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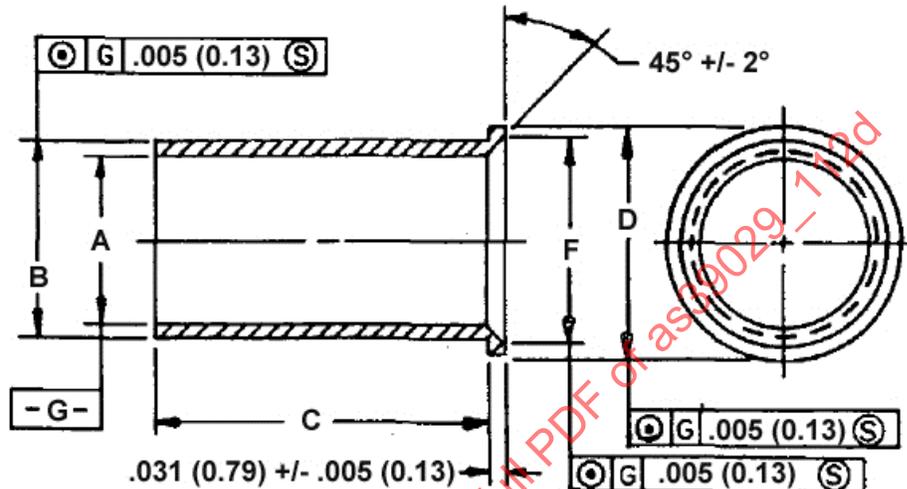
AS39029™/112

RATIONALE

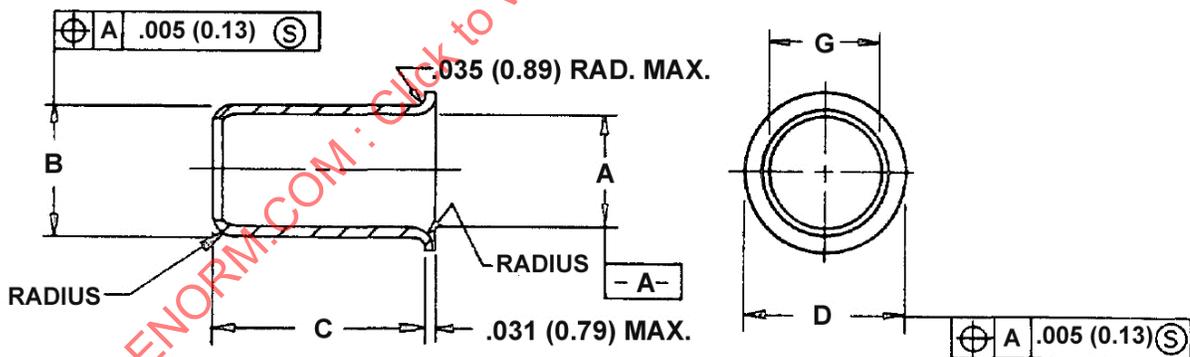
REVISION IS REQUIRED TO CORRECT DIMENSIONAL ERRORS IN THE TABLES, TO ADD A PART NUMBER AND APPLICABLE DIMENSIONS FOR A SIZE 10 BUSHING AS REQUIRED BY THE AS39029 BASE SPECIFICATION, TO CLARIFY SURFACE TEXTURE REQUIREMENT AND TO UPDATE SPECIFICATION REFERENCES/DOCUMENT FORMAT.

NOTICE

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



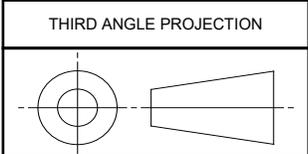
CONTACT BUSHING DESIGN



ALTERNATE CONTACT BUSHING DESIGN

FIGURE 1 - CONTACT BUSHING

For more information on this standard, visit
<https://www.sae.org/standards/content/AS39029/112D>



CUSTODIAN: AE-8/AE-8C1

PROCUREMENT SPECIFICATION: AS39029



AEROSPACE STANDARD

(R) CONTACT BUSHING,
ELECTRICAL CONNECTOR CONTACT,
WIRE BARREL

AS39029™/112
SHEET 1 OF 4

REV.
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ISSUED 2007-03 REVISED 2014-07 REAFFIRMED 2020-08

