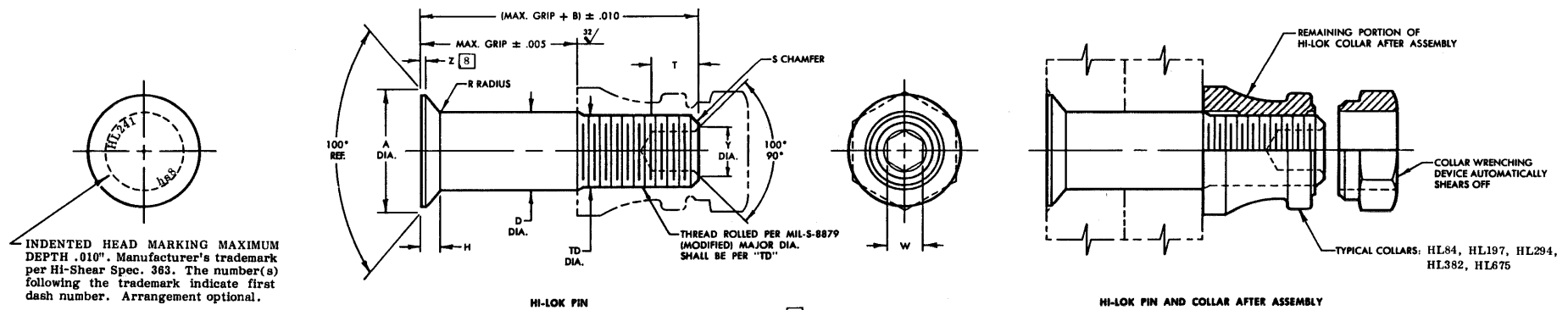


**STANDARDS COMMITTEE  
FOR HI-LOK® PRODUCTS**  
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

HI SHEAR CORPORATION, U.S.A. (Patent Holder)	U.S. Federal Code I.D. No. 73197	HI SHEAR FASTENERS EUROPE, LTD., U.K. (Licensee)	
Division of Hi Shear Industries Inc., U.S.A.		Division of Hi Shear Industries Inc., U.S.A.	
AIR INDUSTRIES CO., INC. (Licensee)	U.S. Federal Code I.D. No. 46725	KAMAX WERKE, Germany (Licensee-EEC Countries)	
DEUTSCH FASTENER CO., INC. (Licensee)	U.S. Federal Code I.D. No. 91939	Rudolph Kellerman GmbH & Co.	
SPS TECHNOLOGIES, U.S.A. (Licensee)	U.S. Federal Code I.D. No. 56878	ST. CHAMOND GRANAT, S.A. France (Licensee-EEC Countries)	
VOI SHAN, Division of VSI Corp., U.S.A. (Licensee)	U.S. Federal Code I.D. No. 92215	SIMMONDS, S.A. France (Licensee-EEC Countries-Collars)	
WEST COAST AEROSPACE INC., U.S.A. (Licensee)	U.S. Federal Code I.D. No. 60516	TOKYO SCREW COMPANY, Japan (Licensee-Japan)	



FIRST DASH NO.	NOM. DIA.	A DIA.	B REF.	D DIA. [7]		TD DIA.	F	H	R RAD.	Z MAX.	S CHAMFER REF.	THREAD	SOCKET			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT COATING, PLATING OR SOLID FILM LUBE	WITH COATING, PLATING OR SOLID FILM LUBE								W HEX.	T DEPTH	Y DIA.		
- 5				NOTE: Use HL141-6													
- 6	7/32	.3303 .3253	.325	.2182 .2177	.2182 .2172	.1840 .1810	.005	.0470 .0449	.030 .020	.015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.135 .115	.119 .104	7,100	2,000
- 8	9/32	.4260 .4210	395	.2807 .2802	.2807 .2797	.2440 .2410	.006	.0610 .0589	.030 .020	.015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	11,800	3,700
- 10	11/32	.5051 .5001	.500	.3432 .3427	.3432 .3422	.3060 .3020	.007	.0679 .0658	.040 .030	.015	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	17,600	5,000
- 12	13/32	.5916 .5866	.545	.4057 .4052	.4057 .4047	.3680 .3640	.008	.0780 .0759	.040 .030	.015	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.200 .180	.217 .197	24,600	7,200
- 14	15/32	.6992 .6932	.635	.4682 .4677	.4682 .4672	.4310 .4260	.009	.0969 .0944	.050 .040	.022	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	32,700	10,000
- 16	17/32	.7852 .7792	.685	.5307 .5302	.5307 .5297	.4930 .4880	.010	.1068 .1043	.050 .040	.022	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	42,000	13,500
- 18	19/32	.8692 .8622	.770	.5927 .5922	.5927 .5917	.5550 .5500	.010	.1160 .1131	.050 .040	.022	1/16" x 45°	9/16-18UNJF-3A Modified	.2555 .2520	.290 .270	.326 .306	52,400	17,000
- 20	21/32	.9562 .9492	.825	.6552 .6547	.6552 .6542	.6180 .6120	.010	.1263 .1233	.050 .040	.022	1/16" x 45°	5/8-18UNJF-3A Modified	.2555 .2520	.330 .305	.326 .306	64,100	21,000
- 24	25/32	1.1282 1.1162	1.050	.7802 .7797	.7802 .7792	.7430 .7370	.012	.1460 .1410	.050 .040	.022	1/16" x 45°	3/4-16UNJF-3A Modified	.3185 .3150	.395 .365	.398 .378	90,900	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, where applicable.
- Surface texture per ANSI B46.1.
- Hole preparation per NAS618.
- Maximum "D" diameter may be increased by .0002 to allow for coated, plated or solid film application.
- Curved or flat edge manufacturer's option.

**MATERIAL:** A-286 high temperature alloy per Spec. AMS5737 or AMS6731.

**HEAT TREAT:** 95,000 psi shear minimum at 70°F.

- © **FINISH:**
- HL241-( )-( ) = Passivate per Hi-Shear Spec. 258, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HL241AZ-( )-( ) = 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.
  - HL241DU-( )-( ) = Solid film lube per MIL-L-46010, Type I.
  - HL241N-( )-( ) = Cadmium plate per QQ-P-416, Type II, Class 2, without lube (for use in LOX systems).
  - HL241PB-( )-( ) = Cadmium plate per QQ-P-416, Type II, Class 2, with color code green on thread end, plus cetyl alcohol lube per Hi-Shear Spec. 305.
  - HL241PY-( )-( ) = Passivate per Hi-Shear Spec. 258.
  - HL241V-( )-( ) = 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 HL241 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**  
HL241PB-8-8  
 ↳ 8/16 or 1/2 Maximum Grip Length  
 ↳ Replaces 8/32 or 1/4 Nominal Diameter Pin  
 ↳ Type II Cadmium Plate  
 ↳ Pin Part Number
- Pin and Collar Assembly Part Number Combination**  
HL241PB84-8-8  
 ↳ Size and grip length, see above example  
 ↳ Collar Part Number  
 ↳ Pin Finish  
 ↳ Pin Part Number

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

DRAWN <i>Miller</i>	DATE 3-31-71	<p>100° FLUSH SHEAR HEAD A-286 HIGH TEMPERATURE ALLOY 1/16" GRIP VARIATION - 1/32" OVERSIZE</p>
APPROVED <i>Miller</i>	DATE 3-31-71	
REVISION (15)	DATE D.P.S. 8-6-92	DRAWING NUMBER <b>HL241</b>