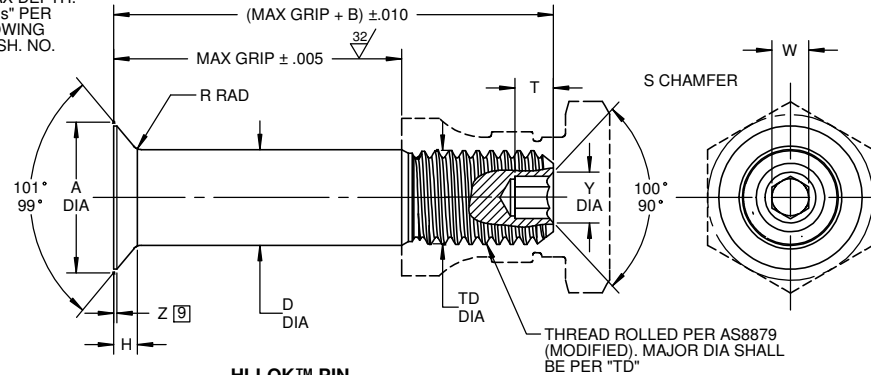
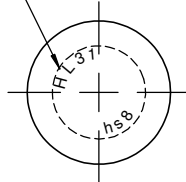
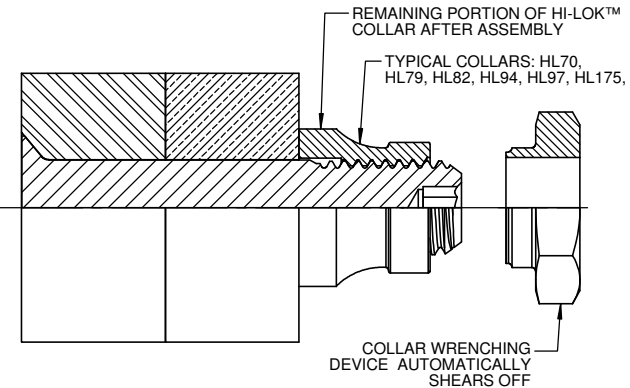


|   |  |                  |   |  |  |
|---|--|------------------|---|--|--|
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INDENTED HEAD MARKING .010 MAX DEPTH.  
MANUFACTURER'S TRADEMARK "hs" PER  
SPEC. 363. THE NUMBER(S) FOLLOWING  
TRADEMARK INDICATES FIRST DASH. NO.  
ARRANGEMENT OPTIONAL.



