lisi AEROSPACE
hi-shear corporation
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509 U.S.A.

HI-SHEAR Corporation, USA
a LISI AEROSPACE Company
Design Holder
CAGE No. 73197

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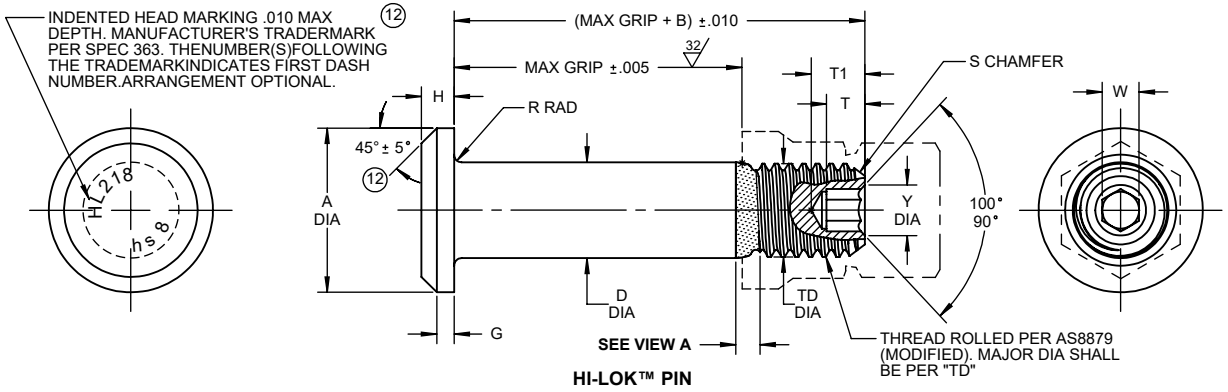
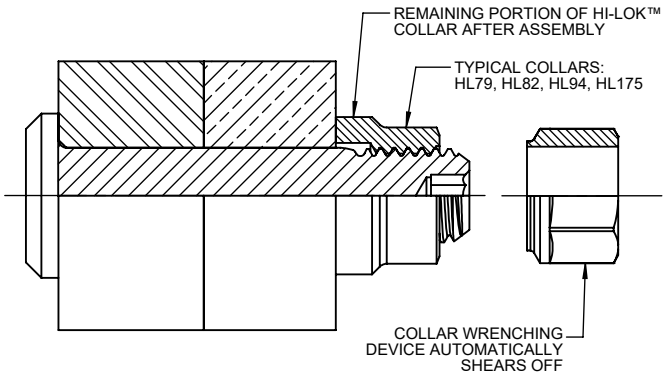



