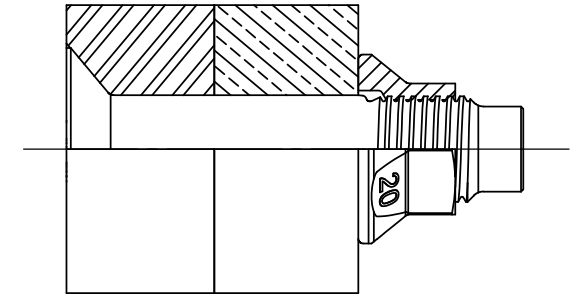
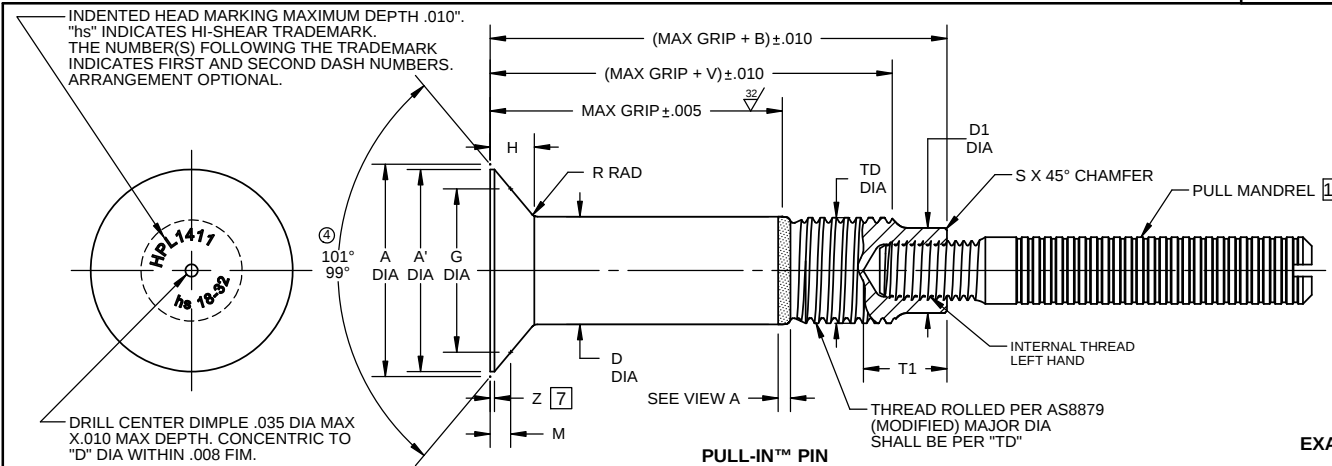


④

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LISI AEROSPACE website at:
[HTTP://WWW.LISI-AEROSPACE.COM/LICENSES](http://www.lisi-aerospace.com/licenses)



EXAMPLE OF PULL-IN™ PIN AND NUT/COLLAR AFTER ASSEMBLY

FIRST DASH NO.	PIN NOM DIA	A DIA MAX	A' DIA MIN	B REF	D DIA	TD DIA	D1 DIA	F REF	G GAGE DIA	H REF	M GAGE PROT.	R RAD ROLLED	S CHAMFER REF	V REF	Z REF	THREAD MODIFIED	INTERNAL THREAD LEFT HAND ⑨			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM	TENSION-TENSION FATIGUE POUNDS MAX
																	T1 MAX	THREAD SIZE UNJF-2B	LOAD POUNDS MAX			
18	9/16	.9300	.881	.844	.5615 .5605	.5537 .5500	.4783 .4764	.010	.8012 .8010	.153	.0533 .0485	.050 .040	.020	.701	.022	.5625-18 UNJF-3A	.465	5/16-SP	11,500	47,200	22,500	7,880
20	5/8	1.0440	.995	.935	.6240 .6230	.6165 .6120	.5413 .5394	.010	.8902 .8900	.174	.0633 .0589	.050 .040	.020	.733	.022	.6250-18 UNJF-3A	.520	3/8-SP	14,200	58,300	29,203	10,200
24	3/4	1.3000	1.251	1.125	.7490 .7480	.7415 .7370	.6575 .6555	.012	1.1124 1.1122	.229	.0776 .0716	.050 .040	.020	.927	.022	.7500-16 UNJF-3A	.625	7/16-SP	19 109	83,900	42,000	14,770
28	7/8	1.5091	1.461	1.315	.8740 .8730	.8663 .8610	.7717 .7697	.014	1.3440 1.3438	.263	.0694 .0622	.050 .040	.020	1.021	.022	.8750-14 UNJF-3A	.725	1/2-SP	31 500	111,100	56,267	19,842
32	1	1.7201	1.671	1.500	.9990 .9980	.9913 .9860	.8819 .8799	.014	1.5732 1.5730	.298	.0617 .0536	.050 .040	.020	1.151	.022	1.0000-12 UNJF-3A	.830	9/16-SP	38 218	140,724	71,000	24,850

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

- GENERAL NOTES:**
- ① Head edge out of roundness shall not exceed "F".
 2. Concentricity: Conical surface of head to "D" diameter within .010 FIM.
 3. "H" is dimensioned from maximum "D" diameter
 4. Dimensions in inches and to be met after finish.
 - ④ 5. Surface texture per ASME B46.1.
 6. Hole preparation per HSL/HPL-IS01: PULL-STEM™/ PULL-IN™ fastener installation specification for HSL/HPL pins.
 - ⑦ Curved or flat edge manufacturers option.
 8. Use HPL1511 for oversize replacement.
 - ⑨ The maximum allowable installation load must not exceed the maximum load values in table or thread/mandrel failure may occur.
 10. Product in accordance with LISI AEROSPACE Product Specification N°415.
 - ⑪ Mandrel is sold separately.
 - ⑫ "NKA" is a duplicate code, use "NAP" for new design.

MATERIAL: Pin = Titanium alloy 6Al-4V per AMS4928 or AMS4967.

HEAT TREAT: Pin = 160,000 psi tensile minimum and 95,000 psi shear minimum.

FINISH: ⑫ HPL1411NAP()-() = HI-KOTE™ 1 NC aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.

HPL1411NKM()-() = HI-KOTE™ 1 NC aluminum coating per Hi-Shear Spec. 294, with color white on pin end ,and cetyl alcohol lube per Hi-Shear Spec. 305.

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

④ **EXAMPLES:** Pin Part Number
HPL1411NAP18-32
32/16 or 1/2 Maximum Grip Length
18/32 or 9/16 Nominal Diameter Pin
Finish Code
Pin Basic Part Number

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



VIEW A

HI-LITE™ THREAD TRANSITION AREA
SEE SPECIFICATION FOR INSPECTION

"HI-KOTE", "HI-LITE", "PULL-IN" AND "HPL", ARE TRADEMARKS OF HI-SHEAR CORPORATION	
DRAWN BY M.ISEMENE	DATE 2012-01-13
APPROVED J.GOYER	DATE 2012-02-17
REVISION ④	DATE M.BEARD 2017-10-25
TITLE PULL-IN™ PIN 100° FLUSH SHEAR HEAD TITANIUM 1/16 GRIP VARIATION INTERFERENCE FIT	
DRAWING NUMBER HPL1411	
1 OF 1	