



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		TD DIA	F	H	K REF	R RAD	Z MAX	S CHAMFER REF	THREAD MODIFIED	SOCKET			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT COATING OR SOLID FILM LUBE	AFTER COATING OR SOLID FILM LUBE									W HEX	T DEPTH	Y DIA		
5	5/32	.3304 .3256	.312	.1635 .1630	.1635 .1625	.1595 .1570	.004	.0698 .0678	.013	.025 .015	.012	1/32 x 37°	.1640-32 UNJC-3A	.0801 .0791	.100 .080	[8]	4,010	2,180
6	3/16	.3813 .3765	.325	.1895 .1890	.1895 .1885	.1840 .1810	.005	.0805 .0785	.016	.030 .020	.015	1/32 x 37°	.1900-32 UNJF-3A	.0806 .0791	.100 .080	.119 .104	5,380	2,750
8	1/4	.5066 .5018	.395	.2495 .2490	.2495 .2485	.2440 .2410	.006	.1080 .1060	.021	.030 .020	.015	1/32 x 37°	.2500-28 UNJF-3A	.0967 .0947	.110 .090	.142 .122	9,300	5,820
10	5/16	.6335 .6287	.500	.3120 .3115	.3120 .3110	.3060 .3020	.007	.1350 .1330	.026	.040 .030	.015	3/64 x 37°	.3125-24 UNJF-3A	.1295 .1270	.130 .110	.180 .160	14,600	9,200
12	3/8	.7604 .7556	.545	.3745 .3740	.3745 .3735	.3680 .3640	.008	.1620 .1600	.030	.040 .030	.015	3/64 x 37°	.3750-24 UNJF-3A	.1617 .1582	.160 .140	.217 .197	21,000	14,000
14	7/16	.8884 .8812	.635	.4370 .4365	.4370 .4360	.4310 .4260	.009	.1895 .1865	.035	.050 .040	.022	3/64 x 37°	.4375-20 UNJF-3A	.1930 .1895	.190 .170	.253 .233	28,600	18,900
16	1/2	1.0139 1.0068	.685	.4995 .4990	.4995 .4985	.4930 .4880	.010	.2160 .2130	.039	.050 .040	.022	3/64 x 37°	.5000-20 UNJF-3A	.2242 .2207	.220 .200	.289 .269	37,300	25,500
18	9/16	1.1408 1.1337	.770	.5615 .5610	.5615 .5605	.5550 .5500	.010	.2430 .2400	.039	.050 .040	.022	1/16 x 37°	.5625-18 UNJF-3A	.2555 .2520	.260 .240	.326 .306	47,200	32,400
20	5/8	1.2723 1.2651	.825	.6240 .6235	.6240 .6230	.6180 .6120	.010	.2720 .2690	.044	.050 .040	.025	1/16 x 37°	.6250-18 UNJF-3A	.2555 .2520	.260 .240	.326 .306	58,300	41,000
24	3/4	1.5308 1.5236	1.050	.7490 .7485	.7490 .7480	.7430 .7370	.012	.3280 .3250	.044	.050 .040	.025	1/16 x 37°	.7500-16 UNJF-3A	.3185 .3150	.330 .300	.398 .378	83,900	59,500
28	7/8	1.7845 1.7773	1.210	.8740 .8735	.8740 .8730	.8680 .8610	.014	.3820 .3790	.045	.050 .040	.025	5/64 x 37°	.8750-14 UNJF-3A	.3820 .3780	.400 .370	.471 .451	114,000	81,500
32	1	2.0405 2.0310	1.390	.9990 .9985	.9990 .9980	.9930 .9860	.014	.4370 .4330	.045	.050 .040	.025	5/64 x 37°	1.000-12 UNJF-3A	.5100 .5040	.520 .490	.618 .598	149,000	106,000

"HI-LOK", "HI-TIGUE", AND "HI-KOTE",  
 ARE TRADEMARKS OF HI-SHEAR CORPORATION

DRAWN BY D.P.S.	DATE 1983-04-05	TITLE <b>HI-LOK™ HI-TIGUE™ PIN</b> 100° FLUSH MS24694 TENSION HEAD TITANIUM 1/16 GRIP VARIATION	
APPROVED R. TING	DATE 1983-04-06		
REVISION 13	DATE F. CARINGELLA 2018-09-24	DRAWING NUMBER <b>HLT453</b>	

- GENERAL NOTES:**
- 1 Head edge out of roundness shall not exceed "F".
  2. Concentricity: Conical surface of head to "D" diameter within .005 FIM.
  3. "H" is dimensioned from maximum "D" diameter.
  4. Surface texture per ASME B46.1.
  5. Hole preparation per NAS618.
  - 6 Curved or flat edge manufacturer's option.
  - 7 Maximum "D" diameter may be increased by .0002 to allow for solid film lube application.
  - 8 Evidence of broken edge across points.
  9. Use HLT437 for oversize replacement.
  - 10 After February, 21st of 2015, HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294 will be replaced by REACH compliant HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on fasteners coated in European Union.
  11. Dimensions are in inches and to be met after finish.

**MATERIAL:** 6Al-4V titanium alloy per AMS4928 or AMS4967.

**HEAT TREAT:** 160,000 psi tensile minimum (95,000 psi shear minimum).

- FINISH:**
- HLT453-( )-( ) = Grit blast top of head, and Cetyl alcohol lube per Hi-Shear Spec. 305.
  - 10 HLT453AP( )-( ) = HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294 and, cetyl alcohol lube per Hi-Shear Spec. 305.
  - HLT453FS( )-( ) = Grit blast top of head, HI-KOTE™ 2 solid film lube on threads only per Hi-Shear Spec. 292, with color light blue on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HLT453MA( )-( ) = Solid film lube per Kalgard RA.
  - HLT453SS( )-( ) = Grit blast top of head with color light blue on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HLT453SU( )-( ) = HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294, with color light blue on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HLT453TB( )-( ) = HI-KOTE™ 2 solid film lube per Hi-Shear Spec.292, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HLT453TF( )-( ) = HI-KOTE™ 2 solid film lube per Hi-Shear Spec.292.
  - HLT453HK( )-( ) = HI-KOTE™ 4 NC aluminum coating per Hi-Shear Spec. 397.

**SPECIFICATION:** HI-LOK™ HI-TIGUE™ 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:**

