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REV.
A

AS39029/32

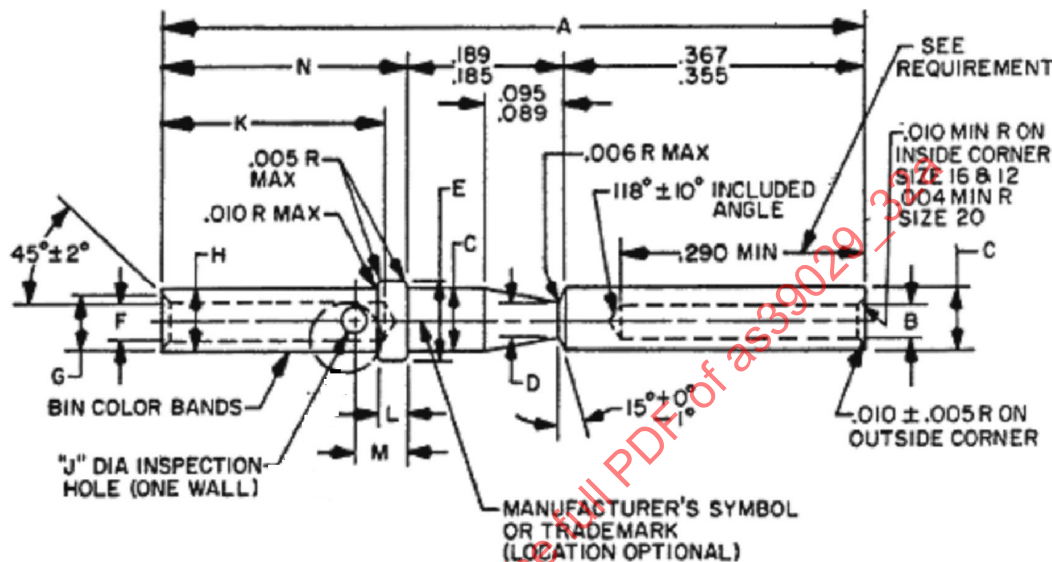
RATIONALE

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 CONTACTS DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE LATEST ISSUE OF: SAE AS39029.

FEDERAL SUPPLY CLASS
5999



SOCKET INTERFACE DESIGN FOR ALL BIN CODES
WIRE BARREL DESIGN FOR BIN CODES 247 THRU 258 (SIZES 16 AND 12 CONTACTS)

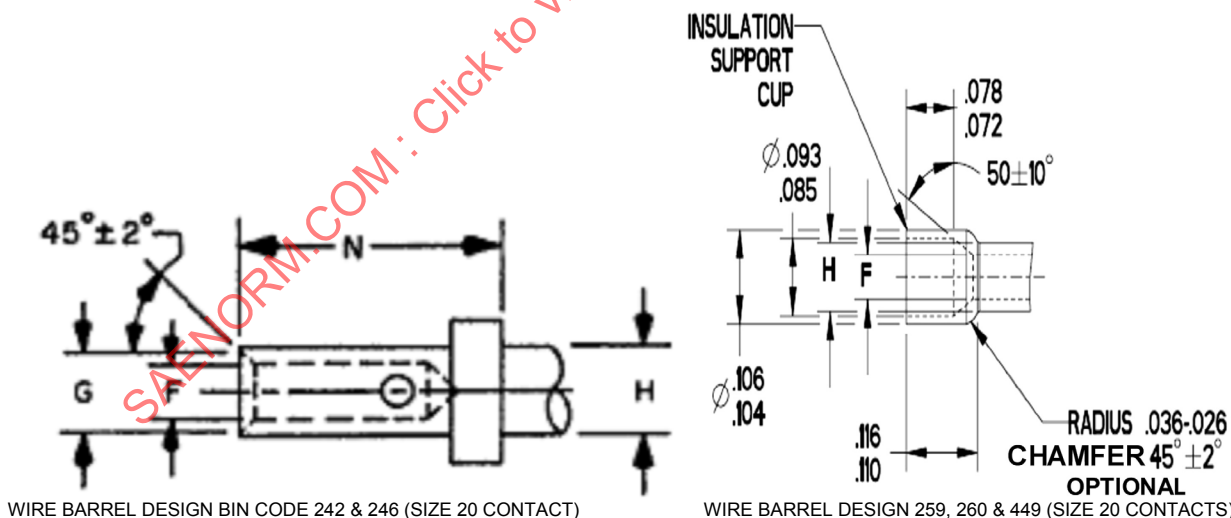
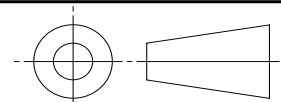


