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REV.
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AS39029™/10

FEDERAL SUPPLY CLASS
5999

RATIONALE

REVISION IS REQUIRED TO IMPROVE DRAWING QUALITY, TO ADD METRIC EQUIVALENTS FOR ALL DIMENSIONS, TO TRANSFER THE BASE DOCUMENT DETAIL SHEET EXCEPTIONS TO THIS SHEET, AND TO UPDATE DOCUMENT TO LATEST SAE FORMAT GUIDELINES.

NOTICE

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

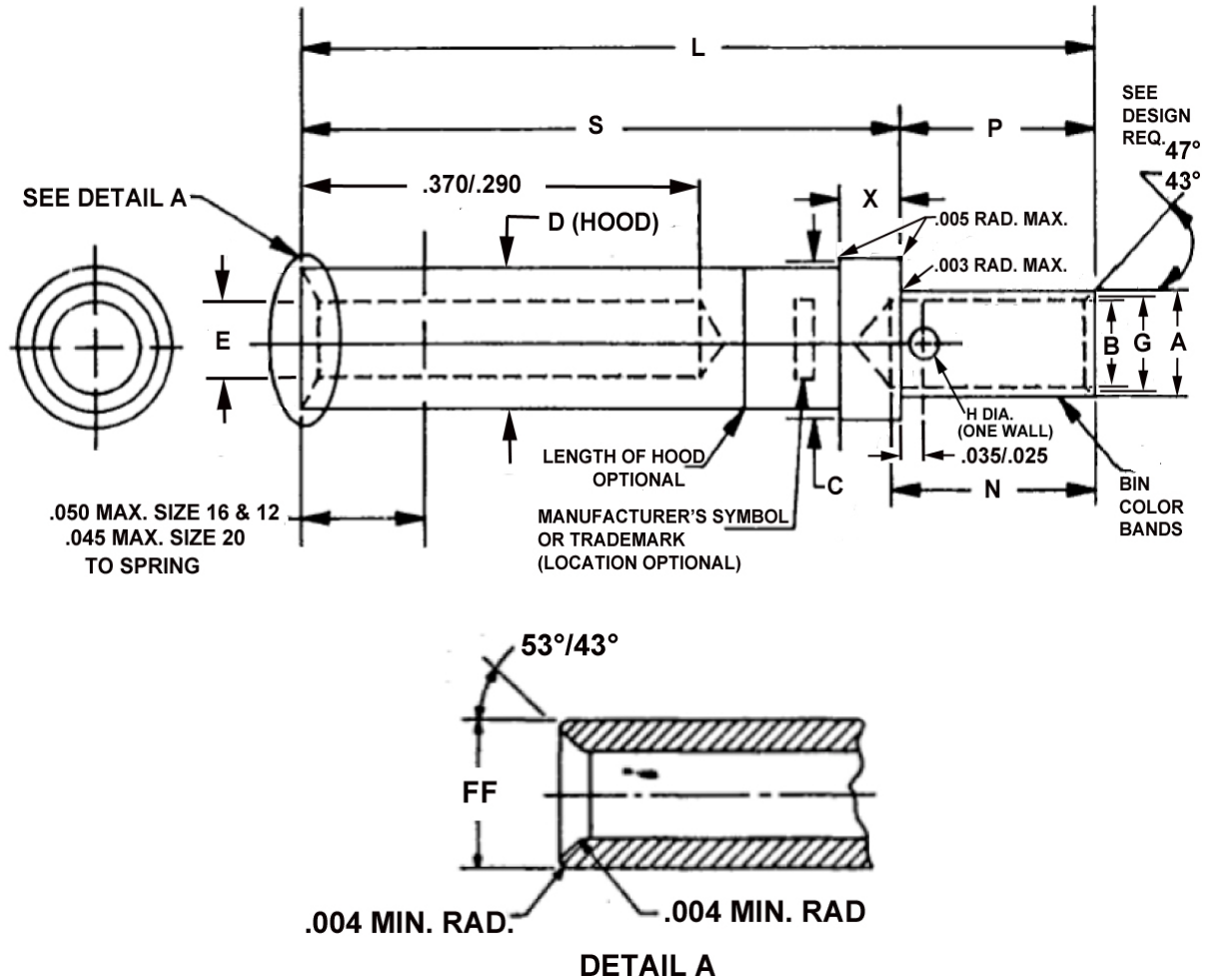
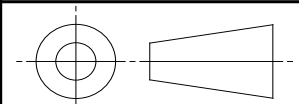


