

REV.
C

AS39029™/29

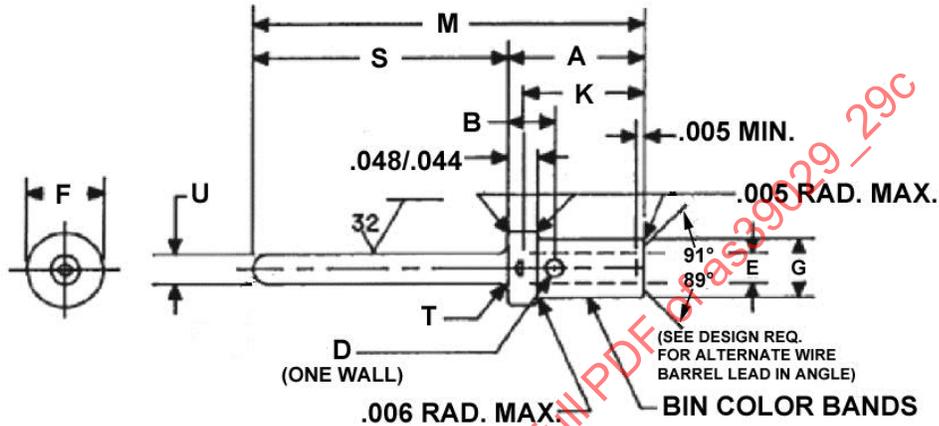
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RATIONALE

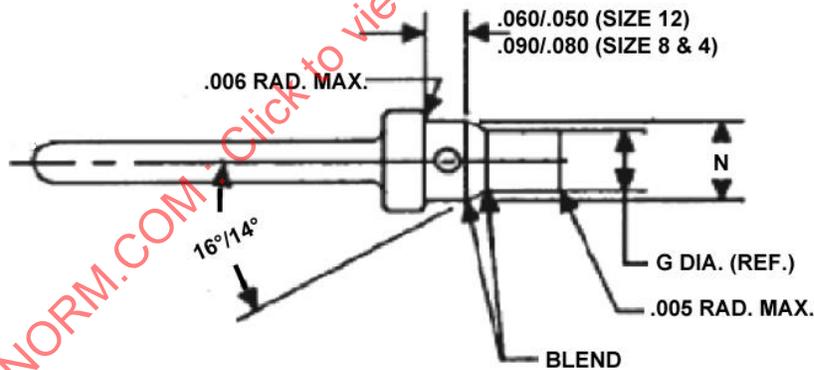
REVISION IS REQUIRED TO IMPROVE DRAWING QUALITY, TO INCORPORATE THE AS39029 BASE SPEC EXCEPTIONS THAT PERTAIN TO THIS DETAIL DOCUMENT, TO CHANGE MILITARY RESTRICTION WORDING, TO CORRECT BASIC CRIMP TOOL PART NUMBER IN TABLE 3 FOR BIN CODE 213, TO ADD THE APPLICABLE AS81969/15 TOOLS TO TABLE 4, TO ADD METRIC EQUIVALENTS AND TO UPDATE DOCUMENT FORMAT TO LATEST SAE GUIDELINES.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS39029.



MATING PIN SIZES 16, 0 CONTACTS AND ALL WIRE BARREL SIZES

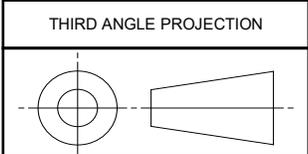


MATING PIN SIZES 12, 8, 4 CONTACTS

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FIGURE 1 - PIN CONTACT CONFIGURATION AND DIMENSIONS

For more information on this standard, visit
<https://www.sae.org/standards/content/AS39029/29C/>



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS39029



AEROSPACE STANDARD

(R) CONTACTS, ELECTRICAL CONNECTOR, PIN, CRIMP REMOVABLE (FOR AS50151 SERIES, AS345XX AND MIL-DTL-83723 SERIES 2 CONNECTORS)

AS39029™/29
SHEET 1 OF 4

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ISSUED 2001-03 REVISED 2016-11 REAFFIRMED 2021-07

TABLE 1 - FIGURE 1 METRIC EQUIVALENTS

INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS
.005	0.13	.044	1.12	.050	1.27	.080	2.03
.006	0.15	.048	1.22	.060	1.52	.090	2.29

