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REV.
B

AS39029™/92

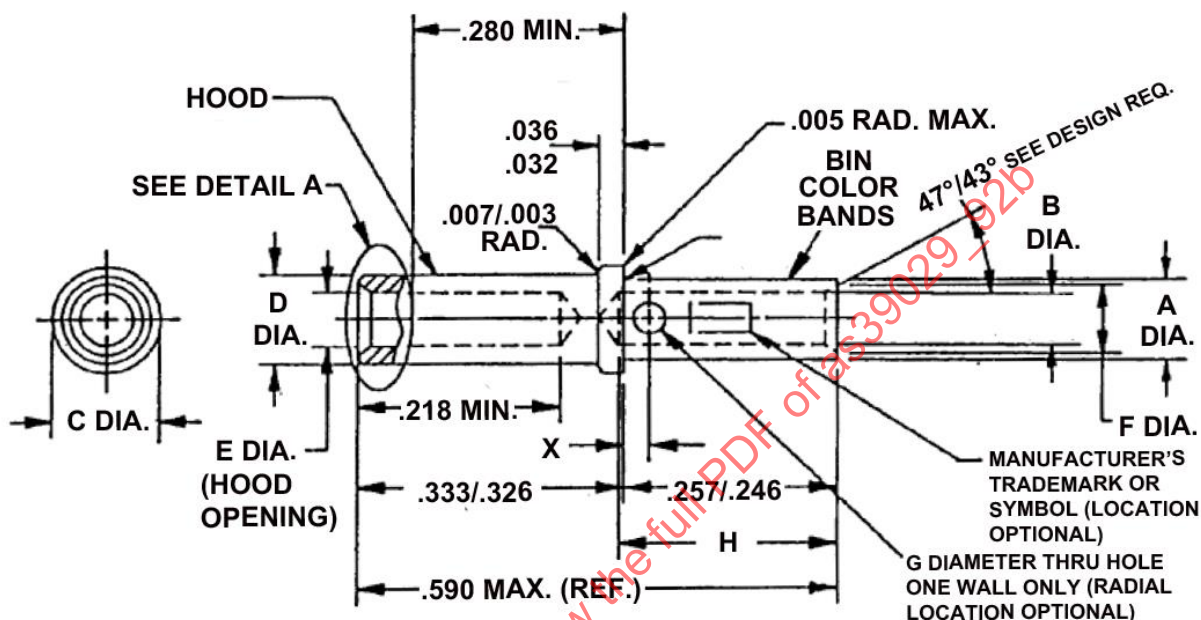
FEDERAL SUPPLY CLASS
5935

RATIONALE

REVISION IS REQUIRED TO IMPROVE DRAWING QUALITY, TO CORRECT INSERTION TOOL ERROR IN TABLE 5 FOR BIN CODE 531 (SHOULD BE M81969/8-03 INSTEAD OF /8-04), AND TO ADD METRIC EQUIVALENTS.

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

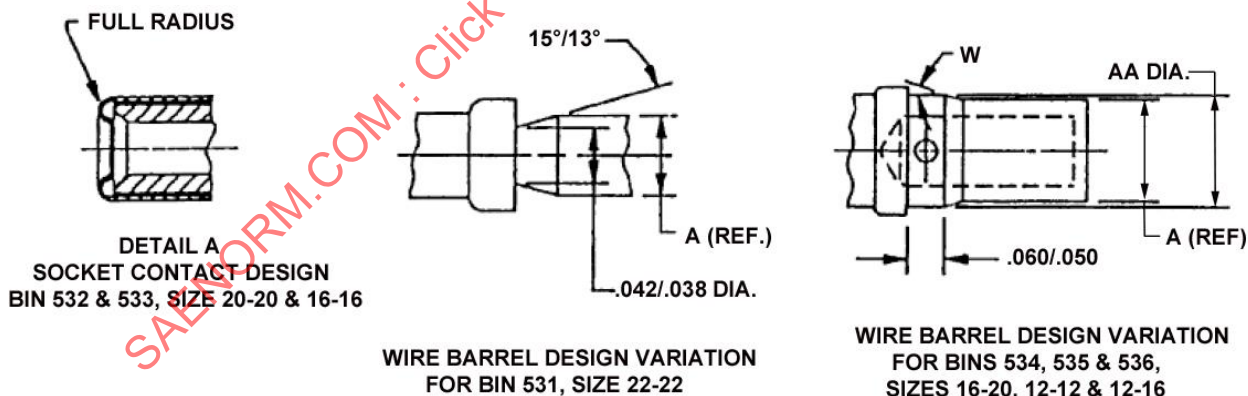
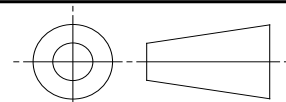


