

RATIONALE

REVISE TO INCLUDE COMMENTS RECEIVED BY THE GOVERNMENT AND INDUSTRY, REMOVE GOVERNMENT JARGON, UPDATE REFERENCES, ALIGN SPECIFICATION WITH SAE GUIDELINES, AND REVIEW SPECIFICATION FOR KNOWN TECHNICAL PROBLEMS.

THE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE LATEST ISSUE OF SAE AS39029.

REV.
A

SAE AS39029/11

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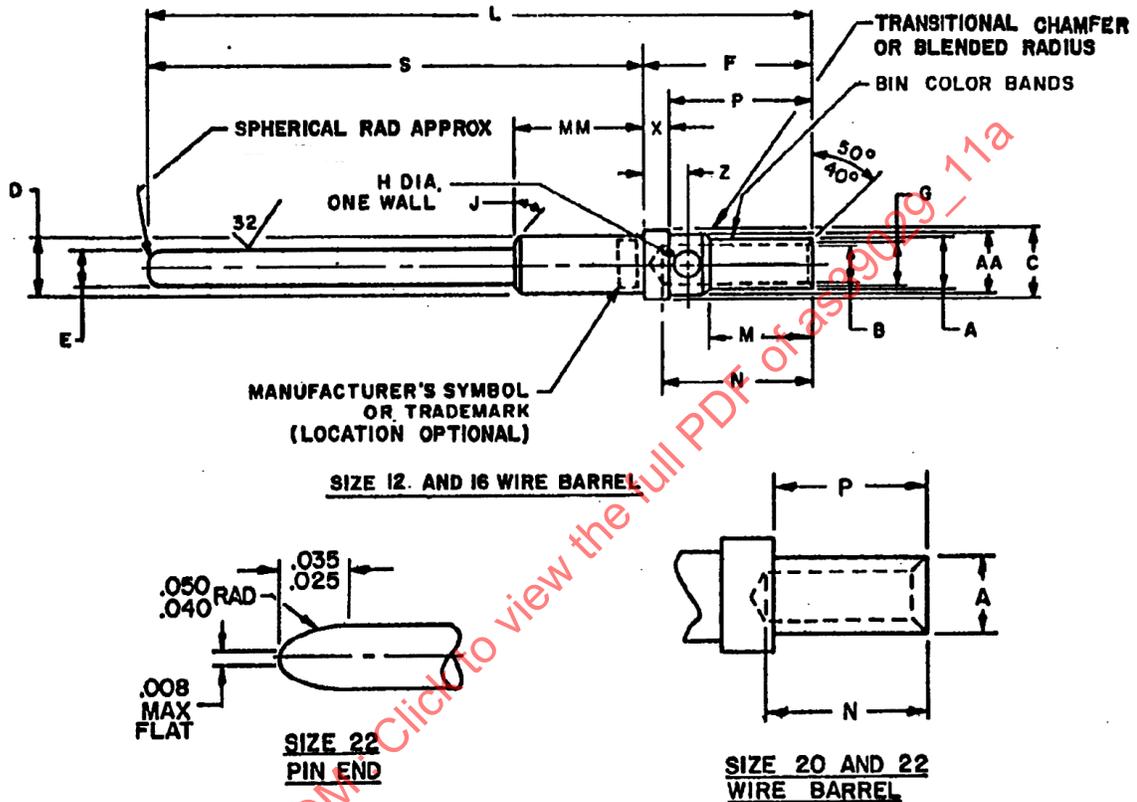
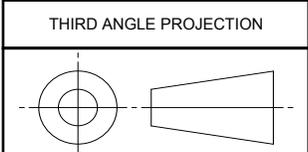


FIGURE 1 - PIN CONTACT

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS39029/11a>



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS39029

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) CONTACTS, ELECTRICAL CONNECTOR, PIN, CRIMP REMOVABLE, (FOR AS81659 SERIES 2 CONNECTORS)

