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REV.
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AS39029™/29

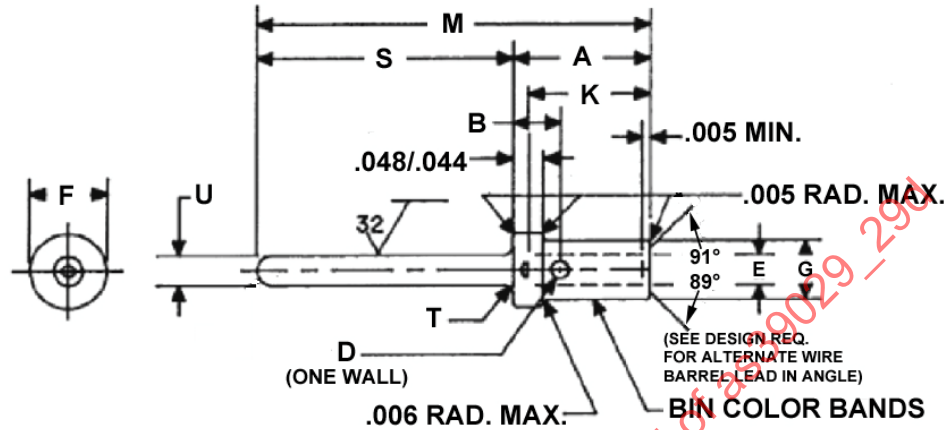
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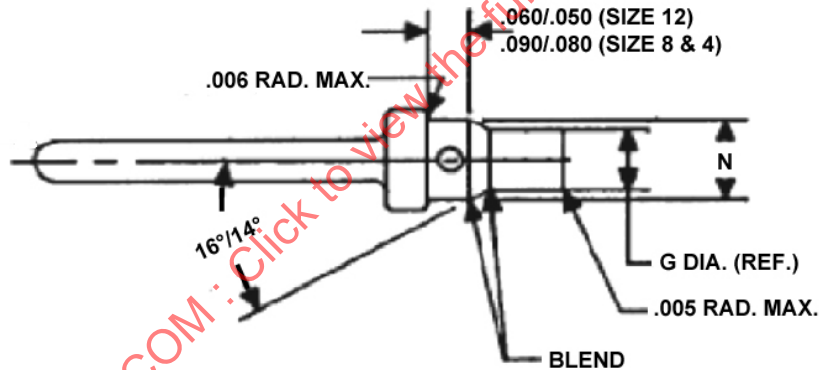
REVISION REQUIRED TO UPDATE THE TOOL TABLE AND CORRECT MINOR TECHNICAL ERRORS AS NEEDED.

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



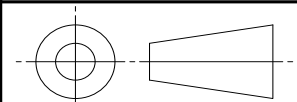
MATING PIN SIZES 12, 8, 4 CONTACTS

FIGURE 1 - PIN CONTACT CONFIGURATION AND DIMENSIONS

For more information on this standard, visit

<https://www.sae.org/standards/content/AS39029/29D/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS39029



AEROSPACE STANDARD

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

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ISSUED 2001-03 REAFFIRMED 2021-07 REVISED 2024-10

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) .066 (1.68)	.133 (3.38) .130 (3.30)	.103 (2.62) .101 (2.57)	.250 (6.35)	.923 (23.44)	N/A	.631 (16.03) .619 (15.72)	.015 (0.38)	.0635 (1.61) .0615 (1.56)
213	.290 (7.37)	.073 (1.85)	.036 (0.91)	.102 (2.59) .098 (2.49)	.189 (4.80) .186 (4.72)	.150 (3.81) .147 (3.73)		1.110 (28.19)	.160 (4.06) .155 (3.94)			.095 (2.41) .093 (2.36)
214	.552 (14.02)	.094 (2.39)	.072 (1.83) .068 (1.73)	.183 (4.65) .179 (4.55)	.306 (7.77) .303 (7.70)	.265 (6.73) .262 (6.65)	.485 (12.32)	1.362 (34.59)	.277 (7.04) .272 (6.91)	.819 (20.80) .808 (20.52)		.143 (3.63) .141 (3.58)
215	.542 (13.77)	.084 (2.13)		.283 (7.19) .279 (7.09)	.417 (10.59) .414 (10.52)	.376 (9.55) .373 (9.47)			.389 (9.88) .384 (9.75)			.226 (5.74) .224 (5.69)
216	.678 (17.22) .660 (16.76)	.124 (3.15) .084 (2.13)			.455 (11.56) .451 (11.46)	.615 (15.62) .611 (15.52)	.564 (14.33) .561 (14.25)	.580 (14.73)	1.486 (37.74)	N/A		.065 (1.65)

TABLE 3 - MARKING AND DESIGN CHARACTERISTICS

BIN CODE	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 (WIRED)	REMOVAL TOOL (UNWIRED)
212	M22520/1-01	N/A	N/A	M22520/1-02 BLUE	M81969/8-207 M81969/14-03	M81969/8-208 M81969/14-03	M8196/30-06
	M22520/7-01	N/A	N/A	M22520/7-03			
213	M22520/1-01	N/A	N/A	M22520/1-02 YELLOW	M81969/8-209 M81969/14-04	M81969/8-210 M81969/14-04	M81969/30-07
214	M22520/23-01	M22520/23-02	M22520/23-09	N/A	N/A	M81969/14-06 M81969/15-01	M81969/14-06* M81969/15-01*
215	M22520/23-01	M22520/23-04	M22520/23-11	N/A	N/A	M81969/14-07 M81969/15-02	M81969/14-07* M81969/15-02*
216	M22520/23-01	M22520/23-05	M22520/23-13	N/A	N/A	M81969/14-08 M81969/15-03	M81969/14-08* M81969/15-03*

* THE REMOVAL TOOL IS INSERTED FROM THE REAR OF THE CONNECTOR TO UNLOCK THE CONTACT AND THE UNWIRED CONTACT SHOULD BE PUSHED OUT FROM THE FRONT WITH AN OBJECT THAT WILL NOT SLIP OFF OR BEND THE CONTACT. CAUTION SHOULD BE USED WHEN PUSHING THE CONTACT OUT TO PREVENT DAMAGE TO THE CONTACTS OR THE CONNECTOR.



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CONTACTS, ELECTRICAL CONNECTOR, PIN,
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TABLE 5 - PART NUMBER

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

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

1. DESIGN:

CONTACTS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLES 2 AND 3. DIMENSIONS ARE IN INCHES. METRIC EQUIVALENTS IN PARENTHESES ARE FOR GENERAL INFORMATION ONLY AND ARE BASED ON 1 INCH = 25.4 MM (SEE TABLE 1). DIMENSIONS APPLY AFTER PLATING. 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 INCH $\pm$.005 INCH.

SIZE 12 - BLEND RADIUS .020 INCH $\pm$.010 INCH.

2. TOOLS:

TOOLS REQUIRED FOR CRIMPING CONTACTS TO THE 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.

APPLICATION NOTES:

1. CONTACT MATES DIRECTLY INTO AN AS39029/30 SOCKET AS SHOWN IN TABLE 6.

2. FOR U.S. DEPARTMENT OF DEFENSE CONTRACTS (NAVY SHIPBOARD), BIN CODES 214, 215, AND 216 ARE NOT RECOMMENDED FOR USE.

TABLE 6 - CONTACT MATING PART NUMBERS

AS39029/29 BIN CODE	MATING AS39029/30 BIN CODE
212	217
212	218
213	219
214	220
215	221
216	222



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