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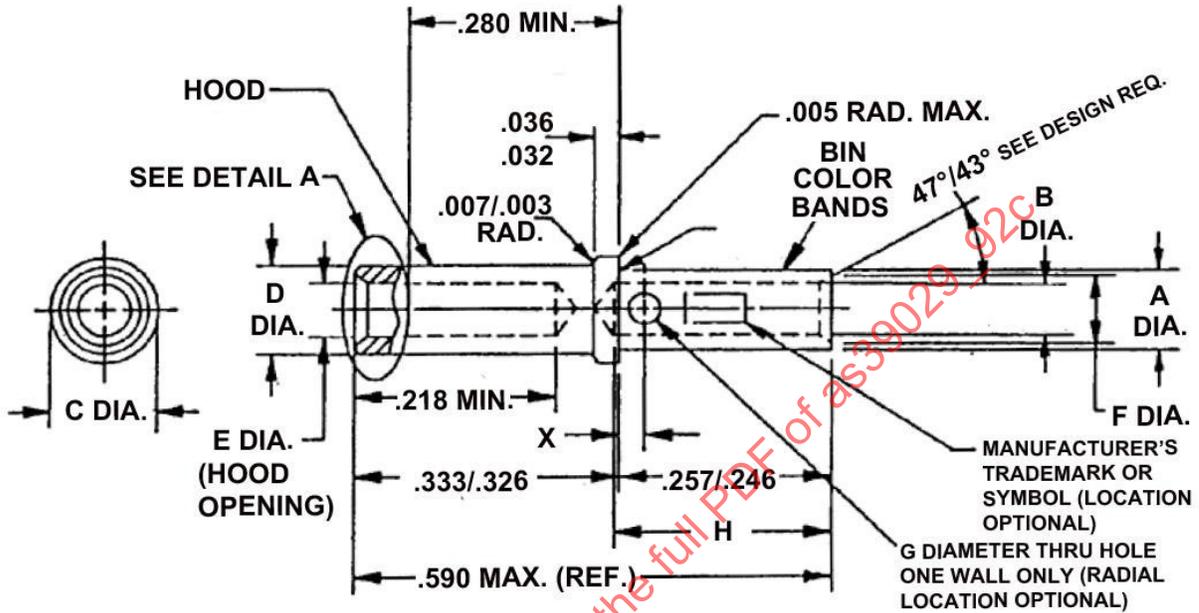
AS39029™/92

RATIONALE

LIMITED SCOPE REVISION REQUIRED TO UPDATE TOOL TABLE AND MINOR CHANGES AS NEEDED.

NOTICE

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



SOCKET CONTACT DESIGN AND WIRE BARREL DESIGN, BINS 532 & 533

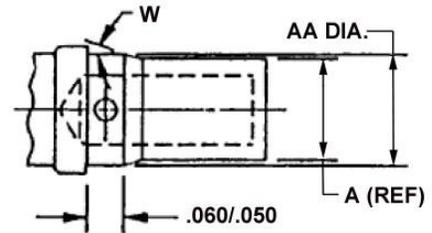
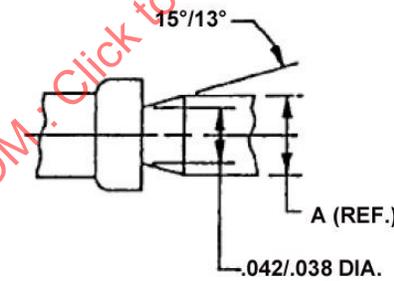
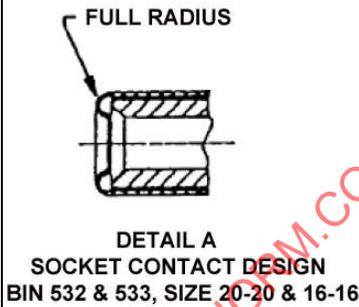
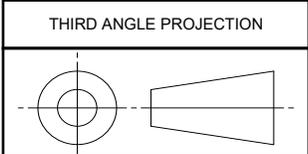


