

REV.
E

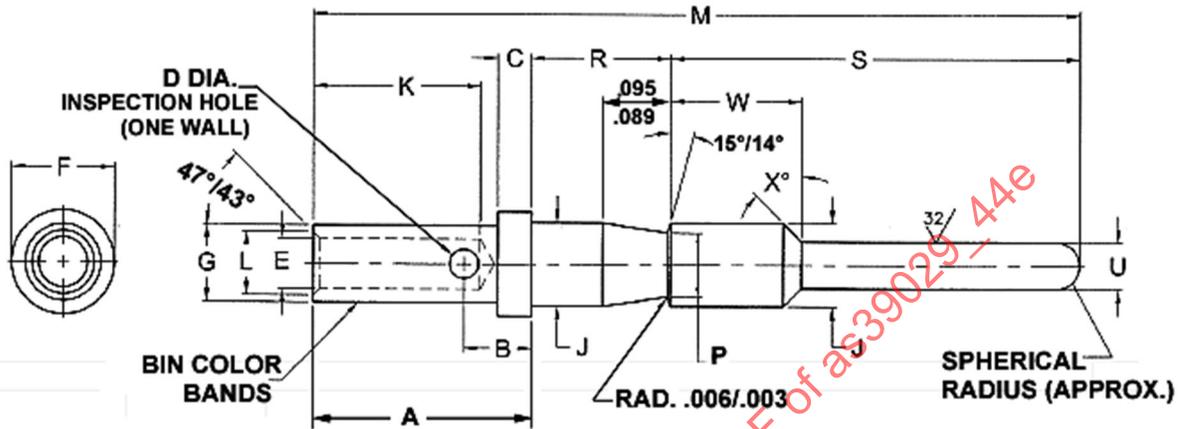
AS39029™/44

RATIONALE

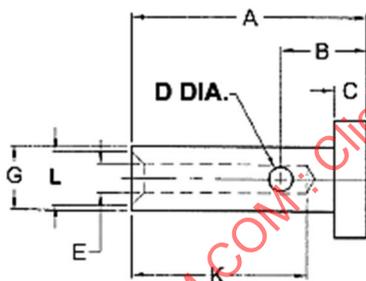
LIMITED SCOPE REVISION NEEDED TO ADD NEW TOOLS TO TABLE 3 AND PROVIDE MINOR TECHNICAL CHANGES AS NEEDED.

NOTICE

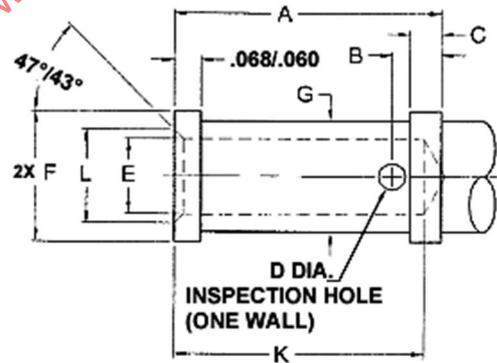
THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS39029.



PIN INTERFACE DESIGN FOR ALL BIN CODES
WIRE BARREL DESIGN FOR BIN CODES 288 THRU 290 (SIZES 16 & 12)



WIRE BARREL DESIGN
BIN CODE 287 (16-22)

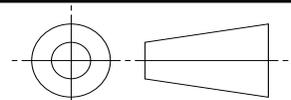


WIRE BARREL DESIGN
BIN CODES 291 THRU 293 (SIZES 8, 4 & 0)

FIGURE 1 - PIN CONTACT

For more information on this standard, visit
<https://www.sae.org/standards/content/AS39029/44E/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS39029



AEROSPACE STANDARD

CONTACTS, ELECTRICAL CONNECTOR, PIN,
CRIMP REMOVABLE (FOR AS50151 SERIES
AS34001 AND AS95234 CONNECTORS)

AS39029™/44
SHEET 1 OF 4

REV.
E

SAE Executive Standards Committee Rules provide that: " This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

TABLE 1 - CONTACT DIMENSIONS

BIN CODE	E DIA	F DIA	J DIA	M REF	P DIA	R	S	U DIA	W	X
287	.0355 (0.90) .0335 (0.85)	.148 (3.76)	.113 (2.87)	1.159 (29.44)	.087 (2.21)		694 (17.63)	.0635 (1.61)		
288	.068 (1.73)	.133 (3.38)	.110 (2.79)	1.172 (29.77)	.083 (2.11)		684 (17.37)	.0615 (1.56)		
289	.066 (1.68)	.202 (5.13) .189 (4.80)	.161 (4.09)	1.360 (34.54)	.135 (3.43)	.189 (4.80)	882 (22.40) 872 (22.15)	.095 (2.41)	.183 (4.65) .173 (4.39)	50° 40°
290	.102 (2.59) .098 (2.49)		.158 (4.01)		.131 (3.33)	.185 (4.70)		.093 (2.36)		
291	.184 (4.67) .179 (4.55)	.313 (7.95) .309 (7.85)	.252 (6.40) .249 (6.32)	1.579 (40.11)	.225 (5.72) .221 (5.61)			.143 (3.63) .141 (3.58)		
292	.286 (7.26) .279 (7.09)	.419 (10.64) .409 (10.39)	.336 (8.53) .333 (8.46)		.310 (7.87) .307 (7.80)			.253 (6.43) .249 (6.32)		
293	.458 (11.63) .451 (11.46)	.611 (15.52) .601 (15.27)	.518 (13.16) .515 (13.08)	1.733 (44.02)	.492 (12.50) .489 (12.42)			.358 (9.09) .356 (9.04)		

