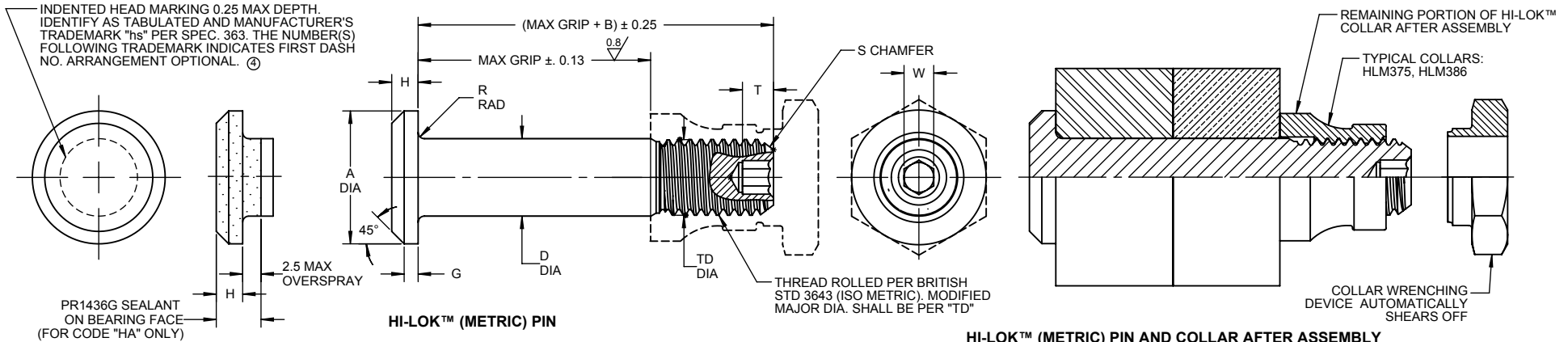




| FIRST DASH NO. | HEAD MARKING     | NOM DIA | A DIA          | B REF | D DIA            |                                | TD DIA         | G REF | H            | R RAD        | S CHAMFER REF | THREAD MODIFIED | SOCKET       |              | ** DOUBLE SHEAR NEWTONS MINIMUM | TENSION NEWTONS MINIMUM |
|----------------|------------------|---------|----------------|-------|------------------|--------------------------------|----------------|-------|--------------|--------------|---------------|-----------------|--------------|--------------|---------------------------------|-------------------------|
|                |                  |         |                |       | HLM312           | HLM312AP HLM312AU AND HLM312HA |                |       |              |              |               |                 | * W HEX      | T DEPTH      |                                 |                         |
| 04             | HLM312M4         | 4.5     | 8.65<br>8.25   | 9.0   | 4.490<br>4.478   | 4.490<br>4.465                 | 3.91<br>3.86   | 0.9   | 1.60<br>1.40 | 0.65<br>0.40 | 0.8 x 37°     | M4 x 0.7-4h     | 1.64<br>1.61 | 2.20<br>1.80 | 20800                           | 9800                    |
| 05             | HLM312M5         | 5.5     | 10.25<br>9.75  | 9.4   | 5.490<br>5.478   | 5.490<br>5.465                 | 4.90<br>4.84   | 1.0   | 1.90<br>1.65 | 0.65<br>0.40 | 0.8 x 37°     | M5 x 0.8-4h     | 2.05<br>2.01 | 2.55<br>2.00 | 31100                           | 15600                   |
| 06             | HLM312M6         | 6.5     | 11.40<br>10.90 | 11.7  | 6.490<br>6.478   | 6.490<br>5.465                 | 5.88<br>5.81   | 1.3   | 2.30<br>2.05 | 0.65<br>0.40 | 0.8 x 37°     | M6 x 1.0-4h     | 2.46<br>2.40 | 2.80<br>2.25 | 43500                           | 22200                   |
| 08             | HLM312M8 X 1     | 8.5     | 13.35<br>12.75 | 14.0  | 8.487<br>8.472   | 8.487<br>8.462                 | 7.88<br>7.80   | 1.6   | 3.05<br>2.80 | 0.75<br>0.50 | 1.2 x 37°     | M8 x 1.0-4h     | 3.29<br>3.22 | 3.35<br>2.80 | 74300                           | 42000                   |
| 10             | HLM312M10 X 1    | 10.5    | 16.70<br>15.90 | 16.2  | 10.487<br>10.472 | 10.487<br>10.462               | 9.88<br>9.80   | 1.9   | 3.75<br>3.50 | 0.75<br>0.50 | 1.2 x 37°     | M10 x 1.0-4h    | 4.11<br>4.02 | 4.35<br>3.80 | 113400                          | 68000                   |
| 12             | HLM312M12 X 1.25 | 12.5    | 19.30<br>18.50 | 19.4  | 12.484<br>12.466 | 12.484<br>12.459               | 11.87<br>11.76 | 2.3   | 4.45<br>4.20 | 0.75<br>0.50 | 1.2 x 37°     | M12 x 1.25-4h   | 4.90<br>4.81 | 5.10<br>4.55 | 160800                          | 100200                  |