TABLE 2 - CONTACT DIMENSIONS

BIN CODE	A	B	D DIA.	E DIA.	F DIA.	G DIA.	K MIN.	M (REF)	N DIA.	S	T MAX.	U DIA.
212	.300 (7.62)	.079 (2.01)	.042 (1.07)	.068 (1.73)	.133 (3.38)	.103 (2.62)	.250 (6.35)	.923 (23.44)	N/A	.631 (16.03)	.015 (0.38)	.0635 (1.61)
				.066 (1.68)	.130 (3.30)	.101 (2.57)				.619 (15.72)		.0615 (1.56)
213	.290 (7.37)	.073 (1.85)	.036 (0.91)	.102 (2.59)	.189 (4.80)	.150 (3.81)	.485 (12.32)	1.110 (28.19)	.160 (4.06)	.819 (20.80)	.015 (0.38)	.095 (2.41)
				.098 (2.49)	.186 (4.72)	.147 (3.73)						.155 (3.94)
214	.552 (14.02)	.094 (2.39)	.072 (1.83)	.183 (4.65)	.306 (7.77)	.265 (6.73)	.485 (12.32)	1.362 (34.59)	.277 (7.04)	.819 (20.80)	.015 (0.38)	.143 (3.63)
				.179 (4.55)	.303 (7.70)	.262 (6.65)						.272 (6.91)
215	.542 (13.77)	.084 (2.13)	.068 (1.73)	.283 (7.19)	.417 (10.59)	.376 (9.55)	.580 (14.73)	1.486 (37.74)	.389 (9.88)	.808 (20.52)	.065 (1.65)	.226 (5.74)
				.279 (7.09)	.414 (10.52)	.373 (9.47)						.384 (9.75)
216	.678 (17.22)	.124 (3.15)	.084 (2.13)	.455 (11.56)	.615 (15.62)	.564 (14.33)	.580 (14.73)	1.486 (37.74)	N/A	.808 (20.52)	.065 (1.65)	.358 (9.09)
				.451 (11.46)	.611 (15.52)	.561 (14.25)						.356 (9.04)

TABLE 3 - MARKING AND DESIGN CHARACTERISTICS

BIN CODES	COLOR BANDS			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1ST	2ND	3RD				
212	RED	BROWN	RED	16	16	A	B
213	RED	BROWN	ORANGE	12	12	A	B
214	RED	BROWN	YELLOW	8	8	A	B
215	RED	BROWN	GREEN	4	4	A	B
216	RED	BROWN	BLUE	0	0	A	B

TABLE 4 - TOOL REQUIREMENTS

BIN CODE	BASIC CRIMPING TOOL	DIE SET	LOCATOR	POSITIONER	INSTALLING TOOL	REMOVAL TOOL
212	M22520/1-01	N/A	N/A	M22520/1-02 BLUE	M81969/14-03	M81969/14-03
	M22520/7-01	N/A	N/A	M22520/7-03		
213	M22520/1-01	N/A	N/A	M22520/1-02 YELLOW	M81969/14-04	M81969/14-04
214	M22520/23-01	M22520/23-02	M22520/23-09	N/A	N/A	M81969/29-02 OR M81969/15-01
215	M22520/23-01	M22520/23-04	M22520/23-11	N/A	N/A	M81969/29-03 OR M81969/15-02
216	M22520/23-01	M22520/23-05	M22520/23-13	N/A	N/A	M81969/29-04 OR M81969/15-03

TABLE 5 - PART NUMBERS

AS39029 PART NUMBER	BIN CODE	SUPERSEDED PART NUMBER(S)
M39029/29-212	212	M39029/29-16-16
M39029/29-213	213	M39029/29-12-12
M39029/29-214	214	M39029/29-8-8
M39029/29-215	215	M39029/29-4-4
M39029/29-216	216	M39029/29-0-0

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

1. DESIGN:

CONTACT SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLES 2 AND 3. DIMENSIONS ARE IN INCHES AND APPLY AFTER PLATING. METRIC EQUIVALENTS ARE IN PARENTHESES, ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.4 MM (SEE TABLE 1). UNLESS OTHERWISE SPECIFIED, SPHERICAL END DIMENSIONS SHALL CONFORM TO AS39029. AN ALTERNATE DESIGN OF THE WIRE BARREL LEAD-IN ANGLE SHALL BE AS FOLLOWS:

SIZE 16 - BLEND RADIUS .020 INCHES ± 0.005 INCHES.

SIZE 12 - BLEND RADIUS .020 INCHES ± 0.010 INCHES.

2. TOOLS:

TOOLS REQUIRED FOR CRIMPING CONTACTS TO WIRE/CABLE AND THE INSTALLING/REMOVAL FROM THE CONNECTOR SHALL BE IN ACCORDANCE WITH TABLE 4.

3. PART NUMBERS:

CONTACT PART NUMBERS SHALL BE IN ACCORDANCE WITH TABLE 5. SUPERSEDED PART NUMBERS ARE AS SPECIFIED.

4. MATERIALS:

MATERIALS SHALL BE IN ACCORDANCE WITH AS39029.

5. MECHANICAL:

MECHANICAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

6. ELECTRICAL:

ELECTRICAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

7. ENVIRONMENTAL:

ENVIRONMENTAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

SHOCK TEST SHALL BE PERFORMED AT TEST CONDITION A.

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	(R) CONTACTS, ELECTRICAL CONNECTOR, PIN, CRIMP REMOVABLE (FOR AS50151 SERIES, AS345XX AND MIL-DTL-83723 SERIES 2 CONNECTORS)		