FIGURE 1- AS39029/32 SOCKET CONTACT

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-26482 SERIES 1, MIL-DTL-26500 AND MIL-DTL-26518 CONNECTORS)

AS39029/32
SHEET 1 OF 5

**REV.
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ISSUED 2001-03
REVISED 2007-11

TABLE 1 - CONTACT DIMENSIONS

BIN CODE	A REF	B MIN DIA	C DIA	D DIA	E DIA	F DIA	G DIA	H DIA	J DIA	K MIN	L	M	N
242, 243, 244, 245, & 246	.854 (21.69)	.041 5	.078 .076	.052 .048	.103 (2.62) .100 (2.54)	.050 .048	.064 .060	.078 .076	.032 .026	.250	.033 .029	.053 .068	.308 .304
247, 248, 249, 250, 251, & 252	.844 (21.44)	.064	.113 .110	.087 .083	.148 (3.76) .144 (3.66)	.068 .066	.092 .080	.105 .101	.042 .036	.236	.048 .044	.068 .085	.298 .294
253, 254, 255, 256, 257, & 258	.844 (21.44)	.095 5	.161 .158	.135 .131	.202 (5.13) .198 (5.03)	.102 .098	.135 .115	.153 .147	.042 .036	.236	.048 .044	.068 .085	.298 .294
259, 260, & 449	.854 (21.69)	.041 5	.078 .076	.052 .048	.103 (2.62) .100 (2.54)	.050 .048	N/A	.078 .076	.032 .026	.267	.033 .029	.053 .068	.308 .304

TABLE 2 - MARKING AND DESIGN CHARACTERISTICS

BIN CODES	COLOR BANDS			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1ST	2ND	3RD				
242	RED	YELLOW	RED	20	20	A	A
243	RED	YELLOW	ORANGE	20	20	C-IRON	A
244	RED	YELLOW	YELLOW	20	20	C-NICKEL- CHROMIUM	A
245	RED	YELLOW	GREEN	20	20	C- NICKEL- ALUMINUM/SILICON	A
246	RED	YELLOW	BLUE	20	20	C- COPPER-NICKEL ALLOY	A
247	RED	YELLOW	VIOLET	16	16	A	A
248	RED	YELLOW	GRAY	16	16	A	B
249	RED	YELLOW	WHITE	16	16	C-IRON	A
250	RED	GREEN	BLACK	16	16	C-NICKEL- CHROMIUM	A
251	RED	GREEN	BROWN	16	16	C- NICKEL- ALUMINUM/SILICON	A
252	RED	GREEN	RED	16	16	C- COPPER-NICKEL ALLOY	A
253	RED	GREEN	ORANGE	12	12	A	A
254	RED	GREEN	YELLOW	12	12	A	B
255	RED	GREEN	GREEN	12	12	C-IRON	A
256	RED	GREEN	BLUE	12	12	C-NICKEL- CHROMIUM	A
257	RED	GREEN	VIOLET	12	12	C- NICKEL- ALUMINUM/SILICON	A
258	RED	GREEN	GRAY	12	12	C- COPPER-NICKEL ALLOY	A
259	RED	GREEN	WHITE	20	20	A	A
260	RED	BLUE	BLACK	20	20	A	B
449	YELLOW	YELLOW	WHITE	20	20	A	B

TABLE 3 - TOOL REQUIREMENTS

BIN CODE	BASIC CRIMPING TOOL	POSITIONER	INSTALLING TOOL	REMOVAL TOOL	
				WIRED CONTACT	UNWIRED CONTACT
242, 243, 244, 245, & 246	M22520/1-01 OR M22520/2-01 OR M22520/7-01	M22520/1-02 RED OR M22520/2-02 OR M22520/7-02	M81969/14-10 OR M81969/17-03	M81969/19-06	M81969/30-05
247, 248, 249, 250, 251, & 252	M22520/1-01 OR M22520/7-01	M22520/1-02 BLUE OR M22520/7-03	M81969/14-03 OR M81969/17-04	M81969/19-01	M81969/30-06
253, 254, 255, 256, 257, & 258	M22520/1-01	M22520/1-02 YELLOW	M81969/14-04 OR M81969/17-05	M81969/19-02	M81969/30-07
259, 260, & 449	M22520/1-01 OR M22520/2-01 OR M22520/7-01	M22520/1-02 RED OR M22520/2-02 OR M22520/7-02	M81969/14-10 OR M81969/17-03	M81969/19-06	M81969/30-05

