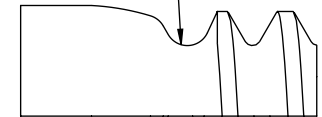


FIRST DASH NO.	PIN NOM DIA	A DIA	A' DIA MIN	B REF	D DIA		TD DIA	F	H	R RAD	Z MAX	S CHAMFER REF	THREAD MODIFIED	ASTER™ RECESSES			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
					WITHOUT ALUMINUM COATING	WITH ALUMINUM COATING								RECESS SIZE CODE	T1 DEPTH MAX	T DEPTH MIN		
5	5/32	.3304 .3256	.311	.280	.1635 .1630	.1635 .1625	.1595 .1570	.004	.0700 .0680	.025 .015	.012	1/32 X 37°	.1640-32 UNJC-3A	A5L-05	.118	.072	4,010	2,180
6	3/16	.3813 .3765	.350	.290	.1895 .1890	.1895 .1885	.1840 .1810	.005	.0805 .0785	.030 .020	.015	1/32 X 37°	.1900-32 UNJF-3A	A5L-06	.116	.069	5,380	3,180
7	7/32	.4425 .4378	.413	.305	.2182 .2177	.2182 .2172	.2100 .2070	.006	.0940 .0920	.030 .020	.015	1/32 X 37°	.2160-28 UNJF-3A	A5L-07	.117	.069	7,194	4,000
8	1/4	.5066 .5018	.475	.320	.2495 .2490	.2495 .2485	.2440 .2410	.006	.1080 .1060	.030 .020	.015	1/32 X 37°	.2500-28 UNJF-3A	A5L-08	.118	.069	9,300	5,820
10	5/16	.6335 .6287	.602	.380	.3120 .3115	.3120 .3110	.3060 .3020	.007	.1350 .1330	.040 .030	.015	3/64 X 37°	.3125-24 UNJF-3A	A5L-10	.127	.070	14,600	9,200
12	3/8	.7604 .7556	.729	.420	.3745 .3740	.3745 .3735	.3680 .3640	.008	.1620 .1600	.040 .030	.015	3/64 X 37°	.3750-24 UNJF-3A	A5L-12	.147	.087	21,000	14,000
14	7/16	.8884 .8812	.840	.500	.4370 .4365	.4370 .4360	.4310 .4260	.009	.1895 .1865	.050 .040	.022	3/64 X 37°	.4375-20 UNJF-3A	A5L-14	.196	.116	28,600	18,900
16	1/2	1.0139 1.0068	.969	.600	.4995 .4990	.4995 .4985	.4930 .4880	.010	.2160 .2130	.050 .040	.022	3/64 X 37°	.5000-20 UNJF-3A	A5L-16	.236	.139	37,300	25,600

THIS AREA OR SPECIAL CONFIGURATION AND COLD WORKING TO MEET PHYSICAL REQUIREMENTS.



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

HSTR13

"HI-LITE", "HSTR", AND "HI-KOTE" ARE TRADEMARKS OF HI-SHEAR CORPORATION. ASTER™ IS A TRADEMARK OF LISI AEROSPACE.		
DRAWN BY F. CARINGELLA	DATE 8/29/12	TITLE HI-LITE™ PIN, ASTER™ RECESS 100° FLUSH MS24694 TENSION HEAD TITANIUM 1/16 GRIP VARIATION
APPROVED C. REITZ	DATE 3/29/16	
REVISION ③	DATE F.C. 3/17/16	DRAWING NUMBER <b>HSTR13</b> 1 OF 2

- ③ **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 ANSI B46.1.
  6. HOLE PREPARATION PER NAS618.
  7. REMOVED
  8. CURVED OR FLAT EDGE MANUFACTURER'S OPTION.
  9. US PATENT 6632057; OTHER US & FOREIGN PATENTS GRANTED AND PENDING PROPERTY OF LISI AEROSPACE.
  10. USE HSTR113 FOR OVERSIZE REPLACEMENT.
  11. BROACH PETALS REMOVED.
  12. NO IDENTIFICATION COLORANT IS ALLOWED IN THE ASTER™ RECESS.

**MATERIAL:** 6AL-4V TITANIUM ALLOY PER AMS4928 OR AMS4967.

- ③ **HEAT TREAT:** 160,000 PSI TENSILE MINIMUM (95,000 PSI SHEAR MINIMUM FOR SIZES UP TO 3/4)

**FINISH:** HSTR13NKJ( )-( ) = 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.

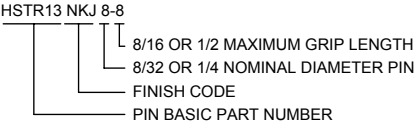
HSTR13NKK( )-( ) = SULFURIC ACID ANODIZING PER ISO8080 AND HI-KOTE™ 1 NC ALUMINUM PIGMENTED COATING PER HI-SHEAR SPEC. 294 ON THREADS ONLY WITH COLOR SILVER ON THREAD END AND CETYL ALCOHOL LUBE PER HI-SHEAR SPEC. 305.

HSTR13NKL( )-( ) = 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.

- ③ **SPECIFICATION:** HI-LITE™ PRODUCT SPECIFICATION 410.  
ASTER™ RECESS PER A5L-QA02.

**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** PIN PART NUMBER ONLY  
**EXAMPLES:**



HSTR13

REVISION	DRAWING NUMBER
③	HSTR13

2 OF 2