

REV.
A

AS39029/9

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.

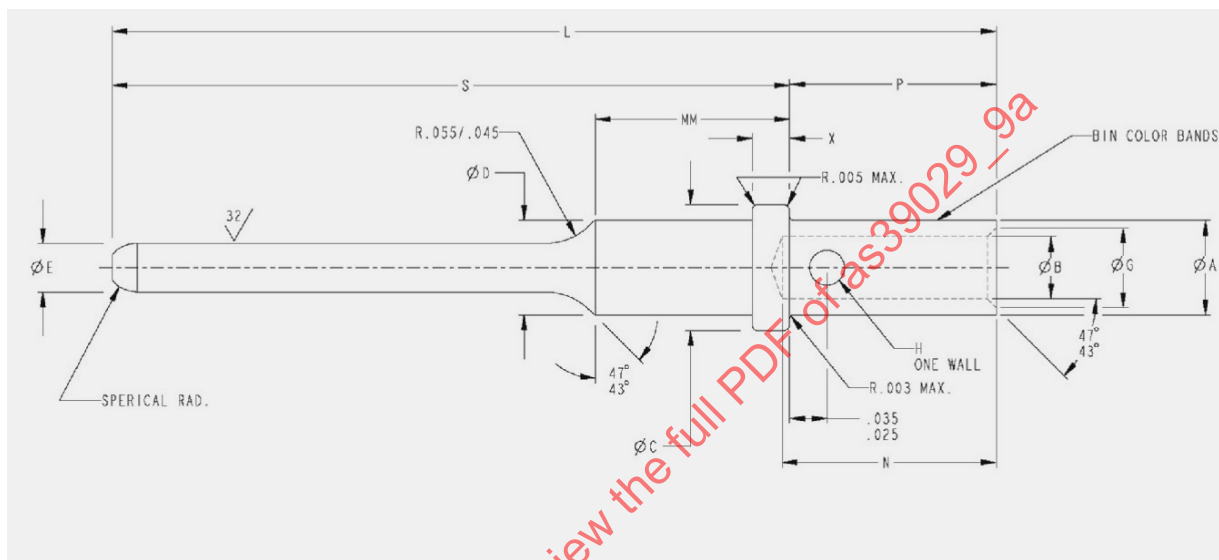
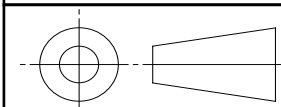


FIGURE 1- AS39029/9 PIN CONTACT (SIZE 16 AND 20)

TABLE 1 - CONTACT DIMENSIONS

BIN CODE	A DIA	B DIA	C DIA	D DIA	E DIA	G DIA	H DIA	L MAX (REF)	N	P	S	X	MM
132	0.078	0.050	0.103	0.078	0.041	0.066	0.032		0.186	0.171	0.549	0.033	0.130
THROUGH 136	0.076	0.048	0.100	0.076	0.039	0.062	0.026	0.720	0.157	0.160	0.543	0.029	0.125
514	0.103	0.068	0.133	0.103	0.0635	0.089	0.042		0.284	0.257	0.564	0.048	0.130
THROUGH 518	0.101	0.066	0.130	0.101	0.0615	0.083	0.036	0.821	0.250	0.246	0.558	0.044	0.125

THIRD ANGLE PROJECTION



CUSTODIAN: SAE AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS39029

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) CONTACTS, ELECTRICAL CONNECTOR, PIN, CRIMP REMOVABLE, THERMOCOUPLE, (FOR MIL-DTL-26482 SERIES 2, AS81703 SERIES 3, MIL-DTL-83723 SERIES I AND III, AND MIL-DTL-83733 CONNECTORS)

AS39029/9
SHEET 1 OF 4

**REV.
A**

Copyright 2007 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Fax: 724-776-0790

