

RATIONALE

A LIMITED SCOPE REVISION IS REQUIRED TO REMOVE THE AS81969/16-01 TOOL FROM TABLE 5, BIN CODE 553; IT IS NO LONGER APPLICABLE.

NOTICE

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

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AS39029™/101

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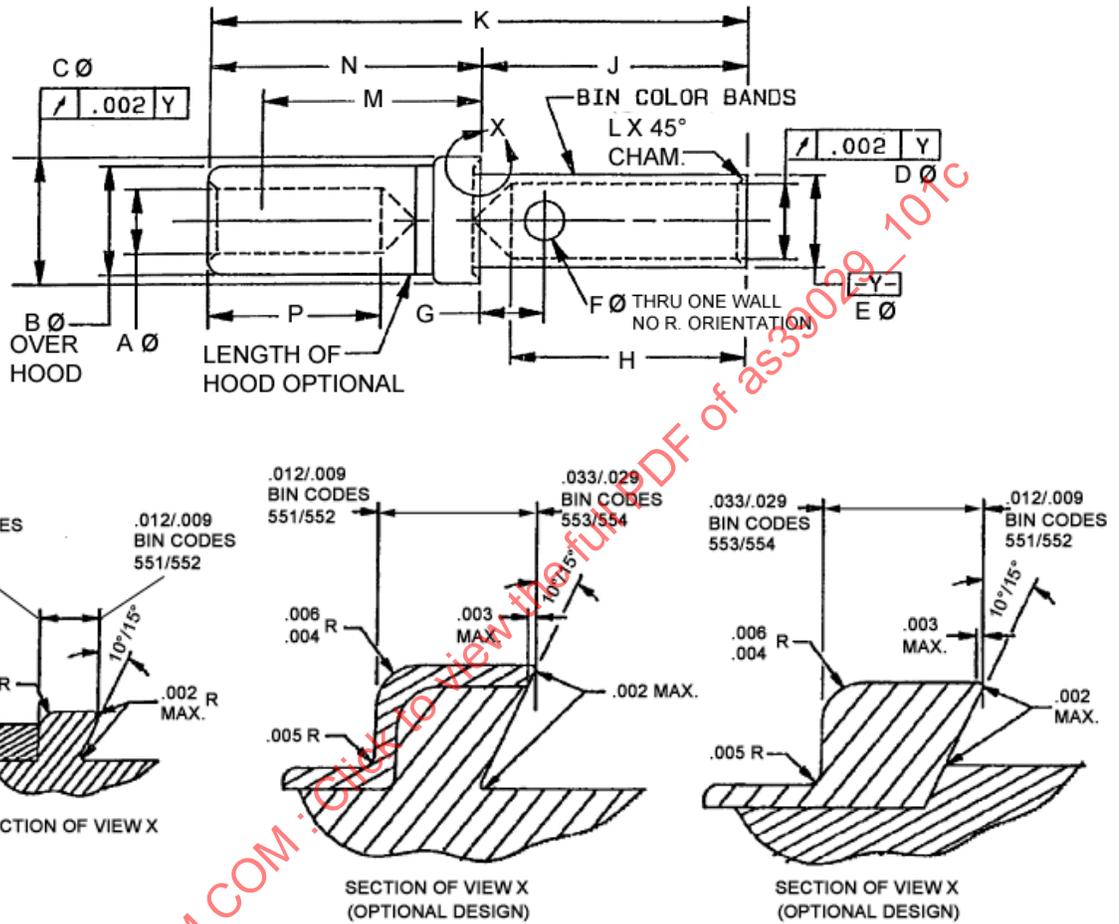
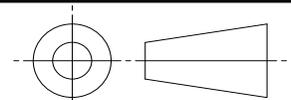


FIGURE 1 - SOCKET CONTACT

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS39029/101C>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS39029



**AEROSPACE STANDARD**

CONTACTS, ELECTRICAL CONNECTOR, SOCKET, CRIMP REMOVABLE (FOR MIL-DTL-12883/44, MIL-DTL-12883/45, MIL-DTL-12883/46, AND MIL-DTL-12883/52 RELAY)

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**TABLE 1 - DIMENSIONS**

BIN CODE	A DIA	B DIA MAX	C DIA	D DIA	E DIA	F DIA	G	H	J	K REF	L CHAM.	M MIN	N	P
551	.033 (.84)	.060 (1.52)	.0615 (1.56)	.0200 (.508) .0180 (.457)	.0480 (1.22)	.022 (.559)				.327 (8.31)	.006 (.152) .003 (.076)	.130 (3.30)	.166 (4.22) .158 (4.01)	
552	.031 (.79)		.0600 (1.52)	.0355 (.902) .0335 (.851)										
553	.044 (1.12) .042 (1.07)	.076 (1.93)	.094 (2.39)	.048 (1.22) .046 (1.17)	.070 (1.78)	.027 (.686)	.021 (.533)	.160 (4.06)	.160 (4.06)	.349 (8.86)	.010 (.025) .005 (.127)	.150 (3.81)	.188 (4.78) .180 (4.57)	.120 (3.05)
554	.066 (1.68) .064 (1.63)		.130 (3.30) .127 (3.23)	.068 (1.73) .066 (1.68)	.103 (2.62) .101 (2.57)									

