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FIRST DASH NO.	PIN NOM DIA	A DIA	B REF	D DIA ⑧		TD DIA	F	H	R RAD	Z MAX	S CHAMFER REF	THREAD MODIFIED	SOCKET			** DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM													
				WITHOUT COATING OR SOLID FILM LUBE	WITH COATING OR SOLID FILM LUBE								W HEX	T DEPTH	Y DIA															
5	13/64			NOTE: Use HL249-6																										
6	7/32	.3813 .3765	.325	.2182 .2177	.2182 .2172	.1840 .1810	.005	.0680 .0660	.030 .020	.015	1/32 x 45°	.1900-32 UNJF-3A	.0806 .0791	.135 .115	.119 .104	7,100	3,180													
8	9/32	.5066 .5018	.395	.2807 .2802	.2807 .2797	.2440 .2410	.006	.0950 .0930	.030 .020	.015	1/32 x 45°	.2500-28 UNJF-3A	.0967 .0947	.150 .130	.142 .122	11,800	5,820													
10	11/32	.6335 .6287	.500	.3432 .3427	.3432 .3422	.3060 .3020	.007	.1220 .1200	.040 .030	.015	3/64 x 45°	.3125-24 UNJF-3A	.1295 .1270	.170 .150	.180 .160	17,600	9,200													
12	13/32	.7604 .7556	.545	.4057 .4052	.4057 .4047	.3680 .3640	.008	.1490 .1470	.040 .030	.015	3/64 x 45°	.3750-24 UNJF-3A	.1617 .1582	.200 .180	.217 .197	24,600	14,000													
14	15/32	.8884 .8812	.635	.4682 .4677	.4682 .4672	.4310 .4260	.009	.1760 .1730	.050 .040	.022	3/64 x 45°	.4375-20 UNJF-3A	.1930 .1895	.230 .210	.253 .233	32,700	18,900													
16	17/32	1.0139 1.0068	.685	.5307 .5302	.5307 .5297	.4930 .4880	.010	.2030 .2000	.050 .040	.022	3/64 x 45°	.5000-20 UNJF-3A	.2242 .2207	.260 .240	.289 .269	42,000	25,600													
18	19/32	1.1408 1.1337	.770	.5927 .5922	.5927 .5917	.5550 .5500	.010	.2300 .2270	.050 .040	.025	1/16 x 45°	.5625-1 UNJF-3A	.2555 .2520	.290 .270	.326 .306	52,400	32,400													
20	21/32	1.2723 1.2651	.825	.6552 .6547	.6552 .6542	.6180 .6120	.010	.2589 .2559	.050 .040	.025	1/16 x 45°	.6250-18 UNJF-3A	.2555 .2520	.330 .305	.326 .306	64,100	41,000													
24	25/32	1.5308 1.5236	1.050	.7802 .7797	.7802 .7792	.7430 .7370	.012	.3149 .3119	.050 .040	.025	1/16 x 45°	.7500-16 UNJF-3A	.3185 .3150	.395 .365	.398 .378	90,900	59,500													

SEE COLLAR STANDARDS FOR COLLAR STRENGTHS. LOWER STRENGTH (PIN OR COLLAR) DETERMINES SYSTEM STRENGTH

\*\* The Double Shear values shown are based on cross sectional area for nominal diameter pin.

"HI-LOK", "HL", AND "HI-KOTE", ARE TRADEMARKS OF HI-SHEAR CORPORATION		
DRAWN BY SHRODE	DATE 1967-10-18	TITLE HI-LOK™ PIN 100° FLUSH MS24694 TENSION HEAD A-286 HIGH TEMPERATURE ALLOY 1/16 GRIP VARIATION - 1/32 OVERSIZE
APPROVED J. MILLER	DATE 1967-10-18	
REVISION ⑦	DATE K. TRAN 2017-11-15	DRAWING NUMBER <b>HL749</b>

- GENERAL NOTES:**
- 1 Head edge out of roundness shall not exceed "F".
  - 2 Concentricity: Conical surface of head to "D" diameter within .005 FIR.
  - 3 "H" dimensioned from maximum "D" diameter.
  - ⑦ 4. Dimensions are in inches and to be met after finish.
  - 5 Non-lubed pins must be used with lubed collars.
  - ⑦ 6. Surface texture per ASME B46.1.
  7. Hole preparation per NAS618.
  - 8 Maximum "D" diameter may be increased by .002 to allow for solid film or coating application.
  - 9 Curved or flat edge manufacturer's option.
  - ⑦ 10 After February, 21st of 2015, HI-KOTE™ 1 aluminum pigmented coating will be replaced by REACH compliant HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on fasteners coated in European Union.

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

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

- FINISH:**
- HL749-( )-( ) = Passivate per Hi-Shear Spec. 258, and cetyl alcohol lube per Hi-Shear Spec. 305.
- ⑦ 10 HL749AZ-( )-( ) = HI-KOTE™ 1 aluminum coating per Hi-Shear Spec. 294, with color code balck on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- ⑦ HL749DL-( )-( ) = Solid film lube per AS5272, Type I, and cetyl alcohol lube per Hi-Shear Spec. 305.
- ⑦ HL749DU-( )-( ) = Solid film lube per AS5272, Type I,
- 5 HL749PY-( )-( ) = Passivate per Hi-Shear Spec. 258.
- HL749V-( )-( ) = Solid film lube per "LUBE"CO" 2123, Type II.

**SPECIFICATION:** HI-LOK™ Product Specification 342.

**CODE:** First dash number indicates nominal diameter in 1/32nds which HL749 oversize pin replaces.  
 Second dash number indicates maximum grip in 1/16ths. See finish note for explanation of code letters.

**HOW TO ORDER**  
 ⑦ **EXAMPLE:**

Pin Part Number  
 HL749AZ-8-8  
 └─ 8/16 or 1/2 Maximum Grip Length  
 └─ Replaces 8/32 or 1/4 Nominal Diameter Pin  
 └─ Finish Code  
 └─ Pin Basic Part Number

Pin and Collar Assembly Part Number Combination  
 HL74993-8-8  
 └─ Size and Grip Length, See Above Example  
 └─ Collar Part Number  
 └─ Pin Part Number

HL749