

INCH-POUND

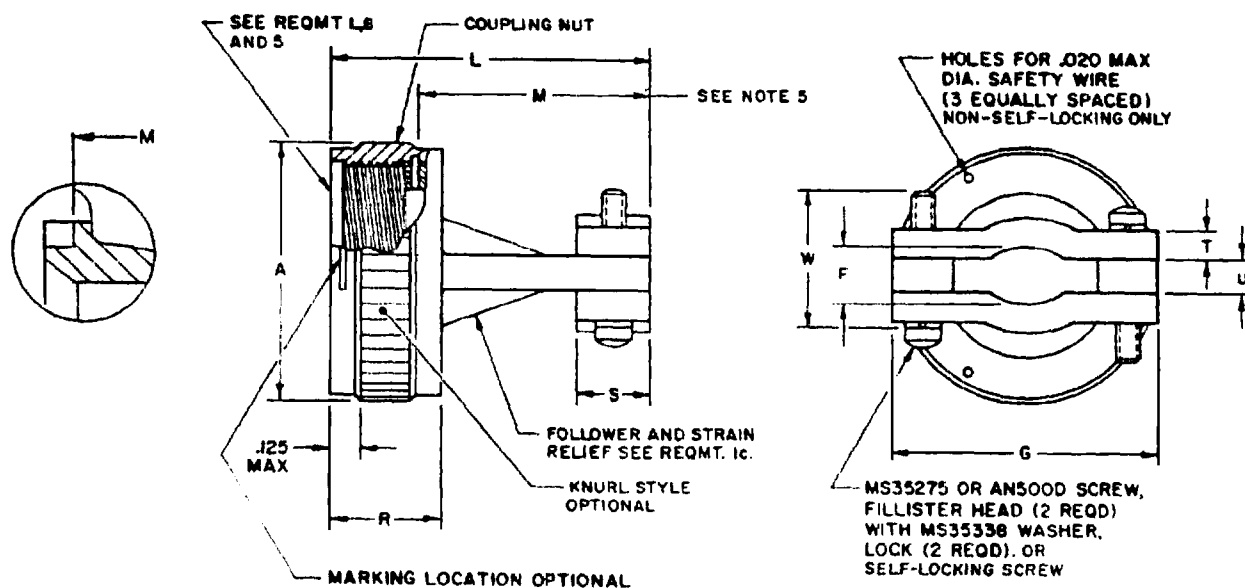
MIL-C-85049/52C
30 November 1990
SUPERSEDING
MIL-C-0085049/52B(USAF)
28 April 1989
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21 November 1986
MIL-C-85049/52
16 January 1980
MIL-C-83723/15
7 May 1976
MS3417E
10 May 1982

MILITARY SPECIFICATION SHEET

CONNECTOR ACCESSORIES, ELECTRICAL, STRAIN RELIEF,
NONENVIRONMENTAL, SELF-LOCKING AND NON-SELF-LOCKING, STRAIGHT,
CATEGORY 4B (FOR MIL-C-5015 CRIMP, MIL-C-26482 SERIES 2,
MIL-C-81703 SERIES 3, AND MIL-C-83723 SERIES III CONNECTORS)

This specification is approved for use by all Departments and
Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of
this specification sheet and the issue of the following specification listed
in that issue of the Department of Defense Index of Specifications and
Standards (DODISS) specified in the solicitation: MIL-C-85049.



NON-SELF-LOCKING OR SELF-LOCKING COUPLING

FIGURE 1. Configuration and dimensions.

AMSC N/A

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

FSC 5935

MIL-C-85049/52C

TABLE I. Dimensions.

Dash No.	For Connector Shell, Size (Ref)				Non-Self-Locking						Self-Locking			
	MIL-C-81703 Series 3	MIL-C-26482 Series 2	MIL-C-5015 Crimp	MIL-C-83723 Series III	A Max Dia	L +.062	M Max	R Max	Fillister Head Screw		A Max Dia	L Max	M Max	R Max
									AN5000 Dash Number	MS35275 Dash Number				
-3	3				.669	.890	.63	.540	6-8	230				
-8		8	8S	8	.617	.890	.63		6-8	230	.885	1.04	.73	.710
-10		10	10S&10SL	10	.734	1.000	.74		6-8	230	1.010	1.16	.85	.710
-12	7	12	12S&12	12	.858	1.125	.86		6-10	231	1.135	1.29	.98	.710
-14	12	14	14S&14	14	.984	1.125	.86		6-10	231	1.260	1.29	.98	.710
-16	19	16	16S&16	16	1.112	1.250	.99		6-10	231	1.385	1.41	1.10	.710
-18	27	18	18	18	1.218	1.500	1.24		8-12	247	1.510	1.66	1.35	.710
-20	37	20	20	20	1.345	1.625	1.36		8-14	248	1.635	1.79	1.48	.710
-22		22	22	22	1.468	1.750	1.49		8-16	249	1.760	1.91	1.60	.710
-24		24	24	24	1.593	1.875	1.61	.540	8-18	N/A	1.885	2.04	1.73	.710
-28			28		1.969	2.187	1.76	.702	8-20	250	2.135	2.35	1.88	.890
-32			32		2.219	2.375	1.95		416-20	284	2.395	2.60	2.13	.890
-36			36		2.469	2.750	2.33		416-24	285	2.635	2.91	2.44	.890
-40			40		2.719	2.938	2.51		416-24	285	2.885	3.10	2.63	.890
-44			44		2.969	3.312	2.89		416-28	286	3.135	3.47	3.00	.890
-48			48		3.219	3.687	3.26	.702	416-32	287	3.385	3.87	3.40	.890
-61	61				1.653	1.875	1.61	.640	8-18	N/A				

