

REV.
A

SAE AS39029/94

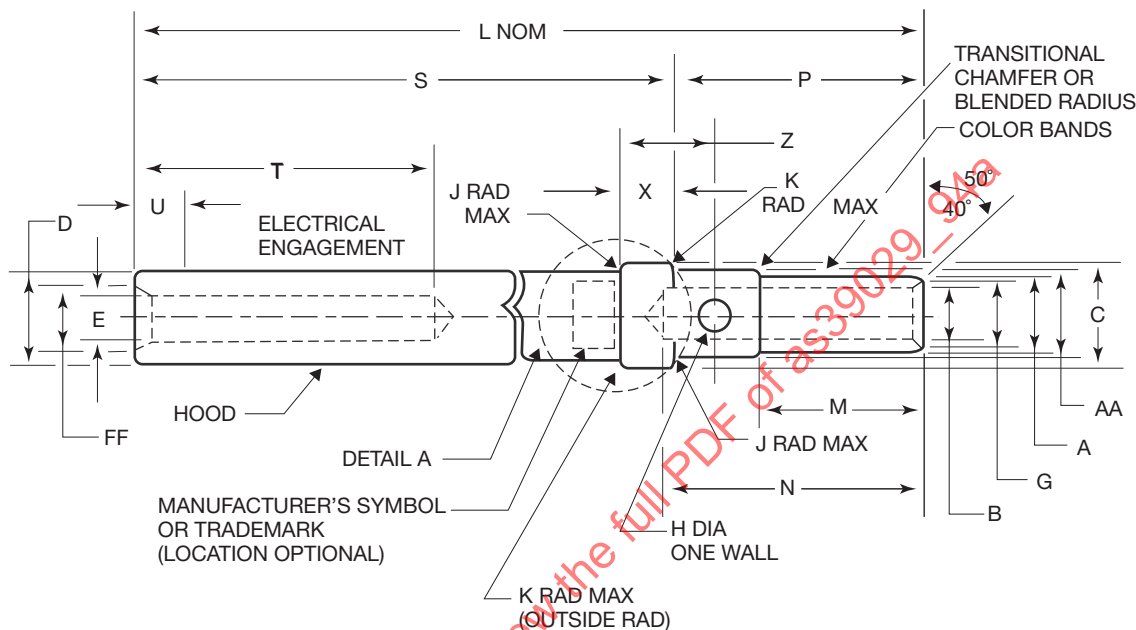
FEDERAL SUPPLY CLASS
5999

RATIONALE

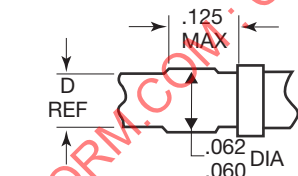
REVISE TO INCLUDE COMMENTS RECEIVED BY THE GOVERNMENT AND INDUSTRY SINCE 1988, INCORPORATES VARIOUS AMENDMENTS, REMOVE GOVERNMENT JARGON AS A RESULT OF THE WORD-FOR-WORD TRANSFERENCE OF AS39029 TO SAE, UPDATE SPECIFICATION REFERENCES, ALIGN SPECIFICATIONS WITH SAE GUIDELINES AS NEEDED, AND REVIEW SPECIFICATIONS FOR KNOWN TECHNICAL PROBLEMS.

NOTICE

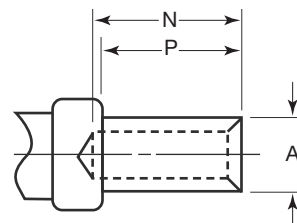
THE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE LATEST ISSUE OF: SAE AS39029.



SOCKET SIDE (ALL BIN CODES) AND WIRE BARREL SIDE (BIN 603 & 604)



DETAIL A: OPTIONAL DESIGN BIN 601

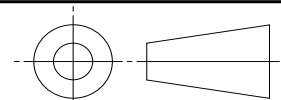


BIN 601 & 602 WIRE BARREL

FIGURE 1 - AS39029/94 SOCKET CONTACT

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS39029/94A>

THIRD ANGLE PROJECTION



CUSTODIAN: SAE AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS39029

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) CONTACTS, ELECTRICAL CONNECTOR,
SOCKET, CRIMP REMOVABLE
(FOR MIL-DTL-83527, CONNECTOR)

SAE AS39029/94
SHEET 1 OF 4

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TABLE 1 - CONTACT DIMENSIONS

BIN CODE	A DIA	B DIA	C DIA	D DIA	E DIA (MIN ONLY)	G DIA	H DIA	J RAD	K RAD	L (NOM)
601 (22-22)	.052 .050	.0375 .0340	.070 (1.78) .068 (1.73)	.061 .059	.031	.047 .041	.022 .018	.002	.003	.650 (16.51) .630 (16.00)
602 (20-20)	.068 .065	.0460 .0430	.084 (2.13) .082 (2.08)	.074 .068	.0415	.058 .052	.033 .025	.002	.003	.918 (23.32) .898 (22.81)
603 (16-16)	.103 .101	.068 .066	.134 (3.40) .130 (3.30)	.113 .106	.064	.090 .080	.042 .036	.003	.005	.965 (24.51)
604 (12-12)	.151 .148	.102 .098	.190 (4.83) .186 (4.72)	.161 .158	.0955	.140 .130	.042 .036	.003	.005	.965 (24.51)

