

REV.  
C

AS39029™/64

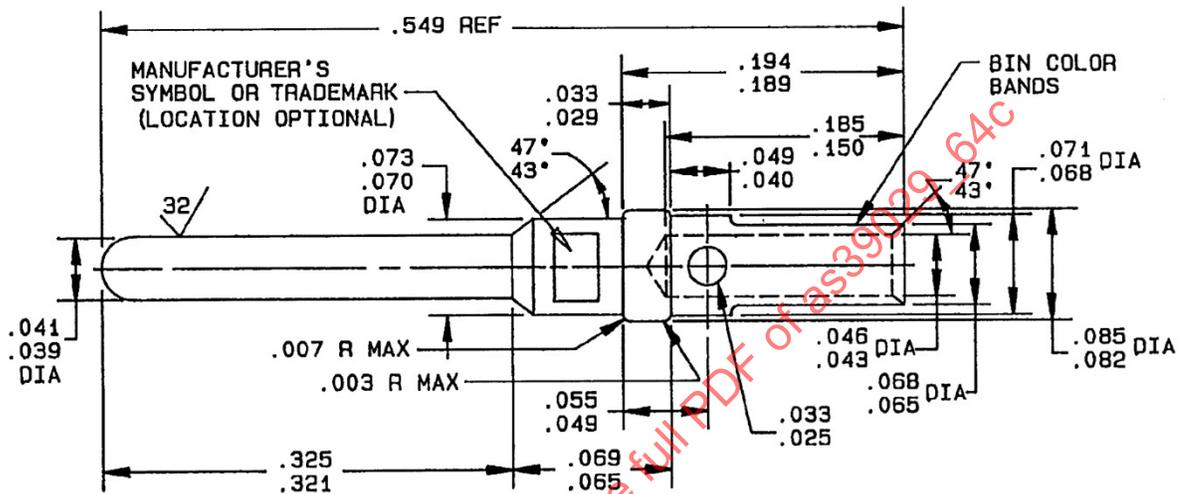
RATIONALE

LIMITED SCOPE REVISION IS REQUIRED TO CORRECT THE M39029/64-657 PART NUMBER REFERENCES IN TABLE 3, IN REQUIREMENT SECTION PARAGRAPH 4 AND IN APPLICATION NOTE SECTION PARAGRAPH 2. THE CORRECT PART NUMBER REFERENCES SHOULD BE AS39029/64-968.

AS39029/64C HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS39029.

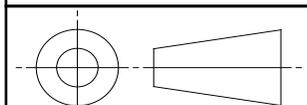


INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM
.003	0.08	.043	1.09	.071	1.80	.321	8.15
.007	0.18	.046	1.17	.073	1.85	.325	8.26
.025	0.64	.049	1.24	.082	2.08	.549	13.94
.029	0.74	.055	1.40	.085	2.16		
.033	0.84	.065	1.65	.150	3.81		
.039	0.99	.068	1.73	.185	4.70		
.040	1.02	.069	1.75	.189	4.80		
.041	1.04	.070	1.78	.194	4.93		

FIGURE 1 - DIMENSIONS AND CONFIGURATION

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS39029/64C/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS39029



**AEROSPACE STANDARD**

CONTACTS, ELECTRICAL CONNECTOR,  
PIN, CRIMP REMOVABLE  
(FOR MIL-DTL-24308 CONNECTORS)

AS39029™/64  
SHEET 1 OF 4

REV.  
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ISSUED 2000-07 REVISED 2019-07 REAFFIRMED 2025-02

**TABLE 1 - DESIGN CHARACTERISTICS**

BIN CODE	COLOR BANDS			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1 <sup>ST</sup>	2 <sup>ND</sup>	3 <sup>RD</sup>				
369	ORANGE	BLUE	WHITE	20	20	A	A
968 1/	WHITE	BLUE	GRAY	20	20	A	A

1/ FINISH SHALL BE GOLD PLATING IN ACCORDANCE WITH ASTM B488, TYPE II, CODE C, CLASS 1.27 OVER A SUITABLE UNDERPLATE. SILVER AND NICKEL SHALL NOT BE USED AS AN UNDERPLATE ON CLASSES M & N. THIS FINISH IS INTENDED FOR USE WITH MIL-DTL-24308 NON-MAGNETIC CONNECTORS, CLASS M AND N ONLY.

**TABLE 2 - TOOLS**

BIN CODE	BASIC CRIMPING	POSITIONER	INSTALLING AND REMOVAL TOOLS
369, 968	M22520/2-01	M22520/2-08	M81969/39-01 M81969/1-02

**TABLE 3 - PART NUMBER**

BIN CODE	AS39029 PART NUMBER	SUPERSEDED PART NUMBER
369	M39029/64-369	M24308/10-1
968	M39029/64-968	---

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

1. DESIGN:

CONTACTS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLE 1. DIMENSIONS ARE IN INCHES. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY. DIMENSIONS SHOWN APPLY AFTER PLATING. MACHINED SURFACES TO HAVE 63 (RA) OR BETTER PER USASI B46.1 UNLESS OTHERWISE SPECIFIED. REMOVE ALL BURRS AND SHARP EDGES .003 (0.08 MM) MAXIMUM, UNLESS OTHERWISE SPECIFIED. ALL DIAMETERS TO BE CONCENTRIC WITH EACH OTHER WITHIN .004 (0.10 MM) TIR.

