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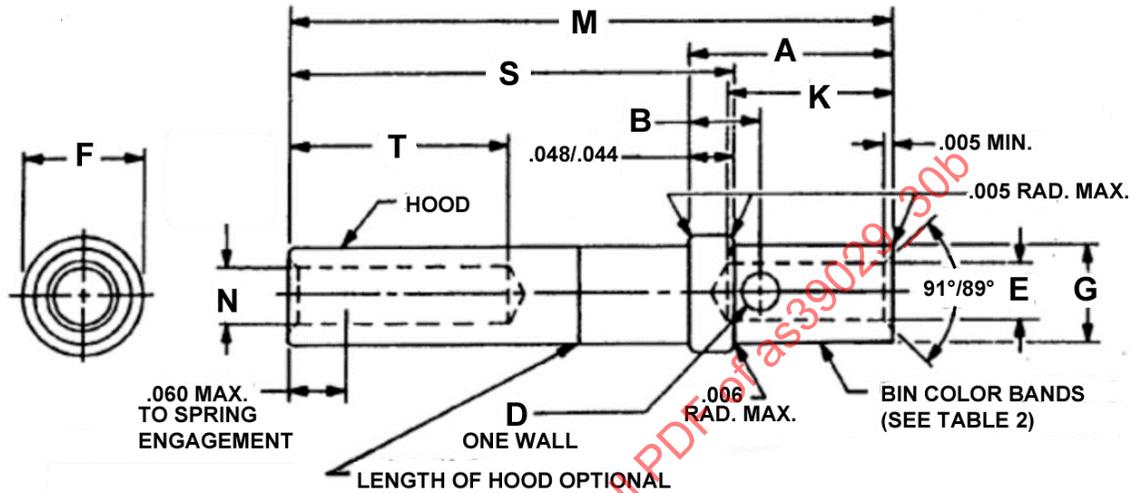
SAE AS39029/30

RATIONALE

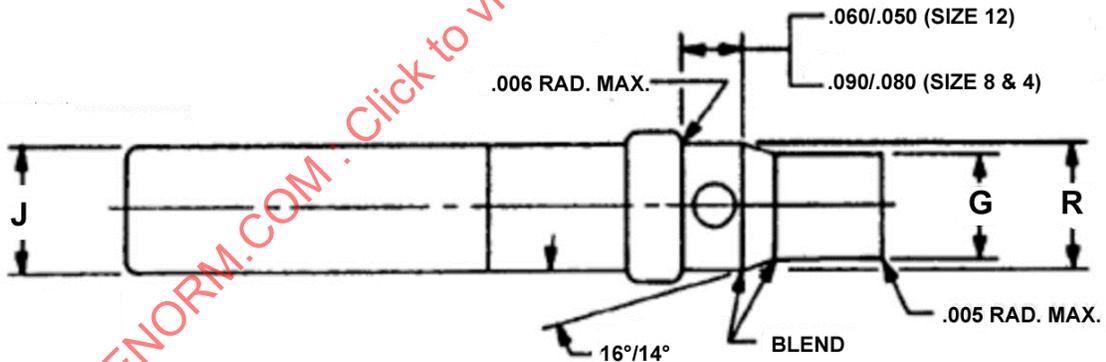
REVISE TO IMPROVE DRAWING/DIMENSION QUALITY, UPDATE REFERENCES, ALIGN SPECIFICATION WITH SAE GUIDELINES, AND REVIEW SPECIFICATION FOR KNOWN TECHNICAL PROBLEMS.

NOTICE

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



FOR CONTACT SOCKET SIZES 16, 16S, 0 AND ALL WIRE BARREL SIZES

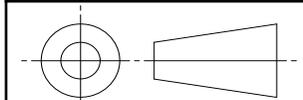


FOR CONTACT SOCKET SIZES 12, 8, AND 4

FIGURE 1 - AS39029/30 SOCKET CONTACT

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THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS39029

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

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

SAE AS39029/30
SHEET 1 OF 4

REV.
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ISSUED 2001-03 REVISED 2012-07

INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM
.005	0.127	.044	1.12	.050	1.27	.080	2.03
.006	0.152	.048	1.22	.060	1.52	.090	2.29

FIGURE 1 - AS39029/30 SOCKET CONTACT (CONTINUED - METRIC EQUIVALENTS)