FIGURE 1 – SOCKET CONTACT DESIGN AND WIRE BARREL DESIGN VARIATIONS

For more information on this standard, visit

<https://www.sae.org/standards/content/AS39029/92B>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS39029



AEROSPACE STANDARD

(R) 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.
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ISSUED 2000-07 REVISED 2016-05 REAFFIRMED 2020-12

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)		.146 (3.71)	
	.051 (1.30)	.036 (0.91)	.073 (1.85)			.043 (1.09)	.017 (0.43)	.120 (3.05)		.126 (3.20)	
532	.078 (1.98)	.050 (1.27)	.103 (2.62)	.078 (1.98)	.0415 (1.05)	.066 (1.68)	.032 (0.81)		N/A		N/A
	.076 (1.93)	.048 (1.22)	.100 (2.54)			.062 (1.57)	.026 (0.66)				
533	.103 (2.62)	.068 (1.73)				.089 (2.26)	.042 (1.07)				
	.101 (2.57)	.066 (1.68)	.133 (3.38)	.113 (2.87)	.0635 (1.61)	.083 (2.11)	.036 (0.91)				
534	.078 (1.98)	.050 (1.27)	.130 (3.30)			.066 (1.68)	.032 (0.81)	.284 (7.21)	46°	.040 (1.02)	.103 (2.62)
	.076 (1.93)	.048 (1.22)				.062 (1.57)	.026 (0.66)	.250 (6.35)	44°	.020 (0.51)	.101 (2.57)
535	.151 (3.84)	.102 (2.59)				.136 (3.45)			16°		
	.148 (3.76)	.098 (2.49)	.190 (4.83)	.161 (4.09)	.0955 (2.43)	.130 (3.30)	.042 (1.07)		14°		.158 (4.01)
536	.103 (2.62)	.068 (1.73)	.187 (4.75)			.089 (2.26)	.036 (0.91)		46°		.155 (3.94)
	.101 (2.57)	.066 (1.68)				.083 (2.11)			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	"	"	RED	20	20		
533	"	"	ORANGE	16	16		
534	"	"	YELLOW	16	20		
535	"	"	GREEN	12	12		
536	"	"	BLUE	12	16		

1/ SEE AS39029 FOR MARKING OPTIONS.

	AEROSPACE STANDARD	AS39029™/92 SHEET 2 OF 4	REV. B
	(R) CONTACTS, ELECTRICAL CONNECTOR, SOCKET REMOVABLE (FOR MIL-PRF-6106 AND MIL-DTL-12883/40 AND /41 RELAY SOCKETS)		

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	K1561 OR 640100 OR EQUIVALENT <u>1/</u>	M81969/8-03 M81969/14-01	M81969/8-04 M81969/14-01	M81969/30-01
-532	M22520/2-01 M22520/1-01 OR M22520/7-01	M22520/2-02, M22520/1-02 RED OR M22520/7-02	M81969/8-05 M81969/14-02	M81969/8-06 M81969/14-02	M81969/30-05
-533	M22520/1-01 OR 122520/7-01	M22520/1-02 BLUE OR M22520/7-03	M81969/8-07 M81969/14-03	M81969/8-08 M81969/14-03	M81969/30-06
-534	M22520/7-01 OR M22520/1-01	M22520/7-03 OR 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 M81969/14-04	M81969/8-10 M81969/14-04	M81969/30-07
-536	M22520/1-01	M22520/1-02 YELLOW	M81969/8-09 M81969/14-04	M81969/8-10 M81969/14-04	M81969/30-06

1/ K1561 IS A DANIELS MANUFACTURING CORP. PART NUMBER AND 640100 IS AN ASTRO TOOL CORP. PART NUMBER.

REQUIREMENTS:

1. DESIGN AND CONSTRUCTION:

CONTACT SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLES 2 AND 3. DIMENSIONS SHOWN ARE IN INCHES AND APPLY AFTER PLATING. ALL DIMENSIONS PROVIDED IN PARENTHESES ARE METRIC EQUIVALENTS AND ARE GIVEN FOR GENERAL INFORMATION ONLY (SEE AS39029 SECTION 6). 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 INCHES. AN ALTERNATE DESIGN OF THE WIRE BARREL LEAD-IN ANGLE SHALL BE AS FOLLOWS:

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

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).

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