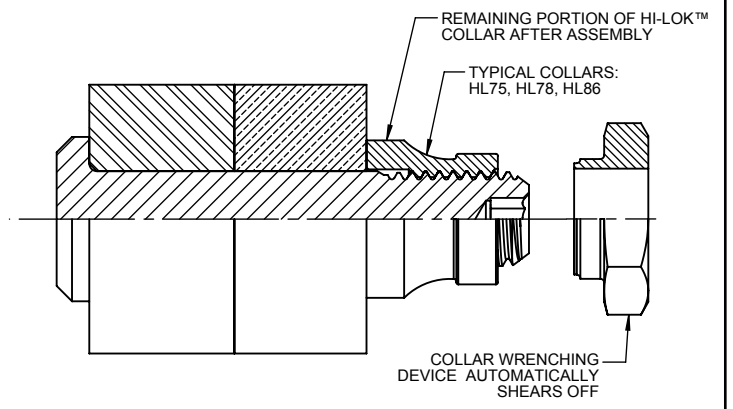


HI-LOK™ PIN



HI-LOK™ PIN AND COLLAR AFTER ASSEMBLY

33 5

| FIRST DASH NO. | PIN NOM DIA | A DIA | B REF | D DIA | | TD DIA | G REF | H | R RAD | 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 | .322 .306 | .312 | .1635 .1630 | .1635 .1625 | .1595 .1570 | .030 | .060 .055 | .025 .015 | 1/32 x 45° | .1640-32 UNJC-3A | .0801 .0791 | .135 .115 | 7 | 4,010 | 2,180 |
| 6 | 3/16 | .377 .357 | .325 | .1895 .1890 | .1895 .1885 | .1840 .1810 | .035 | .074 .064 | .025 .015 | 1/32 x 45° | .1900-32 UNJF-3A | .0806 .0791 | .135 .115 | .119 .104 | 5,380 | 3,180 |
| 8 | 1/4 | .440 .415 | .395 | .2495 .2490 | .2495 .2485 | .2440 .2410 | .045 | .090 .080 | .025 .015 | 1/32 x 45° | .2500-28 UNJF-3A | .0967 .0947 | .150 .130 | .142 .122 | 9,300 | 5,820 |
| 10 | 5/16 | .505 .475 | .500 | .3120 .3115 | .3120 .3110 | .3060 .3020 | .055 | .112 .102 | .030 .020 | 3/64 x 45° | .3125-24 UNJF-3A | .1295 .1270 | .170 .150 | .180 .160 | 14,600 | 9,200 |
| 12 | 3/8 | .565 .530 | .545 | .3745 .3740 | .3745 .3735 | .3680 .3640 | .065 | .140 .130 | .030 .020 | 3/64 x 45° | .3750-24 UNJF-3A | .1617 .1582 | .200 .180 | .217 .197 | 21,000 | 14,000 |
| 14 | 7/16 | .627 .592 | .635 | .4370 .4365 | .4370 .4360 | .4310 .4260 | .075 | .160 .150 | .030 .020 | 3/64 x 45° | .4375-20 UNJF-3A | .1930 .1895 | .230 .210 | .253 .233 | 28,600 | 18,900 |
| 16 | 1/2 | .752 .717 | .685 | .4995 .4990 | .4995 .4985 | .4930 .4880 | .085 | .188 .178 | .030 .020 | 3/64 x 45° | .5000-20 UNJF-3A | .2242 .2207 | .260 .240 | .289 .269 | 37,300 | 25,600 |
| 18 | 9/16 | .877 .842 | .770 | .5615 .5610 | .5615 .5605 | .5550 .5500 | .125 | .210 .200 | .040 .025 | 1/16 x 45° | .5625-18 UNJF-3A | .2555 .2520 | .290 .270 | .326 .306 | 47,200 | 32,400 |
| 20 | 5/8 | .953 .918 | .825 | .6240 .6235 | .6240 .6230 | .6180 .6120 | .140 | .238 .228 | .040 .025 | 1/16 x 45° | .6250-18 UNJF-3A | .2555 .2520 | .330 .305 | .326 .306 | 58,300 | 41,000 |
| 24 | 3/4 | 1.150 1.110 | 1.050 | .7490 .7485 | .7490 .7480 | .7430 .7370 | .200 | .335 .320 | .045 .030 | 1/16 x 45° | .7500-16 UNJF-3A | .3185 .3150 | .395 .365 | .398 .378 | 83,900 | 59,500 |
| 28 | 7/8 | 1.330 1.290 | 1.210 | .8740 .8735 | .8740 .8730 | .8680 .8610 | .250 | .385 .370 | .050 .035 | 5/64 x 45° | .8750-14 UNJF-3A | .3820 .3780 | .400 .370 | .471 .451 | 114,000 | 81,500 |
| 32 | 1 | 1.510 1.470 | 1.390 | .9990 .9985 | .9990 .9980 | .9930 .9860 | .300 | .435 .420 | .060 .045 | 5/64 x 45° | 1.0000-12 UNJF-3A | .5100 .5040 | .520 .490 | .618 .598 | 149,000 | 106,000 |

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 BRIEJ DATE 1963-04-02 J.F. OBISPO 2015-05-20 | TITLE HI-LOK™ PIN PROTRUDING TENSION HEAD A-286 HIGH TEMPERATURE ALLOY 1/16 GRIP VARIATION |
| APPROVED M.C. DATE 1963-04-02 | DRAWING NUMBER HL48 |
| REVISION 33 | DATE M.BEARD 2017-05-18 |

HL48

- GENERAL NOTES:**
1. Concentricity: "A" to "D" diameter within .010 FIM.
 - ③ 2. Dimensions are in inches, and to be met after finish.
 3. Surface texture per ASME B46.1.
 4. Hole preparation per NAS618.
 - ⑤ 5. Maximum "D" diameter may be increased by .0002 to allow for solid film application.
 - ⑥ 6. Broach petals removed.
 - ⑦ 7. Evidence of broken edge across points.
 - ⑧ 8. Non-lubed pins must be used with lubed collars.
 9. Use HL248 for oversize replacement.

MATERIAL: A-286 high temperature alloy per AMS5737 or AMS5731.

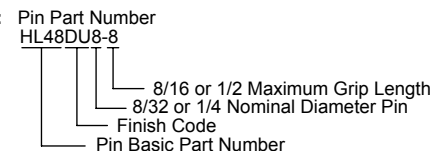
HEAT TREAT: 160,000 psi tensile minimum (95,000 psi shear minimum) at 70°F.

- FINISH:**
- HL48(-)(-) = Passivate per Hi-Shear Spec. 258 and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL48BC(-)(-) = Passivate per Hi-Shear Spec. 258 with blue paint on top of head only and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL48DL(-)(-) = Solid film lube per AS5272, Type I, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL48DS(-)(-) = Solid film lube per LUBECO™ M390.
 - HL48DU(-)(-) = Solid film lube per AS5272, Type I.
 - ⑧ HL48GU(-)(-) = Silver plate per AMS2410.
 - ⑥ HL48K(-)(-) = Solid film lube per LUBECO™ 905.
 - ⑥ HL48MA(-)(-) = Solid film lube per "KalGard™" RA. "KALGARD" is a trademark of Metal Improvement Company
 - ⑧ HL48PY(-)(-) = Passivate per Hi-Shear Spec. 258.
 - HL48TF(-)(-) = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292.
 - HL48V(-)(-) = Solid film lube per LUBECO™ 2123, Type II.
 - HL48HK(-)(-) = HI-KOTE™ 4 NC aluminum coating per Hi-Shear Spec. 397.

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:**



HL48