N/A = Not Available

Non-Self-Locking and Self-Locking									
Dash Number	F (see Note 4) Wire Bundle Accommodation Range		G +.020	S +.020	T +.015	U +.020	W +.032 Screw Length	Screw Size	MS35338 Washer Lock Dash Number
	Max	Min							
-3 <u>1/</u>	.204	.125	.732		.125	.125	.500	6-32	136
-8	.204	.125	.732	↑	↑	↑	.500	6-32	↑
-10	.286	.187	.812	↑	↑	↑	.500	6-32	↑
-12	.416	.291	.968	↑	↑	↑	.625	6-32	↑
-14	.476	.351	1.026	↓	↓	↓	.625	6-32	↓
-16	.625	.501	1.299	.250	.125	.125	.625	6-32	136
-18	.706	.518	1.431	.375	.156	.156	.750	8-32	137
-20	.831	.581	1.537	↑	↑	.156	.875	8-32	↑
-22	.956	.644	1.633	↓	↓	.156	1.000	8-32	↓
-24	1.081	.706	1.755	.375	.156	.188	1.125	8-32	↓
-28	1.187	.750	2.000	.500	.188	.250	1.250	8-32	137
-32	1.250	.875	2.366	↑	↑	.250	1.250	1/4-20	139
-36	1.375	.938	2.476	↓	↓	.375	1.500	1/4-20	↑
-40	1.500	.938	2.546	.500	↑	↑	1.500	1/4-20	↑
-44	1.750	1.188	2.840	.625	↓	↓	1.750	1/4-20	↓
-48	1.875	1.312	3.324	.625	.188	.375	2.000	1/4-20	139
-61 <u>1/</u>	1.081	.706	1.755	.375	.156	.188	1.125	8-32	137

1/ Not available on self-locking configuration.

INCH	mm	INCH	mm	INCH	mm	INCH	mm
0.015	0.380	0.750	19.050	1.385	35.170	2.187	55.540
0.020	0.500	0.812	20.620	1.345	34.160	2.190	55.620
0.032	0.810	0.831	21.100	1.350	34.290	2.260	57.400
0.062	1.570	0.850	21.590	1.360	34.540	2.330	59.180
0.125	3.170	0.858	21.790	1.375	34.920	2.350	59.690
0.161	4.080	0.860	21.840	1.410	35.81	2.366	60.090
0.166	4.210	0.875	22.220	1.431	36.340	2.375	60.320
0.187	4.740	0.885	22.470	1.468	37.280	2.395	60.83
0.188	4.770	0.890	22.60	1.480	37.590	2.440	61.97
0.204	5.180	0.938	23.82	1.500	38.100	2.469	62.710
0.250	6.350	0.956	24.280	1.510	38.350	2.476	62.890
0.286	7.260	0.968	24.580	1.537	39.030	2.510	63.750
0.297	7.540	0.980	24.890	1.593	40.460	2.600	66.040
0.351	8.910	0.984	24.990	1.600	40.640	2.630	66.800
0.375	9.520	0.990	25.140	1.625	41.270	2.635	66.920
0.416	10.560	1.000	25.400	1.633	41.470	2.719	69.060
0.476	12.090	1.010	25.650	1.635	41.520	2.750	69.850
0.500	12.700	1.026	26.060	1.653	41.980	2.840	72.130
0.501	12.720	1.040	26.400	1.660	42.160	2.885	73.270
0.540	13.710	1.081	27.450	1.730	43.940	2.895	73.530
0.518	13.150	1.100	27.940	1.750	44.450	2.910	73.910
0.581	14.750	1.112	28.240	1.755	44.570	2.938	74.620
0.617	15.670	1.125	28.570	1.760	44.700	2.969	75.410
0.625	15.870	1.135	28.820	1.790	45.460	3.000	76.200
0.630	16.000	1.160	29.460	1.875	47.620	3.100	78.740
0.640	16.250	1.187	30.140	1.880	47.750	3.135	79.620
0.644	16.350	1.188	30.170	1.885	47.870	3.212	81.580
0.669	16.990	1.218	30.930	1.910	48.510	3.319	84.300
0.702	17.830	1.240	31.490	1.950	49.530	3.324	84.420
0.706	17.930	1.250	31.750	1.969	50.010	3.385	85.970
0.710	18.030	1.260	32.000	2.000	50.800	3.400	86.360
0.730	18.540	1.295	32.850	2.040	51.810	3.470	88.130
0.732	18.590	1.299	32.990	2.130	54.100	3.687	93.640
0.734	18.640	1.312	33.320	2.135	54.220	3.870	98.290
0.740	18.79						