TABLE 4 - PART NUMBERS

AS39029 PART NUMBER	BIN CODE	SUPERSEDING PART NUMBER(S)	AS39029 PART NUMBER	BIN CODE	SUPERSEDING PART NUMBER(S)
M39029/32-242	242	MS3193-20-20A	M39029/32-252	252	MS3193-16-16C3
M39029/32-243	243	MS3193-20-20C4	M39029/32-253	253	MS3193-12-12A
M39029/32-244	244	MS3193-20-20C1	M39029/32-254	254	MS24255-12S
M39029/32-245	245	MS3193-20-20C2	M39029/32-255	255	MS3193-12-12C4
M39029/32-246	246	MS3193-20-20C3	M39029/32-256	256	MS3193-12-12C1
M39029/32-247	247	MS3193-16-16A	M39029/32-257	257	MS3193-12-12C2
M39029/32-248	248	MS24255-16S	M39029/32-258	258	MS3193-12-12C3
M39029/32-249	249	MS3193-16-16C4	M39029/32-259	259	MS3193A20-20A
M39029/32-250	250	MS3193-16-16C1	M39029/32-260	260	MS24255-20S
M39029/32-251	251	MS3193-16-16C2	M39029/32-449	449	MS39029/32-20-20 M39029/32-261

REQUIREMENTS: REQUIREMENTS SHALL CONSIST HEREIN AND AS39029.

1. DESIGN:

CONTACT SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1, TABLES 1 AND 2. DIMENSIONS ARE IN INCHES AND SHOWN AFTER PLATING. UNLESS OTHERWISE SPECIFIED, SPHERICAL END DIMENSIONS SHALL CONFORM TO AS39029.

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. SUPERSEDING PART NUMBERS ARE AS SPECIFIED.

4. MATERIALS:

MATERIALS SHALL BE IN ACCORDANCE WITH AS39029.

	AEROSPACE STANDARD	AS39029/32 SHEET 3 OF 5	REV. A
	(R) CONTACTS, ELECTRICAL CONNECTOR, SOCKET, CRIMP REMOVABLE (FOR MIL-DTL-26482 SERIES 1, MIL-DTL-26500 AND MIL-DTL-26518 CONNECTORS)		

5. MECHANICAL:

MECHANICAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

AUXILIARY PRESSURE MEMBERS OF CANTILEVER TYPE SHALL ARE NOT PERMISSIBLE. CANTILEVER PRESSURE MEMBERS THAT ARE AN INTEGRAL PART OF THE CONTACT BODY ARE PERMISSIBLE.

6. ELECTRICAL:

ELECTRICAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

7. ENVIRONMENTAL:

ENVIRONMENTAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

CLASS A CONTACTS SHALL BE VIBRATION TESTED IN ACCORDANCE WITH EIA364.28, TEST CONDITION III.

CLASS A CONTACT SHALL BE SHOCK TESTED IN ACCORDANCE WITH EIA364.27, TEST CONDITION A

CLASS B CONTACTS SHALL BE VIBRATION TESTED IN ACCORDANCE WITH EIA364.28, TEST CONDITION IV.

CLASS B CONTACTS SHALL BE SHOCK TESTED IN ACCORDANCE WITH EIA364.27, TEST CONDITION C.

8. APPLICATION NOTES:

THE AS39029/32 SOCKET CONTACT MATES DIRECTLY INTO AN AS39029/31 PIN AS SHOWN TABLE 5.

TABLE 5 - CONTACT MATING PART NUMBERS

AS39029/32 BIN CODE	MATING AS39029/31 BIN CODE	AS39029/32 BIN CODE	MATING AS39029/31 BIN CODE
242	223	252	233
243	224	253	234
244	225	254	235
245	226	255	236
246	227	256	237
247	228	257	238
248	229	258	239
249	230	259	240
250	231	260	448
251	232	449	627

ALL DIMENSIONS PROVIDED IN PARENTHESES ARE METRIC EQUIVALENTS AND ARE GIVEN FOR GENERAL INFORMATION ONLY (SEE AS39029 SECTION 6). DIMENSIONS ARE IN INCHES AND SHOWN AFTER PLATING. METRIC EQUIVALENT, TO THE NEAREST 0.01 MM, MAY BE CALCULATED BASED ON 1 INCH EQUALS 25.4 MM (SEE AS39029 SECTION 6 FOR MORE DETAILS).

INACTIVE FOR NEW DESIGN FOR MILITARY APPLICATIONS.

CLASS A CONTACTS ARE USED IN MIL-DTL-26482 SERIES 1 CONNECTORS.

CLASS B CONTACTS ARE USED IN MIL-DTL-26500 CONNECTORS.

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