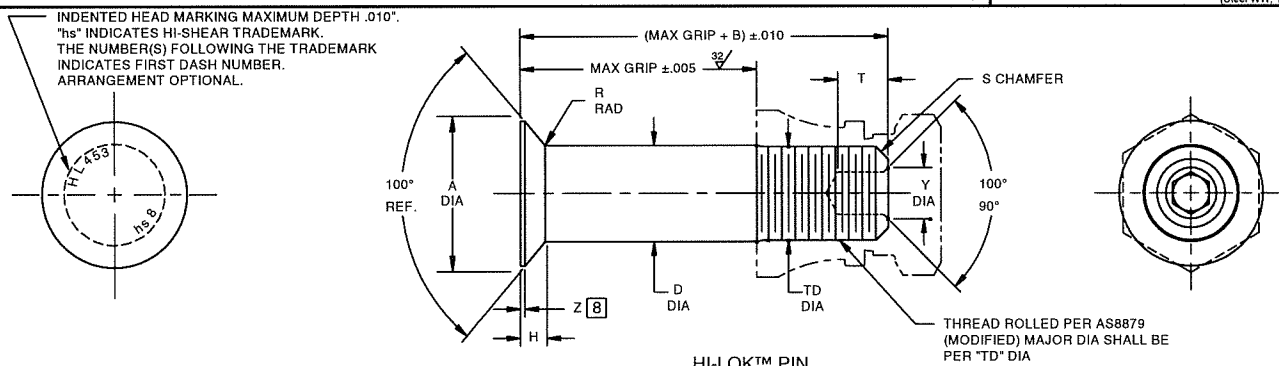
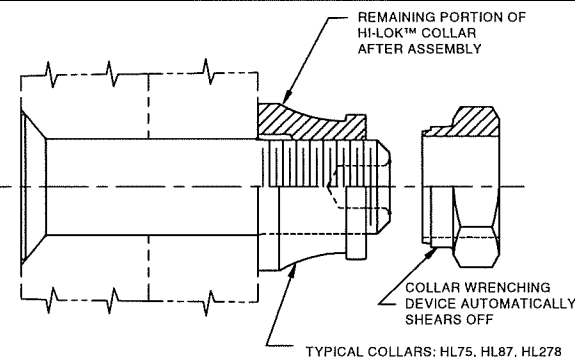


Hi-Shear Corporation, U.S.A. a LISI AEROSPACE Company	Design Holder	CAGE No. 73197	SPS TECHNOLOGIES, UK	Licensee	CAGE No. K5673
BLANC AERO INDUSTRIES UK Ltd	Licensee	CAGE No. U6300	SPS TECHNOLOGIES, USA	Licensee	CAGE No. 56878
a LISI AEROSPACE Company			MINEBEA, Japan	Licensee (Japan)	CAGE No. SB962
BLANC AERO INDUSTRIES SA, France	Licensee	CAGE No. F0188-C	AFSR City of Industry, USA	Licensee	CAGE No. 1RC86
a LISI AEROSPACE Company			WEST COAST AEROSPACE, USA	Licensee	CAGE No. 06950
LIISI AEROSPACE CANADA, Canada	Licensee	CAGE No. L4528		Licensee (oversize: WW except Japan normal: USA & Canada)	CAGE No. 06725
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HI-LOK™ PIN



