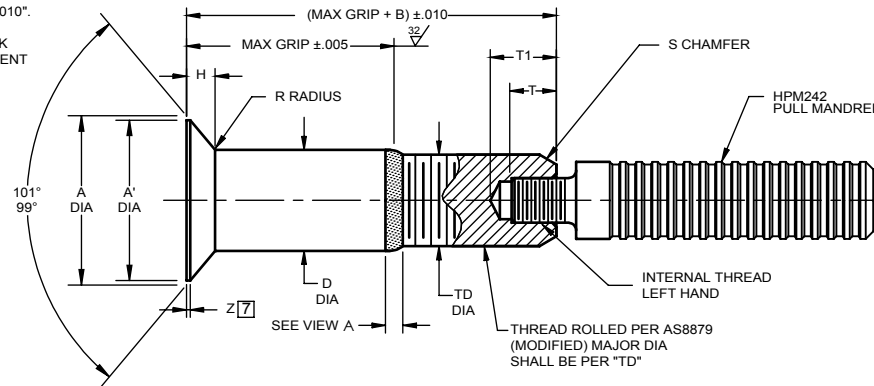
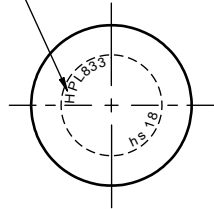
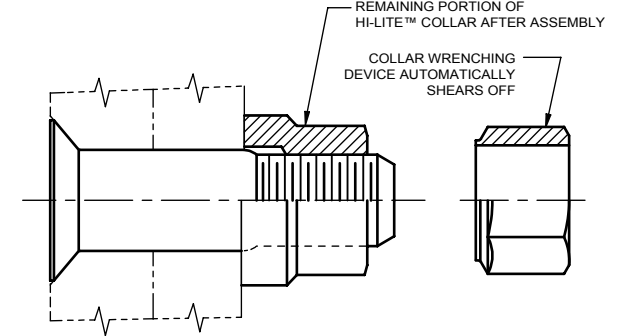


INDENTED HEAD MARKING MAXIMUM DEPTH .010".
 "hs" INDICATES HI-SHEAR TRADEMARK.
 THE NUMBER(S) FOLLOWING THE TRADEMARK
 INDICATES FIRST DASH NUMBER. ARRANGEMENT
 OPTIONAL.



PULL-IN™ PIN



PULL-IN™ PIN AND COLLAR AFTER ASSEMBLY

| FIRST DASH NO. | PIN NOM DIA | A DIA | A' A4 DIA | B REF | D DIA | TD DIA | F | H | R RAD | Z MAX | S CHAMFER REF | THREAD MODIFIED | INTERNAL THREAD LEFT HAND | | | DOUBLE SHEAR POUNDS MINIMUM | TENSION POUNDS MINIMUM |
|----------------------|-------------------|------------------|-----------------|----------|----------------|----------------|------|----------------|--------------|----------|---------------------|---------------------|------------------------------|-----------|----------------|--------------------------------------|------------------------------|
| | | | | | | | | | | | | | T MIN | T1 MAX | THREAD SIZE | | |
| 18 | 37/64 | 1.1408 1.1337 | 1.133 1.085 | .770 | .5771 .5766 | .5550 .5500 | .010 | .2365 .2335 | .050 .040 | .025 | 1/16 x 45° | .5625-18 UNJF-3A | .280 | .456 | .312-24UNJF-2B | 65,600 | 43,500 |
| 20 | 41/64 | 1.2723 1.2651 | 1.265 1.217 | .825 | .6396 .6391 | .6180 .6120 | .010 | .2654 .2624 | .050 .040 | .025 | 1/16 x 45° | .6250-18 UNJF-3A | .280 | .456 | .312-24UNJF-2B | 80,600 | 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 FIM.
- "H" is dimensioned from maximum "D" diameter.
- Hole preparation per NAS618.
- Dimensions are in inches and to be met after finish.
- Surface texture per ASME B46.1.
- [7] Curved or flat edge manufacturer's option.
- Lead radius must be tangent to "D" diameter at maximum grip.
- Use HPL843 for oversize replacement.
- After February, 21st of 2015, HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294 will be replaced by REACH compliant HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on fasteners coated in European Union.

MATERIAL: Nickel Base Alloy per AMS5662.

HEAT TREAT: 125,000 psi shear minimum.

- FINISH:**
- [1] HPL833AP() = HI-KOTE™ 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - [10] HPL833AG() = HI-KOTE™ 1 aluminum coating per Hi-Shear Spec. 294, color code orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HPL833DL() = Kalgard FA or EM620C solid film lube per AS5272, Type I and cetyl alcohol lube per Hi-Shear Spec. 305.

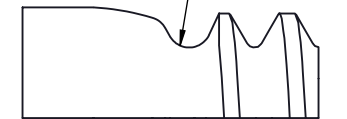
SPECIFICATION: HI-LITE™ Product Specification 391.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HPL833 oversize replaces.
 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
 HPL833DL 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 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 J.F.O. | DATE 1996-04-17 | TITLE PULL-IN™ PIN 100° FLUSH (MS24694) TENSION HEAD NICKEL BASE ALLOY (INCONEL 718) SPECIAL THREAD 1/16 GRIP VARIATION, 1/64 OVERSIZE | |
| APPROVED J. RAUSCH | DATE 1996-04-22 | DRAWING NUMBER HPL833 | |
| REVISION 3 | DATE F. CARINGELLA 2019-04-22 | 1 OF 1 | |