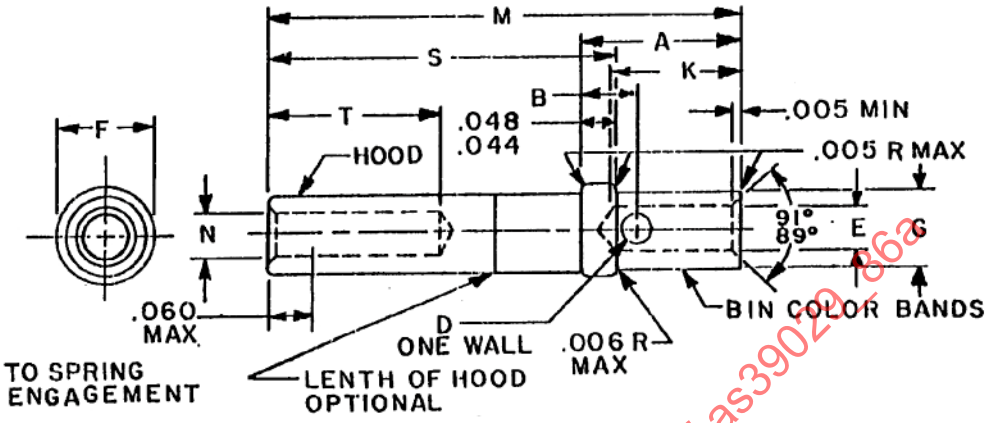
FEDERAL SUPPLY CLASS
5935

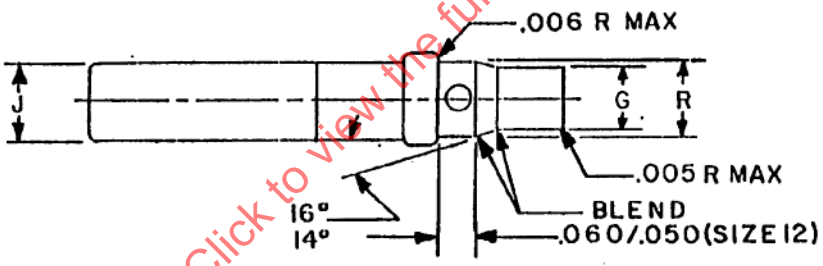
RATIONALE

REVISE TO INCLUDE COMMENTS RECEIVED BY THE GOVERNMENT AND INDUSTRY, REMOVE GOVERNMENT JARGON, UPDATE REFERENCES, ALIGN SPECIFICATION WITH SAE GUIDELINES, AND REVIEW SPECIFICATION FOR KNOWN TECHNICAL PROBLEMS.

THE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE LATEST ISSUE OF SAE AS39029.



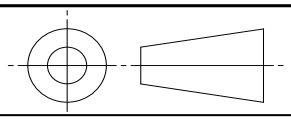
Size 16S - 16 Bin Codes 510 thru 513
Size 16 - 16 Bin Codes 462 thru 465



Size 12 - 12 Bin Codes 466 thru 469

FIGURE 1 - SOCKET CONTACT

THIRD ANGLE PROJECTION



ISSUED 2000-07 REAFFIRMED 2006-10 REVISED 2011-01

CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS39029

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

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

TABLE 1 - DIMENSIONS

BIN CODE	A	B	D DIA	E DIA	F DIA	G DIA	J DIA	K	M REF	N DIA	R	S	T
510 THRU 513	.300 (7.62) .290 (7.37)	.082 (2.08) .070 (1.78)	.042 (1.07) .036 (.91)	.068 (1.73) .066 (1.68)	.133 (3.38) .130 (3.30)	.103 (2.62) .101 (2.57)	.113 (2.87) .106 (2.69)	.280 (7.11) .250 (6.35)	.911 (23.14)	.068 (1.72) .065 (1.65)	N/A	.666 (16.92) .656 (16.66)	.560 (14.22) .399 (10.13)
462 THRU 465									1.101 (27.97)			.856 (21.74)	.560 (14.22) .430 (10.92)
466 THRU 469				.102 (2.59) .098 (2.49)	.189 (4.80) .186 (4.72)	.150 (3.81) .147 (3.73)	.161 (4.09) .154 (3.91)			.100 (2.54) .097 (2.46)	.160 (4.06) .155 (3.94)	.846 (21.49)	.710 (18.03) .587 (14.91)

TABLE 2 - DESIGN CHARACTERISTICS

BIN CODE	COLOR BANDS 1ST	2ND	3RD	MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
510	GREEN	BROWN	BLACK	16S	16	SEE TABLE 4 FOR COMPOSITION	B
511	GREEN	BROWN	BROWN	16S	16		B
512	GREEN	BROWN	RED	16S	16		B
513	GREEN	BROWN	ORANGE	16S	16		B
462	YELLOW	BLUE	RED	16	16		B
463	YELLOW	BLUE	ORANGE	16	16		B
464	YELLOW	BLUE	YELLOW	16	16		B
465	YELLOW	BLUE	GREEN	16	16		B
466	YELLOW	BLUE	BLUE	12	12		B
467	YELLOW	BLUE	VIOLET	12	12		B
468	YELLOW	BLUE	GRAY	12	12		B
469	YELLOW	BLUE	WHITE	12	12		B

TABLE 3 - TOOLS

BIN CODE	BASIC CRIMPING TOOL	POSITIONER	INSTALLING TOOL	REMOVAL TOOL
462 THRU 465	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
510 THRU 513				
466 THRU 469	M22520/1-01	M22520/1-02 YELLOW	M81969/8-09 M81969/14-04	M81969/8-10 M81969/14-04

TABLE 4 - MATERIALS, PLATING, AND TENSILE STRENGTH

BIN CODE	MATERIALS	PLATING	TENSILE STRENGTH 1/					
			WIRE SIZE	AXIAL LOAD (LBS)	WIRE SIZE	AXIAL LOAD (LBS)	WIRE SIZE	AXIAL LOAD (LBS)
510	JN	NONE	16	33	18	23	20	14
511	KN	NONE						
512	KP	NONE						
513	JP	CADMIUM PLATE 2/						
462	JN	NONE	16	33	18	23	20	14
463	KN	NONE						
464	KP	NONE						
465	JP	CADMIUM PLATE 2/						
466	JN	NONE	12	85	14	53	16	33
467	KN	NONE						
468	KP	NONE						
469	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	PART NUMBER	SUPERSEDED PART NUMBER
510	M39029/86-510	—
511	M39029/86-511	—
512	M39029/86-512	—
513	M39029/86-513	—
462	M39029/86-462	M39029/861616C1
463	M39029/86-463	M39029/861616C2
464	M39029/86-464	M39029/861616C3
465	M39029/86-465	M39029/861616C4
466	M39029/86-466	M39029/861212C1
467	M39029/86-467	M39029/861212C2
468	M39029/86-468	M39029/861212C3
469	M39029/86-469	M39029/861212C4

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS SPECIFICATION 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 K BORE SHALL NOT BREAK THROUGH TO THE T BORE. THE MAXIMUM ALLOWABLE GAP BETWEEN THE HOOD AND THE BODY OF THE CONTACT IS .010 INCHES. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH SHALL BE 63 MICROINCHES.

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.