HI-LOK™ PIN



HI-LOK™ PIN AND COLLAR AFTER ASSEMBLY

| FIRST DASH NO. | PIN NOM DIA | A DIA          | B REF | D DIA                         |                             | TD DIA         | F REF | H              | R RAD        | Z MAX | S CHAMFER REF | THREAD MODIFIED     | SOCKET         |              |              | DOUBLE SHEAR POUNDS MINIMUM | TENSION POUNDS MINIMUM |
|----------------|-------------|----------------|-------|-------------------------------|-----------------------------|----------------|-------|----------------|--------------|-------|---------------|---------------------|----------------|--------------|--------------|-----------------------------|------------------------|
|                |             |                |       | WITHOUT COATING OR SOLID FILM | AFTER COATING OR SOLID FILM |                |       |                |              |       |               |                     | W HEX          | T DEPTH      | Y DIA        |                             |                        |
| 5              | 5/32        | .2612<br>.2564 | .312  | .1635<br>.1630                | .1635<br>.1625              | .1595<br>.1570 | .004  | .0410<br>.0390 | .025<br>.015 | .010  | 1/32 x 45°    | .1640-32<br>UNJC-3A | .0801<br>.0791 | .135<br>.115 | [8]          | 5,280                       | 1,700                  |
| 6              | 3/16        | .3016<br>.2966 | .325  | .1895<br>.1890                | .1895<br>.1885              | .1840<br>.1810 | .005  | .0470<br>.0449 | .030<br>.020 | .015  | 1/32 x 45°    | .1900-32<br>UNJF-3A | .0806<br>.0791 | .135<br>.115 | .119<br>.104 | 7,060                       | 2,600                  |
| 8              | 1/4         | .3948<br>.3898 | .395  | .2495<br>.2490                | .2495<br>.2485              | .2440<br>.2410 | .006  | .0610<br>.0589 | .030<br>.020 | .015  | 1/32 x 45°    | .2500-28<br>UNJF-3A | .0967<br>.0947 | .150<br>.130 | .142<br>.122 | 12,260                      | 4,400                  |
| 10             | 5/16        | .4739<br>.4689 | .500  | .3120<br>.3115                | .3120<br>.3110              | .3060<br>.3020 | .007  | .0679<br>.0659 | .040<br>.030 | .015  | 3/64 x 45°    | .3125-24<br>UNJF-3A | .1295<br>.1270 | .170<br>.150 | .180<br>.160 | 19,160                      | 7,000                  |
| 12             | 3/8         | .5604<br>.5554 | .545  | .3745<br>.3740                | .3745<br>.3735              | .3680<br>.3640 | .008  | .0780<br>.0759 | .040<br>.030 | .015  | 3/64 x 45°    | .3750-24<br>UNJF-3A | .1617<br>.1582 | .200<br>.180 | .217<br>.197 | 27,600                      | 10,000                 |
| 14             | 7/16        | .6680<br>.6620 | .635  | .4370<br>.4365                | .4370<br>.4360              | .4310<br>.4260 | .009  | .0969<br>.0944 | .040<br>.030 | .022  | 3/64 x 45°    | .4375-20<br>UNJF-3A | .1930<br>.1895 | .230<br>.210 | .253<br>.233 | 37,500                      | 13,500                 |
| 16             | 1/2         | .7540<br>.7480 | .685  | .4995<br>.4990                | .4995<br>.4985              | .4930<br>.4880 | .010  | .1068<br>.1043 | .050<br>.040 | .022  | 3/64 x 45°    | .5000-20<br>UNJF-3A | .2242<br>.2207 | .260<br>.240 | .289<br>.269 | 49,100                      | 18,000                 |

SEE COLLAR STANDARDS  
FOR COLLAR STRENGTHS.  
LOWER STRENGTH (PIN OR  
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 .003 FIM.
  3. Dimensions to be met after finish.
  4. Surface texture per ANSI B46.1.
  5. Hole preparation per NAS618.
  6. "H" is dimensioned from maximum "D" diameter.
  7. Use HL67 for oversize replacement.
  - [8] Evidence of broken edge across points.
  - [9] Curved or flat edge manufacturer's option.
  - [10] 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.

**SPECIFICATION:** HI-LOK™ Product Specification 342.

**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  
EXAMPLE:**

Pin Part Number  
HL31AP8-8  
└─ 8/16 or 1/2 Maximum Grip Length  
└─ 8/32 or 1/4 Nominal Diameter Pin  
└─ HI-KOTE™ 1 Aluminum Coating  
└─ Pin Basic Part Number

**MATERIAL:** Type 431 stainless steel per AMS5628 and MIL-S-18732.

**HEAT TREAT:** 125,000 psi shear minimum.

- [2] **FINISH:** HL31(-)(-) = Passivate per Hi-Shear Spec. 258, and Cetyl alcohol lube per Hi-Shear Spec. 305.  
HL31AP(-)(-) = HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.  
HL31BJ(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305.  
HL31D(-)(-) = Solid film lube per Spec. AS5272, Type I.  
HL31K(-)(-) = Solid film lube per "Lubeco" 905.  
HL31UR(-)(-) = Passivate per Hi-Shear Spec. 285, red identification on top of head, and cetyl alcohol lube per Hi-Shear Spec. 305.

| "HI-LOK", "HL", and "HI-KOTE",<br>are Trademarks of Hi-Shear Corporation |                      |   |
|--|----------------------|---|
| DRAWN BY<br>Gardiner   | DATE<br>12-22-60     | TITLE<br><b>HI-LOK™ PIN</b><br>100° FLUSH SHEAR HEAD<br>TYPE 431 STAINLESS STEEL<br>1/16 GRIP VARIATION |
| APPROVED<br>Cessna   | DATE<br>12-23-60     |   |
| REVISION<br>[22]   | DATE<br>FC<br>4-4-16 | DRAWING NUMBER<br><b>HL31</b>   |