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REV. A

TABLE 1 – DIMENSIONS

BIN CODE	A DIA	B DIA	C DIA	D DIA	E DIA	F	G DIA	H DIA	J (DEG)	L (REF)
144 (22-22)	.052 (1.32)	.0375 (.953)	.070 (1.57)	.050 (1.27)	.031 (.787)	.271 (6.88)	.047 (1.19)	.022 (.559)	-----	.665 (16.89)
	.050 (1.27)	.0340 (.864)	.068 (1.73)	.047 (1.19)	.029 (.737)	.260 (6.60)	.041 (1.04)	.018 (.457)		.645 (16.38)
145 (20-20)	.068 (1.73)	.0460 (1.17)	.084 (2.13)	.072 (1.83)	.041 (1.04)	.199 (5.05)	.058 (1.47)	.033 (.838)	50	.790 (20.07)
	.065 (1.65)	.0430 (1.09)	.082 (2.08)	.069 (1.75)	.039 (.991)	.184 (4.67)	.052 (1.32)	.025 (.635)	40	.770 (19.56)
146 (16-16)	.103 (2.62)	.068 (1.73)	.134 (3.40)	.113 (2.87)	.0635 (1.61)	.305 (7.75)	.090 (2.29)	.042 (1.07)	35	1.014 (25.76)
	.101 (2.57)	.066 (1.68)	.130 (3.30)	.110 (2.79)	.0615 (1.56)	.289 (7.34)	.080 (2.03)	.036 (.914)	25	.994 (25.25)
147 (12-12)	.151 (3.84)	.102 (2.59)	.190 (4.83)	.151 (3.84)	.095 (2.41)	.305 (7.75)	.140 (3.56)	.042 (1.07)	35	1.017 (25.83)
	.148 (3.76)	.098 (2.49)	.186 (4.72)	.148 (3.76)	.093 (2.36)	.289 (7.34)	.130 (3.30)	.036 (.914)	25	.996 (.25.30)

TABLE 1 – DIMENSIONS (CONTINUED)

BIN CODE	M MIN	N	P (REF)	S	X	Z	AA DIA	MM
144 (22-22)	N/A	.165 (4.19)	.237 (6.02)	.394 (10.01)	.034 (.864)	.161 (4.09)	N/A	.105 (2.67)
		.135 (3.43)	.231 (5.87)	.385 (9.98)	.029 (.737)	.132 (3.35)		.095 (2.41)
145 (20-20)	N/A	.190 (4.83)	.165 (4.19)	.591 (15.01)	.034 (.864)	.069 (1.75)	N/A	.146 (3.71)
		.150 (3.81)	.155 (3.94)	.586 (14.88)	.029 (.737)	.054 (1.37)		.140 (3.56)
146 (16-16)	.150 (3.81)	.290 (7.37)	.257 (6.53)	.715 (18.16)	.048 (1.22)	.083 (2.11)	.111 (2.82)	.195 (4.95)
		.250 (6.35)	.245 (6.22)	.705 (17.91)	.044 (1.12)	.069 (1.75)	.107 (2.72)	.175 (4.45)
147 (12-12)	.150 (3.81)	.290 (7.37)	.257 (6.53)	.715 (18.16)	.048 (1.22)	.083 (2.11)	.158 (4.01)	.195 (4.95)
		.250 (6.35)	.245 (6.22)	.705 (17.91)	.044 (1.12)	.069 (1.75)	.155 (3.94)	.180 (4.57)

TABLE 2 – DESIGN CHARACTERISTICS

BIN CODE	COLOR BANDS			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1 ST	2 ND	3 RD				
144	BROWN	YELLOW	YELLOW	22	22	A	B
145	BROWN	YELLOW	GREEN	20	20		
146	BROWN	YELLOW	BLUE	16	16		
147	BROWN	YELLOW	VIOLET	12	12		

TABLE 3 – TOOLS

BIN CODE	BASIC CRIMPING TOOL	POSITIONER	INSTALLING TOOL	REMOVAL TOOL
144	M22520/2-01	M22520/2-23	M81969/1-01	M81969/1-01
145	M22520/2-01 M22520/7-01	M22520/2-08 M22520/7-02	M81969/1-02	M81969/1-02
146	M22520/1-01 M22520/7-01	M22520/1-02 (BLUE) M22520/7-03	M81969/1-03	M81969/1-03
147	M22520/1-01	M22520/1-11	-----	M81969/28-02

TABLE 4 – PART NUMBER

BIN CODE	PART NUMBER	SUPERSEDED PART NUMBER
144	M39029/11-144	M39029/11-22-22
145	M39029/11-145	M39029/11-20-20
146	M39029/11-146	M39029/11-16-16
147	M39029/11-147	M39029/11-12-12

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS SPECIFICATION AND THE LATEST ISSUE OF AS39029.

1. DESIGN:

CONTACTS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLES 1 AND 2. DIMENSIONS ARE IN INCHES. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY. DIMENSIONS SHOWN APPLY AFTER PLATING. SPHERICAL END DIMENSIONS SHALL CONFORM TO AS39029.

2. TOOLS:

TOOLS REQUIRED FOR CRIMPING CONTACTS TO THE WIRE/CABLE AND THE INSTALLING/REMOVAL FROM THE CONNECTOR SHALL BE IN ACCORDANCE WITH TABLE 3.

3. PART NUMBERS:

CONTACT PART NUMBERS SHALL BE IN ACCORDANCE WITH TABLE 4. SUPERSEDED PART NUMBERS ARE AS SPECIFIED.

4. MATERIALS:

MATERIALS SHALL BE IN ACCORDANCE WITH SAE AS39029.

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