Second dash number indicates maximum grip in 1/16ths. See finish note for explanation of code letters.

HOW TO ORDER EXAMPLES:



** The Double Shear values shown are based on cross sectional area for nominal diameter pin.

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

DRAWN BRLEY 3-8-85	DATE	hi-lok PIN 100° FLUSH SHEAR HEAD A-286 HIGH TEMPERATURE ALLOY 1/16" GRIP VARIATION - 1/64" OVERSIZING
APPROVED MILLER 3-8-85	DATE	
REVISION (12)	DATE D.P.S. 8-6-92	DRAWING NUMBER HL141

HL141