



HI-LITE™ 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 OR SOLID FILM	AFTER COATING OR SOLID FILM								W HEX	T DEPTH	Y DIA		
5	5/32	.2612 .2564	.280	.1635 .1630	.1635 .1625	.1595 .1570	.004	.0410 .0390	.025 .015	.012	1/32 x 45°	.1640-32 UNJC-3A	.0801 .0791	.100 .080	.119 .104	5,280	1,700
6	3/16	.3016 .2966	.290	.1895 .1890	.1895 .1885	.1840 .1810	.005	.0470 .0450	.030 .020	.015	1/32 x 45°	.1900-32 UNJF-3A	.0806 .0791	.100 .080	.119 .104	7,060	2,600
8	1/4	.3948 .3898	.320	.2495 .2490	.2495 .2485	.2440 .2410	.006	.0610 .0590	.030 .020	.015	1/32 x 45°	.2500-28 UNJF-3A	.0967 .0947	.110 .090	.142 .122	12,260	4,400
10	5/16	.4739 .4689	.380	.3120 .3115	.3120 .3110	.3060 .3020	.007	.0680 .0660	.040 .030	.015	3/64 x 45°	.3125-24 UNJF-3A	.1295 .1270	.130 .110	.180 .160	19,160	7,000
12	3/8	.5604 .5554	.420	.3745 .3740	.3745 .3735	.3680 .3640	.008	.0780 .0760	.040 .030	.015	3/64 x 45°	.3750-24 UNJF-3A	.1617 .1582	.160 .140	.217 .197	27,600	10,000
14	7/16	.6680 .6620	.485	.4370 .4365	.4370 .4360	.4310 .4260	.009	.0969 .0944	.050 .040	.022	3/64 x 45°	.4375-20 UNJF-3A	.1930 .1895	.190 .170	.253 .233	37,500	13,500
16	1/2	.7540 .7480	.525	.4995 .4990	.4995 .4985	.4930 .4880	.010	.1068 .1043	.050 .040	.022	3/64 x 45°	.5000-20 UNJF-3A	.2242 .2207	.220 .200	.289 .269	49,100	18,000
18	9/16	.8380 .8310	.600	.5615 .5610	.5615 .5605	.5550 .5500	.010	.1160 .1131	.050 .040	.022	1/16 x 45°	.5625-18 UNJF-3A	.2555 .2520	.260 .240	.326 .306	62,100	22,500
20	5/8	.9250 .9180	.660	.6240 .6235	.6240 .6230	.6180 .6120	.010	.1260 .1230	.050 .040	.022	1/16 x 45°	.6250-18 UNJF-3A	.2555 .2520	.260 .240	.326 .306	76,700	28,000
24	3/4	1.0970 1.0850	.895	.7490 .7485	.7490 .7480	.7430 .7370	.012	.1460 .1410	.050 .040	.022	1/16 x 45°	.7500-16 UNJF-3A	.3185 .3150	.330 .300	.398 .378	110,400	40,200

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	DATE 2014-12-17	TITLE HI-LITE™ PIN 100° FLUSH SHEAR HEAD PH13-8Mo STAINLESS STEEL 1/16 GRIP VARIATION
D.P.S.	1983-03-18	
APPROVED R.TING	DATE 1983-03-18	DRAWING NUMBER HST645
REVISION 11	DATE B. CHAN 2021-11-09	

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 Evidence of broken edge across points.
10. Use HST745 for oversize replacement.
- 11 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 & European Union.

MATERIAL: PH13-8Mo stainless steel per AMS5629.

HEAT TREAT: 125,000 psi shear minimum.

FINISH: HST645-()-() = Passivate per Hi-Shear Spec. 262 and cetyl alcohol lube per Hi-Shear Spec. 305.
 11 HST645AP()-() = HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
 HST645TB()-() = HI-KOTE™ 2 solid film lube per per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
 HST645DU()-() = Solid film lube per AS5272, Type I.
 HST645TP()-() = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, with color orange on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.
 HST645HK()-() = HI-KOTE™ 4 NC aluminum coating per Hi-Shear Spec. 397.
 HST645NAP()-() = 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. 11

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
 HST645AP8-8
 8/16 or 1/2 Maximum Grip Length
 8/32 or 1/4 Nominal Diameter Pin
 Finish Code
 Pin Basic Part Number

HST645

DRAWING NUMBER

HST645

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