FIGURE 1 - AS39029/10 SOCKET CONTACT CONFIGURATION

For more information on this standard, visit
<https://www.sae.org/standards/content/AS39029/10C>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS39029



AEROSPACE STANDARD

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

AS39029™/10
SHEET 1 OF 4

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TABLE 1 – FIGURE 1 METRIC EQUIVALENTS

INCHES	MILLIMETERS	INCHES	MILLIMETERS	INCHES	MILLIMETERS
.003	0.08	.025	0.64	.050	1.27
.004	0.10	.035	0.89	.290	7.37
.005	0.13	.045	1.14	.370	9.40

TABLE 2 - CONTACT DIMENSIONS

BIN CODE	A DIA.	B DIA.	C DIA.	D DIA.	E DIA.	G DIA.	H DIA.	R	L MAX. (REF.)	N	P	S	X	FF DIA. MIN. REF. ONLY	Q
138-142	.078	.050	.103	.078	.044	.066	.032	.051		.186	.171	.485	.033		
	(1.98)	(1.27)	(2.62)	(1.98)	(1.12)	(1.68)	(0.81)	(1.30)		(4.72)	(4.34)	(12.32)	(0.84)		
	.076	.048	.100	.076	.042	.062	.026	.026	.656	.157	.160	.479	.029	.060	.032
519-523	(1.93)	(1.22)	(2.54)	(1.93)	(1.07)	(1.57)	(0.66)	(0.66)	(16.66)	(3.99)	(4.06)	(12.17)	(0.74)	(1.52)	(0.81)
	.103	.068	.133	.113	.068	.089	.042			.284	.257	.500	.048		
	(2.62)	(1.73)	(3.38)	(2.87)	(1.73)	(2.26)	(1.07)			(7.21)	(6.53)	(12.70)	(1.22)		
	.101	.066	.130	.110	.065	.083	.036	---	.759	.250	.246	.494	.044	.087	---
	(2.57)	(1.68)	(3.30)	(2.79)	(1.65)	(2.11)	(0.91)		(19.28)	(6.35)	(6.25)	(12.55)	(1.12)	(2.21)	

TABLE 3 - MARKING AND DESIGN CHARACTERISTICS

BIN CODES	COLOR BANDS			MATING END SIZE	WIRE BARREL SIZE	TYPE	CLASS
	1ST	2ND	3RD				
138	BROWN	ORANGE	GRAY	20	20	C-COPPER WITH GOLD FLASH	B
139	BROWN	ORANGE	WHITE	20	20	C-JN 1/	B
140	BROWN	YELLOW	BLACK	20	20	C-KN 1/	B
141	BROWN	YELLOW	BROWN	20	20	C-KP 1/	B
142	BROWN	YELLOW	RED	20	20	C-JP (WITH CADMIUM PLATE) 1/	B
519	GREEN	BROWN	WHITE	16	16	C-COPPER WITH GOLD FLASH	B
520	GREEN	RED	BLACK	16	16	C-JN 1/	B
521	GREEN	RED	BROWN	16	16	C-KN 1/	B
522	GREEN	RED	RED	16	16	C-KP 1/	B
523	GREEN	RED	ORANGE	16	16	C-JP (WITH CADMIUM PLATE) 1/	B

1/ JN = TYPE J NEGATIVE (FORMERLY CONSTANTAN/COPPER-NICKEL-ALLOY), KN = TYPE K NEGATIVE (FORMERLY ALUMEL/NICKEL-ALUMINUM/SILICONE), KP = TYPE K POSITIVE (FORMERLY CHROMEL/NICKEL CHROMIUM), JP = TYPE J POSITIVE (FORMERLY IRON)

TABLE 4 - TOOL REQUIREMENTS

BIN CODE	BASIC CRIMPING TOOL	POSITIONER	INSTALLING TOOL	REMOVAL TOOL	
				WIRED CONTACT	UNWIRED CONTACT
138, 139, 140, 141, & 142	M22520/1-01 OR M22520/2-01	M22520/1-02 (RED) OR M22520/2-02	M81969/8-205 (METAL) M81969/14-11 (PLASTIC)	M81969/8-206 (METAL) M81969/14-11 (PLASTIC)	M81969/30-05 RED
519, 520, 521, 522, & 523	M22520/1-01 OR M22520/7-01	M22520/1-02 (BLUE) OR M22520/7-03	M81969/8-207 (METAL) M81969/14-03 (PLASTIC)	M81969/8-208 (METAL) M81969/14-11 (PLASTIC)	M81969/30-06 BLUE



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