

RATIONALE

REVISION REQUIRED TO UPDATE THE TOOL TABLE, ESTABLISH QUALIFICATION TEST WIRE, AND CORRECT MINOR TECHNICAL ERRORS AS NEEDED.

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™/85

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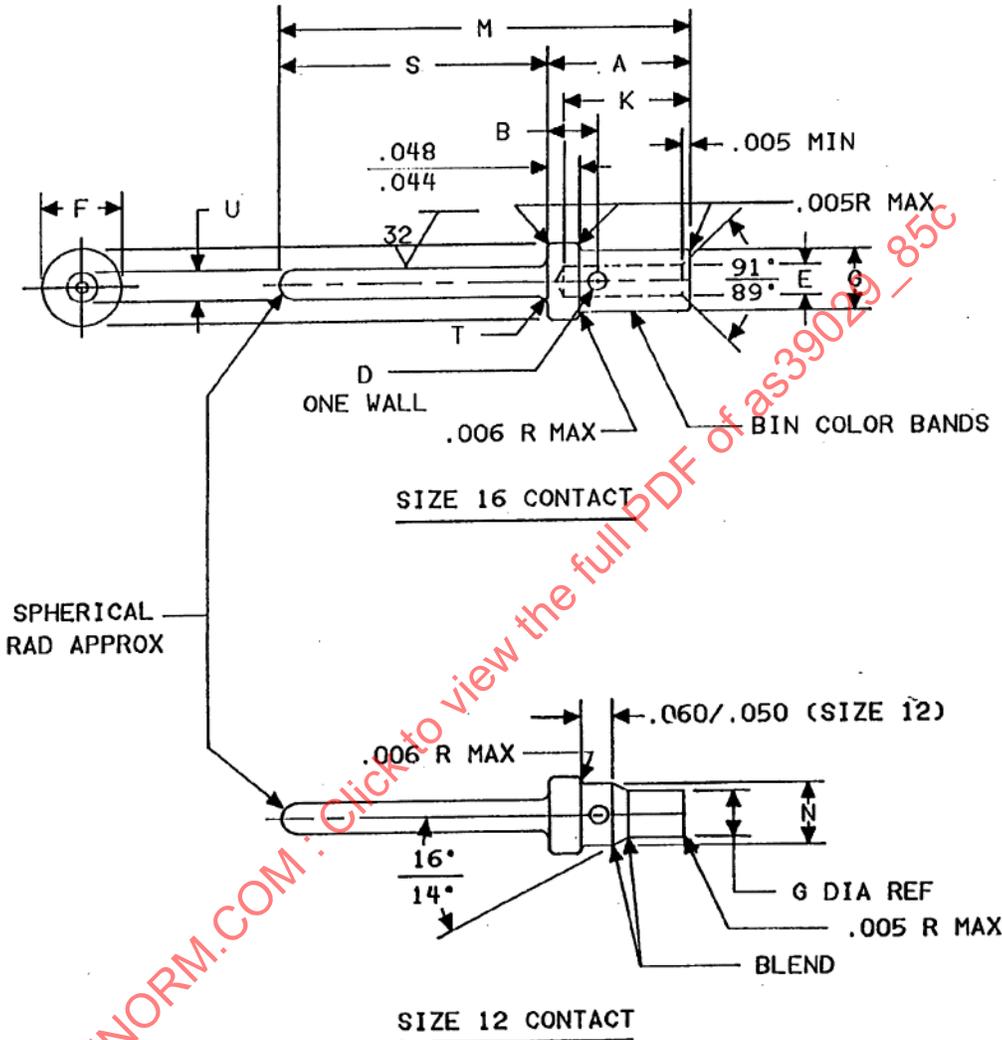
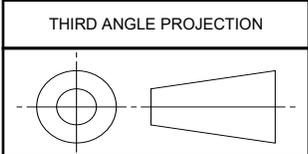


FIGURE 1 - PIN CONTACTS

For more information on this standard, visit
<https://www.sae.org/standards/content/AS39029/85c>



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS39029



AEROSPACE STANDARD

CONTACTS, ELECTRICAL CONNECTOR, PIN, CRIMP
REMOVABLE, THERMOCOUPLE (FOR AS50151 AS34501
SERIES AND MIL-DTL-83723 SERIES II CONNECTORS)