TABLE 1A - CONTACT DIMENSIONS (CONTINUED)

BIN CODE	A	B	C	D DIA	G DIA	K	L
287	.285 (7.24) .280 (7.11)	.106 (2.69) .100 (2.54)	.042 (1.07) .036 (0.91)	.032 (0.81) .026 (0.66)	.078 (1.98) .076 (1.93)	.216 (5.49) .206 (5.23)	.067 (1.70) .061 (1.55)
288	.298 (7.57) .294 (7.47)	.079 (2.01) .073 (1.85)		.042 (1.07) .036 (0.91)	.105 (2.67)	.281 (7.14) .250 (6.35)	.090 (2.29)
289					.101 (2.57)		.080 (2.03)
290	.294 (7.47)	.073 (1.85)	.048 (1.22) .044 (1.12)		.153 (3.89) .147 (3.73)	.250 (6.35)	.125 (3.18) .115 (2.92)
291					.269 (6.83) .263 (6.68)		.230 (5.84) .220 (5.59)
292	.520 (13.21) .510 (12.95)	.094 (2.39) .084 (2.13)		.066 (1.68) .060 (1.52)	.380 (9.65) .370 (9.40)	.480 (12.19)	.364 (9.25) .354 (8.99)
293	.675 (17.15) .665 (16.89)				.568 (14.43) .558 (14.17)	.690 (17.53) .636 (16.15)	.542 (13.77) .532 (13.51)

TABLE 2 - MARKING AND DESIGN CHARACTERISTICS

BIN CODE	COLOR BANDS			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1ST	2ND	3RD				
287	RED	GRAY	VIOLET	16	22	A	B
288	RED	GRAY	GRAY	16	16		
289 1/	RED	GRAY	WHITE	12	16		
290	RED	WHITE	BLACK	12	12		
291	RED	WHITE	BROWN	8	8		
292	RED	WHITE	RED	4	4		
293	RED	WHITE	ORANGE	0	0		

1/ BIN CODE 289 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
287 1/	M22520/1-01	---	---	M22520/1-02 BLUE	M81969/17-09	M81969/19-01
288	M22520/1-01	---	---	M22520/1-02 BLUE	M81969/17-04	M81969/19-01
289	M22520/1-01	---	---	M22520/1-02 YELLOW	M81969/17-04	M81969/19-02
290	M22520/1-01	---	---	M22520/1-02 YELLOW	M81969/17-05	M81969/19-02
291	M22520/23-01 M22520/48-01	M22520/23-02	M22520/23-09	---	M81969/17-06	M81969/19-03
292		M22520/23-04	M22520/23-11	---	M81969/17-07	M81969/19-04
293		M22520/23-05	M22520/23-13	---	M81969/17-08	M81969/19-05

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

TABLE 4 - PART NUMBERS

AS39029 PART NUMBER	BIN CODE	SUPERSEDED PART NUMBER(S)
M39029/44-287	287	MS90453-16-22
M39029/44-288	288	MS90453-16-16
M39029/44-289	289	MS90453-12-16
M39029/44-290	290	MS90453-12-12
M39029/44-291	291	MS90453-8-8
M39029/44-292	292	MS90453-4-4
M39029/44-293	293	MS90453-0-0

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

1. DESIGN:

CONTACT SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLES 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 TABLE 1). AN ALTERNATE DESIGN OF THE WIRE BARREL LEAD-IN ANGLE SHALL BE AS FOLLOWS:

SIZE 16: BLEND RADIUS .020 INCH ± .005 INCH.

SIZE 12: BLEND RADIUS .020 INCH ± .010 INCH.

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.

5. MECHANICAL:

MECHANICAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

6. ELECTRICAL:

ELECTRICAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

7. ENVIRONMENTAL:

ENVIRONMENTAL PROPERTIES SHALL BE IN ACCORDANCE WITH AS39029.

VIBRATION SHALL BE TEST CONDITION III FOLLOWED BY THE ENDURANCE TEST IN ACCORDANCE WITH MIL-STD-167-1.

SHOCK SHALL BE TEST CONDITION A.

APPLICATION NOTES:

- CONTACT MATES DIRECTLY INTO AN AS39029/45 SOCKET AS SHOWN IN TABLE 5.

TABLE 5 CONTACT MATING PART NUMBERS

AS39029/44 BIN CODE	MATING AS39029/45 BIN CODE
287	294
288	295
289	296
290	297
291	298
292	299
293	300

	AEROSPACE STANDARD	AS39029™/44 SHEET 3 OF 4	REV. E
	CONTACTS, ELECTRICAL CONNECTOR, PIN, CRIMP REMOVABLE (FOR AS50151 SERIES AS34001 AND AS95234 CONNECTORS)		