

REV.  
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RATIONALE

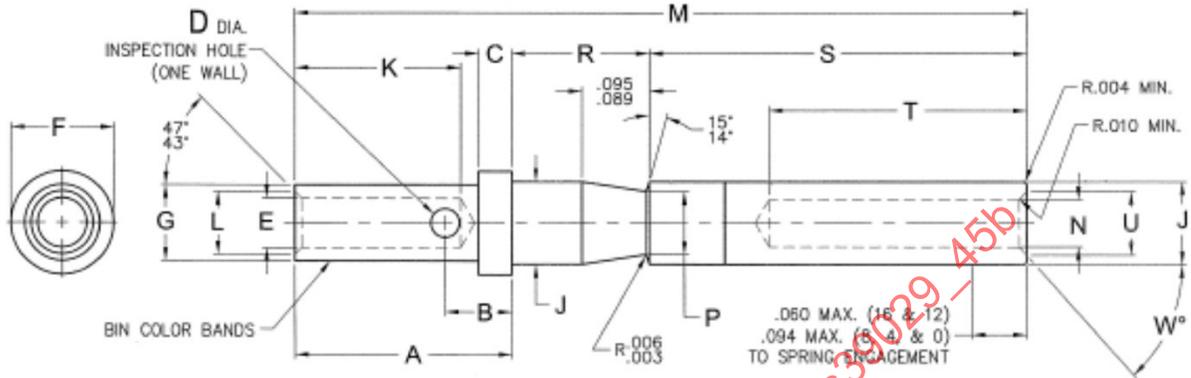
REVISE TO INCORPORATE THE OUTSTANDING AMENDMENT AS REQUIRED BY SAE GUIDELINES AND UPDATE  
FORMAT, FIGURES AND TABLES.

NOTICE

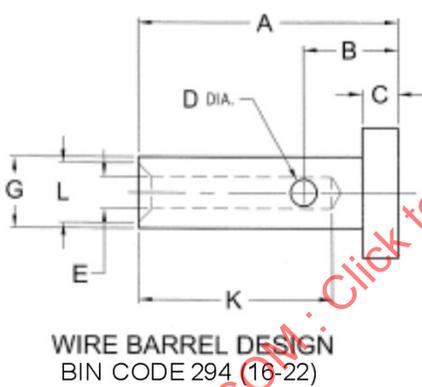
THE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS  
SPECIFICATION SHEET AND THE LATEST ISSUE OF SAE AS39029.

SAE AS39029/45

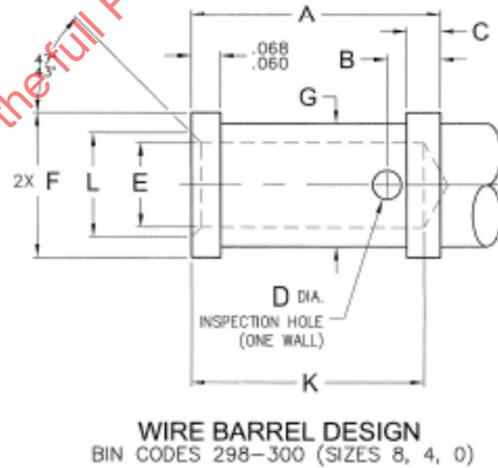
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SOCKET INTERFACE DESIGN FOR ALL BIN CODES  
WIRE BARREL DESIGN FOR BIN CODES 295 THRU 297 (SIZES 16 AND 12 CONTACTS)



WIRE BARREL DESIGN  
BIN CODE 294 (16-22)

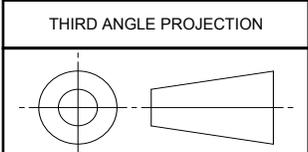


WIRE BARREL DESIGN  
BIN CODES 298-300 (SIZES 8, 4, 0)

FIGURE 1 - SOCKET CONTACT

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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 AS50151 SERIES  
AS34001 CONNECTORS)