AS39029™/85
SHEET 1 OF 4

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TABLE 1 - DIMENSIONS

BIN CODE	A	B	D DIA	E DIA	F DIA	G DIA	K	M REF	N DIA	S	T MAX	U DIA
454 THRU 457	.300 (7.62)	.079 (2.01)	.042 (1.07)	.068 (1.73) .066 (1.68)	.133 (3.38) .130 (3.30)	.103 (2.62) .101 (2.57)	.280 (7.11)	.923 (23.44)	N/A	.631 (16.03) .619 (15.72)	.015 (0.38)	.0635 (1.61) .0615 (1.56)
458 THRU 461	.290 (7.37)	.073 (1.85)	.036 (0.91)	.102 (2.59) .098 (2.49)	.189 (4.80) .186 (4.72)	.150 (3.81) .147 (3.73)	.250 (6.35)	1.110 (28.19)	.160 (4.06) .155 (3.94)	.819 (20.80) .808 (20.52)		.095 (2.41) .093 (2.36)

TABLE 2 - DESIGN CHARACTERISTICS

BIN CODE	COLOR BANDS			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1ST	2ND	3RD				
454	YELLOW	GREEN	YELLOW	16	16	SEE TABLE 4	B
455	YELLOW	GREEN	GREEN	16	16		B
456	YELLOW	GREEN	BLUE	16	16		B
457	YELLOW	GREEN	VIOLET	16	16		B
458	YELLOW	GREEN	GRAY	12	12		B
459	YELLOW	GREEN	WHITE	12	12		B
460	YELLOW	BLUE	BLACK	12	12		B
461	YELLOW	BLUE	BROWN	12	12		B

TABLE 3 - TOOLS

BIN CODE	BASIC CRIMPING TOOL	POSITIONER	INSTALLING TOOL	REMOVAL TOOL (WIRED)	REMOVAL TOOL (UNWIRED)
454 455 456 457	M22520/1-01 M22520/7-01	M22520/1-02 BLUE M22520/7-03	M81969/8-207 M81969/14-03	M81969/8-208 M81969/14-03	M8196/30-06
458 459 460 461	M22520/1-01	M22520/1-02 YELLOW	M81969/8-209 M81969/14-04	M81969/8-210 M81969/14-04	M81969/30-07

TABLE 4 - MATERIALS, PLATING, AND TENSILE STRENGTH

BIN CODE	MATERIALS	PLATING	TENSILE STRENGTH 1/					
			WIRE SIZE	AXIAL LOAD (LB)	WIRE SIZE	AXIAL LOAD (LB)	WIRE SIZE	AXIAL LOAD (LB)
454	JN	NONE	20	14	18	23	16	33
455	KN	NONE						
456	KP	NONE						
457	JP	CADMIUM PLATE 2/						
458	JN	NONE	N/A	N/A	14	53	12	85
459	KN	NONE						
460	KP	NONE						
461	JP	CADMIUM PLATE 2/						

1/ APPLIES TO TYPE 1 WIRE PER MIL-DTL-5846.

2/ CHROMATE CLEAR COAT.

TABLE 5 - PART NUMBER AND BIN CODE

BIN CODE	AS39029 PART NUMBER	SUPERSEDED PART NUMBER
454	M39029/85-454	M39029/851616C1
455	M39029/85-455	M39029/851616C2
456	M39029/85-456	M39029/851616C3
457	M39029/85-457	M39029/851616C4
458	M39029/85-458	M39029/851212C1
459	M39029/85-459	M39029/851212C2
460	M39029/85-460	M39029/851212C3
461	M39029/85-461	M39029/851212C4

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 AND TABLES 1 AND 2. DIMENSIONS ARE IN INCHES. METRIC EQUIVALENTS IN PARENTHESES ARE FOR GENERAL INFORMATION ONLY AND ARE BASED ON 1 INCH = 25.4 MM. DIMENSIONS APPLY AFTER PLATING. SPHERICAL END DIMENSIONS SHALL CONFORM TO AS39029.

2. TOOLS:

TOOLS REQUIRED FOR CRIMPING CONTACTS TO THE 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 5. SUPERSEDED PART NUMBERS ARE AS SPECIFIED.

4. MATERIALS AND PLATING:

SEE TABLE 4.

5. MECHANICAL:

MECHANICAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

TENSILE STRENGTH SHALL BE AS SHOWN IN TABLE 4.

6. ELECTRICAL:

NOT REQUIRED.

7. ENVIRONMENTAL:

ENVIRONMENTAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

8. QUALIFICATION:

THE INSULATED WIRE FOR QUALIFICATION TESTING SHALL BE IN ACCORDANCE WITH AS22759 WITH A SILVER-PLATED CONDUCTOR.

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