



HI-LOK™ HI-TIGUE™ PIN

HI-LOK™ HI-TIGUE™ PIN AND COLLAR AFTER ASSEMBLY

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		
4	1/8	.2219 .2171	.294	.1375 .1370	.1375 .1365	.1335 .1310	.003	.0354 .0334	.010	.020 .010	.010	1/32 x 37°	.1380-32 UNJC-3A	.0645 .0635	.100 .080	[8]	2,840	950
5	5/32	.2612 .2564	.312	.1635 .1630	.1635 .1625	.1595 .1570	.004	.0408 .0388	.013	.025 .015	.010	1/32 x 37°	.1640-32 UNJC-3A	.0801 .0791	.100 .080	[8]	4,010	1,290
6	3/16	.3016 .2966	.325	.1895 .1890	.1895 .1885	.1840 .1810	.005	.0470 .0449	.016	.030 .020	.015	1/32 x 37°	.1900-32 UNJF-3A	.0806 .0791	.100 .080	.119 .104	5,380	2,000
8	1/4	.3948 .3898	.395	.2495 .2490	.2495 .2485	.2440 .2410	.006	.0610 .0589	.021	.030 .020	.015	1/32 x 37°	.2500-28 UNJF-3A	.0967 .0947	.110 .090	.142 .122	9,300	3,700
10	5/16	.4739 .4689	.500	.3120 .3115	.3120 .3110	.3060 .3020	.007	.0679 .0658	.026	.040 .030	.015	3/64 x 37°	.3125-24 UNJF-3A	.1295 .1270	.130 .110	.180 .160	14,600	5,000
12	3/8	.5604 .5554	.545	.3745 .3740	.3745 .3735	.3680 .3640	.008	.0780 .0759	.030	.040 .030	.015	3/64 x 37°	.3750-24 UNJF-3A	.1617 .1582	.160 .140	.217 .197	21,000	7,200
14	7/16	.6680 .6620	.635	.4370 .4365	.4370 .4360	.4310 .4260	.009	.0969 .0944	.035	.050 .040	.022	3/64 x 37°	.4375-20 UNJF-3A	.1930 .1895	.190 .170	.253 .233	28,600	10,000
16	1/2	.7540 .7480	.685	.4995 .4990	.4995 .4985	.4930 .4880	.010	.1068 .1043	.039	.050 .040	.022	3/64 x 37°	.5000-20 UNJF-3A	.2242 .2207	.220 .200	.289 .269	37,300	13,500
18	9/16	.8380 .8310	.770	.5615 .5610	.5615 .5605	.5550 .5500	.010	.1160 .1130	.039	.050 .040	.025	1/16 x 37°	.5625-18 UNJF-3A	.2555 .2520	.260 .240	.326 .306	47,200	17,000
20	5/8	.9250 .9180	.825	.6240 .6235	.6240 .6230	.6180 .6120	.010	.1260 .1230	.044	.050 .040	.025	1/16 x 37°	.6250-18 UNJF-3A	.2555 .2520	.260 .240	.326 .306	58,300	21,000
24	3/4	1.0970 1.0850	1.050	.7490 .7485	.7490 .7480	.7430 .7370	.012	.1460 .1410	.044	.050 .040	.025	1/16 x 37°	.7500-16 UNJF-3A	.3185 .3150	.330 .300	.398 .378	83,900	30,700
28	7/8	1.3197 1.3030	1.210	.8740 .8735	.8740 .8730	.8680 .8610	.014	.1870 .1800	.045	.050 .040	.025	5/64 X 37°	.8750-14 UNJF-3A	.3820 .3780	.400 .370	.471 .451	114,000	42,000
32	1	1.5186 1.4995	1.390	.9990 .9985	.9990 .9980	.9930 .9860	.014	.2180 .2100	.045	.050 .040	.025	5/64 x 37°	1.0000-12 UNJF-3A	.5100 .5040	.520 .490	.618 .598	149,000	55,000

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

DRAWN BY D.P.S.	DATE 1983-04-05	TITLE HI-LOK™ HI-TIGUE™ PIN 100° FLUSH SHEAR HEAD TITANIUM 1/16 GRIP VARIATION
APPROVED R.TING	DATE 1983-04-06	
REVISION 12	DATE M.BEARD 2017-12-20	DRAWING NUMBER HLT451

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.
- ⑫ 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 HLT435 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.
- ⑫ 11. Dimensions are in inches.

MATERIAL:

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

HEAT TREAT:

95,000 psi shear minimum.

⑫ **FINISH:**

- HLT451(-)(-) = Grit blast top of head, and Cetyl alcohol lube per Hi-Shear Spec. 305.
- ⑩ HLT451AP(-)(-) = HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294 and, cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT451FZ(-)(-) = Grit blast top of head, HI-KOTE™ 2 solid film lube on threads only per Hi-Shear Spec. 292.
- HLT451MA(-)(-) = Solid film lube per KAL-GARD RA.
- HLT451TB(-)(-) = HI-KOTE™ 2 solid film lube per Hi-Shear Spec.292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT451TF(-)(-) = HI-KOTE™ 2 solid film lube per Hi-Shear Spec.292.
- ⑫ HLT451HK(-)(-) = 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

⑫ **EXAMPLE:**

Pin Part Number

HLT451TF8-8

8/16 or 1/2 Maximum Grip Length
 8/32 or 1/4 Nominal Diameter Pin
 Finish Code
 Pin Basic Part Number

HLT451

DRAWING NUMBER

HLT451

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