

TINCH-POUND

MIL-C-39029/92B

2 March 1989

SUPERSEDING

MIL-C-39029/92A

16 December 1985

MILITARY SPECIFICATION SHEET

CONTACTS, ELECTRICAL CONNECTOR, SOCKET, CRIMP REMOVABLE (FOR MIL-R-6106 AND MIL-S-12883/40 AND /41 RELAY SOCKETS)

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-39029.

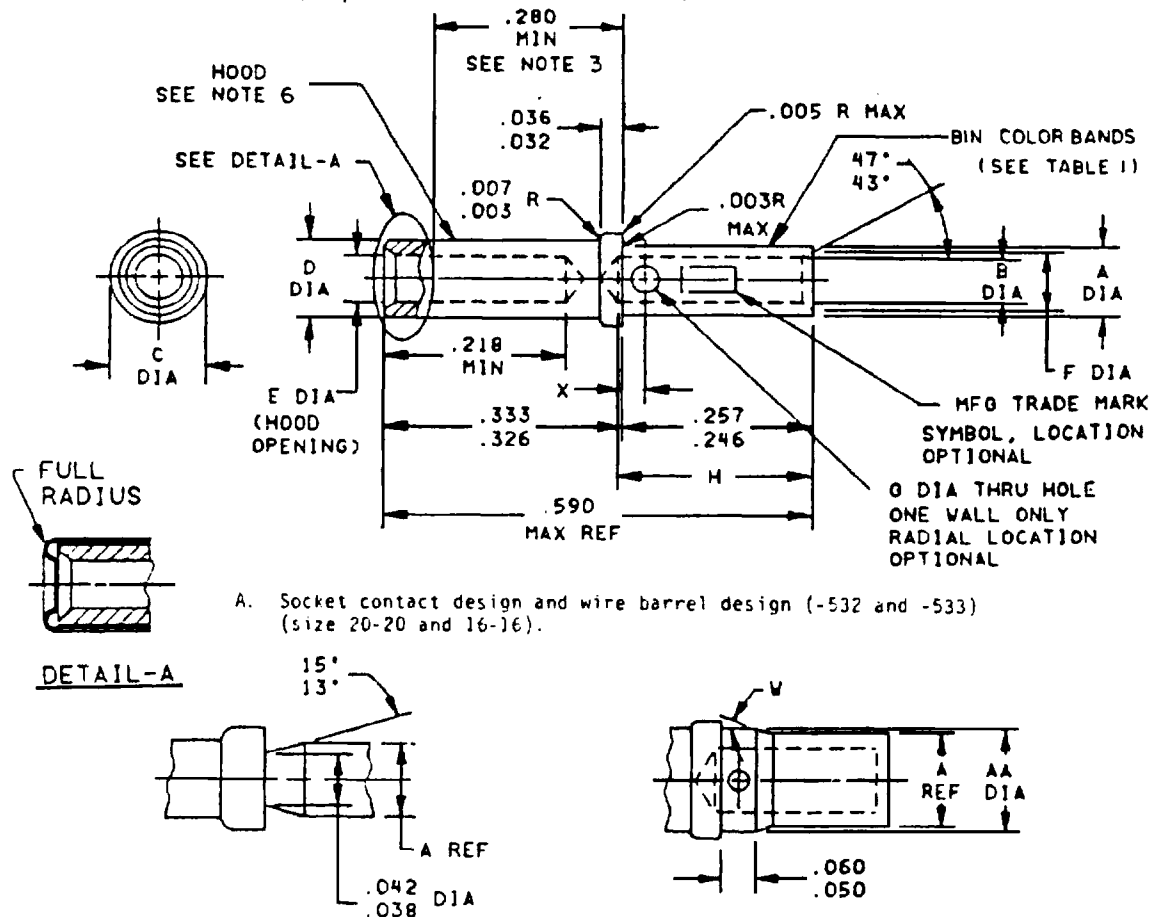


FIGURE 1. Socket contact design and wire barrel design variation.

AMSC N/A

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FSC 5935

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

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.003	0.08	.042	1.07	.0930	2.362	.155	3.94
.004	0.10	.043	1.09	.0950	2.413	.158	4.01
.005	0.13	.047	1.19	.0955	2.426	.161	4.09
.007	0.18	.048	1.22	.098	2.49	.187	4.75
.010	0.25	.050	1.27	.100	2.54	.190	4.83
.017	0.43	.051	1.30	.101	2.57	.218	5.54
.020	0.51	.053	1.35	.102	2.59	.246	6.25
.022	0.56	.060	1.52	.103	2.62	.250	6.35
.026	0.66	.0615	1.562	.113	2.87	.257	6.53
.0295	0.749	.062	1.57	.120	3.05	.280	7.11
.0305	0.775	.0635	1.613	.126	3.20	.284	7.21
.0315	0.800	.066	1.68	.130	3.30	.326	8.28
.032	0.81	.068	1.73	.133	3.38	.333	8.46
.036	0.91	.073	1.85	.136	3.45	.590	14.99
.038	0.97	.076	1.93	.140	3.56	14.	356.
.0390	0.991	.078	1.98	.146	3.71	16.	406.
.040	1.02	.083	2.11	.146	3.76	44.	1118.
.0410	1.041	.089	2.26	.151	3.84	46.	1168.
.0415	1.054						

Dimensions.