**SAE AS39029/45**  
SHEET 1 OF 4

REV.  
B

TABLE 1 - CONTACT DIMENSIONS

BIN Code	E Dia	F Dia	J Dia	M Ref	N Dia	P Dia	R	S	T Min	U Min	W	A	B	C	D Dia	G Dia	K	L
294	0.0355	0.148 (3.76)	0.113	1.272	0.064	0.087	0.189	0.808	0.510	0.086	53 43	0.285	0.106	0.042	0.032	0.078	0.216	0.067
	0.0335	0.133 (3.38)	0.110			0.083						0.185	0.798	0.280	0.100	0.036	0.026	0.076
295	0.068			1.286								0.298	0.079	0.048	0.042	0.105	0.281	0.090
296		0.202	0.161		0.0955	0.135			0.625	0.125								
297	0.102 0.098															0.153 0.147		0.125 0.115
298	0.184	0.313 (7.95)	0.252	1.505	0.149	0.225				0.193	31 29	0.520	0.094		0.066	0.269	0.534	0.230
	0.179	0.309 (7.85)	0.249	(38.23)	0.145	0.221			0.510			0.084		0.060	0.263	0.480	0.220	
299	0.286	0.419 (10.64)	0.336		0.232	0.310	0.253	0.744		0.280						0.380		0.364
	0.279	0.409 (10.39)	0.333		0.228	0.307	0.249	0.734									0.370	
300	0.458	0.611 (15.52)	0.518	1.660	0.364	0.492				0.386		0.675				0.568	0.690	0.542
	0.451	0.601 (15.27)	0.515	(42.16)	0.360	0.489						0.665					0.558	0.636

TABLE 2 - MARKING AND DESIGN CHARACTERISTICS

BIN Codes	Color Bands			Mating End	Wire Barrel	Type Size	Class
	1st	2nd	3rd				
294	Red	White	Yellow	16	22	A	B
295	Red	White	Green	16	16		
296 1/	Red	White	Blue	12	16		
297	Red	White	Violet	12	12		
298	Red	White	Gray	8	8		
299	Red	White	White	4	4		
300	Orange	Black	Black	0	0		

1/ BIN 296 SHALL MEET ALL APPLICABLE TEST REQUIREMENTS FOR SIZE 12-14

TABLE 3 - TOOL REQUIREMENTS

BIN CODE	BASIC CRIMPING TOOL	DIE SET	LOCATOR	POSITIONER	INSTALLING TOOL	REMOVAL TOOL
294 1/	M22520/1-01	---	---	M22520/1-02 BLUE	M81969/17-09	M81969/19-01
295	M22520/1-01	---	---	M22520/1-02 BLUE	M81969/17-04	M81969/19-01
296	M22520/1-01	---	---	M22520/1-02 YELLOW	M81969/17-04	M81969/19-02
297	M22520/1-01	---	---	M22520/1-02 YELLOW	M81969/17-05	M81969/19-02
298	M22520/23-01	M22520/23-02	M22520/23-09	---	M81969/17-06	M81969/19-03
299	M22520/23-01	M22520/23-04	M22520/23-11	---	M81969/17-07	M81969/19-04
300	M22520/23-01	M22520/23-05	M22520/23-13	---	M81969/17-08	M81969/19-05

1/ USE SELECTOR NUMBER 3, 2, 1 FOR WIRE SIZE 22, 24, 26 RESPECTIVELY.

TABLE 4 - PART NUMBERS

AS39029 PART NUMBER	BIN CODE	SUPERSEDED PART NUMBER(S)
M39029/45-294	294	MS90454-16-22
M39029/45-295	295	MS90454-16-16
M39029/45-296	296	MS90454-12-16
M39029/45-297	297	MS90454-12-12
M39029/45-298	298	MS90454-8-8
M39029/45-299	299	MS90454-4-4
M39029/45-300	300	MS90454-0-0

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS SPECIFICATION AND THE LATEST ISSUE OF AS39029.

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. 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.

 An SAE International Group	<b>AEROSPACE STANDARD</b> (R) CONTACTS, ELECTRICAL CONNECTOR, SOCKET, CRIMP REMOVABLE (FOR AS50151 SERIES AS34001 CONNECTORS)	<b>SAE AS39029/45</b> SHEET 3 OF 4	<b>REV.</b> <b>B</b>