FIGURE 1 - SOCKET CONTACT DESIGN AND WIRE BARREL DESIGN VARIATIONS

For more information on this standard, visit
<https://www.sae.org/standards/content/AS39029/92C/>



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS39029



AEROSPACE STANDARD

CONTACTS, ELECTRICAL CONNECTOR, SOCKET
REMOVABLE (FOR MIL-PRF-6106 AND
MIL-DTL-12883/40 AND /41 RELAY SOCKETS)

AS39029™/92
SHEET 1 OF 4

REV.
C

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ISSUED 2000-07 REAFFIRMED 2020-12 REVISED 2024-10

TABLE 1 - FIGURE 1 METRIC EQUIVALENTS

INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS
.003	0.08	.036	0.91	.060	1.52	.326	8.28
.005	0.13	.039	0.99	.218	5.54	.333	8.46
.007	0.18	.042	1.07	.246	6.25	.590	14.99
.032	0.81	.050	1.27	.257	6.53		

TABLE 2 - FIGURE 1 DIMENSIONS

BIN CODE	A DIA	B DIA	C DIA	D DIA MAX	E DIA MIN	F DIA	G DIA	H	W°	X	AA
531	.053 (1.35)	.038 (0.97)	.076 (1.93)	.0615 (1.56)	.0315 (0.80)	.047 (1.19)	.022 (0.56)	.140 (3.56)	N/A	.146 (3.71)	N/A
	.051 (1.30)	.036 (0.91)	.073 (1.85)			.043 (1.09)	.017 (0.43)	.120 (3.05)		.126 (3.20)	
	.078 (1.98)	.050 (1.27)	.103 (2.62)	.078 (1.98)	.0415 (1.05)	.066 (1.68)	.032 (0.81)				
532	.076 (1.93)	.048 (1.22)	.100 (2.54)			.062 (1.57)	.026 (0.66)				
	.103 (2.62)	.068 (1.73)				.089 (2.26)	.042 (1.07)				
533	.101 (2.57)	.066 (1.68)	.133 (3.38)	.113 (2.87)	.0635 (1.61)	.083 (2.11)	.036 (0.91)				
	.078 (1.98)	.050 (1.27)	.130 (3.30)			.066 (1.68)	.032 (0.81)	.284 (7.21)	46° 44°	.040 (1.02)	.103 (2.62)
534	.076 (1.93)	.048 (1.22)				.062 (1.57)	.026 (0.66)	.250 (6.35)		.020 (0.51)	.101 (2.57)
	.151 (3.84)	.102 (2.59)				.136 (3.45)			16° 14°		.158 (4.01)
535	.148 (3.76)	.098 (2.49)	.190 (4.83)	.161 (4.09)	.0955 (2.43)	.130 (3.30)	.042 (1.07)				
	.103 (2.62)	.068 (1.73)	.187 (4.75)			.089 (2.26)	.036 (0.91)				.155 (3.94)
536	.101 (2.57)	.066 (1.68)				.083 (2.11)			46° 44°		

TABLE 3 - DESIGN CHARACTERISTICS

BIN CODE	COLOR BAND 1/			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1ST	2ND	3RD				
531	GREEN	ORANGE	BROWN	22	22	A	A
532	GREEN	ORANGE	RED	20	20		
533	GREEN	ORANGE	ORANGE	16	16		
534	GREEN	ORANGE	YELLOW	16	20		
535	GREEN	ORANGE	GREEN	12	12		
536	GREEN	ORANGE	BLUE	12	16		

1/ REFER TO AS39029 FOR MARKING OPTIONS.

