



HI-LITE® ST™ PIN

HI-LITE® ST™ PIN AND COLLAR AFTER ASSEMBLY

| FIRST DASH NO. | NOM. DIA. | A DIA. | A' DIA. | B REF. | D DIA. | TD DIA. | F | H | R RAD. | Z MAX. | S CHAMFER REF. | THREAD | INTERNAL THREAD LEFT HAND | | DOUBLE SHEAR POUNDS MINIMUM | TENSION POUNDS MINIMUM | |
|----------------|-----------|--------|---------|--------|--------|---------|------|-------|--------|--------|----------------|-------------------------|---------------------------|--------------------|-----------------------------|------------------------|--------|
| | | | | | | | | | | | | | T MIN | T ₁ MAX | | | |
| 18 | 9/16 | 1.1408 | 1.133 | .770 | .5615 | .5550 | .010 | .2430 | .050 | .025 | 1/16" x 45° | 9/16-18UNJF-3A Modified | .280 | .456 | .312-24UNJF-2B | 62,100 | 43,500 |
| 20 | 5/8 | 1.2723 | 1.265 | .825 | .6240 | .6180 | .010 | .2720 | .050 | .025 | 1/16" x 45° | 5/8-18UNJF-3A Modified | .280 | .456 | .312-24UNJF-2B | 76,700 | 54,600 |

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

GENERAL NOTES:

- Head edge out of roundness shall not exceed "F".
- Concentricity: Conical surface of head to "D" diameter within .005 FIR.
- "H" is dimensioned from maximum "D" diameter.
- Dimensions to be met after finish.
- Surface texture per ANSI B46.1.
- Hole preparation per NAS618.
- Curved or flat edge manufacturer's option.
- Lead radius must be tangent to "D" diameter at maximum grip.
- Use HPL833 for oversize replacement.

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. Code letter "A" following second dash number indicates assembly with HPM pull mandrel.

HOW TO ORDER EXAMPLES:

Pin Part Number Only
HPL823DL-18-8A
 - Assembled with HPM Pull Mandrel (Optional)
 - 8/16 or 1/2 Maximum Grip Length
 - 18/32 or 9/16 Nominal Diameter Pin
 - Finish
 - Pin Part Number

MATERIAL: Nickel Base Alloy per AMS5662.
HEAT TREAT: 125,000 psi shear minimum.
FINISH: HPL823DL(-)(-) = Kalgard FA or EM620C solid film lube per MIL-L-46010, Type 1 and cetyl alcohol lube per Hi-Shear Spec. 305.
 HPL823AG(-)(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, with color code orange on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.
 HPL823AP(-)(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
SPECIFICATION: Hi-Lite Product Specification 391.

VIEW A

HI-LITE THREAD TRANSITION AREA. THIS AREA OF SPECIAL CONFIGURATION AND COLD WORKING TO MEET PHYSICAL REQUIREMENTS. SEE SPECIFICATION FOR INSPECTION.

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| U.S. Patents 4,326,825; 4,485,510 and 4,957,401. Other U.S. and foreign patents pending. "Hi-Lite" is a registered trademark and "Hi-Lite ST" is a trademark of Hi-Shear Corporation. | |
| DRAWN DATE J.F.Obispo 4-1-96 | TITLE HI-LITE® ST™ PIN 100° FLUSH (MS24694) TENSION HEAD NICKEL BASE ALLOY (INCONEL 718) SPECIAL THREAD 1/16" GRIP VARIATION |
| APPROVED DATE J.Rausch 4-2-96 | |
| REVISION DATE ③ J.R.H. 5-19-99 | DRAWING NUMBER HPL823 |

HPL823