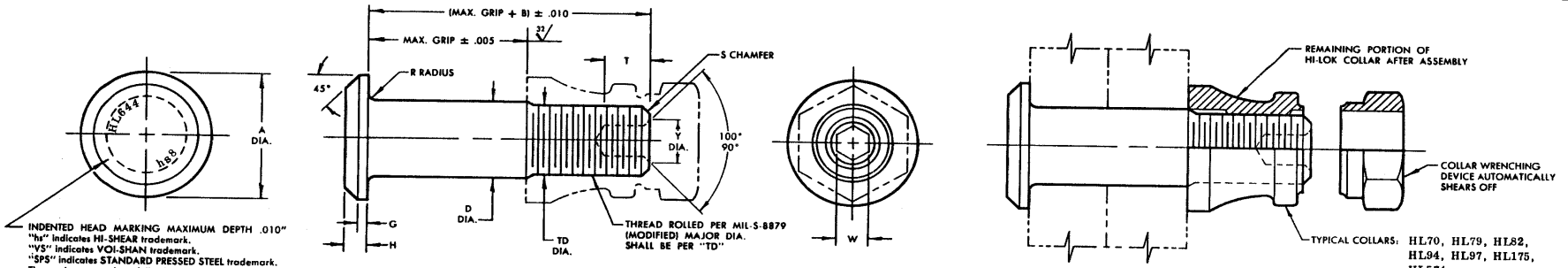


**STANDARDS COMMITTEE  
FOR HI-LOK® PRODUCTS**  
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

HI-SHEAR CORPORATION, U.S.A. (Patent Holder) U.S. Federal Code I.D. No. 73187	HI-SHEAR FASTENERS EUROPE LTD., U.K. (Licensee) Division of Hi-Shear Industries Inc., U.S.A.	KAMAZ-WERKE, Germany (Licensee—EEC Countries) Rudolphi Kolbenring GmbH & Co.
AND INDUSTRIES CO., INC. (Licensee) U.S. Federal Code I.D. No. 80725	DEUTSCH FASTENER CO., INC. (Licensee) U.S. Federal Code I.D. No. 87325	ST. CHAMOND ERAMET, S.A. France (Licensee—EEC Countries—Colony)
SPR TECHNOLOGIES, U.S.A. (Licensee) U.S. Federal Code I.D. No. 56878	YSC-SHAKI, Division of YSC Corp., U.S.A. (Licensee) U.S. Federal Code I.D. No. 92215	SIMMONDS, S.A. France (Licensee—EEC Countries—Colony)
WEST COAST AEROSPACE INC., U.S.A. (Licensee) U.S. Federal Code I.D. No. 05516	Pin & Steel Collars	TOKYO SCREW COMPANY, Japan (Licensee—Japan)



INDENTED HEAD MARKING MAXIMUM DEPTH .010"  
"H" indicates HI-SHEAR trademark.  
"YS" indicates YOUNG SHANN 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. [5]		TD DIA.	G REF.	H	R RAD.	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 HEK.	T DEPTH	Y DIA.		
-5	5/32	.262 .242	.312	.1635 .1630	.1635 .1625	.1595 .1570	.020	.047 .037	.025 .015	1/32" x 45°	8-32UNJ-C-3A Modified	.0645 .0635	.135 .115	.090 .075	5,280	2,200
-6	3/16	.315 .295	.325	.1895 .1890	.1895 .1885	.1840 .1810	.025	.055 .045	.025 .015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.135 .115	.119 .104	7,060	3,000
-8	1/4	.412 .397	.395	.2495 .2490	.2495 .2485	.2440 .2410	.030	.069 .059	.025 .015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	12,260	5,100
-10	5/16	.505 .475	.500	.3120 .3115	.3120 .3110	.3060 .3020	.035	.078 .068	.030 .020	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	19,160	8,000
-12	3/8	.600 .565	.545	.3745 .3740	.3745 .3735	.3680 .3640	.040	.088 .078	.030 .020	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.200 .180	.217 .197	27,600	11,300
-14	7/16	.676 .641	.635	.4370 .4365	.4370 .4360	.4310 .4260	.045	.105 .093	.030 .020	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	37,500	15,500
-16	1/2	.770 .735	.695	.4995 .4990	.4995 .4985	.4930 .4880	.050	.115 .103	.030 .020	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	49,100	20,000
-18	9/16	.864 .829	.770	.5615 .5610	.5615 .5605	.5550 .5500	.055	.127 .112	.040 .025	1/16" x 45°	9/16-18UNJF-3A Modified	.2555 .2520	.260 .240	.326 .306	62,100	25,000
-20	5/8	.953 .918	.825	.6240 .6235	.6240 .6230	.6180 .6120	.060	.137 .122	.040 .025	1/16" x 45°	5/8-18UNJF-3A Modified	.2555 .2520	.260 .240	.326 .306	76,700	30,200
-24	3/4	1.108 1.066	1.050	.7490 .7485	.7490 .7480	.7430 .7370	.070	.151 .136	.045 .030	1/16" x 45°	3/4-16UNJF-3A Modified	.3185 .3150	.330 .300	.398 .378	110,400	40,200
-28	7/8	1.285 1.241	1.210	.8740 .8735	.8740 .8730	.8680 .8610	.090	.187 .172	.050 .035	5/64" x 45°	7/8-14UNJF-3A Modified	.3820 .3780	.400 .370	.471 .451	150,300	59,100
-32	1	1.468 1.424	1.390	.9990 .9985	.9990 .9980	.9930 .9860	.110	.218 .203	.060 .045	5/64" x 45°	1-12UNJF-3A Modified	.6100 .6040	.520 .490	.618 .598	196,300	80,000

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. Surface texture per ANSI B46.1.
  4. Hole preparation per NAS618.
  5. Maximum "D" diameter may be increased by .0002 to allow for solid film or coating application.
  6. Use HL744 for oversize replacement.

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  
HL644-8-8  
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  
HL64479-8-8  
8- Size and Grip Length, See Above Example  
79- Collar Part Number  
8- Pin Part Number

MATERIAL: PH13-8Mo stainless steel per Spec. AMS5629.  
HEAT TREAT: 125,000 psi shear minimum.  
FINISH: HL644-( )-( ) = Solid film lube per Spec. MIL-L-46010 Type I.  
HL644AP-( )-( ) = HI-Kote 1 aluminum coating per HI-Shear Spec. 294 and cetyl alcohol lube per HI-Shear Spec. 305.  
HL644LL-( )-( ) = Passivate per HI-Shear Spec. 258 and cetyl alcohol lube per HI-Shear Spec. 305.  
HL644TB-( )-( ) = HI-Kote 2 solid film lube per HI-Shear Spec. 292 and cetyl alcohol lube per HI-Shear Spec. 305.  
HL644YE-( )-( ) = Passivate per HI-Shear Spec. 258, white paint on head, and cetyl alcohol lube per HI-Shear Spec. 305.

SPECIFICATION: HI-Lok Product Specification 342.

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

DRAWN	DATE	
J.M.	12-20-69	
APPROVED	DATE	PROTRUDING SHEAR HEAD PH13-8Mo STAINLESS STEEL 1/16" GRIP VARIATION
J.M.	12-23-69	
REVISION	DATE	DRAWING NUMBER
10	D.P.S. 4-16-91	HL644

HL644