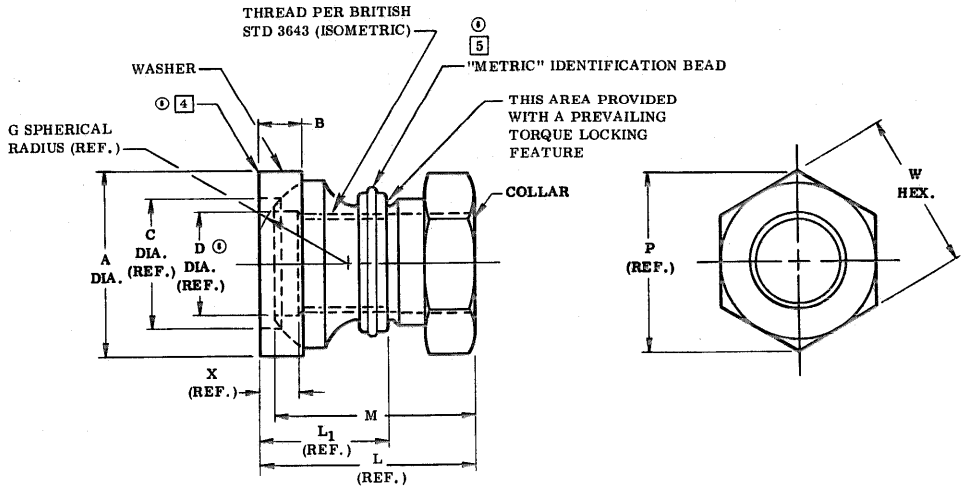
STANDARDS COMMITTEE FOR HI-LOK® PRODUCTS
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

① HI-SHEAR CORPORATION, U.S.A. (Patent Holder) U.S. Federal Code I.D. No. 73197
Division of Hi-Shear Industries Inc.
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.
Division of Litton Systems, Inc. (Licensee) U.S. Federal Code I.D. No. 97928

KAMAX-WERKE, Germany (Licensee)
Rudolph Kellerman GmbH & Co.
ST. CHAMOND-GRANAT, S.A. France (Licensee)
TOKYO SCREW COMPANY, Japan (Licensee)



① 5

DASH NO. (METRIC)	PIN NOM. DIA.	THREAD	A DIA.	B DIA.	C DIA. (REF.)	D DIA. (REF.)	G SPHER. RAD. (REF.)	L (REF.)	L_1 (REF.)	M	P (REF.)	W (HEX.)	X (REF.)	TORQUE OFF NEWTON-METER	ULT TNSN STR NEWTONS MINIMUM
-04	4	M4 x 0.7-4H5H	9.27 9.01	1.99 1.72	6.0	4.2	5.1	11.50	7.2	10.90 10.40	8.87	8.00 7.78	2.8	1.7-2.9	9600
-05	5	M5 x 0.8-4H5H	10.90 10.64	2.29 2.03	6.5	5.2	5.1	11.65	7.4	10.90 10.40	11.10	10.00 9.78	2.9	2.8-4.6	12700
-06	6	M6 x 1.0-4H5H	12.80 12.54	2.67 2.41	8.1	6.2	6.7	14.25	9.2	13.45 12.95	12.12	11.00 10.73	3.3	5.6-9.1	20700
-08	8	M8 x 1.0-4H5H	16.70 16.44	3.00 2.74	10.6	8.2	8.7	16.75	11.0	15.75 15.25	14.40	13.00 12.73	3.3	14.6-18.1	36900
-10	10	M10 x 1.0-4H5H	20.60 20.34	3.94 3.68	13.0	10.2	11.4	19.50	12.9	18.30 17.80	15.56	14.00 13.73	3.3	23.7-28.3	62300
-12	12	M12 x 1.25-4H5H	24.40 24.14	4.58 4.32	15.7	12.2	13.1	22.85	15.3	21.10 20.60	18.90	17.00 16.73	3.9	36.1-43.0	97800

NOTES:
1. Go thread gage penetration shall be 3/4 of one revolution minimum after thread lock.
2. Dimensions apply after finish.
3. For use on sloped surface up to 7° maximum on Hi-Lok standard pins.
① 4. Break sharp edge.
① 5. Parts made prior to this revision are OK to use.
① 6. Use HL475 for oversize replacement.

① MATERIAL: Collar — 303 Se stainless steel per ASTM A-582 and AMS5640.
Washer — "W" = 17-4PH stainless steel per AMS5643, or 17-7PH per AMS5528, or PH15-7Mo per AMS5520.
"WA" = 4140 or 8740 alloy steel per MIL-S-5626 or MIL-S-6049.

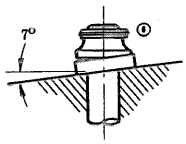
HEAT TREAT: Collar — None.
Washer — "W" = Age to H-1025 condition for 17-4PH, age to TH1050 condition for 17-7PH and 15-7Mo per MIL-H-6875.
"WA" = 180,000—200,000 psi tensile per MIL-H-6875.

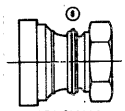
FINISH: Collar — HLM175DU-( )A = Solid film lube per MIL-L-8937.
HLM175PB-( )A = Cadmium plate per QQ-P-416, Type II, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.
Washer — HLM175-( )PBWA = Cadmium plate per QQ-P-416, Type II, Class 2.
HLM175-( )WU = Passivate per Hi-Shear Spec. 258.

SPECIFICATION: Hi-Lok Product Specification M345.

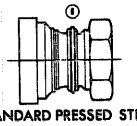
CODE: Dash number indicates nominal thread size in 1 mm.
Code letter "A" following dash number indicates Hi-Lok collar only.
Code letters "W" or "WA" following dash number indicate swivel washer only.
See "Finish" note for explanation of code letters.

EXAMPLE: HLM175DU-08AWU = M8 x 1.0 Hi-Lok collar and HLM175-08WU swivel washer.
HLM175DU-08A = M8 x 1.0 Hi-Lok collar with solid film lube.
HLM175-08WU = 8 mm size swivel washer with passivate.





VOI-SHAN
1 raised bead indicates VOI-SHAN identification.



STANDARD PRESSED STEEL
2 raised beads indicate STANDARD PRESSED STEEL identification.

U.S. patents 2,927,491; 2,940,495; 3,027,789; 3,138,987.
Other U.S. and Foreign patents granted and pending.
"Hi-Lok" and "HL" are Registered Trademarks of Hi-Shear Corporation.

	DATE	BY
DRAWN	8-30-71	Van
APPROVED	9-9-71	R. Yates
6 REVISION	5-7-80	D.P.S.

TITLE

hi-Lok® COLLAR (METRIC SERIES)

SELF-ALIGNING COLLAR ASSEMBLY
(STAINLESS STEEL COLLAR — STAINLESS STEEL OR ALLOY STEEL WASHER)
1 mm GRIP VARIATION — SHEAR APPLICATION

DRAWING NUMBER

HLM175

2-1501

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