Bin code	A Dia	B Dia	C Dia	D Max Dia	E Min Dia	F Dia	G Dia	H	W	X	AA
531	.053 .051	.038 .036	.076 .073	.0615	.0315	.047 .043	.022 .017	.140 .120	---	.146 .126	---
532	.078 .076	.050 .048	.103 .100	.078	.0415	.066 .062	.032 .026	.284 .250	---	.040 .020	---
533	.103 .101	.068 .066	.133 .130	.113	.0635	.089 .083	.042 .036	.284 .250	---	.040 .020	---
534	.078 .076	.050 .048	.133 .130	.113	.0635	.066 .062	.032 .026	.284 .250	46 44	.040 .020	.103 .101
535	.151 .148	.102 .098	.190 .187	.161	.0955	.136 .130	.042 .036	.284 .250	16 14	.040 .020	.158 .155
536	.103 .101	.068 .066	.190 .187	.161	.0955	.089 .083	.042 .036	.284 .250	46 44	.040 .020	.158 .155

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Distance between rear of contact shoulder and point at which a gauge pin, of same basic diameter as mating pin contact and square face, first engages socket contact spring member.
4. Diameters to be concentric within .004 FIM.
5. Dimensions shown apply after plating.
6. Maximum gap of .010 inch between hood and body of the contact.

FIGURE 1. Socket contact design and wire barrel design variation - Continued.

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REQUIREMENTS:

Qualification:

Electrical contact shall be tested using a relay and relay socket in accordance with MIL-S-12883/40 and MIL-S-12883/41 (latest revision).

Design and construction: See figure 1 and table 1.

TABLE I. Design characteristics.

Bin code	Color band			Mating end size	Wire barrel size	Type	Class
	<u>1/</u> 1st	2nd	3rd				
531	Green	Orange	Brown	22	22	A	A
532	"	"	Red	20	20		
533	"	"	Orange	16	16		
534	"	"	Yellow	16	20		
535	"	"	Green	12	12		
536	"	"	Blue	12	16		

1/ See MIL-C-39029 for marking options.

ELECTRICAL:

Mating electrical contact: Relay pin, see MIL-S-12883/40 and MIL-S-12883/41 for part or identifying number (PIN).

Current rating (maximum): Operating current shall be determined by derating for intended applications (see table II).

TABLE II. Current rating (maximum rms).

Bin code	Max (rms)	Bin code	Max (rms)
-531	5 amps	-534	7.5 amps
-532	7.5 amps	-535	23 amps
-533	10 amps	-536	10 amps

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ENVIRONMENTAL:

Temperature range: -70°C to +125°C.

MECHANICAL:

Vibration (sinusoidal): In accordance with MIL-STD-202, method 204, condition G with the following exceptions:

- a. The frequency range shall be varied logarithmically between the limits of 10 and 3,000 Hz.
- b. The procedure of MIL-STD-202, method 201 may be applied during 10 to 55 Hz band of the vibration frequency range.

Vibration (random): In accordance with MIL-STD-202, method 214 test condition IG. Unless otherwise specified, a qualified mating relay shall be used as a test gauge.

- a. 0.4 g²/Hz.
- b. 15 min each plane.

Mechanical shock: In accordance with MIL-STD-202, method 213, condition C, except peak value shall be 200 g.

Tools: See table III.

TABLE III. Tools.

Bin code	Basic crimping tool	Positioner	Installing tool	Removal tool	
				Wired contact	Unwired contact
-531	M22520/2-01	M22520/2-06	M81969/8-03 M81969/14-01	M81969/8-04 M81969/14-01	M81969/30-01
-532	M22520/2-01 M22520/1-01 or M22520/7-01	M22520/2-02, M22520/1-02 Red or M22520/7-02	M81969/8-05 M81969/14-02	M81969/8-06 M81969/14-02	M81969/30-05
-533	M22520/1-01 or M22520/7-01	M22520/1-02 Blue or M22520/7-03	M81969/8-07 M81969/14-03	M81969/8-08 M81969/14-03	M81969/30-06
-534	M22520/7-01 or M22520/1-01	M22520/7-03 or M22520/1-02 Blue	M81969/8-07 M81969/14-03	M81969/8-08 M81969/14-03	M81969/30-05
-535	M22520/1-01	M22520/1-02 Yellow	M81969/8-09 M81969/14-04	M81969/8-10 M81969/14-04	M81969/30-07
-536	M22520/1-01	M22520/1-02 Yellow	M81969/8-09 M81969/14-04	M81969/8-10 M81969/14-04	M81969/30-06

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Part or identifying number: In accordance with table IV.

TABLE IV. Part or identifying number.

Bin code	PIN
-531	M39029/92-531
-532	M39029/92-532
-533	M39029/92-533
-534	M39029/92-534
-535	M39029/92-535
-536	M39029/92-536

QPL evaluation activity: Defense Electronics Supply Center (DESC-E), Dayton, Ohio 45444.

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

Custodians:
Army - CR
Navy - EC
Air Force - 85

Review activities:
Army - AR, MI
Air Force - 99
DLA - ES

User activities:
Army - AT, AV, ME

Preparing activity:
Army - CR

Agent:
DLA - ES

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