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REV.
C

AS39029™/18

FEDERAL SUPPLY CLASS
5999

RATIONALE

REVISION IS REQUIRED TO IMPROVE DRAWING QUALITY, TO REVISE THE USAGE STATEMENT TO MEET THE LATEST SAE GUIDELINES, TO INCORPORATE THE AS39029 BASE SPEC EXCEPTIONS SPECIFIC TO THIS DETAIL SHEET, AND TO ADD METRIC EQUIVALENTS/FORMAT UPDATES.

NOTICE

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

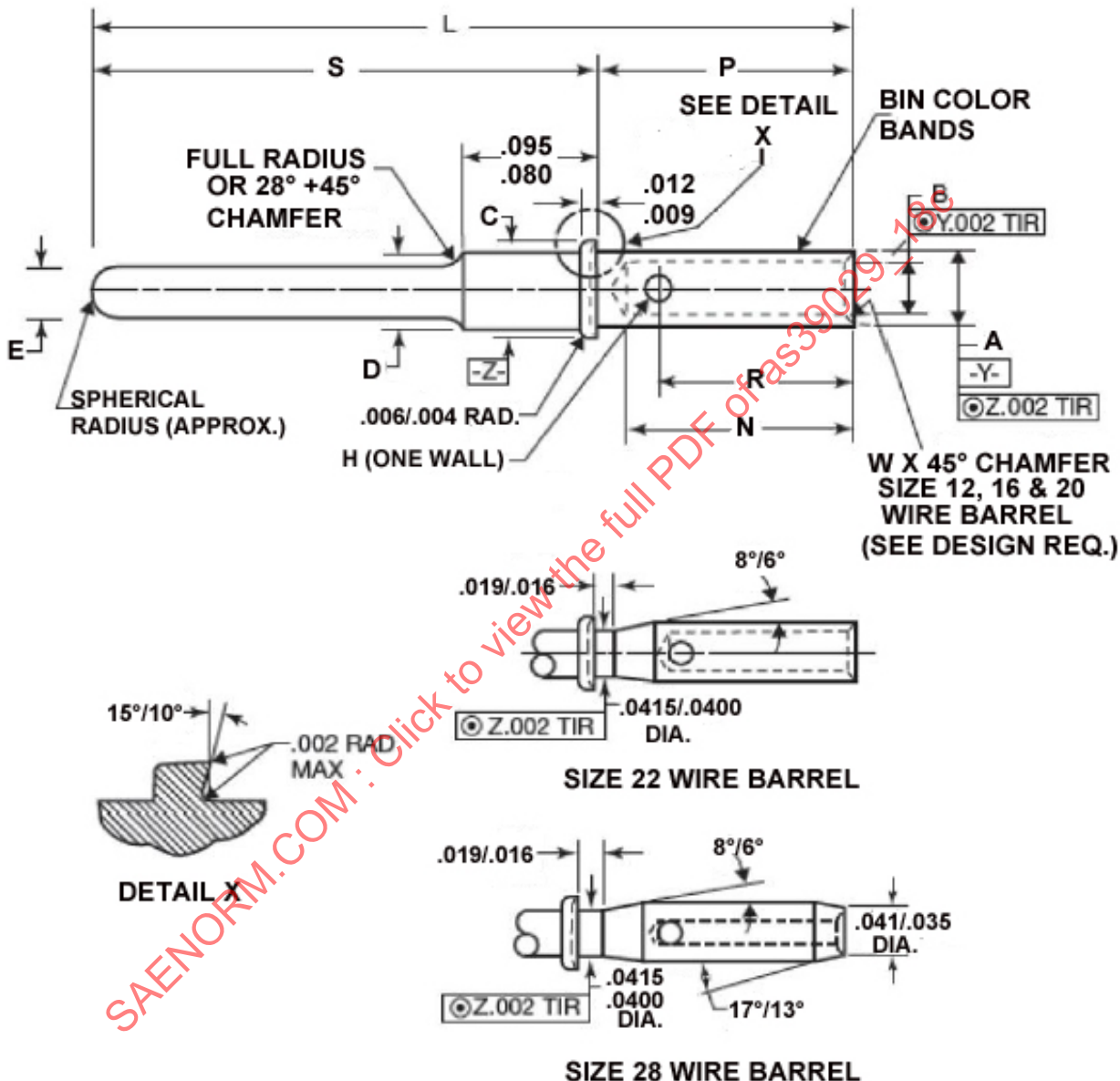
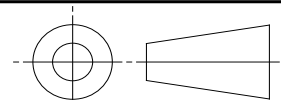


FIGURE 1 - AS39029/18 PIN CONFIGURATIONS

For more information on this standard, visit
<https://www.sae.org/standards/content/AS39029/18/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS39029



AEROSPACE STANDARD

(R) CONTACTS, ELECTRICAL CONNECTOR, PIN
CRIMP REMOVABLE
(FOR AS81511 SERIES 3 AND 4 CONNECTORS)

AS39029™/18
SHEET 1 OF 4

REV.
C

TABLE 1 – FIGURE 1 METRIC EQUIVALENTS

INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS
.002	0.05	.012	0.30	.0400	1.02	.095	2.41
.004	0.10	.016	0.41	.041	1.04		
.006	0.15	.019	0.48	.0415	1.05		
.009	0.23	.035	0.89	.080	2.03		