TABLE 1 - CONTACT DIMENSIONS

BIN CODE	A	B	D DIA.	E DIA.	F DIA.	G DIA.	J MAX. DIA.	K MIN.	M (REF)	N DIA.	R	S	T MIN.
217				.068 (1.73)	.133 (3.38)	.103 (2.62)	.113 (3.38)		.911 (23.14)	.064 (1.63)	N/A	.666 (16.92) .656 (16.66)	.399 (10.13)
218	.300 (7.62) .290 (7.37)	.079 (2.01) .073 (1.85)	.042 (1.07) .036 (.914)	.066 (1.68)	.130 (3.30)	.101 (2.57)		.250 (6.35)		1/	N/A	.856 (21.74) .846 (21.49)	.430 (10.92)
219				.102 (2.59) .098 (2.49)	.189 (4.80) .186 (4.72)	.150 (3.81) .147 (3.73)	.161 (4.09)		1.101 (27.97)	.0955 (2.43) 1/	.160 (4.06) .155 (3.94)		
220	.552 (14.02) .542 (13.77)	.094 (2.39) .084 (2.13)		.183 (4.65) .179 (4.55)	.306 (7.77) .303 (7.70)	.265 (6.73) .262 (6.65)	.257 (6.63)		.485 (12.32)	.157 (3.99) .145 (3.68)	.277 (7.04) .272 (6.91)		
221			.072 (1.83) .068 (1.73)	.283 (7.19) .279 (7.09)	.417 (10.59) .414 (10.52)	.376 (9.55) .373 (9.47)	.336 (8.53)		1.342 (34.09)	.240 (6.07) .228 (5.79)	.389 (9.88) .384 (9.75)	.849 (21.56) .833 (21.16)	.587 (14.91)
222	.678 (17.22) .668 (16.97)	.124 (3.15) .084 (2.13)		.455 (11.56) .451 (11.46)	.615 (15.62) .611 (15.52)	.564 (14.33) .561 (14.25)	.518 (13.16)	.580 (14.73)	1.466 (37.24)	.372 (9.45) .360 (9.14)	N/A		

1/ MINIMUM DIAMETER ONLY.

TABLE 2 - MARKING AND DESIGN CHARACTERISTICS

BIN CODES	COLOR BANDS			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1ST	2ND	3RD				
217	RED	BROWN	VIOLET	16S	16	A	B
218	RED	BROWN	GRAY	16	16	A	B
219	RED	BROWN	WHITE	12	12	A	B
220	RED	RED	BLACK	8	8	A	B
221	RED	RED	BROWN	4	4	A	B
222	RED	RED	RED	0	0	A	B

TABLE 3 - TOOL REQUIREMENTS

BIN CODE	BASIC CRIMPING TOOL	DIE SET	LOCATOR	POSITIONER	INSTALLING TOOL	REMOVAL TOOL
217	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		
218	M22520/1-01	N/A	N/A	M22520/1-02 BLUE	M81969/14-04	M81969/14-04
	M22520/7-01	N/A	N/A	M22520/7-03		
219	M22750/1-01	N/A	N/A	M22520/1-02 YELLOW		
220	M22520/23-01	M22520/23-02	M22520/23-09	N/A	N/A	M81969/29-02
221	M22520/23-01	M22520/23-04	M22520/23-11	N/A	N/A	M81969/29-03
222	M22520/23-01	M22520/23-05	M22520/23-13	N/A	N/A	M81969/29-04

TABLE 4 - PART NUMBERS

AS39029 PART NUMBER	BIN CODE	SUPERSEDED PART NUMBER(S)
M39029/30-217	217	M39029/30-16S-16
M39029/30-218	218	M39029/30-16-16
M39029/30-219	219	M39029/30-12-12
M39029/30-220	220	M39029/30-8-8
M39029/30-221	221	M39029/30-4-4
M39029/30-222	222	M39029/30-0-0

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

1. DESIGN:

CONTACT SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1, TABLES 1 AND 2. DIMENSIONS ARE IN INCHES AND SHOWN AFTER PLATING. UNLESS OTHERWISE SPECIFIED, SPHERICAL END DIMENSIONS SHALL CONFORM TO AS39029. METRIC EQUIVALENTS AND GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED ON 1 INCH = 25.4 MM. E AND N DIAMETER BORES SHALL NOT BREAK THROUGH. THE MECHANICAL PRESSURE MEMBER SHALL BE SHROUDED. THE GAP BETWEEN THE HOOD, IF USED, AND BODY OF THE CONTACT SHALL NOT EXCEED .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 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 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:

- CONTACT MATES DIRECTLY WITH AN AS39029/29 PIN AS SHOWN IN TABLE 5.
- BIN CODE 220, 221, AND 222 ARE NOT RECOMMENDED FOR NAVY SHIPBOARD APPLICATION.

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