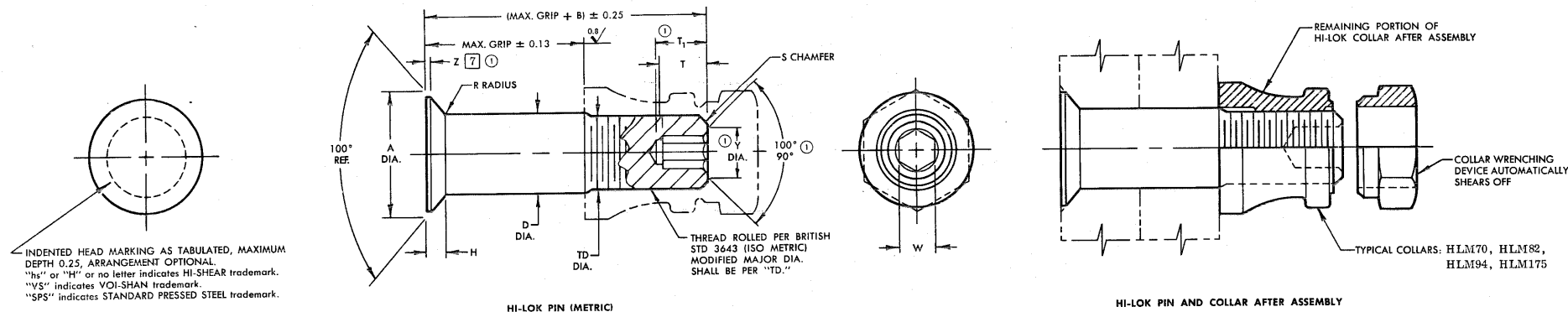


STANDARDS COMMITTEE FOR HI-LOK® PRODUCTS 2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

ST. BERNARD GRAMAT, S.A. France (Licensee—EEC Countries)
 KAMAX-WERKE, Germany (Licensee—EEC Countries)
 Rudolf Kellerman GmbH & Co. (Licensee—EEC Countries)
 SIMMONDS, S.A. France (Licensee—EEC Countries)
 TOKYO SCREW COMPANY, Japan (Licensee—Japan)
 WEST COAST AEROSPACE INC., U.S.A. (Licensee—Oversize Pins & Steel Collars)
 U.S. Federal Code I.D. No. 60916



FIRST DASH NO.	HEAD MARKING	NOM. DIA.	A DIA.	B REF.	D DIA.	TD DIA.	F	H	R RAD.	Z MAX.	S CHAMFER REF.	THREAD (MODIFIED)	SOCKET				DOUBLE SHEAR NEWTONS MINIMUM	TENSION NEWTONS MINIMUM
													* W HEX.	T HEX DEPTH MIN.	T1 DEPTH MAX.	Y DIA.		
-04	HLM19M4	4	6.49 6.35	8.35	3.990 3.965	3.91 3.86	0.11	1.05 0.99	0.65 0.40	0.25	0.8 x 45°	M4 x 0.7-4h	1.64 1.61	1.80	2.95	2.30 1.90	16400	6200
-05	HLM19M5	5	7.85 7.71	8.65	4.990 4.965	4.90 4.84	0.13	1.20 1.14	0.75 0.50	0.38	0.8 x 45°	M5 x 0.8-4h	2.05 2.01	2.00	3.05	3.05 2.60	25700	9300
-06	HLM19M6	6	9.68 9.54	10.70	5.990 5.965	5.88 5.81	0.16	1.55 1.49	0.75 0.50	0.38	1.8 x 45°	M6 x 1.0-4h	2.46 2.40	2.25	3.40	3.60 3.10	37000	14700
-08	HLM19M8 x 1	8	12.73 12.59	12.95	7.987 7.962	7.88 7.80	0.18	1.99 1.93	1.00 0.75	0.38	1.2 x 45°	M8 x 1.0-4h	3.29 3.22	2.80	4.15	4.60 4.05	65800	24400
-10	HLM19M10 x 1	10	15.68 15.54	15.20	9.987 9.962	9.88 9.80	0.21	2.39 2.33	1.00 0.75	0.38	1.2 x 45°	M10 x 1.0-4h	4.11 4.02	3.80	5.35	5.55 5.00	102900	37800
-12	HLM19M12 x 1.25	12	18.42 18.28	18.15	11.984 11.959	11.87 11.76	0.23	2.70 2.64	1.25 1.00	0.56	1.2 x 45°	M12 x 1.25-4h	4.90 4.81	4.55	6.30	6.45 5.90	148100	52000

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

- ① GENERAL NOTES: 1. Head edge out of roundness shall not exceed "F." 2. Concentricity: Conical surface of head to "D" diameter within 0.08 FIR. 3. "H" is dimensioned from maximum "D" diameter. 4. Dimensions to be met after finish. 5. Surface texture per ISO/R468. 6. Use HLM119 for oversize replacement. 7. Curved or flat edge manufacturer's option. 8. Parts made prior to this revision are OK to use.

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
 HLM19-04-8
 — 8 mm Maximum Grip Length
 — 4 mm Nominal Diameter Pin
 — Pin Part Number

Pin and Collar Assembly Part Number Combination
 HLM1970-04-8
 — Size and Grip Length, See Above Example
 — Collar Part Number
 — Pin Part Number

* INCH STANDARD HEX.

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

HEAT TREAT: 655 N/mm² shear minimum per Spec. MIL-H-6875.

FINISH: HLM19-()-() = Cadmium plate per Spec. QQ-P-416, Type I, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.
 HLM19PB-()-() = 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 M342.

U.S. patents 3,390,906; and foreign patents. "Hi-Lok" and "HL" are Registered Trademarks of Hi-Shear Corporation.	
DRAWN VAN 12-15-72	DATE 12-15-72
APPROVED R. P. S. 12-19-72	DATE 12-19-72
REVISION 1	DATE D. P. S. 6-10-83
hi-lok® PIN (METRIC SERIES) 100° FLUSH SHEAR HEAD ALLOY STEEL 1 mm GRIP VARIATION	
DRAWING NUMBER HLM19	

© 1983 Hi-Shear Corporation