TABLE 2 - CONTACT DIMENSIONS

BIN CODE	A DIA.	B DIA.	C DIA.	D DIA.	E DIA.	H DIA.	L (REF)	N	P	R	S	W CHAM.
176	.0480 (1.22)	.0200 (0.51) .0180 (0.46)	.0555 (1.41)	.0390 (0.99)	.0275 (0.70)	.022 (0.56)	.636 (16.15)	.155 (3.94)	.218 (5.54) .208 (5.28)	.145 (3.68)	.426 (10.82) .420 (10.67)	.006 (0.15)
177	.0465 (1.18)	.0355 (0.90) .0335 (0.85)	.0540 (1.37)	.0365 (0.93)	.0260 (0.66)	.018 (0.46)		.145 (3.68)		.139 (3.53)		.002 (0.05)
178	.0615 (1.56) .0600 (1.52)	.0450 (1.14) .0430 (1.09)	.0760 (1.93) .0745 (1.89)	.0615 (1.56) .0600 (1.52)	.0410 (1.04) .0390 (0.99)	.027 (0.69)		.195 (4.95) .185 (4.70)		.165 (4.19) .159 (4.04)		.007 (0.18) .002 (0.05)
179	.0925 (2.35) .0910 (2.31)	.0645 (1.64) .0625 (1.59)	.1080 (2.74) .1065 (2.71)	.0925 (2.35) .0910 (2.31)	.0630 (1.60) .0610 (1.55)	.023 (0.58)						.010 (0.25) .002 (0.05)
180	.1515 (3.85) .1500 (3.81)	.1020 (2.59) .0980 (2.49)	.1695 (4.31) .1680 (4.27)	.1515 (3.85) .1500 (3.81)	.0950 (2.41) .0930 (2.36)	.042 (1.07) .038 (0.97)	.663 (16.84)	.232 (5.89) .216 (5.49)	.245 (6.22) .235 (5.97)	.196 (4.98) .190 (4.83)		.012 (0.30) .006 (0.15)

TABLE 3 - MARKING AND DESIGN CHARACTERISTICS

BIN CODE	COLOR BANDS			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1 ST	2 ND	3 RD				
176	BROWN	VIOLET	BLUE	23	28	A	B
177	BROWN	VIOLET	VIOLET	23	22		
178	BROWN	VIOLET	GRAY	20	20		
179	BROWN	VIOLET	WHITE	16	16		
180	BROWN	GRAY	BLACK	12	12		



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AS39029™/18
SHEET 2 OF 4

**REV.
C**

TABLE 4 - TOOL REQUIREMENTS

BIN CODE	BASIC CRIMPING TOOL	POSITIONER	INSTALLING TOOL	REMOVAL TOOL	
				WIRED CONTACT	UNWIRED CONTACT
176	M22520/2-01	M22520/2-13	M81969/16-04	M81969/16-04	M81969/30-01
177	M22520/2-01	M22520/2-13	M81969/16-04	M81969/16-04	M81969/30-01
178	M22520/2-01 M22520/7-01	M22520/2-14 M22520/7-02	M81969/16-01	M81969/16-01	M81969/30-02
179	M22520/2-01 M22520/7-01	M22520/2-15 M22520/7-03	M81969/16-02	M81969/16-02	M81969/30-03
180	M22520/1-01	M22520/1-09	M81969/16-03	M81969/16-03	M81969/30-04

TABLE 5 - PART NUMBERS

PART NUMBER	BIN CODE	SUPERSEDED PART NUMBER(S)
M39029/18-176	176	M39029/18-23-28
M39029/18-177	177	M39029/18-23-22
M39029/18-178	178	M39029/18-20-20
M39029/18-179	179	M39029/18-16-16
M39029/18-180	180	M39029/18-12-12

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 2 AND 3. DIMENSIONS ARE IN INCHES AND SHOWN AFTER PLATING. UNLESS OTHERWISE SPECIFIED, SPHERICAL END DIMENSIONS SHALL CONFORM TO AS39029. DIMENSION "U" IS THE POINT OF INITIAL ENGAGEMENT. A .001 INCH MAXIMUM BURR IS PERMITTED ON THE PERIPHERY OF SHOULDER (SEE VIEW X). FOR THE WIRE BARREL LEAD IN ANGLE, THE FOLLOWING BLEND RADIUS DIMENSIONS ARE OPTIONAL:

SIZE 23 - BLEND RADIUS .010 INCHES $\pm$.005 INCHES.
 SIZE 20 - BLEND RADIUS .015 INCHES $\pm$.005 INCHES.
 SIZE 16 - BLEND RADIUS .020 INCHES $\pm$.005 INCHES.
 SIZE 12 - BLEND RADIUS .020 INCHES $\pm$.010 INCHES.

2. TOOLS:

TOOLS REQUIRED FOR CRIMPING CONTACTS TO WIRE/CABLE AND THE INSTALLING/REMOVAL FROM THE CONNECTOR SHALL BE IN ACCORDANCE WITH TABLE 4.

3. PART NUMBERS:

CONTACT PART NUMBERS SHALL BE IN ACCORDANCE WITH TABLE 5. 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.

	AEROSPACE STANDARD	AS39029™/18 SHEET 3 OF 4	REV. C
	(R) CONTACTS, ELECTRICAL CONNECTOR, PIN CRIMP REMOVABLE (FOR AS81511 SERIES 3 AND 4 CONNECTORS)		