TABLE 4 - CURRENT RATING (MAXIMUM RMS)

BIN CODE	MAX (RMS)	BIN CODE	MAX (RMS)
-531	5 AMPS	-534	7.5 AMPS
-532	7.5 AMPS	-535	23 AMPS
-533	10 AMPS	-536	10 AMPS

TABLE 5 - TOOLS

BIN CODE	BASIC CRIMPING TOOL	POSITIONER	INSTALLING TOOL	REMOVAL TOOL	
				WIRED CONTACT	UNWIRED CONTACT
-531	M22520/2-01	M22520/2-38	M81969/8-03 M81969/14-01	M81969/8-04 M81969/14-01	M81969/30-01
-532	M22520/2-01 M22520/1-01 M22520/7-01	M22520/2-02, M22520/1-02 RED M22520/7-02	M81969/8-05 M81969/8-205 M81969/8-305 M81969/14-02	M81969/8-06 M81969/8-206 M81969/8-306 M81969/14-02	M81969/30-05
-533	M22520/1-01 M22520/7-01	M22520/1-02 BLUE M22520/7-03	M81969/8-07 M81969/14-03	M81969/8-08 M81969/14-03	M81969/30-06
-534	M22520/7-01 M22520/1-01	M22520/7-03 M22520/1-02 BLUE	M81969/8-07 M81969/14-03	M81969/8-08 M81969/14-03	M81969/30-05
-535	M22520/1-01	M22520/1-02 YELLOW	M81969/8-09 M81969/8-209 M81969/8-309 M81969/14-04	M81969/8-10 M81969/8-210 M81969/8-310 M81969/14-04	M81969/30-07
-536	M22520/1-01	M22520/1-02 YELLOW	M81969/8-09 M81969/8-209 M81969/8-309 M81969/14-04	M81969/8-10 M81969/8-210 M81969/8-310 M81969/14-04	M81969/30-06

REQUIREMENTS:

1. DESIGN AND CONSTRUCTION:

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 (REFER TO AS39029, SECTION 6). DIMENSIONS APPLY AFTER PLATING. THE .280 MINIMUM DIMENSION IS THE DISTANCE BETWEEN THE REAR OF THE CONTACT SHOULDER AND THE POINT AT WHICH A GAGE PIN OF THE SAME BASIC DIAMETER AS THE MATING CONTACT AND SQUARE FACE, FIRST ENGAGES THE SOCKET CONTACT SPRING MEMBER. DIAMETERS ARE TO BE CONCENTRIC WITHIN .004 FIM. THE MAXIMUM ALLOWABLE GAP BETWEEN THE HOOD AND THE BODY OF THE CONTACT IS .010 INCH. AN ALTERNATE DESIGN OF THE WIRE BARREL LEAD-IN ANGLE SHALL BE AS FOLLOWS:

- SIZE 22 - BLEND RADIUS .010 INCH ± .005 INCH.
- SIZE 20 - BLEND RADIUS .015 INCH ± .005 INCH.
- SIZE 16 - BLEND RADIUS .020 INCH ± .005 INCH.
- SIZE 12 - BLEND RADIUS .020 INCH ± .010 INCH.

2. QUALIFICATION:

ELECTRICAL CONTACTS SHALL BE TESTED USING A RELAY AND RELAY SOCKET IN ACCORDANCE WITH MIL-DTL-12883/40 AND MIL-DTL-12883/41 (LATEST REVISION).

3. ELECTRICAL:

MATING ELECTRICAL CONTACT: RELAY PIN, SEE MIL-DTL-12883/40 AND MIL-DTL-12883/41 FOR PART OR IDENTIFYING NUMBER (PIN).

CURRENT RATING (MAXIMUM): OPERATING CURRENT SHALL BE DETERMINED BY DERATING FOR INTENDED APPLICATIONS (SEE TABLE 4).

4. ENVIRONMENTAL:

TEMPERATURE RANGE: -70 TO +125 °C.

	AEROSPACE STANDARD	AS39029™/92 SHEET 3 OF 4	REV. C
	CONTACTS, ELECTRICAL CONNECTOR, SOCKET REMOVABLE (FOR MIL-PRF-6106 AND MIL-DTL-12883/40 AND /41 RELAY SOCKETS)		