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REV.
C

AS39029™/30

FEDERAL SUPPLY CLASS
5999

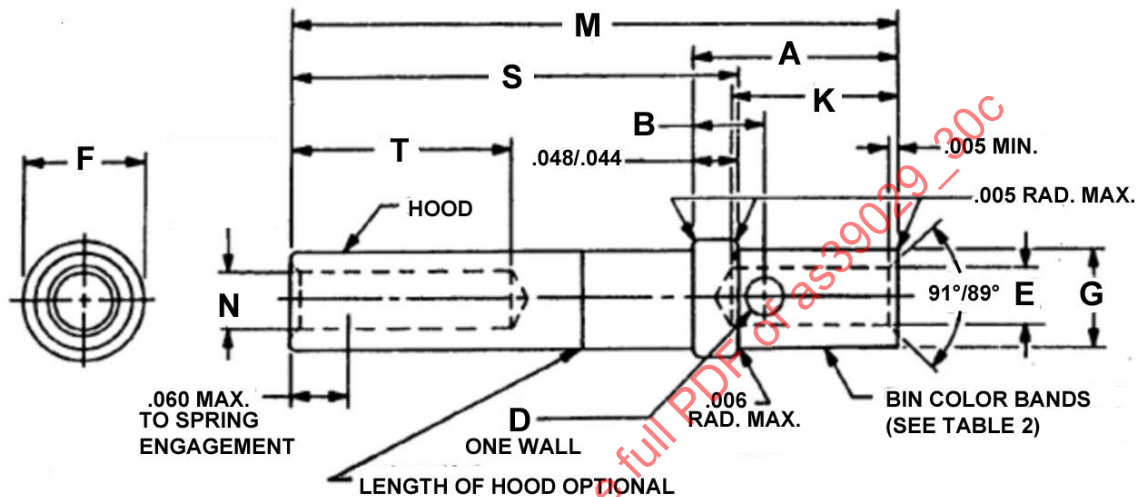
RATIONALE

REVISION IS REQUIRED TO CORRECT THE TOOL PART NUMBERS IN TABLE 4, TO INCLUDE ADDITIONAL TOOL PART NUMBERS AND TO ADD THE AS39029 BASE SPECIFICATION EXCEPTIONS APPLICABLE TO THIS DETAIL SHEET.

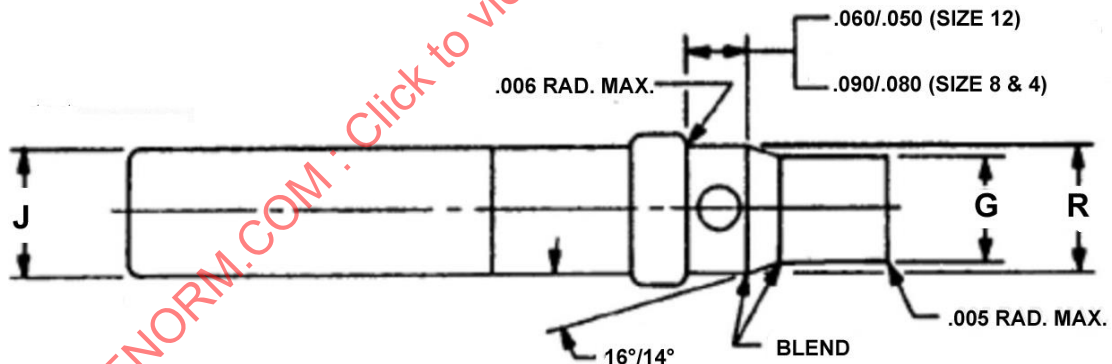
AS39029/30C HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

NOTICE

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



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



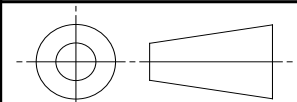
FOR CONTACT SOCKET SIZES 12, 8, AND 4

FIGURE 1 - AS39029/30 SOCKET CONTACT

For more information on this standard, visit

<https://www.sae.org/standards/content/AS39029/30C/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS39029



