



DASH NO.	PIN NOM DIA	THREAD	A DIA	A1 DIA (REF)	B DIA	L	L1 (REF)	L2 (REF)	L3 (REF)	P (REF)	W HEX	X (REF)	X1 (REF)	UTS LBS. MIN	TORQUE-OFF INCH-POUNDS
5	5/32	.1640-32 UNJC-3B	.287 .283	.320	.173 .166	.447 .427	.265	.280	.460	.344	.314 .302	.107	.120	2,300	30-40
6	3/16	.1900-32 UNJF-3B	.307 .303	.340	.200 .192	.457 .437	.275	.290	.470	.344	.314 .302	.107	.120	2,750	40-50
8	1/4	.2500-28 UNJF-3B	.412 .408	.442	.261 .252	.552 .532	.340	.355	.565	.380	.346 .332	.112	.125	5,000	110-130
10	5/16	.3125-24 UNJF-3B	.518 .512	.552	.325 .314	.672 .652	.430	.445	.685	.484	.440 .425	.122	.135	8,300	200-250
12	3/8	.3750-24 UNJF-3B	.628 .622	.665	.388 .376	.744 .724	.475	.490	.755	.557	.503 .488	.122	.135	12,700	360-420
14	7/16	.4375-20 UNJF-3B	.733 .727	.765	.463 .442	.862 .842	.560	.575	.875	.840	.753 .736	.137	.150	19,000	525-675
16	1/2	.5000-20 UNJF-3B	.848 .842	.880	.528 .501	.942 .922	.610	.625	.955	.970	.878 .861	.137	.150	25,500	725-1000
18	9/16	.5625-18 UNJF-3B	.915 .905	.940	.598 .570	1.029 1.009	.670	.685	1.042	.970	.878 .861	.145	.158	29,000	1000-1150
20	5/8	.6250-18 UNJF-3B	.995 .985	1.040	.661 .634	1.123 1.103	.735	.750	1.136	1.120	1.003 .986	.145	.158	32,000	1350-1550
24	3/4	.7500-16 UNJF-3B	1.120 1.110	1.140	.786 .762	1.371 1.351	.940	.955	1.384	1.240	1.128 1.110	.156	.169	42,000	1900-2200
28	7/8	.8750-14 UNJF-3B	1.345 1.335	1.365	.911 .887	1.575 1.545	1.060	1.075	1.584	1.520	1.380 1.356	.169	.182	62,000	3200-3600
32	1	1.0000-12 UNJF-3B	1.490 1.480	1.510	1.036 1.015	1.840 1.810	1.225	1.240	1.849	1.650	1.504 1.480	.186	.199	84,000	4500-5000

"HI-LOK" AND "HL" ARE INTERNATIONAL  
 REGISTERED TRADEMARKS OF HI-SHEAR CORPORATION

DATE	BY	TITLE	DRAWING NO.
DRAWN	1960-07-29	HI-LOK™ COLLAR	HL86
APPROVED	1965-08-06	TYPE 303 Se STAINLESS STEEL	
REVISION	2018-02-15	1/16 GRIP VARIATION, TENSION APPLICATION	

**GENERAL NOTES:**

1. Go thread gage penetration shall be 3/4 of one revolution minimum.
2. Dimensions are in inches and apply after finish and before application of lubricants.
3. Use HL87 for oversize replacement.
4. Use HL73 or HL273 for higher tension application.
5. Use TB64VF( )L for HL86D( ), HL86DU( ), HL86K( ), HL86TB( ), HL86TF( ), HL86MA( ), HL86HK( ), and HL86DUW( ) thread lock inspection.

**MATERIAL:**

Collar 303 Se stainless steel per ASTM A-582 (AMS5640).  
Steel Washer 300 series stainless steel (.010 thick).  
Aluminum Washer 2024-T6 aluminum alloy (.020 thick) per AMS-QQ-A-250/4 or AMS-QQ-A-250/5 (sizes -5 through -12 only).

**FINISH:**

Collar

HL86-( ) = Collar only with cadmium plate per AMS-QQ-P-416, Type I, Class 2 and cetyl alcohol lube per Hi-Shear Spec. 305.

HL86D( ) = Collar only with cadmium plate per AMS-QQ-P-416, Type II, Class 2, and solid film lube per AS5272, Type I.

HL86DU( ) = Collar only with solid film lube per AS5272, Type I.

HL86G( ) = Collar only with silver plate per AMS2410 and cetyl alcohol lube per Hi-Shear Spec. 305.

HL86K( ) = Collar only with solid film lube "Lubeco" 905 (recommended for use on HL32 and HL33 only).

HL86KP( ) = Collar only with cadmium plate per AMS-QQ-P-416, Type II, Class 2, color violet to purple, and cetyl alcohol lube per Hi-Shear Spec. 305.

HL86MA( ) = Collar only with solid film lube per Kalgard RA.

HL86PB( ) = Collar only with cadmium plate per AMS-QQ-P-416, Type II, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.

HL86TB( ) = Collar only with HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.

HL86TF( ) = Collar only with HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292.

HL86HK( ) = Collar only with HI-KOTE™ 4 NC aluminum coating per Hi-Shear Spec. 397.

Collar & Washer

HL86PBW( ) = Collar finish the same as HL86PB( ), and steel washer with cadmium plate per AMS-QQ-P-416, Type II, Class 2.

HL86TW( ) = Collar with cadmium plate per AMS-QQ-P-416, Type I, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305, and aluminum washer anodize per MIL-A-8625, dye color blue (sizes -5 through -12 only).

HL86W( ) = Collar finish the same as HL86-( ), and steel washer with cadmium plate per AMS-QQ-P-416, Type I, Class 2.

HL86CNNW( ) = Collar with diffused nickel-cadmium plating per AMS2416, and cetyl alcohol lube per Hi-Shear Spec. 305, and steel washer is passivated.

HL86DUW( ) = Collar finish the same as HL86DU( ), and steel washer with cadmium plate per AMS-QQ-P-416, Type II, Class 2.

HL86GGW( ) = Collar and steel washer both with silver plate per AMS2410 and cetyl alcohol lube per Hi-Shear Spec. 305.

HL86GNW( ) = Collar with silver plate per AMS2410 and cetyl alcohol lube per Hi-Shear Spec. 305, and steel washer is passivated.

HL86KPW( ) = Collar finish the same as HL86KP( ), and steel washer with cadmium plate per AMS-QQ-P-416, Type II, Class 2.

**SPECIFICATION:**

HI-LOK™ Product Specification 345. Test bolt requirement exceptions per note 5 above. 50

**CODE:**

Dash number indicates nominal thread size in 1/32nds.  
See Finish note for explanation of code letters.

**EXAMPLES:**

HL86W8 = 1/4-28 HI-LOK™ collar with steel washer.  
HL86TW8 = 1/4-28 HI-LOK™ collar with aluminum washer.

DRAWING NO.

**HL86**

2 of 2