**TABLE 2 - DESIGN CHARACTERISTICS**

BIN CODE	COLOR BANDS			MATING END SIZE (REF)	WIRE BARREL SIZE	TYPE	CLASS
	1 <sup>ST</sup>	2 <sup>ND</sup>	3 <sup>RD</sup>				
551	GREEN	GREEN	BROWN	22	28	A	A
552	GREEN	GREEN	RED	22	22		
553	GREEN	GREEN	ORANGE	20	20		
554	GREEN	GREEN	YELLOW	16	16		

**TABLE 3 - ENGAGEMENT AND SEPARATION**

BIN CODE	MINIMUM SEPARATION FORCE FOR MINIMUM PIN DIAMETER (OUNCES)	AVERAGE ENGAGEMENT FORCE FOR MAXIMUM PIN DIAMETER (OUNCES)	MAXIMUM SEPARATION FORCE FOR MINIMUM PIN DIAMETER (OUNCES)	MINIMUM SEPARATION FORCE FOR MINIMUM PIN DIAMETER (OUNCES)	AVERAGE ENGAGEMENT FORCE FOR MAXIMUM PIN DIAMETER (OUNCES)	MAXIMUM ENGAGEMENT FORCE FOR MAXIMUM PIN DIAMETER (OUNCES)
553	.7	20	25	.6	22	29
554	2.0	32	40	1.5	37	46

**TABLE 4 - PROBE DAMAGE**

BIN CODE	TEST PROBE DIAMETER			BENDING MOMENT IN-LB ±10% <u>1/</u>
	MAXIMUM PIN DIAMETER INSERTION PROBE (INCHES) +.0001 -.0000	MINIMUM PIN DIAMETER RETENTION PROBE (INCHES) +.0000 -.0001	MOMENT PROBE (INCHES) ±.0001	
551	.0305	.0295	.030	.25
552	.0305	.0295	.030	.25
553	.0410	.0390	.040	1.0
554	.0635	.0615	.0625	2.0

1/ DEPTH OF INSERTION SHALL BE FULL DEPTH OF BORE.

**TABLE 5 - TOOLS**

BIN CODE	BASIC CRIMPING TOOL	POSITIONER	INSTALLING AND REMOVAL TOOL
551	M22520/7-01 M22520/2-01	M22520/7-11 M22520/2-19	M81969/16-04, OR M81969/14-01
552	M22520/7-01 M22520/2-01	M22520/7-11 M22520/2-19	M81969/16-04 OR M81969/14-01
553	M22520/7-01 M22520/1-01	M22520/7-12 M22520/1-18	M81969/14-10
554	M22520/7-01 M22520/1-01	M22520/7-13 M22520/1-18	M81969/16-02 OR M81969/14-03

**TABLE 6 - PART NUMBER**

BIN CODE	PART NUMBER
551	M39029/101-551
552	M39029/101-552
553	M39029/101-553
554	M39029/101-554

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, TABLES 1 AND 2. DIMENSIONS ARE IN INCHES. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY. DIMENSIONS SHOWN APPLY AFTER PLATING. THE C DIMENSION IS THE DISTANCE BETWEEN THE REAR OF THE CONTACT SHOULDER AND THE POINT AT WHICH A GAUGE PIN OF THE SAME BASIC DIAMETER AS THE MATING PIN CONTACT AND SQUARE FACE, FIRST ENGAGES THE SOCKET CONTACT SPRING MEMBER. THE A DIAMETER IS THE CLOSEST ENTRY OF THE SOCKET HOOD. THE MAXIMUM ALLOWABLE GAP BETWEEN THE HOOD AND THE BODY OF THE CONTACT IS .010 INCH. TEMPERATURE RANGE -70 TO 125 °C.

2. TOOLS:

TOOLS REQUIRED FOR CRIMPING CONTACTS TO WIRE/CABLE AND THE INSTALLING/REMOVAL FROM THE CONNECTOR SHALL BE IN ACCORDANCE WITH TABLE 5.

3. PART NUMBERS:

CONTACT PART NUMBERS SHALL BE IN ACCORDANCE WITH TABLE 6.

	<b>AEROSPACE STANDARD</b>	<b>AS39029™/101</b> SHEET 3 OF 4	<b>REV.</b> <b>C</b>
	CONTACTS, ELECTRICAL CONNECTOR, SOCKET, CRIMP REMOVABLE (FOR MIL-DTL-12883/44, MIL-DTL-12883/45, MIL-DTL-12883/46, AND MIL-DTL-12883/52 RELAY)		