**HI-LOK™ PIN**




**HI-LOK™ PIN AND COLLAR AFTER ASSEMBLY**

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

| FIRST DASH NO. | PIN NOM DIA | A DIA | B REF | D DIA WITHOUT COATING | TD DIA | G REF | H | R RAD | S CHAMFER REF | THREAD MODIFIED | SOCKET W HEX | SOCKET T DEPTH MIN | SOCKET Y DIA | DOUBLE SHEAR POUNDS MINIMUM | TENSION POUNDS MINIMUM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 3/16 | | | | NOTE: USEHL18-6( ) or HL418-6-( ) | | | | | | | | | | |
| 6 | 13/64 | .315<br>.295 | .325 | .2182<br>.2172 | .1840<br>.1810 | .025 | .055<br>.045 | .025<br>.015 | 1/32 x 45° | 10-32UNJF-3A Modified | .0806<br>.0791 | .135<br>.115 | .119<br>.104 | 7,100 | 2,500 |
| 8 | 17/64 | .412<br>.387 | .395 | .2807<br>.2797 | .2440<br>.2410 | .030 | .069<br>.059 | .025<br>.015 | 1/32 x 45° | 1/4-28UNJF-3A Modified | .0967<br>.0947 | .150<br>.130 | .142<br>.122 | 11,800 | 4,300 |
| 10 | 21/64 | .505<br>.475 | .500 | .3432<br>.3422 | .3060<br>.3020 | .035 | .078<br>.068 | .030<br>.020 | 3/64 x 45° | 5/16-24UNJF-3A Modified | .1295<br>.1270 | .170<br>.150 | .180<br>.160 | 17,600 | 6,300 |
| 12 | 25/64 | .600<br>.565 | .545 | .4057<br>.4047 | .3680<br>.3640 | .040 | .088<br>.078 | .030<br>.020 | 3/64 x 45° | 3/8-24UNJF-3A Modified | .1617<br>.1582 | .200<br>.180 | .217<br>.197 | 24,600 | 8,700 |
| 14 | 29/64 | .676<br>.641 | .635 | .4682<br>.4672 | .4310<br>.4260 | .045 | .105<br>.093 | .030<br>.020 | 3/64 x 45° | 7/16-20UNJF-3A Modified | .1930<br>.1895 | .230<br>.210 | .253<br>.233 | 32,700 | 12,100 |
| 16 | 33/64 | .770<br>.735 | .685 | .5307<br>.5297 | .4930<br>.4880 | .050 | .115<br>.103 | .030<br>.020 | 3/64 x 45° | 1/2-20UNJF-3A Modfied | .2242<br>.2207 | .260<br>.240 | .289<br>.269 | 42,000 | 15,300 |
| 18 | 37/64 | .864<br>.829 | .770 | .5927<br>.5917 | .5550<br>.5500 | .055 | .127<br>.112 | .040<br>.025 | 1/16 x 45° | 9/16-18UNJF-3A Modified | .2555<br>.2520 | .290<br>.270 | .326<br>.306 | 52,400 | 19,000 |
| 20 | 41/64 | .953<br>.918 | .825 | .6552<br>.6542 | .6180<br>.6120 | .060 | .137<br>.122 | .040<br>.025 | 1/16 x 45° | 5/8-18UNJF-3A Modified | .2555<br>.2520 | .330<br>.305 | .326<br>.306 | 64,100 | 23,000 |
| 24 | 49/64 | 1.108<br>1.066 | 1.050 | .7802<br>.7702 | .7430<br>.7370 | .070 | .151<br>.136 | .045<br>.030 | 1/16 x 45° | 3/4-16UNJF-3A Modified | .3185<br>.3150 | .395<br>.365 | .398<br>.378 | 90,900 | 30,700 |
| 28 | 57/64 | 1.285<br>1.241 | 1.210 | .9052<br>.9042 | .8680<br>.8610 | .090 | .187<br>.172 | .050<br>.035 | 5/64 x 45° | 7/8-14UNJF-3A Modified | .3820<br>.3780 | .455<br>.425 | .471<br>.451 | 122,000 | 45,000 |
| 32 | 1-1/64 | 1.468<br>1.424 | 1.390 | 1.0302<br>1.0292 | .9930<br>.9860 | .110 | .218<br>.203 | .060<br>.045 | 5/64 x 45° | 1-12UNJF-3A Modified | .5100<br>.5040 | .580<br>.550 | .618<br>.598 | 158,000 | 60,900 |



| DRAWN BY | DATE | TITLE |
|---|---|---|
| Blrej | 1964-03-11 | HI-LOK™ PIN<br>PROTRUDING SHEAR HEAD<br>ALLOY STEEL<br>1/16 GRIP VARIATION,1/32 OVERSIZE |
| APPROVED | DATE | |
| Cessna | 1964-03-11 | |
| REVISION | DATE | DRAWING NUMBER |
| 12 | B. CHAN 2021-02-15 | HL218 1 OF 2 |



HL218

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**GENERAL NOTES:**
1. Concentricity: "A" diameter to "D" diameter within .010 FIM.
2. Dimensions are in inches and to be met after finish.
3. Surface texture per ASME B46.1.
4. Hole preparation per NAS618.
6. Use HL202 for oversize replacement.

**MATERIAL:** Alloy steel per AMS6415, AMS6349 or AMS6382, AMS6322.

**HEAT TREAT:** 160,000-180,000 psi tensile minimum per AMS-H-6875 (95,000 psi shear minimum).

**FINISH:**

HL218-( )-( ) = Cadmium plate per AMS-QQ-P-416 Type II, Class 2, color bronze, and cetyl alcohol lube per Hi-Shear Spec. 305,

HL218A-( )-( ) = Cadmium plate per AMS2400-3, and cetyl alcohol lube per Hi-Shear Spec. 305

HL218TF( )-( ) = Cadmium plate per AMS-QQ-P-416, Type III, Class 2, and Hi-Kote 2 solid film lube per Hi-Shear Spec 292.

(12) HL218UC( )-( ) = Cadmium Plate Per AMS-QQ-P-416, Type II Class 2, Cetyl Alcohol Green on Thread End

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

**CODE:** First dash number indicates nominal diameter in 1/32nds of the pin which HL218 oversize pin replaces. Second dash number indicates maximum grip in 1/16ths. See Finish note for explanation of code letters.

**HOW TO ORDER EXAMPLE:** Pin Part Number
HL218PB8-8

- 8/16 or 1/2 Maximum Grip Length
- Replaces 8/32 or 1/4 Nominal Diameter Pin
- Finish Code
- Pin Basic Part Number

~~Pin and Collar Assmebly part Combination~~
~~HL202287-8-8~~

- ~~Size and Grip Length~~
- ~~See Above Example~~
- ~~Collar Part Number~~
- ~~Pin Basic Part Number~~

HL218