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

### HI-LOK™ PIN

**DESIGN HOLDER CAGE NO.** 73197

**FOR THE CURRENT LIST OF LICENSED MANUFACTURERS, PLEASE VISIT THE LISI AEROSPACE WEBSITE AT:**

HTTP://WWW.LISI-AEROSPACE.COM/LICENSES

**INDENTED HEAD MARKING:** .01

**MAX DEPTH:** .005

**MANUFACTURER’S TRADEMARK PER SPEC 363. THE NUMBER(S) FOLLOWING TRADEMARK INDICATES FIRST DASH NO. ARRANGEMENT OPTIONAL.**

**INDENTED HEAD MARKING .01**

**O**

**MAX DEPTH.**

**Hl-LOK™ PIN**

**REMAINING PORTION OF Hl-LOK™ COLLAR AFTER ASSEMBLY**

**COLLAR WRENCHING DEVICE AUTOMATICALLY SHEARS OFF**

**THREAD ROLLED PER AS8879 (MODIFIED). MAJOR DIA SHALL BE PER “TD”**

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

### TABLE OF COLLAR STANDARDS

<table>
<thead>
<tr>
<th>FIRST DASH NO.</th>
<th>PIN NOM DIA</th>
<th>A DIA</th>
<th>B REF</th>
<th>D DIA</th>
<th>TD DIA</th>
<th>G REF</th>
<th>H</th>
<th>R RAD</th>
<th>S CHAMFER REF</th>
<th>THREAD MODIFIED</th>
<th>SOCKET</th>
<th>DOUBLE SHEAR POUNDS MINIMUM</th>
<th>TENSION POUNDS MINIMUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>32</td>
<td>.312</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
<tr>
<td>6</td>
<td>31</td>
<td>.325</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
<tr>
<td>8</td>
<td>40</td>
<td>.365</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
<tr>
<td>10</td>
<td>505</td>
<td>.500</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
<tr>
<td>12</td>
<td>600</td>
<td>.545</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
<tr>
<td>14</td>
<td>716</td>
<td>.635</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
<tr>
<td>16</td>
<td>877</td>
<td>.770</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
<tr>
<td>18</td>
<td>916</td>
<td>.825</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
<tr>
<td>20</td>
<td>953</td>
<td>.825</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
<tr>
<td>24</td>
<td>1,150</td>
<td>1.100</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
<tr>
<td>26</td>
<td>1,300</td>
<td>1.210</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
<tr>
<td>32</td>
<td>1,510</td>
<td>1.390</td>
<td>.040</td>
<td>.065</td>
<td>.025</td>
<td>.102</td>
<td>.025</td>
<td>.130</td>
<td>.064</td>
<td>1/32 x 37</td>
<td>.065</td>
<td>.065</td>
<td>.025</td>
</tr>
</tbody>
</table>

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

**"HI-LOK", "HL", AND "HI-KOTE", ARE TRADEMARKS OF HI-SHEAR CORPORATION.**

**DRAWN BY DATE TITLE**

MARTIN 1963-11-19

J.F. OBISPO 2014-07-30

APPROVED DATE DRAWING NUMBER

CESSNA 1963-11-26

HL12

©2022 Hi-Shear Corporation
### GENERAL NOTES:
1. Concentricity: "A" to "D" diameter within ±0.010 FIM.
2. Dimensions are in inches and to be met after finish.
3. Surface texture per ASME B46.1.
5. Maximum "D" diameter may be increased by .0002 to allow for solid film or aluminum coating application.
7. Dimensions to be met before finish for "V" code only.
8. Use HL112 for oversize replacement.
9. Non-lubed pins must be used with lubed collars or wet sealant.
10. Deleted.

### MATERIAL:
- 6AL-4V titanium alloy per AMS4928 or AMS4967.

### HEAT TREAT:
- 160,000 psi tensile minimum (95,000 psi shear minimum for sizes up to 3/4, 90,000 psi shear minimum for 7/8 and larger).

### FINISH:

<table>
<thead>
<tr>
<th>Pin Part Number</th>
<th>Finish Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL12VAP8-8</td>
<td></td>
<td>HL12VAP</td>
</tr>
</tbody>
</table>

**EXAMPLE:**
- HL12VAP8-8 = Cetyl alcohol lube per Hi-Shear Spec. 294.
- HL12VAP8-8 = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294.
- HL12VAP8-8 = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL12VAP8-8 = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HL12VAP8-8 = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, with color blue on thread end.
- HL12VAP8-8 = Solid film lube per "KalGard™ FA". 

**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.

**SPECIFICATION:**

**HOW TO ORDER:**
- Pin Part Number
- HL12VAP8-8
- Finish Code
- 8/16 or 1/2 Maximum Grip Length
- 8/32 or 1/4 Nominal Diameter Pin
- Pin Basic Part Number
- HL12VAP8-8

©2022 Hi-Shear Corporation