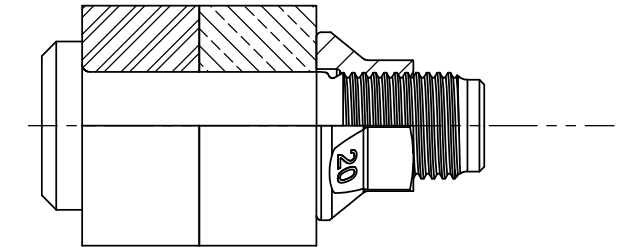
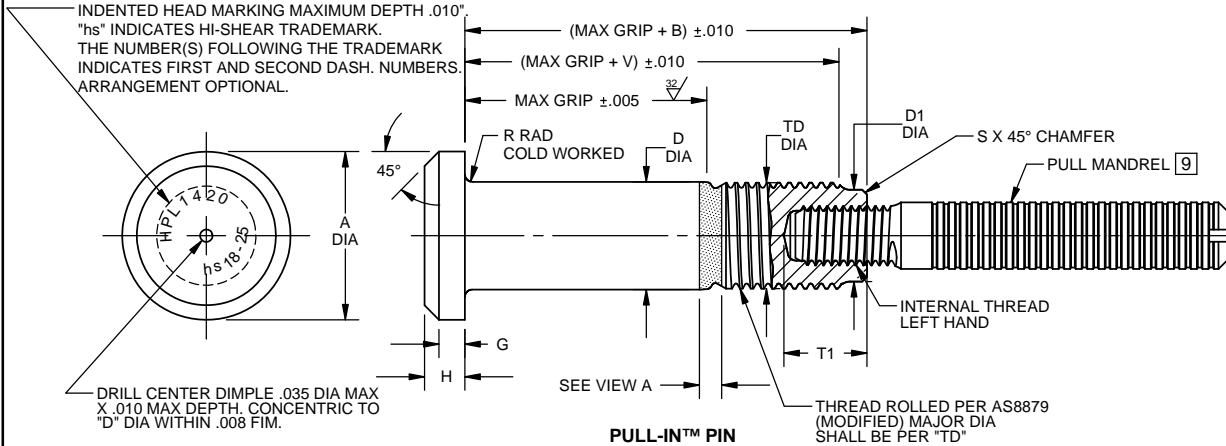


①

For the current list of licensed manufacturers, please visit the 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	B REF	D DIA	TD DIA	D1 DIA	G REF	H	R RAD ROLLED	S CHAMFER REF	V REF	THREAD MODIFIED	INTERNAL THREAD LEFT HAND [7]			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM	TENSION-TENSION FATIGUE POUNDS MAX
													T1 MAX	THREAD SIZE UNJF-2B	LOAD POUNDS MAX			
18	9/16	.877 .842	.844	.5771 .5761	.5550 .5500	.4783 .4764	.125	.210 .200	.040 .025	.020	.701	.5625-18 UNJF-3A	.465	5/16-SP	11,500	65,600	44,321	15,700
20	5/8	.953 .918	.935	.6396 .6386	.6180 .6120	.5413 .5394	.140	.238 .228	.040 .025	.020	.733	.6250-18 UNJF-3A	.520	3/8-SP	14,200	80,600	49,458	16,816
24	3/4	1.150 1.110	1.125	.7646 .7636	.7430 .7370	.6575 .6555	.200	.335 .320	.045 .030	.020	.927	.7500-16 UNJF-3A	.625	7/16-SP	19,109	115,100	81,469	28,500
28	7/8	1.330 1.290	1.315	.8896 .8886	.8680 .8610	.7717 .7697	.250	.385 .370	.050 .035	.020	1.021	.8750-14 UNJF-3A	.725	1/2-SP	31,500	156,000	112,121	38,210
32	1	1.510 1.470	1.500	1.0146 1.0136	.9930 .9860	.8819 .8799	.300	.435 .420	.060 .045	.020	1.151	1.0000-12 UNJF-3A	.830	9/16-SP	38,218	202,000	132,100	48,900

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

- GENERAL NOTES:**
1. Concentricity: "A" dia to "D" diameter within .010 FIM.
  2. Dimensions in inches and to be met after finish.
  - ① 3. Surface texture per ASME B46.1.
  4. Hole preparation per HSL/HPL-IS01: PULL-STEM™/ PULL-IN™ fastener installation specification for HSL/HPL pins.
  5. HPL1420 is the oversize replacement for HPL1410.
  6. Use HPL1430 for oversize replacement.
  - [7] The maximum allowable installation load must not exceed the maximum load values in table or thread/mandrel failure may occur.
  8. Product in accordance with LISI AEROSPACE Product Specification N°415.
  - [9] Mandrel is sold separately.

**CODE:** First dash number indicates nominal diameter in 1/32nds of the pin which HPL1420 oversize pin replaces.  
Second dash number indicates maximum grip in 1/16ths.  
See "Finish" note for explanation of code letters.

#### HOW TO ORDER

① **EXAMPLES:** Pin Part Number  
HPL1420NAP18-25  
25/16 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

**MATERIAL:** Pin = Nickel base alloy (inconel 718) per AMS5662 or AMS5962.

**HEAT TREAT:** Pin = 220,000 psi tensile minimum and 125,000 psi shear minimum.

**FINISH:** HPL1420NAP( )-( ) = HI-KOTE™ 1 NC aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.

HPL1420NSU( )-( ) = HI-KOTE™ 1 NC aluminum coating per Hi-Shear Spec. 294, with color blue on pin end, and cetyl alcohol lube per Hi-Shear Spec. 305.

"HI-KOTE", "HI-LITE", "PULL-IN" AND "HPL", ARE TRADEMARKS OF HI-SHEAR CORPORATION

DRAWN BY F. CARINGELLA	DATE 2016-02-09	TITLE PULL-IN™ PIN PROTRUDING TENSION HEAD INTERFERENCE FIT NICKEL BASE ALLOY (INCONEL 718) 1/16 GRIP VARIATION, 1/64 OVERSIZE	
APPROVED C. RIETZ	DATE 2016-02-09	DRAWING NUMBER <b>HPL1420</b>	
REVISION ①	DATE M. BEARD 2017-10-30	1 OF 1	