



HI-LOK™ PIN AND COLLAR AFTER ASSEMBLY

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	T1 DEPTH MAX	Y DIA		
5	5/32	.322 .306	.312	.1635 .1630	.1635 .1625	.1595 .1570	.030	.065 .055	.025 .015	1/32 x 37°	.1640-32 UNJC-3A	.0801 .0791	.100 .080	.140	6	4,010	2,180
6	3/16	.377 .357	.325	.1895 .1890	.1895 .1885	.1840 .1810	.035	.074 .064	.025 .015	1/32 x 37°	.1900-32 UNJF-3A	.0806 .0791	.100 .080	.140	.119 .104	5,380	3,180
7	7/32	.410 .390	.355	.2182 .2177	.2182 .2172	.2100 .2070	.040	.081 .071	.025 .015	1/32 x 37°	.2160-28 UNJF-3A	.0806 .0791	.100 .080	.140	.119 .104	7,110	4,280
8	1/4	.440 .415	.395	.2495 .2490	.2495 .2485	.2440 .2410	.045	.090 .080	.025 .015	1/32 x 37°	.2500-28 UNJF-3A	.0967 .0947	.110 .090	.160	.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 37°	.3125-24 UNJF-3A	.1295 .1270	.130 .110	.200	.180 .160	14,600	9,200
12	3/8	.600 .565	.545	.3745 .3740	.3745 .3735	.3680 .3640	.075	.140 .130	.030 .020	3/64 x 37°	.3750-24 UNJF-3A	.1617 .1582	.160 .140	.235	.217 .197	21,000	14,000
14	7/16	.676 .641	.635	.4370 .4365	.4370 .4360	.4310 .4260	.095	.160 .150	.030 .020	3/64 x 37°	.4375-20 UNJF-3A	.1930 .1895	.190 .170	.280	.253 .233	28,600	18,900
16	1/2	.770 .735	.685	.4995 .4990	.4995 .4985	.4930 .4880	.095	.188 .178	.030 .020	3/64 x 37°	.5000-20 UNJF-3A	.2242 .2207	.220 .200	.320	.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 37°	.5625-18 UNJF-3A	.2555 .2520	.260 .240	.360	.326 .306	47,200	32,400
20	5/8	.953 .905	.825	.6240 .6235	.6240 .6230	.6180 .6120	.140	.238 .228	.040 .025	1/16 x 37°	.6250-18 UNJF-3A	.2555 .2520	.260 .240	.400	.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 37°	.7500-16 UNJF-3A	.3185 .3150	.330 .300	.425	.398 .378	83,900	59,500

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 J.F.OBISPO VAN	DATE 2015-01-06 1973-11-02	TITLE HI-LOK™ PIN PROTRUDING TENSION HEAD TITANIUM 1/16 GRIP VARIATION (SPECIAL SOCKET APPLICATION)
APPROVED JGWILCOX	DATE 1973-11-02	
REVISION 18	DATE C.ARTOS 2024-04-15	DRAWING NUMBER HL1012

**GENERAL NOTES:**

**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:**

Pin Part Number

HL1012AZ8-8

- 8/16 or 1/2 Maximum Grip Length

8/32 or 1/4 Nominal Diameter Pin

Post Office Code

— Pin Basic Part Number

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

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

**FINISH:**

HL1012-( )-( ) = Cetyl alcohol lube per Hi-Shear Spec. 305.

HL1012AZ(-)(-) = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

HL1012DK ( )-( ) = Solid film lube per "KalGard™" FA. "KALGARD" is a trademark of Metal Improvement Company.

HL1012GL( )-( ) = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only (no overspray is allowed on the shank) with color white on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

HL1012RA( )-( ) = Phosphate fluoride treat with color red on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.

HL1012SY( )-( ) = Phosphate fluoride treat, solid film lube per AS5272, Type I, color red on thread end.

HL1012VF( )-( ) = Anodize per Hi-Shear Spec 306, Type I, color blue, and cetyl alcohol lube per Hi-Shear Spec. 305.

HL1012NKJ(-)(-) = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

HL1012NKK(-)(-) = Sulfuric acid anodizing per ISO8080 and HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

HL1012NKL( )-( ) = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

# HL1012

DRAWING NUMBER

# HL1012

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