AEROSPACE STANDARD

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

AS39029™/30
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REV.
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ISSUED 2001-03 REVISED 2017-11 REAFFIRMED 2022-10

TABLE 1 - FIGURE 1 METRIC EQUIVALENTS

INCH	MM	INCH	MM	INCH	MM	INCH	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 2 - 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	.300 (7.62) .290 (7.37)	.079 (2.01) .073 (1.85)	.042 (1.07) .036 (.914)	.068 (1.73) .066 (1.68)	.133 (3.38) .130 (3.30)	.103 (2.62) .101 (2.57)	.113 (2.87)	.250 (6.35)	.911 (23.14)	.064 (1.63) 1/ 1/	N/A	.666 (16.92) .656 (16.66)	.399 (10.13)	
218				1.101 (27.97)	.160 (4.06) .155 (3.94)	.856 (21.74) .846 (21.49)			.430 (10.92)					
219														
220	.552 (14.02) .542 (13.77)	.094 (2.39) .084 (2.13)	.072 (1.83) .068 (1.73)	.183 (4.65) .179 (4.55)	.306 (7.77) .303 (7.70)	.265 (6.73) .262 (6.65)	.257 (6.53)	.485 (12.32)	1.342 (34.09)	.157 (3.99) .145 (3.68)	.277 (7.04) .272 (6.91)	.849 (21.56) .833 (21.16)	.587 (14.91)	
221				.283 (7.19) .279 (7.09)	.417 (10.59) .414 (10.52)	.376 (9.55) .373 (9.47)				.336 (8.53)	.240 (6.10) .228 (5.79)			.389 (9.88) .384 (9.75)
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)

1/ MINIMUM DIAMETER ONLY.

TABLE 3 - 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



AEROSPACE STANDARD

CONTACTS, ELECTRICAL CONNECTOR, SOCKET,
CRIMP REMOVABLE (FOR AS50151 AS345XX SERIES
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TABLE 4 - TOOL REQUIREMENTS

BIN CODE	BASIC CRIMPING TOOL	DIE SET	LOCATOR	POSITIONER	INSTALLING TOOL	REMOVAL TOOL (WIRED)	REMOVAL TOOL (UNWIRED)
217	M22520/1-01	N/A	N/A	M22520/1-02 BLUE	M81969/8-207 M81969/14-03	M81969/8-208 M81969/14-03	M81969/30-06
	M22520/7-01	N/A	N/A	M22520/7-03			
218	M22520/1-01	N/A	N/A	M22520/1-02 BLUE	M81969/8-209 M81969/14-04	M81969/8-210 M81969/14-04	M81969/30-07
	M22520/7-01	N/A	N/A	M22520/7-03			
219	M22750/1-01	N/A	N/A	M22520/1-02 YELLOW	M81969/8-209 M81969/14-04	M81969/8-210 M81969/14-04	M81969/30-07
220	M22520/23-01	M22520/23-02	M22520/23-09	N/A	NONE REQ	M81969/14-06 M81969/15-01	M81969/14-06* M81969/15-01*
221	M22520/23-01	M22520/23-04	M22520/23-11	N/A	NONE REQ	M81969/14-07 M81969/15-02	M81969/14-07* M81969/15-02*
222	M22520/23-01	M22520/23-05	M22520/23-13	N/A	NONE REQ	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.

TABLE 5 - 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 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 SHOWN AFTER PLATING. UNLESS OTHERWISE SPECIFIED, SPHERICAL END DIMENSIONS SHALL CONFORM TO AS39029. METRIC EQUIVALENTS ARE 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 INCH. 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 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.

	AEROSPACE STANDARD	AS39029™/30 SHEET 3 OF 4	REV. C
	CONTACTS, ELECTRICAL CONNECTOR, SOCKET, CRIMP REMOVABLE (FOR AS50151 AS345XX SERIES AND MIL-DTL-83723 SERIES II CONNECTORS)		