TABLE 1 - CONTACT DIMENSIONS (CONTINUED)

BIN CODE	M MIN	N	P	S	T MIN	U MAX	X	Z	AA DIA	FF MIN
601 (22-22)	N/A	.165 .135	.237 .231	.410 .401	2.80	.043	.034 .029	.161 .132	---	.043
602 (20-20)	N/A	.190 .150	.165 .155	.750 .745	.325	.041	.034 .029	.069 .054	N/A	.056
603 (16-16)	.150	.290 .250	.257 .245	.718 .710	.468	.060	.048 .044	.083 .069	.111 .107	.086
604 (12-12)	.150	.290 .250	.257 .245	.718 .710	.468	.060	.048 .044	.083 .069	.158 .155	.116

TABLE 2 - MARKING AND DESIGN CHARACTERISTICS

BIN CODE	COLOR BANDS			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1 ST	2 ND	3 RD				
601	BLUE	BLACK	BROWN	22	22	A	B
602	BLUE	BLACK	RED	20	20		
603	BLUE	BLACK	ORANGE	16	16		
604	BLUE	BLACK	YELLOW	12	12		

TABLE 3 - TOOL REQUIREMENTS

BIN CODE	BASIC CRIMPING TOOL	POSITIONER	INSTALLING TOOL	REMOVAL TOOL
601	M22520/2-01	M22520/2-23	M81969/1-01	M81969/1-01
602	M22520/2-01	M22520/2-08	M81969/1-02	M81969/1-02
	M22520/7-01	M22520/7-02		
603	M22520/1-01	M22520/1-02 BLUE	M81969/1-03	M81969/1-03
	M22520/7-01	M22520/7-03		
604	M22520/1-01	M22520/1-11	N/A	M81969/28-02

TABLE 4 - CONTACT ENGAGEMENT AND SEPARATION FORCES

BIN CODE	MATING END SIZE	INITIAL			AFTER CONDITIONING		
		MINIMUM SEPARATION FORCE (OUNCES)	MAXIMUM AVERAGE ENGAGEMENT FORCE (OUNCES)	MAXIMUM ENGAGEMENT FORCE (OUNCES)	MINIMUM SEPARATION FORCE (OUNCES)	MAXIMUM AVERAGE ENGAGEMENT FORCE (OUNCES)	MAXIMUM ENGAGEMENT FORCE (OUNCES)
		MINIMUM DIAMETER AS31971 PIN	MAXIMUM DIAMETER AS31971 PIN	MAXIMUM DIAMETER AS31971 PIN	MAXIMUM DIAMETER AS31971 PIN	MAXIMUM DIAMETER AS31971 PIN	MAXIMUM DIAMETER AS31971 PIN
601	22	0.75	2.50	3.0	0.60	2.75	4.0
602	20	0.75	5.0	6.0	0.60	6.00	7.0
603	16	2.00	9.0	12.0	1.0	11.5	15.0
604	12	3.00	12.0	15.0	2.0	14.5	18.0

TABLE 4 - PART NUMBERS

AS39029 PART NUMBER	BIN CODE	SUPERSEDED PART NUMBER(S)
M39029/94-601	601	
M39029/94-602	602	
M39029/94-603	603	
M39029/94-604	604	

DETAIL SPECIFICATION REQUIREMENTS:

1. DESIGN:

CONTACT SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1, TABLE 1 AND 2. DIMENSIONS ARE IN INCHES AND SHOWN AFTER PLATING. UNLESS OTHERWISE SPECIFIED, SPHERICAL END DIMENSIONS SHALL CONFORM TO AS39029. THE MECHANICAL PRESSURE MEMBER SHALL BE SHROUDED. THERE SHALL BE A MAXIMUM GAP OF 0.010 INCH (2.54 MM) BETWEEN THE HOOD, IF USED, AND THE BODY OF THE CONTACT. ALL DIMENSIONS IN PARENTHESES ARE METRIC EQUIVALENTS AND PROVIDED FOR GENERAL INFORMATION ONLY (SEE AS39029 SECTION 6).

2. TOOLS:

TOOLS REQUIRED FOR CRIMPING CONTACTS TO 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 4. SUPERSEDED PART NUMBERS ARE AS SPECIFIED.

4. MATERIALS:

MATERIALS SHALL BE IN ACCORDANCE WITH AS39029.

 An SAE International Group	AEROSPACE STANDARD	SAE AS39029/94 SHEET 3 OF 4	REV. A
	(R) CONTACTS, ELECTRICAL CONNECTOR, SOCKET, CRIMP REMOVABLE (FOR MIL-DTL-83527, CONNECTOR)		