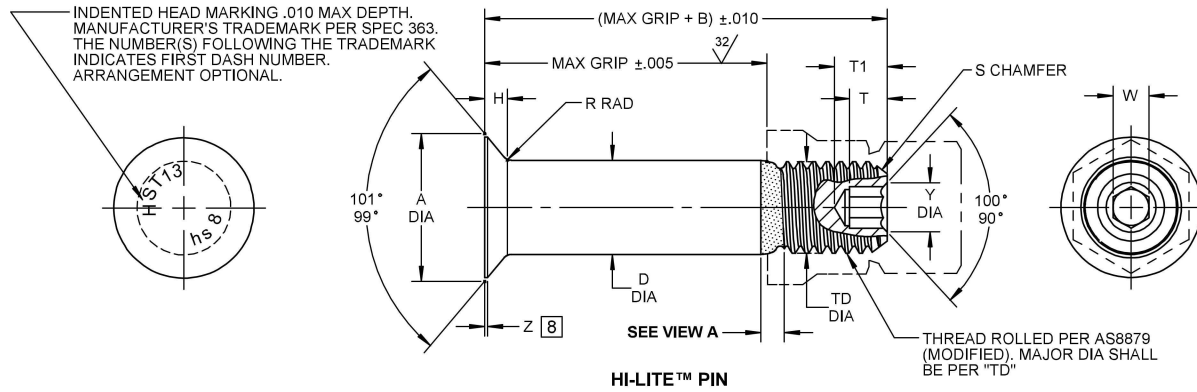
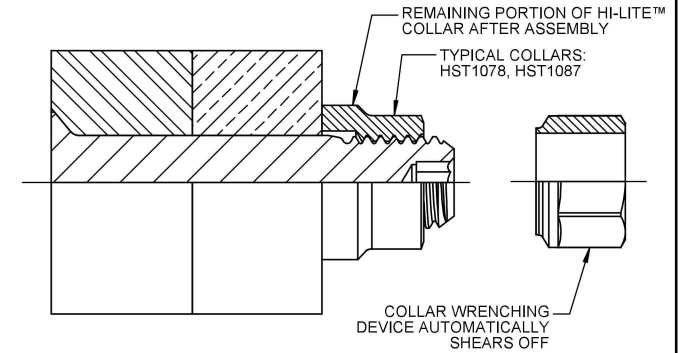


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HI-LITE™ PIN



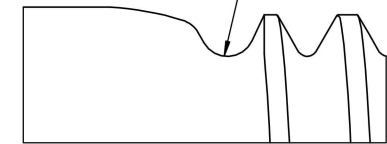
HI-LITE™ PIN AND COLLAR AFTER ASSEMBLY

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

[7] [1]

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 OR SOLID FILM	AFTER COATING OR SOLID FILM								W HEX	T DEPTH MIN	T1 DEPTH MAX	Y DIA		
5	5/32	.3304 .3256	.280	.1635 .1630	.1635 .1625	.1595 .1570	.004	.0700 .0680	.025 .015	.012	1/32 x 37°	.1640-32 UNJC-3A	.0801 .0791	.080	.135	[10]	4,010	2,180
6	3/16	.3813 .3765	.290	.1895 .1890	.1895 .1885	.1840 .1810	.005	.0805 .0785	.030 .020	.015	1/32 x 37°	.1900-32 UNJF-3A	.0806 .0791	.080	.135	.119 .104	5,380	3,180
8	1/4	.5066 .5018	.320	.2495 .2490	.2495 .2485	.2440 .2410	.006	.1080 .1060	.030 .020	.015	1/32 x 37°	.2500-28 UNJF-3A	.0967 .0947	.090	.160	.142 .122	9,300	5,820
10	5/16	.6335 .6287	.380	.3120 .3115	.3120 .3110	.3060 .3020	.007	.1350 .1330	.040 .030	.015	3/64 x 37°	.3125-24 UNJF-3A	.1295 .1270	.110	.200	.180 .160	14,600	9,200
12	3/8	.7604 .7556	.420	.3745 .3740	.3745 .3735	.3680 .3640	.008	.1620 .1600	.040 .030	.015	3/64 x 37°	.3750-24 UNJF-3A	.1617 .1582	.140	.235	.217 .197	21,000	14,000
14	7/16	.8884 .8812	.500	.4370 .4365	.4370 .4360	.4310 .4260	.009	.1895 .1865	.050 .040	.022	3/64 x 37°	.4375-20 UNJF-3A	.1930 .1895	.150	.246	.253 .233	28,600	18,900
16	1/2	1.0139 1.0068	.600	.4995 .4990	.4995 .4985	.4930 .4880	.010	.2160 .2130	.050 .040	.022	3/64 x 37°	.5000-20 UNJF-3A	.2242 .2207	.170	.275	.289 .269	37,300	25,600
18	9/16	1.1408 1.1337	.700	.5615 .5610	.5615 .5605	.5550 .5500	.010	.2430 .2400	.050 .040	.025	1/16 x 37°	.5625-18 UNJF-3A	.2555 .2520	.200	.329	.326 .306	47,200	32,400
20	5/8	1.2723 1.2651	.780	.6240 .6235	.6240 .6230	.6180 .6120	.010	.2720 .2690	.050 .040	.025	1/16 x 37°	.6250-18 UNJF-3A	.2555 .2520	.210	.339	.326 .306	58,300	41,000
24	3/4	1.5308 1.5236	1.020	.7490 .7485	.7490 .7480	.7430 .7370	.012	.3280 .3250	.050 .040	.025	1/16 x 37°	.7500-16 UNJF-3A	.3185 .3150	.290	.452	.398 .378	83,900	59,500
28	7/8	1.7845 1.7773	1.160	.8740 .8735	.8740 .8730	.8680 .8610	.014	.3820 .3790	.050 .040	.025	5/64 x 37°	.8750-14 UNJF-3A	.3820 .3780	.340	.525	.471 .451	114,000	77,500
32	1	2.0405 2.0310	1.305	.9990 .9985	.9990 .9980	.9930 .9860	.014	.4370 .4330	.050 .040	.025	5/64 x 37°	1.0000-12 UNJF-3A	.5100 .5040	.460	.682	.618 .598	149,000	106,000

