



HI-LITE™ PIN

HI-LITE™ PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	PIN NOM DIA	A DIA	A' DIA MIN	B REF	D DIA	TD DIA	F	H REF	M GAGE PROT.	R RAD Cold- Worked	V GAGE DIA	Z MAX	S CHAMFER REF	THREAD MODIFIED	SOCKET				DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM	TENSION FATIGUE POUNDS MAXIMUM
															W HEX	T DEPTH MIN	T1 DEPTH MAX	Y DIA			
5									NOTE: USE HST755-6												
6	7/32	.3277	.2963	.300	.2182 .2172	.1840 .1810	.005	.044	.0295 .0263	.030 .020	.2560 .2558	.015	1/32 x 37°	.1900-32 UNJF-3A	.0806 .0791	.080	.135	.119 .104	7,100	2,400	900
8	9/32	.4283	.3969	.330	.2807 .2797	.2440 .2410	.006	.060	.0227 .0195	.030 .020	.3732 .3730	.015	1/32 x 37°	.2500-28 UNJF-3A	.0967 .0947	.090	.160	.142 .122	11,800	4,500	1,575
10	11/32	.5361	.5047	.390	.3432 .3422	.3060 .3020	.007	.079	.0234 .0198	.040 .030	.4791 .4789	.015	3/64 x 37°	.3125-24 UNJF-3A	.1295 .1270	.110	.200	.180 .160	17,600	6,850	2,397
12	13/32	.6415	.6101	.430	.4057 .4047	.3680 .3640	.008	.097	.0295 .0259	.040 .030	.5698 .5696	.015	3/64 x 37°	.3750-24 UNJF-3A	.1617 .1582	.140	.235	.217 .197	24,600	10,200	3,570
14	15/32	.7425	.6941	.495	.4682 .4672	.4310 .4260	.009	.114	.0347 .0307	.050 .040	.6582 .6580	.022	3/64 x 37°	.4375-20 UNJF-3A	.1930 .1895	.170	.275	.253 .233	32,700	13,100	4,585
16	17/32	.8423	.7939	.535	.5307 .5297	.4930 .4880	.010	.128	.0504 .0464	.050 .040	.7200 .7198	.022	3/64 x 37°	.5000-20 UNJF-3A	.2242 .2207	.200	.315	.289 .269	42,000	18,000	6,300
18	19/32	.9300	.8816	.610	.5927 .5917	.5550 .5500	.010	.140	.0533 .0485	.050 .040	.8012 .8010	.022	1/16 x 37°	.5625-18 UNJF-3A	.2555 .2520	.240	.365	.326 .306	52,400	22,500	7,875
20	21/32	1.0440	.9956	.670	.6552 .6542	.6180 .6120	.010	.162	.0633 .0589	.050 .040	.8902 .8900	.022	1/16 x 37°	.6250-18 UNJF-3A	.2555 .2520	.240	.365	.326 .306	64,100	29,200	10,200

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

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 D.P.S.	DATE 1990-10-29	TITLE HI-LITE™ PIN 100° FLUSH SPECIAL SHEAR HEAD TITANIUM 1/16 GRIP VARIATION, 1/32 OVERSIZE	
APPROVED A. BROWN	DATE 1990-11-14	DRAWING NUMBER HST859	
REVISION ⑥	DATE 2023-04-07 C.ARTOS	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 .005 FIR.
- 3. "H" is dimensioned from maximum "D" diameter.
- 4. Dimensions in inches and to be met after finish.
- 5. Surface texture per ASME B46.1.
- 6. Hole preparation per NAS618.
- 7 Curved or flat edge manufacturer's option.
- 8 Fatigue test pins having grip equal two diameters or longer using these loads at R =0.1.
- 9. Oversize replacement for HST755 and HST855 pins.
- 10 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 the UK and European Union.

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

HEAT TREAT: 160,000 psi tensile minimum (95,000 psi shear minimum).

FINISH:

HST859-()-() = Anodized per Hi-Shear Spec. 306, Type I, color blue, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

10 HST859AT()-() = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum coating per Hi-Shear Spec. 294.

HST859CE()-() = I.V.D. aluminum coating per MIL-DTL-83488, Type II (.00015-.00045 thick) with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

HST859CF()-() = I.V.D. aluminum coating per MIL-DTL-83488, Type II (.00015-.00045 thick) with color black on thread end.

10 HST859KM()-() = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum coating per Hi-Shear Spec. 294 with color white on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

HST859NAP()-() = HI-KOTE™ 1 NC aluminum coating per Hi-Shear Spec. 294 (0.0002 to 0.0005 Thickness) and cetyl alcohol lube per Hi-Shear Spec. 305.

HST859NKY()-() = Sulfuric Acid Anodizing per ISO8080, Hi-Kote 1 NC Aluminum Pigmented Coating per HS294 on Threads only and cetyl alcohol lube per Hi-Shear Spec. 305.

HST859NGD()-() = HI-KOTE™ 1 NC Aluminum Pigmented Coating per Hi-Shear Spec. 294 on threads only and cetyl alcohol lube per Hi-Shear Spec. 305.

HST859NGM()-() = HI-KOTE™ 1 NC Aluminum Pigmented Coating per Hi-Shear Spec. 294 on threads only and top of head only, white on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.

SPECIFICATION: HI-LITE™ Product Specification 380, except as noted 8.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HST859 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
HST859CE8-8

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

HST859

DRAWING NUMBER

HST859

2 OF 2