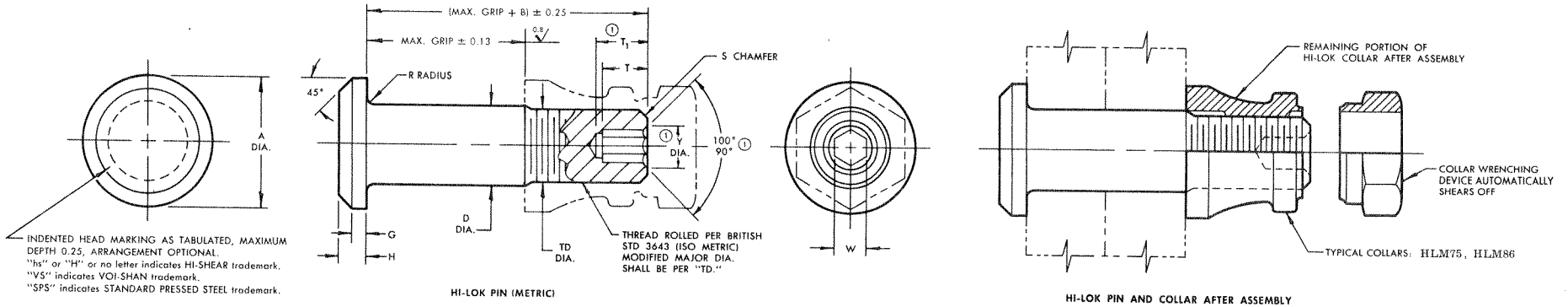


**STANDARDS COMMITTEE  
FOR HI-LOK® PRODUCTS**  
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

① HI-SHEAR CORPORATION, U.S.A. (Patent Holder) U.S. Federal Code I.D. No. 73197  
 Division of Hi-Shear Industries Inc., U.S.A.  
 AIRCRAFT FASTENERS (Forged Parts) LTD., U.K. (Licensee)  
 Division of Hi-Shear Industries Inc., U.S.A.  
 VOI-SHAN, Division of VSI Corp., U.S.A. (Licensee) U.S. Federal Code I.D. No. 92215  
 SPS TECHNOLOGIES, U.S.A. (Licensee) U.S. Federal Code I.D. No. 56878  
 LITTON FASTENING SYSTEMS, U.S.A. (Licensee) U.S. Federal Code I.D. No. 97928  
 Division of Litton Systems Inc., U.S.A.  
 ST. CHAMOND-GRANAT, S.A. France (Licensee—EEC Countries)  
 KAMAX-WERKE, Germany (Licensee—EEC Countries)  
 Rudolph Kellerman GmbH & Co.  
 SHIMODS, S.A. France (Licensee—Japan)  
 TOKYO SCREW COMPANY, Japan (Licensee—EEC Countries—Collars)  
 WEST COAST AEROSPACE INC., U.S.A. (Licensee—Oversize Pins & Steel Collars)  
 U.S. Federal Code I.D. No. 60516



FIRST DASH NO.	HEAD MARKING	NOM. DIA.	A DIA.	B REF.	D DIA.	TD DIA.	G REF.	H	R RAD.	S CHAMFER REF.	THREAD (MODIFIED)	SOCKET				DOUBLE SHEAR NEWTONS MINIMUM	TENSION NEWTONS MINIMUM
												* W HEX.	T HEX DEPTH MIN.	T <sub>1</sub> DEPTH MAX.	Y DIA.		
-04	HLM20M4	4	8.15 7.75	8.35	3.990 3.965	3.91 3.86	0.9	1.60 1.40	0.65 0.40	0.8 x 45°	M4 x 0.7-4h	1.64 1.61	1.80	2.95	1.90	16400	9800
-05	HLM20M5	5	9.75 9.25	8.65	4.990 4.965	4.90 4.84	1.0	1.90 1.65	0.65 0.40	0.8 x 45°	M5 x 0.8-4h	2.05 2.01	2.00	3.05	2.60	25700	15600
-06	HLM20M6	6	10.90 10.40	10.70	5.990 5.965	5.88 5.81	1.3	2.30 2.05	0.65 0.40	0.8 x 45°	M6 x 1.0-4h	2.46 2.40	2.25	3.40	3.10	37000	22200
-08	HLM20M8 x 1	8	12.85 12.25	12.95	7.987 7.962	7.88 7.80	1.6	3.05 2.80	0.75 0.50	1.2 x 45°	M8 x 1.0-4h	3.29 3.22	2.80	4.15	4.60 4.05	65800	42000
-10	HLM20M10 x 1	10	16.20 15.40	15.20	9.987 9.962	9.88 9.80	1.9	3.75 3.50	0.75 0.50	1.2 x 45°	M10 x 1.0-4h	4.11 4.02	3.80	5.35	5.55 5.00	102900	68000
-12	HLM20M12 x 1.25	12	18.80 18.00	18.15	11.984 11.959	11.87 11.76	2.3	4.45 4.20	0.75 0.50	1.2 x 45°	M12 x 1.25-4h	4.90 4.81	4.55	6.30	6.45 5.90	148100	100200

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

- ① GENERAL NOTES:
1. Concentricity: "A" to "D" diameter within 0.25 FIN.
  2. Dimensions to be met after finish.
  3. Surface texture per ISO/R468.
  4. Use HLM320 for oversize replacement.
  5. Parts made prior to this revision are OK to use.

MATERIAL: Alloy steel per Spec. MIL-S-5000, MIL-S-5626 or MIL-S-6049.

HEAT TREAT: 655 N/mm<sup>2</sup> shear minimum per Spec. MIL-H-6875.

FINISH: HLM20-( )-( ) = Cadmium plate per Spec. QQ-P-416, Type I, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.  
 HLM20PB-( )-( ) = Cadmium plate per Spec. QQ-P-416, Type II, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.

SPECIFICATION: Hi-Lok Product Specification No. M342.

CODE: First dash number indicates nominal diameter in 1 mm.  
 Second dash number indicates maximum grip in 1 mm.  
 See "Finish" note for explanation of code letters.

HOW TO ORDER  
 EXAMPLES:

Pin Part Number Only  
 HLM20-04-8  
 — 8 mm Maximum Grip Length  
 — 4 mm Nominal Diameter Pin  
 — Pin Part Number

Pin and Collar Assembly Part Number Combination  
 HLM2086-04-8  
 — Size and Grip Length, See Above Example  
 — Collar Part Number  
 — Pin Part Number

\* INCH STANDARD HEX.

U.S. patents 3,390,906; and foreign patents.  
 "Hi-Lok" and "HL" are Registered Trademarks of Hi-Shear Corporation.

DRAWN	DATE		<b>hi-lok® PIN (METRIC SERIES)</b> PROTRUDING TENSION HEAD ALLOY STEEL 1 mm GRIP VARIATION
D. P. S.	3-11-77		
APPROVED	DATE		DRAWING NUMBER <b>HLM20</b>
REVISION	DATE		
①	6-10-83		