THIS AREA OF SPECIAL CONFIGURATION
 AND COLD WORKING TO MEET PHYSICAL
 REQUIREMENTS



VIEW A
 HI-LITE™ THREAD TRANSITION AREA
 SEE SPECIFICATION FOR INSPECTION

"HI-LITE", "HST", AND "HI-KOTE",
 ARE TRADEMARKS OF HI-SHEAR CORPORATION

DRAWN BY J. Obispo D.P.S.	DATE 2014-12-14 1983-03-18	TITLE HI-LITE™ PIN 100° FLUSH MS24694 TENSION HEAD TITANIUM 1/16 GRIP VARIATION	
APPROVED E.E.BEELES	DATE 1983-03-18	DRAWING NUMBER HST13	
REVISION [32]	DATE K. PHAM 2022-03-14	1 OF 2	

GENERAL NOTES:

- 1 Head edge out of roundness shall not exceed "F".
2. Concentricity: Conical surface of head to "D" diameter within .003 FIM.
3. "H" is dimensioned from maximum "D" diameter.
4. Dimensions are in inches and to be met after finish.
5. Surface texture per ASME B46.1.
6. Hole preparation per NAS618.
- 7 Maximum "D" diameter may be increased by .0002 to allow for solid film or aluminum coating application.
- 8 Curved or flat edge manufacturer's option.
- 9 Broach petals removed.
- 10 Evidence of broken edge across points.
11. Use HST113 for oversize replacement.
- 12 After February, 21st of 2015, HI-KOTE™ 1 aluminum pigmented coating will be replaced by REACH compliant HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on fasteners coated in UK and European Union.
- 13 After September 30th of 2015, HI-KOTE™ 4 coating per HS397 will be replaced by HI-KOTE™ 4 NC coating per HS397.

MATERIAL: 6AL-4V titanium alloy per AMS4928 or AMS4967.

HEAT TREAT: 160,000 psi tensile minimum (95,000 psi shear minimum for sizes up to 3/4; 90,000 psi shear minimum for 7/8 and larger).

- FINISH:** HST13(-)(-) = Cetyl alcohol lube per Hi-Shear Spec. 305.
 HST13AB(-)(-) = I.V.D. aluminum coating per BAC5315 with conversion coating (.0003-.0006 thick) per MIL-C-5541, Class 1A and cetyl alcohol lube per Hi-Shear Spec. 305.
- 32 12 HST13AG(-)(-) = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 32 12 HST13AP(-)(-) = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 32 12 HST13AZ(-)(-) = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST13BJ(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 9 HST13CT(-)(-) = Color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 32 12 HST13GD(-)(-) = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 32 12 HST13GM(-)(-) = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads (no overspray on the shank is allowed) and top of head only (.005 max overspray on the head bearing surface permissible) with color white on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 13 HST13HK(-)(-) = HI-KOTE™ 4 NC aluminum coating per Hi-Shear Spec. 397.
- 9 HST13K(-)(-) = Solid film lube per "Lubeco™ 905". "LUBECCO" is a trademark of Lubeco Incorporated.
- 9 HST13MA(-)(-) = Solid film lube per "KalGard™ RA". "KALGARD" is a trademark of Metal Improvement Company.
- HST13RP(-)(-) = Phosphate fluoride treat with color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST13RS(-)(-) = Phosphate fluoride treat, solid film lube per AS5272, Type I, and color orange on thread end.
- HST13RV(-)(-) = Phosphate fluoride treat, HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 32 12 HST13SU(-)(-) = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color light blue on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST13TB(-)(-) = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 32 HST13UV(-)(-) = Anodize per Hi-Shear Spec 306, Type II, HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 32 HST13VF(-)(-) = Anodize per Hi-Shear Spec 306, Type I, color blue, and cetyl alcohol lube per Hi-Shear Spec. 305.

- 32 HST13WF(-)(-) = Anodize per Hi-Shear Spec 306, Type I, color blue, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST13YW(-)(-) = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292 on thread only, with color white on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST13NKJ(-)(-) = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST13NKK(-)(-) = Sulfuric acid anodizing per ISO8080 and HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST13NKL(-)(-) = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST13NAP(-)(-) = HI-KOTE™ 1 NC Aluminum coating per Hi-Shear Spec. 294, Cetyl alcohol lube per per Hi-Shear Spec. 305

SPECIFICATION: HI-LITE™ Product Specification 380.

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

EXAMPLE:

Pin Part Number
 HST13AP8-8
 8/16 or 1/2 Maximum Grip Length
 8/32 or 1/4 Nominal Diameter Pin
 Finish Code
 Pin Basic Part Number

HST13

DRAWING NUMBER

HST13

2 OF 2