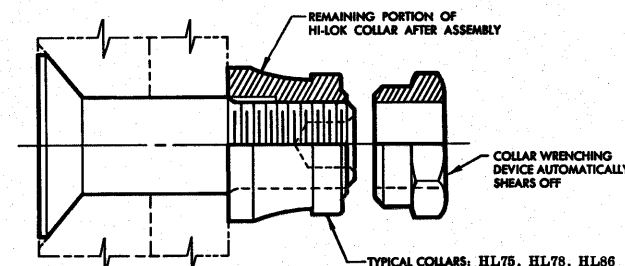
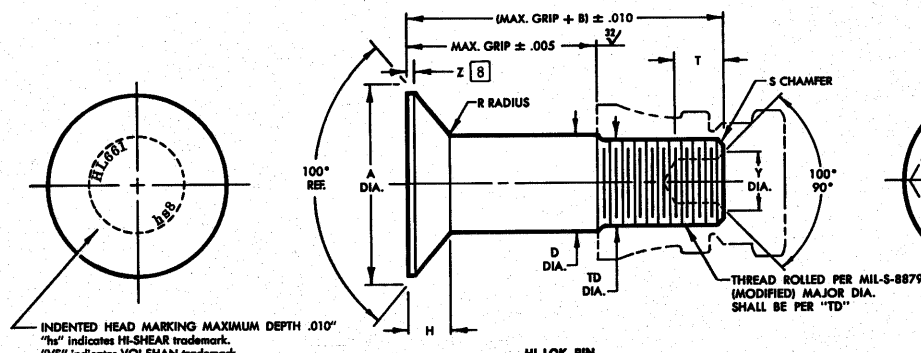


STANDARDS COMMITTEE FOR HI-LOK® PRODUCTS

2800 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

HI-SHEAR CORPORATION, U.S.A. (Patent Holder) U.S. Federal Code I.D. No. 73197
Division of HI-Shear Industries Inc.
VOI-SHAN, Division of VSI Corp., U.S.A. (Licensee) U.S. Federal Code I.D. No. 92215
SPS TECHNOLOGIES, U.S.A. (Licensee) U.S. Federal Code I.D. No. 56878
LITTON FASTENING SYSTEMS, U.S.A. (Licensee) U.S. Federal Code I.D. No. 97828
Division of Litton Systems, Inc.

KAMAX-WERKE, Germany (Licensee)
Rudolph Kellerman GmbH & Co.
ST. CHAMOND-BRANAT, S.A. France (Licensee)
TOKYO SCREW COMPANY, Japan (Licensee)



HI-LOK PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	NOM. DIA.	A DIA.	B REF.	D DIA.	TD DIA.	F	H	R RAD.	Z MAX.	S CHAMFER REF.	THREAD	SOCKET			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
												W HEX.	Y DEPTH	Y DIA.		
-5	5/32	.3304 .3256	.312	.1635 .1630	.1595 .1570	.004	.0700 .0690	.025 .015	.015	1/32" x 45°	8-32UNJC-3A Modified	.0801 .0791	.100 .080	[5]	4,560	2,450
-6	3/16	.3813 .3765	.325	.1895 .1890	.1840 .1810	.005	.0805 .0785	.030 .020	.015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.100 .080	.119 .104	6,125	3,850
-8	1/4	.5066 .5018	.395	.2495 .2490	.2440 .2410	.006	.1079 .1059	.030 .020	.015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.110 .090	.142 .122	10,600	6,550
-10	5/16	.6335 .6287	.500	.3120 .3115	.3060 .3020	.007	.1349 .1329	.040 .030	.015	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.130 .110	.180 .160	16,600	10,350
-12	3/8	.7804 .7556	.545	.3745 .3740	.3680 .3640	.008	.1619 .1599	.040 .030	.015	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.160 .140	.217 .197	23,900	15,750
-14	7/16	.8884 .8812	.635	.4370 .4365	.4310 .4260	.009	.1894 .1864	.050 .040	.022	3/64" x 45°	7/16-20UNJF-3A Modified	.1830 .1895	.190 .170	.253 .233	32,500	21,200
-16	1/2	1.0139 1.0068	.685	.4995 .4990	.4930 .4880	.010	.2158 .2128	.050 .040	.022	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.220 .200	.289 .269	42,400	28,800

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

- GENERAL NOTES:
- Head edge 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.
 - Evidence of broken edge across points.
 - Surface texture per ANSI B46.1.
 - Hole preparation per NAS618.
 - Curved or flat edge manufacturer's option.

MATERIAL: Nickel base alloy per AMS5662.

HEAT TREAT: 108,000 psi shear minimum (180,000 psi tensile minimum).

FINISH: HL661-()-() = Passivate per HI-Shear Spec. 258, and cetyl alcohol lube per HI-Shear Spec. 305.

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.

HOW TO ORDER EXAMPLES:

Pin Part Number Only

HL661-8-8
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

HL66186-8-8
Size and Grip Length, See Above Example
Collar Part Number
Pin Part Number

U.S. patents 2,927,491; 2,940,495; 3,027,789; 3,138,987.
Other U.S. and Foreign patents granted and pending.
"HI-Lok" and "HL" are Registered Trademarks of HI-Shear Corporation.

DRAWN D. P. S.	DATE 11-1-79	HI-LOK PIN 100° FLUSH MS24694 TENSION HEAD NICKEL BASE ALLOY (INCONEL 718) 1/16" GRIP VARIATION DRAWING NUMBER HL661
APPROVED R. S. S.	DATE 11-2-79	
REVISION	DATE	