HI-LOK™ PIN AND COLLAR AFTER ASSEMBLY

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

FIRST DASH NO.	PIN NOM DIA	A DIA	B REF	D DIA		TD DIA	F	H	R RAD	Z MAX	S CHAMFER REF	THREAD MODIFIED	SOCKET			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT COATING S.F.L OR PLATING	WITH COATING S.F.L OR PLATING								W HEX	T DEPTH	Y DIA		
5	3/16																
NOTE: USE HL449-6 (-)																	
6	13/64	.3813 .3765	.325	.2026 .2021	.2026 .2016	.1840 .1810	.005	.0750 .0730	.030 .020	.015	1/32 x 45°	.1900-32 UNJF-3A	.0806 .0791	.135 .115	.119 .104	6,130	3,180
8	17/64	.5066 .5018	.395	.2651 .2641	.2651 .2641	.2440 .2410	.006	.1013 .0993	.030 .020	.015	1/32 x 45°	.2500-28 UNJF-3A	.0967 .0947	.150 .130	.142 .122	10,490	5,820
10	21/64	.6335 .6287	.500	.3276 .3271	.3276 .3266	.3060 .3020	.007	.1283 .1263	.040 .030	.015	3/64 x 45°	.3125-24 UNJF-3A	.1295 .1270	.170 .150	.180 .160	16,000	9,200
12	25/64	.7604 .7556	.545	.3901 .3896	.3901 .3891	.3680 .3640	.008	.1554 .1533	.040 .030	.015	3/64 x 45°	.3750-24 UNJF-3A	.1617 .1582	.200 .180	.217 .197	22,700	14,000
14	29/64	.8884 .8812	.635	.4526 .4521	.4526 .4516	.4310 .4260	.009	.1828 .1798	.050 .040	.022	3/64 x 45°	.4375-20 UNJF-3A	.1930 .1895	.230 .210	.253 .233	30,600	18,900
16	33/64	1.0139 1.0068	.685	.5151 .5146	.5151 .5141	.4930 .4880	.010	.2092 .2063	.050 .040	.022	3/64 x 45°	.5000-20 UNJF-3A	.2242 .2207	.260 .240	.289 .269	39,600	25,600
18	37/64	1.1408 1.1337	.770	.5771 .5766	.5771 .5761	.5550 .5500	.010	.2365 .2335	.040 .030	.025	1/16 x 45°	.5625-18 UNJF-3A	.2555 .2520	.290 .270	.326 .306	49,700	32,400
20	41/64	1.2723 1.2651	.825	.6396 .6391	.6396 .6386	.6180 .6120	.010	.2654 .2624	.050 .040	.025	1/16 x 45°	.6250-18 UNJF-3A	.2555 .2520	.330 .305	.326 .306	61,000	41,000
24	49/64	1.5308 1.5236	1.050	.7646 .7641	.7646 .7636	.7430 .7370	.012	.3214 .3184	.050 .040	.025	1/16 x 45°	.7500-16 UNJF-3A	.3185 .3150	.395 .365	.398 .378	87,200	59,500

GENERAL NOTES:

- Head edge out of roundness shall not exceed "F".
- Concentricity: Conical surface of head to "D" diameter within .005 FIM.
- "H" is dimensioned from maximum "D" diameter.
- Dimensions to be met after finish.
- Evidence of broken edge across point.
- Surface texture per ANSI B46.1.
- Hole preparation per NAS618.
- Curved or flat edge manufacturer's option.
- Maximum "D" diameter may be increased by .0002" to allow for plated, coated or solid film application.
- Non-lubed pin must be used with wet sealant or with lubed collars.
- Use HL455 for oversize replacement.
- After February, 21st of 2015, HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294 will be replaced by REACH compliant HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on fasteners coated in European Union.

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

HEAT TREAT: 160,000 psi tensile minimum (95,000 psi shear minimum) at 70°F.

FINISH: HL453(-)(-) = Cadmium plate per AMS-QQ-P-416, Type II, Class 2, with color blue on top of head and cetyl alcohol lube per Hi-Shear Spec. 305.

HL453AP(-)(-) = HI-KOTE™ 1 aluminum coating per Hi-Shear Spec. 294 and cetyl alcohol lube per Hi-Shear Spec. 305.

HL453AZ(-)(-) = HI-KOTE™ 1 aluminum coating per Hi-Shear Spec. 294, with color black on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.

HL453EL(-)(-) = Solid film lube per "Electrofilm" 4396.

SPECIFICATION:

HL453N(-)(-) = Cadmium plate per AMS-QQ-P-416, Type II, Class 2., without lubricant. (For use in LOX systems.)
HL453UC(-)(-) = Cadmium plate per AMS-QQ-P-416, Type II, Class 2., with color green on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.

HL453PY(-)(-) = Passivate per Hi-Shear Spec. 258.

HL453PZ(-)(-) = Passivate per Hi-Shear Spec. 258 and cetyl alcohol lube per Hi-Shear Spec. 305.

CODE:

HI-LOK™ Product Specification 342.

First dash number indicates nominal diameter in 1/32nds of the pin which HL453 oversize pin replaces.
Second dash number indicates maximum grip in 1/16ths. See Finish note for explanation of code letters.

HOW TO ORDER

EXAMPLE:

Pin Part Number Only
HL453AP8-8
8/16 or 1/2 Maximum Grip Length
8/32 or 1/4 Nominal Diameter Pin
HI-KOTE™ 1 Aluminum Coating
Pin Basic Part Number

"HI-LOK", "HL", and "HI-KOTE",
are Trademarks of Hi-Shear Corporation.

DRAWN BY	DATE	TITLE
Brief	4-1-63	HI-LOK™ PIN
APPROVED	DATE	100° FLUSH MS24694 TENSION HEAD
Cessna	4-1-63	A-286 HIGH TEMPERATURE ALLOY
REVISION	DATE	1/16 GRIP VARIATION, 1/16 OVERSIZE
12	F.C. 11-23-15	DRAWING NUMBER HL453