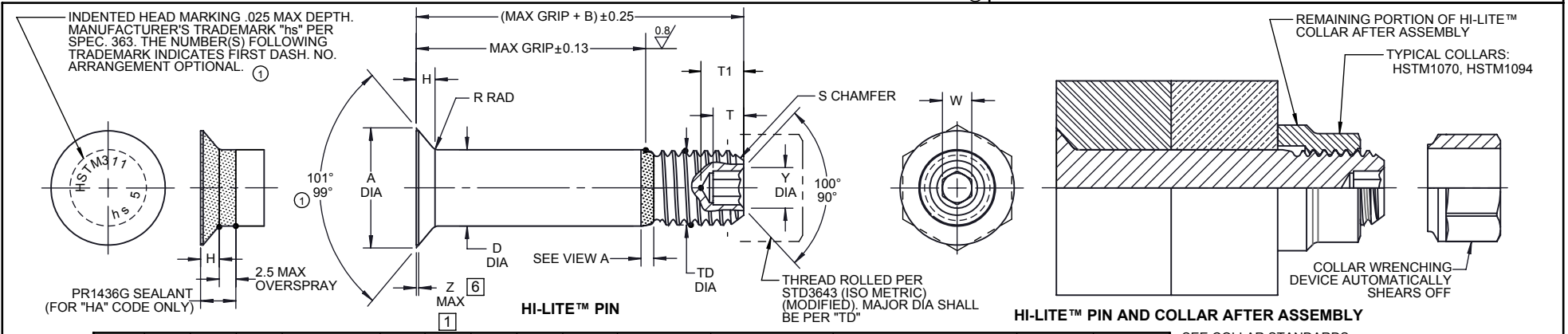




| FIRST DASH NO. | PIN NOM DIA | A DIA          | B REF | D DIA            |                         | TD DIA         | F    | H            | R RAD        | Z MAX | S CHAMFER REF | THREAD        | SOCKET       |                 |              |              | DOUBLE SHEAR NEWTONS MINIMUM | TENSION NEWTONS MINIMUM |
|----------------|-------------|----------------|-------|------------------|-------------------------|----------------|------|--------------|--------------|-------|---------------|---------------|--------------|-----------------|--------------|--------------|------------------------------|-------------------------|
|                |             |                |       | HSTM311          | HSTM311AZ AND HSTM311HA |                |      |              |              |       |               |               | * W HEX      | T HEX DEPTH MIN | T1 DEPTH MAX | Y DIA        |                              |                         |
| 04             | 4           | 6.99<br>6.85   | 7.11  | 4.490<br>4.478   | 4.490<br>4.465          | 3.91<br>3.86   | 0.11 | 1.05<br>0.99 | 0.65<br>0.40 | 0.25  | 0.8 x 37°     | M4 x 0.7-4h   | 1.64<br>1.61 | 1.63            | 2.90         | 2.30<br>1.90 | 20,800                       | 6,200                   |
| 05             | 5           | 8.35<br>8.21   | 7.65  | 5.490<br>5.478   | 5.490<br>5.465          | 4.90<br>4.84   | 0.13 | 1.20<br>1.14 | 0.75<br>0.50 | 0.38  | 0.8 x 37°     | M5 x 0.8-4h   | 2.05<br>2.01 | 2.00            | 3.43         | 3.05<br>2.60 | 31,100                       | 9,300                   |
| 06             | 6           | 10.18<br>10.04 | 8.65  | 6.490<br>6.478   | 6.490<br>6.465          | 5.88<br>5.81   | 0.16 | 1.55<br>1.49 | 0.75<br>0.50 | 0.38  | 0.8 x 37°     | M6 x 1.0-4h   | 2.46<br>2.40 | 2.25            | 4.06         | 3.60<br>3.10 | 43,500                       | 14,700                  |
| 08             | 8           | 13.23<br>13.09 | 9.65  | 8.487<br>8.472   | 8.487<br>8.462          | 7.88<br>7.80   | 0.18 | 1.99<br>1.93 | 1.00<br>0.75 | 0.38  | 1.2 x 37°     | M8 x 1.0-4h   | 3.29<br>3.22 | 2.75            | 5.08         | 4.60<br>4.05 | 74,300                       | 24,400                  |
| 10             | 10          | 16.18<br>16.04 | 11.82 | 10.487<br>10.472 | 10.487<br>10.462        | 9.88<br>9.80   | 0.21 | 2.39<br>2.33 | 1.00<br>0.75 | 0.38  | 1.2 x 37°     | M10 x 1.0-4h  | 4.11<br>4.02 | 3.50            | 5.97         | 5.50<br>5.00 | 113,400                      | 37,800                  |
| 12             | 12          | 18.92<br>18.78 | 13.33 | 12.484<br>12.466 | 12.484<br>12.459        | 11.87<br>11.76 | 0.23 | 2.70<br>2.64 | 1.25<br>1.00 | 0.56  | 1.2 x 37°     | M12 x 1.25-4h | 4.90<br>4.81 | 4.30            | 6.99         | 6.45<br>5.90 | 160,800                      | 52,000                  |

