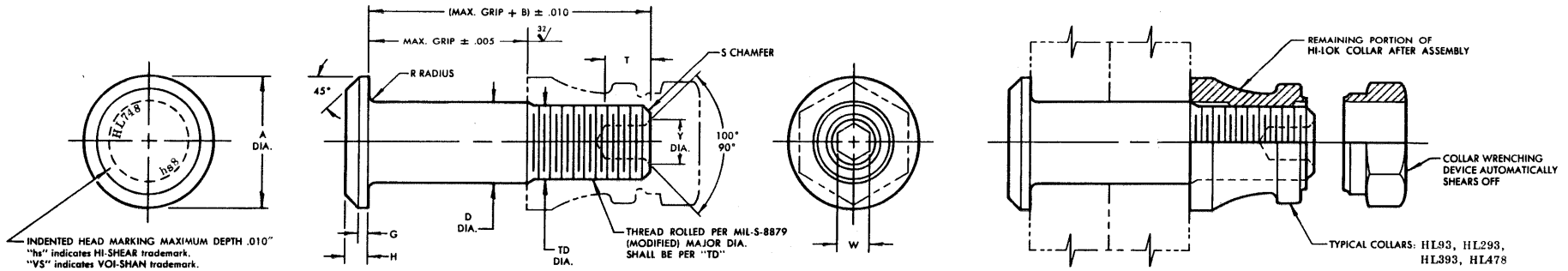


**STANDARDS COMMITTEE
FOR HI-LOK® PRODUCTS**
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

HI-SHEAR CORPORATION, U.S.A. (Patent Holder) U.S. Federal Code No. 73197
 Division of Hi-Shear Industries Inc., U.S.A.
 AIR INDUSTRIES CO., INC. (Licensee) U.S. Federal Code No. 04725
 DEUTSCH FASTENER CO., INC. (Licensee) U.S. Federal Code No. 97829
 SPS TECHNOLOGIES, U.S.A. (Licensee) U.S. Federal Code No. 58879
 VOI-SHAN, Division of VSI Corp., U.S.A. (Licensee) U.S. Federal Code No. 92215
 WEST COAST AEROSPACE INC., U.S.A. (Licensee) U.S. Federal Code No. 60516
 Pins & Steel Collars

HI-SHEAR FASTENERS EUROPE, LTD., U.K. (Licensee)
 Division of Hi-Shear Industries Inc., U.S.A.
 KAMAX-WERKE, Germany (Licensee - EEC Countries)
 Rudolph Keilmann GmbH & Co.
 ST. CHAMOND GRANAT, S.A. France (Licensee - EEC Countries)
 SIMMONDS, S.A. France (Licensee - EEC Countries)
 Collars
 TOKYO SCREW COMPANY, Japan (Licensee - Japan)



HI-LOK PIN

HI-LOK PIN AND COLLAR AFTER ASSEMBLY

INDENTED HEAD MARKING MAXIMUM DEPTH .010"
 "HL" indicates HI-SHEAR trademark.
 "VS" indicates VOI-SHAN trademark.
 "SPS" indicates STANDARD PRESSED STEEL trademark.
 The number or numbers following the trademark indicate first dash number.

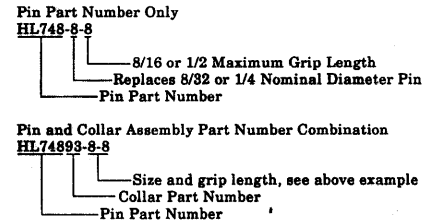
FIRST DASH NO.	NOM. DIA.	A DIA.	B REF.	D DIA. [6]			TD DIA.	G REF.	H	R RAD.	S CHAMFER REF.	THREAD	SOCKET			** DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT COATING OR SOLID FILM LUBE	WITH COATING OR SOLID FILM LUBE								W HEX.	T DEPTH	Y DIA.		
-5	13/64			NOTE: Use HL248-6													
-6	7/32	.390 .370	.325	.2182 .2177	.2182 .2172	.1940 .1810	.035	.074 .064	.025 .015		1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.135 .115	.119 .104	7,100	3,180
-8	9/32	.460 .435	.395	.2807 .2802	.2807 .2797	.2440 .2410	.045	.090 .080	.025 .015		1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	11,800	5,820
-10	11/32	.520 .490	.500	.3432 .3427	.3432 .3422	.3060 .3020	.055	.112 .102	.030 .020		3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	17,600	9,200
-12	13/32	.585 .550	.545	.4057 .4052	.4057 .4047	.3690 .3640	.065	.140 .130	.030 .020		3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.200 .180	.217 .197	24,600	14,000
-14	15/32	.650 .615	.635	.4682 .4677	.4682 .4672	.4310 .4260	.075	.160 .150	.030 .020		3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	32,700	18,900
-16	17/32	.775 .740	.685	.5307 .5302	.5307 .5297	.4930 .4880	.085	.188 .178	.030 .020		3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	42,000	25,600
-18	19/32	.905 .870	.770	.5927 .5922	.5927 .5917	.5550 .5500	.125	.210 .200	.040 .025		1/16" x 45°	9/16-18UNJF-3A Modified	.2555 .2520	.290 .270	.326 .306	52,400	32,400
-20	21/32	.975 .940	.825	.6552 .6547	.6552 .6542	.6180 .6120	.140	.238 .229	.040 .025		1/16" x 45°	5/8-18UNJF-3A Modified	.2555 .2520	.330 .305	.326 .306	64,100	41,000
-24	25/32	1.185 1.145	1.050	.7802 .7797	.7802 .7792	.7430 .7370	.200	.335 .320	.045 .030		1/16" x 45°	3/4-16UNJF-3A Modified	.3185 .3150	.395 .365	.398 .378	90,900	59,500
-28	29/32	1.375 1.335	1.210	.9052 .9047	.9052 .9042	.8680 .8610	.250	.385 .370	.050 .035		5/64" x 45°	7/8-14UNJF-3A Modified	.3820 .3780	.400 .370	.471 .451	122,000	81,500

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. Non-lubed pins must be used with lubed collars.
 4. Surface texture per ANSI B46.1.
 5. Hole preparation per NAS618.
 6. Maximum "D" diameter may be increased by .0002 to allow for solid film or coating application.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HL748 oversize pin replaces.
 Second dash number indicates maximum grip in 1/16ths.
 See finish note for explanation of code letters.

HOW TO ORDER:
EXAMPLE:



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

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

HEAT TREAT: 180,000 psi tensile minimum (95,000 psi shear minimum) at 70°F.

- ① **FINISH:**
- HL748(-)(-) = Passivate per Hi-Shear Spec. 258, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL748AZ(-)(-) = 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.
 - HL748DL(-)(-) = Solid film lube per MIL-L-46010, Type I, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL748DU(-)(-) = Solid film lube per MIL-L-46010, Type I.
 - ③ HL748PY(-)(-) = Passivate per Hi-Shear Spec. 258.
 - HL748V(-)(-) = Solid film lube per "Lubeco" 2123, Type II.

SPECIFICATION: Hi-Lok Product Specification 342.

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

DRAWN SHRODE 10-18-67	DATE	hi-lok® PIN PROTRUDING TENSION HEAD A-286 HIGH TEMPERATURE ALLOY 1/16" GRIP VARIATION - 1/32" OVERSIZE
APPROVED J.MILLER 10-18-67	DATE	
REVISION ①	DATE D.P.S. 8-6-92	DRAWING NUMBER HL748

HL748