- GENERAL NOTES:**
- Concentricity: "A" to "D" diameter within 0.25 FIR.
  - Surface texture per ISO/DR221.
  - Dimensions are in millimeters and to be met after finish.
  - Use HLM612 for oversize replacement.
  - 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 MPa shear minimum.

- FINISH:** HLM312-(-)(-) = Surface coating per Hi-Shear Spec. 306, Type I, color blue-violet (equivalent to LN9368 Blatt 4), and cetyl alcohol lube per Hi-Shear Spec. 305.
- ④ ⑤ HLM312AP(-)(-) = HI-KOTE™ 1 aluminum coating per Hi-Shear Spec. 294 and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLM312AU(-)(-) = Solid film lube per "ELECTROFILM" XSF-104.
- ④ ⑤ HLM312HA(-)(-) = HI-KOTE™ 1 aluminum coating per Hi-Shear Spec. 294 and apply precoat No. PR1436G sealant (.051-.127 mm thick) plus cetyl alcohol lube per Hi-Shear Spec. 305.

**SPECIFICATION:** HI-LOK™ Product Specification M342.

**CODE:** First dash number indicates nominal diameter in 1 mm. which HLM312 oversize pin replaces.  
Second dash number indicates maximum grip in 1 mm.  
See Finish note for explanation of code letters.

#### HOW TO ORDER

##### ④ EXAMPLE:

Pin Part Number  
HLM312AP-04-8  
└─ 8 mm Maximum Grip Length  
└─ Replaces 4 mm Nominal Diameter Pin  
└─ Finish Code  
└─ Pin Basic Part Number

Pin and Collar Assembly Part Number combination  
HLM312386-04-8

└─ Size and Grip Length, See Above Example  
└─ Collar Part Number  
└─ Pin Part Number

\* Inch standard hex.

\*\* The Double shear values shown are based on cross sectional area for nominal diameter pin.

| "HI-LOK", "HL", AND "HI-KOTE",<br>ARE TRADEMARKS OF HI-SHEAR CORPORATION |                                    |                                                                                                                       |
|--------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| DRAWN BY<br>D.P.S.                                                       | DATE<br>1977-05-17                 | TITLE<br>HI-LOK™ PIN (METRIC SERIES)<br>PROTRUDING TENSION HEAD<br>TITANIUM<br>1 mm GRIP VARIATION<br>0.5 mm OVERSIZE |
| APPROVED<br>R. TING                                                      | DATE<br>1977-05-19                 |                                                                                                                       |
| REVISION<br>④                                                            | DATE<br>F.CARINGELLA<br>2018-01-25 | DRAWING NUMBER<br><b>HLM312</b>                                                                                       |