\* INCH STANDARD HEX

- GENERAL NOTES:**
- Head edge out of roundness shall not exceed "F".
  - Concentricity: Conical surface of head to "D" diameter within 0.08 FIR.
  - "H" dimensioned from maximum "D" diameter.
  - Surface texture per ISO/R468.
  - Dimensions are in millimeters and to be met after finish.
  - Curved or flat edge manufacturer's option.
  - Use HSTM611 for oversize replacement.

- ① ⑧ After February, 21st of 2015, HI-KOTE™ 1 aluminum pigmented coating 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:** 6AL-4V titanium alloy per Spec. AMS4928 or AMS4967 for all sizes.  
 6AL-6V-2sn titanium alloy per Spec. AMS4971 is acceptable for -10 size and larger.

**HEAT TREAT:** 655 N/mm<sup>2</sup> shear minimum.

**FINISH:** HSTM311-( )-( ) = Surface coating per Hi-Shear Spec. 306, Type I, color blue-violet (equivalent to LN9368 Blatt 4) with color code black on thread end plus cetyl alcohol lube per Hi-Shear Spec. 305.

① ⑧ HSTM311AZ-( )-( ) = HI-KOTE™ 1 aluminum coating per Hi-Shear Spec. 294 with color code black on thread end plus cetyl alcohol lube per Hi-Shear Spec. 305.

① ⑧ HSTM311HA-( )-( ) = HI-KOTE™ 1 aluminum coating per Hi-Shear Spec. 294 apply precoat No. PR1436G sealant (.051-.127 mm thick) with color code black on thread end plus cetyl alcohol lube per Hi-Shear Spec. 305.

**SPECIFICATION:** HI-LITE™ Product Specification No. M380.

**CODE:** First dash number indicates nominal diameter in 1 mm.  
 Second dash number indicates maximum grip in 1 mm.  
 See "Finish" note for explanation of code letters.

**HOW TO ORDER**

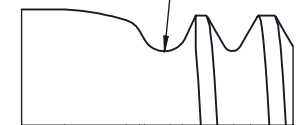
**① EXAMPLE:**

Pin Part Number  
**HSTM311AZ-04-8**  
 8mm Maximum Grip Length  
 4mm Nominal Diameter Pin  
 Finish Code  
 Pin Basic Part Number

Pin and Collar Assembly Part Number Combination  
**HSTM3111070-04-8**

Size and Grip Length, See Above Example  
 Collar Part Number  
 Pin 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-LITE", "HST", AND "HI-KOTE" ARE TRADEMARKS OF HI-SHEAR CORPORATION |                               |                                                                                                                   |
|------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------|
| DRAWN BY<br>D.P.S.                                                     | DATE<br>1987-01-28            | TITLE<br>HI-LITE™ PIN (METRIC SEIRES)<br>100° FLUSH SHEAR HEAD<br>TITANIUM<br>1mm GRIP VARIATION -0.5 mm OVERSIZE |
| APPROVED<br>E.E.B.                                                     | DATE<br>1987-01-28            |                                                                                                                   |
| REVISION<br>①                                                          | DATE<br>K. TRAN<br>2017-12-12 | DRAWING NUMBER<br><b>HSTM311</b><br>1 OF 1                                                                        |