Tel: 724-776-4970 (outside USA)
Email: CustomerService@sae.org

SAE WEB ADDRESS: <http://www.sae.org>

ISSUED 2001-03 REVISED 2007-09

TABLE 2 - MARKING AND DESIGN CHARACTERISTICS

BIN CODES	COLOR BANDS			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1ST	2ND	3RD				
132	BROWN	ORANGE	RED	20	20	C-COPPER WITH GOLD FLASH	B
133	BROWN	ORANGE	ORANGE	20	20	C-COPPER-NICKEL ALLOY	B
134	BROWN	ORANGE	YELLOW	20	20	C-NICKEL-ALUMINUM/SILICON	B
135	BROWN	ORANGE	GREEN	20	20	C-NICKEL-CHROMIUM	B
136	BROWN	ORANGE	BLUE	20	20	C-IRON WITH CADMIUM PLATING	B
514	GREEN	BROWN	YELLOW	16	16	C-COPPER WITH GOLD FLASH	B
515	GREEN	BROWN	GREEN	16	16	C-COPPER-NICKEL ALLOY	B
516	GREEN	BROWN	BLUE	16	16	C-NICKEL-ALUMINUM/SILICON	B
517	GREEN	BROWN	VIOLET	16	16	C-NICKEL-CHROMIUM	B
518	GREEN	BROWN	GRAY	16	16	C-IRON WITH CADMIUM PLATING	B

TABLE 3 - TOOL REQUIREMENTS

BIN CODE	BASIC CRIMPING TOOL	POSITIONER	INSTALLING TOOL	REMOVAL TOOL	
				WIRED CONTACT	UNWIRED CONTACT
132, 133, 134, 135, & 136	M22520/1-01 OR M22520/2-01	M22520/1-02 RED OR M22520/2-02	M81969/14-11	M81969/14-11	M81969/30-05 RED
514, 515, 516, 517, & 518	M22520/1-01 OR M22520/7-01	M22520/1-02 BLUE OR M22520/7-03	M81969/14-03	M81969/14-03	M81969/30-06 BLUE

TABLE 4 - PART NUMBERS

AS39029 PART NUMBER	BIN CODE	SUPERSEDES PART NUMBER(S)
M39029/9-132	132	M39029/9-20-20 C1
M39029/9-133	133	M39029/9-20-20 C2
M39029/9-134	134	M39029/9-20-20 C3
M39029/9-135	135	M39029/9-20-20 C4
M39029/9-136	136	M39029/9-20-20 C5
M39029/9-514	514	5000-070-516 1/
M39029/9-515	515	5000-070-416 1/
M39029/9-516	516	5000-070-116 1/
M39029/9-517	517	5500-070-216 1/
M39029/9-518	518	5000-070-316 1/

REQUIREMENTS: ALL REQUIREMENTS SHALL BE 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. ALL DIMENSIONS PROVIDED IN PARENTHESES ARE METRIC EQUIVALENTS AND ARE GIVEN FOR GENERAL INFORMATION ONLY (SEE AS39029 SECTION 6). 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.

 An SAE International Group	AEROSPACE STANDARD		AS39029/9 SHEET 2 OF 4	REV. A
	(R) CONTACTS, ELECTRICAL CONNECTOR, PIN, CRIMP REMOVABLE, THERMOCOUPLE, (FOR MIL-DTL-26482 SERIES 2, AS81703 SERIES 3, MIL-DTL-83723 SERIES I AND III, AND MIL-DTL-83733 CONNECTORS)			

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.

5. MECHANICAL:

MECHANICAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

TENSILE STRENGTH SHALL BE AS SHOWN IN TABLE 5.

TABLE - 5 CONTACT TENSILE STRENGTH

BIN CODE	TENSILE STRENGTH (LB)	
	WIRE SIZE	AXIAL LOAD
132, 133, 134, 135, & 136	24	6
	20	12
514, 515, 516, 517, & 518	20	14
	16	45

6. ELECTRICAL:

NOT REQUIRED.

7. ENVIRONMENTAL:

ENVIRONMENTAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

8. APPLICATION NOTES:

CONTACT MATES DIRECTLY INTO AN AS39029/10 SOCKET AS SHOWN TABLE 6.

TABLE - 6 CONTACT MATING PART NUMBERS

AS39029/9 BIN CODE	MATING AS39029/10 BIN CODE
132	138
133	139
134	140
135	141
136	142
514	519
515	520
516	521
517	522
518	523