REQUIREMENTS:

1. Design and construction:

- a. Dimensions and configuration: See figure 1 and table I.
- b. Interface dimensions shall be in accordance with MIL-C-85049, figure 4.
- c. Accessory consists of a coupling nut and follower. The coupling nut shall be captivated to and free to rotate on the follower.
- d. Clamps shall have no protrusions or sharp edges which may pinch cable.

MIL-C-85049/52C

2. Material and finish: See table II.
3. Accessories will not accommodate connectors using size 8, 4 or 0 contacts.

TABLE II. Material and finish.

Figure	Material	Finish
1 & 2	Aluminum alloy in accordance with MIL-C-85049	<u>1</u> / N, <u>2</u> / W A

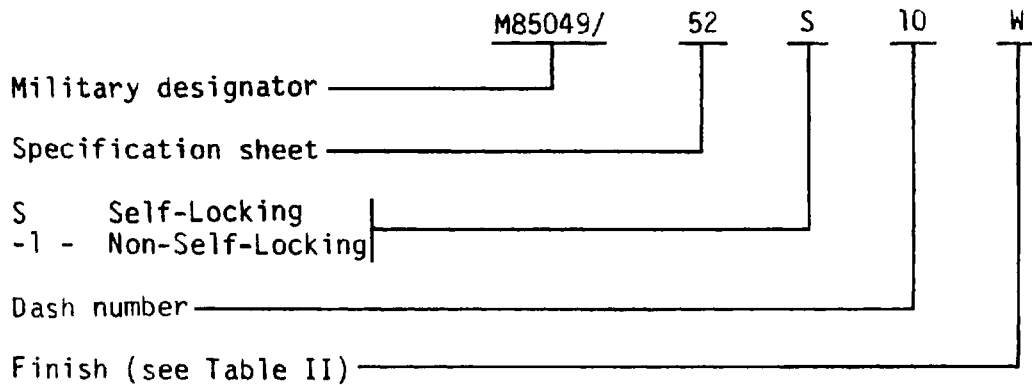
1/ Not for Navy use. Restricted to Air Force Space applications only.
2/ W finish not for use in space application.

4. Qualification:

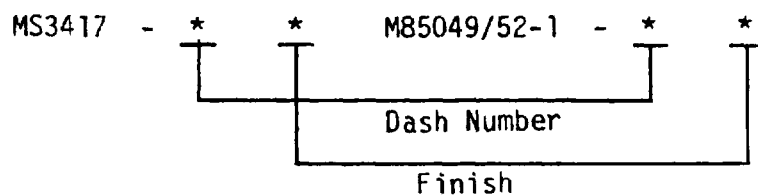
Non-self-locking and self-locking - See MIL-C-85049, category 4B.

Information pertaining to qualification of products may be obtained from the Commanding Officer, Naval Avionics Center, Attention: Code B/444, 6000 East 21st Street, Indianapolis, IN 46219-2189.

5. Part Number: For figure 1 see example below:



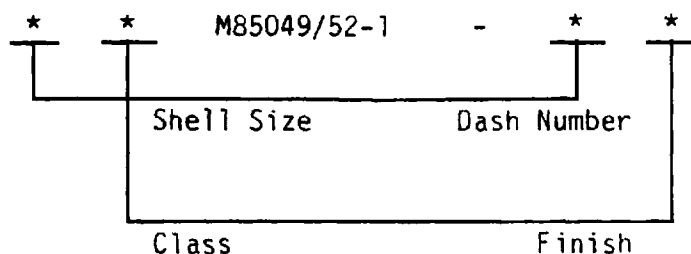
6. Supersession data:



<u>Old</u>	<u>New</u>
C	W
A	W
G	A
N	N

MIL-C-85049/52C

M83723/15S



<u>Old</u>	<u>New</u>
A	W
R	N

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are based upon 1.00 inch = 25.4 mm and shall be in accordance with ASTM E380, paragraph 4.5, Method A and ASTM E29, rounding-off method.
3. Dimensions apply after plating.
4. "Wire bundle accommodation range" dimension is defined as the envelope area of the wire bundle. This dimension is not meant to define the clamp hardware limits.
5. Measured from the root of the tooth to the back of the coupling nut.

Revision letters are not used to denote changes due to the extensiveness of the changes.

Custodians:

Army - CR
Navy - AS
Air Force - 85

Preparing activity:

Navy - AS
Project No. 5935-3734-03

Review activities:

Army - AR, MI
Navy - EC
Air Force - 11, 15, 19, 99
DLA - ES
NASA - JFK, LRC, GSF