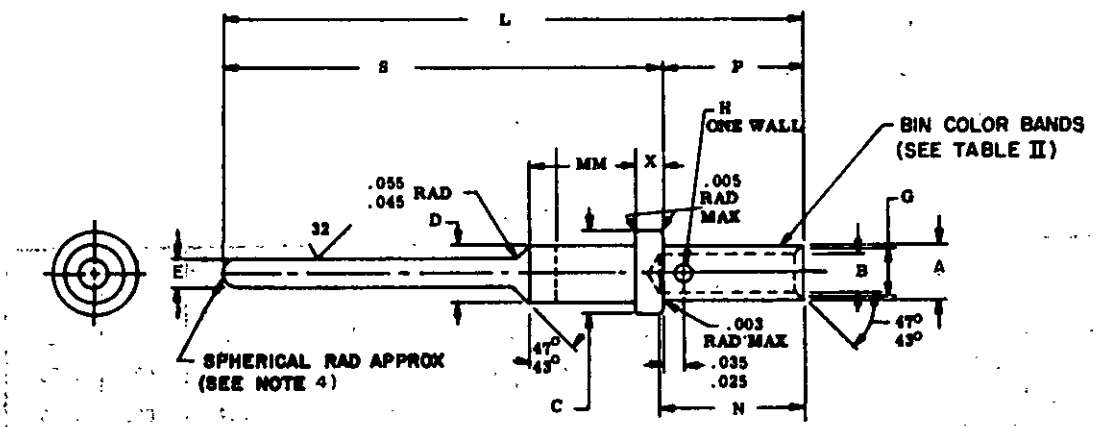
MILITARY SPECIFICATION SHEET

CONTACTS, ELECTRICAL CONNECTOR, PIN, CRIMP REMOVABLE, THERMOCOUPLE, (FOR MIL-C-26482 SERIES 2, MIL-C-81703 SERIES 3, MIL-C-83723 SERIES 3, AND MIL-C-83733 CONNECTORS)

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

The complete requirements for acquiring the contacts described herein shall consist of this specification and the latest issue of MIL-C-39029.



SIZE 20-20 AND 16-16 WIRE BARREL

FIGURE 1. Connector contact.

FSC 5935

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INCHES	MM	INCHES	MM	INCHES	MM
.003	.08	.0615	1.56	.186	4.72
.005	.13	.062	1.57	.246	6.25
.025	.64	.0635	1.61	.250	6.35
.026	.66	.066	1.68	.257	6.53
.029	.74	.068	1.73	.284	7.21
.032	.81	.076	1.93	.543	13.79
.033	.84	.078	1.98	.549	13.94
.035	.89	.083	2.11	.558	14.17
.039	.99	.100	2.54	.564	14.33
.041	1.04	.101	2.57	.720	18.29
.042	1.07	.103	2.62	.821	20.85
.044	1.12	.125	3.18		
.045	1.14	.130	3.30		
.048	1.22	.133	3.38		
.050	1.27	.157	3.99		
.055	1.40	.160	4.06		
		.171	4.34		

TABLE I. Dimensions.

BIN code	A DIA	B DIA	C DIA	D DIA	E DIA	G DIA	H DIA	L MAX (REF)	N	P	S	X	MM
132 through 136	.078	.050	.103	.078	.041	.066	.032	.720	.186	.171	.549	.033	.130
	.076	.048	.100	.076	.039	.062	.026		.157	.160	.543	.029	.125
514 through 518	.103	.068	.133	.103	.0635	.089	.042	.821	.284	.257	.564	.048	.130
	.101	.066	.130	.101	.0615	.083	.036		.250	.246	.558	.044	.125

NOTES:
1. Dimensions are in inches.
2. Metric equivaletns (to the nearest .01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. Dimensions shown apply after plating.
4. Spherical end dimension shall conform to MIL-C-39029.

FIGURE 1. Connector contact - Continued.

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TABLE II. Design characteristics.

BIN code	Color bands			Mating end size	Wire barrel size	Type	Class
	1st.	2nd.	3rd.				
132	Brown	Orange	Red	20	20	C see table IV	B
133	Brown	Orange	Orange				
134	Brown	Orange	Yellow				
135	Brown	Orange	Green				
136	Brown	Orange	Blue				
514	Green	Brown	Yellow	16	16	C see table IV	B
515	Green	Brown	Green				
516	Green	Brown	Blue				
517	Green	Brown	Violet				
518	Green	Brown	Gray				

TABLE III. Tools.

BIN code	Basic crimping tool	Positioner	Installing tool	Removal tool	
				Wired contact	Unwired contact
132	M22520/2-01 or M22520/1-01	M22520/2-02 Red or M22520/1-02	M81969/14-02 Red	M81969/14-02 White	M81969/30-05 Red
133					
134					
135					
136					
514	M22520/1-01 or M22520/7-01	M22520/1-02 Blue or M22520/7-03	M81969/14-03 Blue	M81969/14-03 White	M81969/30-06 Blue
515					
516					
517					
518					

TABLE IV. Materials, plating, and tensile strength.

BIN code	Materials	Plating	Tensile strength			
			Wire size	Axial load	Wire size	Axial load
132	Copper	Gold Flash	24	6 lbs.	20	12 lbs.
133	Constantan	None				
134	Alumel	None				
135	Chromel	None				
136	Iron	Cadmium Plate				
514	Copper	Gold Flash	20	14 lbs.	16	45 lbs.
515	Constantan	None				
516	Alumel	None				
517	Chromel	None				
518	Iron	Cadmium Plate				

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REQUIREMENTS:

Dimensions, design characteristics, and configuration: See figure 1 and tables I and II.

Tools: See table III.

Mating contacts: MIL-C-39029/10.

Material and plating: See table IV.

Vibration: Test condition VI, letter J, of method 2005 of MIL-STD-1344, except the duration shall be 8 hours in the longitudinal direction and 8 hours in the perpendicular direction (16 hours total).

Shock (specified pulse): Test condition D, of method 2004 of MIL-STD-1344, except the pulse shall be an approximate half-sine wave of 300g ±15 percent magnitude with a duration of 3 milliseconds ±1. One shock shall be exerted in each of three mutually perpendicular directions.

Tensile strength: See table IV.

QPL evaluating activity: Naval Avionics Center, Code D/714, 6000 East 21st Street, Indianapolis, Indiana 46218.

International interest: NEPR 57.

Part number: See table V.

TABLE V. Part number.

BIN code	Part number	Supersedes	Manufacturer's code
132	M39029/9-132	M39029/9 20 20 C1	N/A
133	M39029/9-133	M39029/9 20 20 C2	
134	M39029/9-134	M39029/9 20 20 C3	
135	M39029/9-135	M39029/9 20 20 C4	
136	M39029/9-136	M39029/9 20 20 C5	
514	M39029/9-514	5000-070-516	14283
515	M39029/9-515	5000-070-416	
516	M39029/9-516	5000-070-116	
517	M39029/9-517	5000-070-216	
518	M39029/9-518	5000-070-316	

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

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

Review activities:
Army - AR, MI
Navy - EC, MC, SH
Air Force - 11, 17, 99
DLA - ES

User activities:
Navy - OS

Agent:
DLA - ES

Preparing activity:
Navy - AS

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