2. TOOLS:

TOOLS REQUIRED FOR CRIMPING CONTACTS TO THE WIRE/CABLE AND THE INSTALLING/REMOVAL FROM THE CONNECTOR SHALL BE IN ACCORDANCE WITH TABLE 2.

3. PART NUMBERS:

CONTACT PART NUMBERS SHALL BE IN ACCORDANCE WITH TABLE 3. SUPERSEDED PART NUMBERS ARE AS SPECIFIED.

4. MATERIALS:

MATERIALS SHALL BE IN ACCORDANCE WITH AS39029.

OUTGASSING REQUIREMENT:

PART NUMBER M39029/64-968 SHALL MEET THE OUTGASSING REQUIREMENTS OF ASTM E595. THE REQUIREMENT MAY BE VERIFIED BY CERTIFICATION. CONTACT THE QUALIFYING ACTIVITY FOR DETAILS CONCERNING THE CERTIFICATION PROCESS.

RESIDUAL MAGNETISM REQUIREMENT:

PART NUMBER M39029/64-968 SHALL ALSO MEET THE RESIDUAL MAGNETISM. WHEN TESTED WITH THE APPLICABLE MIL-DTL-24308 CONNECTOR, THE RESIDUAL MAGNETISM SHALL NOT EXCEED 200 GAMMA. THE FOLLOWING DETAILS SHALL APPLY:

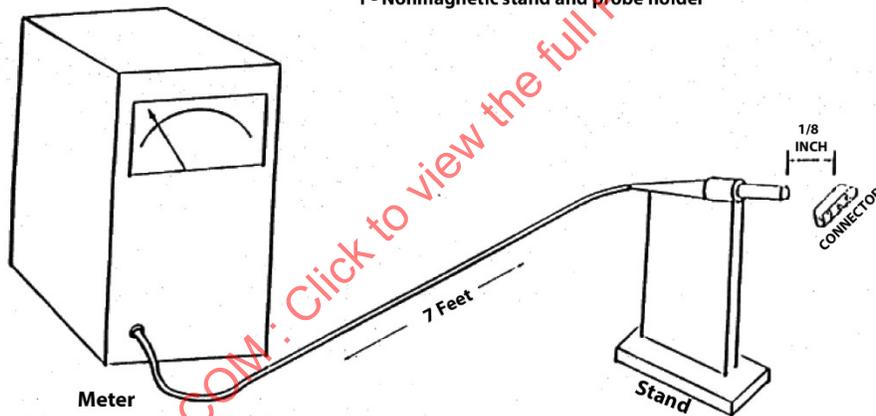
ACCEPTABLE TEST METHOD.

CONNECTOR SHALL BE FULLY ASSEMBLED BEFORE TESTING. THE RESIDUAL MAGNETISM TEST SHALL BE PERFORMED IN A MAGNETICALLY QUIET AREA, I.E., WHERE MACHINES, ELECTRONIC EQUIPMENT, VEHICLES, AND PERSONNEL TRAFFIC ARE RESTRICTED. SEE THE TEST ARRANGEMENT OF FIGURE 2 BELOW AND PROCEED AS FOLLOWS:

- a. WARM UP THE MILLIAMMETER OR FLUX METER FOR A MINIMUM OF 15 MINUTES.
- b. MOUNT THE MAGNETOMETER PROBE IN A NON-MAGNETIC STAND IN A HORIZONTAL POSITION AT FULL CABLE LENGTH FROM THE MILLIAMMETER.
- c. WITH THE METER PRESET TO THE APPROPRIATE SCALE, ALIGN THE PROBE IN A MAGNETIC E-W DIRECTION OR ORIENT TO OBTAIN A ZERO READING ON THE METER.
- d. PASS THE CONNECTOR SPECIMEN THREE TIMES BETWEEN THE POLES OF A MAGNET WITH A FIELD STRENGTH OF 5000 GAUSS  $\pm 5\%$ . THE CONNECTOR SHALL NOT CONTACT THE POLE PIECES.
- e. IMMEDIATELY PLACE THE CONNECTOR TO WITHIN ONE-EIGHT (1/8) INCH OF THE PROBE TIP AND ORIENT THE SPECIMEN FOR A MAXIMUM MAGNETISM READING. THE MEASUREMENT UNIT SHALL BE IN GAMMA, WHERE ONE GAMMA IS EQUIVALENT TO  $1 \times 10^{-5}$  GAUSS.

**EQUIPMENT**

- 1 - Milliammeter or Flux meter capable of taking required measurements. (Example-HP model 4288 milliammeter)
- 1 - Appropriate magnetometer probe (Example-HP model 3529A)
- 1 - Nonmagnetic stand and probe holder



**FIGURE 2 - RESIDUAL MAGNETISM TEST ARRANGEMENT**

AN ALTERNATIVE RESIDUAL MAGNETISM TEST METHOD MAY BE USED WITH APPROVAL FROM THE QUALIFYING ACTIVITY.

5. MECHANICAL:

MECHANICAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

6. ELECTRICAL:

ELECTRICAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

	<b>AEROSPACE STANDARD</b>	<b>AS39029™/64</b> SHEET 3 OF 4	<b>REV.</b> <b>C</b>
	CONTACTS, ELECTRICAL CONNECTOR, PIN, CRIMP REMOVABLE (FOR MIL-DTL-24308 CONNECTORS)		