



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- FATIGUE POUNDS MAX
																	T1 MAX	THREAD SIZE UNJF-2B	LOAD POUNDS MAX			
20	11/16	1.1850	1.1320	.935	.6865 .6855	.6180 .6120	.5413 .5394	.010	.8902 .8900	.209	.1236 .1205	.050 .040	.020	.733	.022	6250-18 UNJF-3A	.520	3/8-SP	14,200	70,500	29,203	10,200
24	13/16	1.3970	1.3450	1.125	.8115 .8105	.7430 .7370	.6575 .6555	.012	1.1124 1.1122	.246	.1195 .1145	.050 .040	.020	.927	.022	.7500-16 UNJF-3A	.625	7/16-SP	19,109	98,600	42,000	14,770
28	15/16	1.6100	1.5580	1.315	.9365 .9355	.8680 .8610	.7717 .7697	.014	1.3440 1.3438	.283	.1117 .1069	.050 .040	.020	1.021	.022	.8750-14 UNJF-3A	.725	1/2-SP	31,500	123,700	56,267	19,842
32	17/16	1.8220	1.7700	1.500	1.0615 1.0605	.9930 .9860	.8819 .8799	.014	1.5732 1.5730	.319	.1046 .0996	.050 .040	.020	1.151	.022	1.0000-12 UNJF-3A	.830	9/16-SP	38,218	163,800	71,000	24,850

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

- GENERAL NOTES:**
- Head edge out of roundness shall not exceed "F".
  - Concentricity: Conical surface of head to "D" diameter within .010 FIM.
  - "H" is dimensioned from maximum "D" diameter
  - Dimensions in inches and to be met after finish.
  - Surface texture per AMSE B46.1.
  - Hole preparation per HSL/HPL-IS01: PULL-STEM™/ PULL-IN™ fastener installation specification for HSL/HPL pins.
  - Curved or flat edge manufacturers option.
  - HPL1711 is the oversize replacement for HPL1611.
  - The maximum allowable installation load must not exceed the maximum load values in table or thread/mandrel failure may occur.
  - Product in accordance with LISI AEROSPACE Product Specification N°415.
  - Mandrel is sold separately.

**CODE:** First dash number indicates nominal diameter in 1/32nds of the pin which HPL1711 oversize pin replaces.  
Second dash number indicates maximum grip in 1/16ths.  
See "Finish" note for explanation of code letters.

#### HOW TO ORDER

**EXAMPLES:**

Pin Part Number  
HPL1711NAP20-32  
32/16 or 2 Maximum Grip Length  
20/32 or 5/8 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 = Titanium alloy 6Al-4V per AMS4928 or AMS4967.

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

**FINISH:** HPL1711NAP( ) = HI-KOTE™ 1 NC aluminum coating per Hi-Shear Spec. 294,  
and cetyl alcohol lube per Hi-Shear Spec. 305.

HPL1711NKM( ) = 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.

"HI-KOTE", "HI-LITE", "PULL-IN" AND "HPL", ARE TRADEMARKS OF HI-SHEAR CORPORATION			
DRAWN BY F.CARINGELLA	DATE 2016-02-18	TITLE PULL-IN™ PIN 100° FLUSH SPECIAL SHEAR HEAD INTERFERENCE FIT TITANIUM 1/16 GRIP VARIATION, 1/16 OVERSIZE	
APPROVED C.REITZ	DATE 2016-02-18		
REVISION 1	DATE F.CARINGELLA 2017-10-25	DRAWING NUMBER <b>HPL1711</b>	