TABLE 1 - CONTACT BUSHING DIMENSIONS

DASH NUMBER	CONTACT WIRE BARREL SIZE (REF)	WIRE SIZE (REF)	A +.002 (0.05) -.003 (0.08) DIA	B +.002 (0.05) -.003 (0.08) DIA	C +.017 (0.43) -.016 (0.41)	D ±.016 (0.41)	F +.006 (0.15) -.005 (0.13) DIA
-10 -12	10	12	.101 (2.57)	.128 (3.25)	.270 (6.86)	.170 (4.32)	.120 (3.05)
-8 -10	8	10	.136 (3.45)	.173 (4.39)	.380 (9.65)	.250 (6.35)	.188 (4.78)
-6 -10L	6	10	.136 (3.45)	.225 (5.72)	.700 (17.78)	.297 (7.54)	.188 (4.78)
-6 -9L	6	9	.155 (3.94)	.225 (5.72)	.700 (17.78)	.297 (7.54)	.219 (5.56)
-6 -8L	6	8	.185 (4.70)	.225 (5.72)	.700 (17.78)	.297 (7.54)	.250 (6.35)
-4 -8L	4	8	.185 (4.70)	.272 (6.91)	.700 (17.78)	.344 (8.74)	.250 (6.35)
-4 -6	4	6	.225 (5.72)	.272 (6.91)	.380 (9.65)	.344 (8.74)	.292 (7.42)
-4 -6L	4	6	.225 (5.72)	.272 (6.91)	.700 (17.78)	.344 (8.74)	.292 (7.42)
-4 -5L	4	5	.250 (6.35)	.272 (6.91)	.700 (17.78)	.344 (8.74)	.292 (7.42)
-1 -6L	1	6	.225 (5.72)	.396 (10.06)	.700 (17.78)	.516 (13.11)	.422 (10.72)
-1 -2L	1	2	.359 (9.12)	.396 (10.06)	.700 (17.78)	.516 (13.11)	.422 (10.72)
-0 -2	1/0	2	.359 (9.12)	.444 (11.28)	.536 (13.61)	.516 (13.11)	.462 (11.73)
-4/0 -2/0L	4/0	2/0	.500 (12.70)	.629 (15.98)	.700 (17.78)	.719 (18.26)	.562 (14.27)

TABLE 2 - ALTERNATE CONTACT BUSHING DESIGN DIMENSIONS

DASH NUMBER	CONTACT WIRE BARREL SIZE (REF)	WIRE SIZE (REF)	A +.002 (0.05) -.003 (0.08) DIA	B +.002 (0.05) -.003 (0.08) DIA	C +.010 (0.25)	D +.016 (0.41)	G DIA MIN
-10-12	10	12	.101 (2.57)	.128 (3.25)	.270 (6.86)	.170 (4.32)	.095 (2.41)
-8-10	8	10	.146 (3.71)	.173 (4.39)	.380 (9.65)	.250 (6.35)	.136 (3.45)
-6-10L	6	10	.146 (3.71)	.225 (5.72)	.700 (17.78)	.297 (7.54)	.136 (3.45)
-6-9L	6	9	.165 (4.19)	.225 (5.72)	.700 (17.78)	.297 (7.54)	.155 (3.94)
-6-8L	6	8	.195 (4.95)	.225 (5.72)	.700 (17.78)	.297 (7.54)	.185 (4.70)
-4-8L	4	8	.195 (4.95)	.272 (6.91)	.700 (17.78)	.344 (8.74)	.185 (4.70)
-4-6	4	6	.235 (5.97)	.272 (6.91)	.380 (9.65)	.344 (8.74)	.225 (5.71)
-4-6L	4	6	.235 (5.97)	.272 (6.91)	.700 (17.78)	.344 (8.74)	.225 (6.35)
-4-5L	4	5	.260 (6.60)	.272 (6.91)	.700 (17.78)	.344 (8.74)	.250 (6.35)
-1-6L	1	6	.235 (5.97)	.396 (10.06)	.700 (17.78)	.516 (13.11)	.225 (5.72)
-1-2L	1	2	.369 (9.37)	.396 (10.06)	.700 (17.78)	.516 (13.11)	.359 (9.12)
-0-2	1/0	2	.369 (9.37)	.444 (11.28)	.536 (13.61)	.516 (13.11)	.359 (9.12)
-4/0-2/0L	4/0	2/0	.510 (12.95)	.629 (15.98)	.700 (17.78)	.719 (18.26)	.500 (12.70)

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

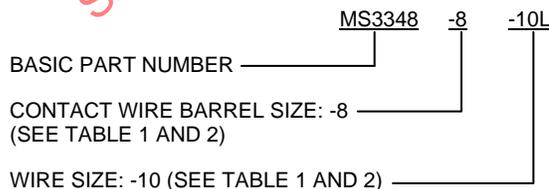
1. DESIGN: CONTACTS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE 1 AND TABLES 1 AND 2. DIMENSIONS ARE IN INCHES. METRIC EQUIVALENTS ARE IN PARENTHESES, ARE GIVEN FOR GENERAL INFORMATION ONLY, AND BASED UPON 1.00 INCH = 25.4 MM. DIMENSIONS SHOWN APPLY AFTER PLATING. DIMENSIONING AND TOLERANCING IN ACCORDANCE WITH ASME Y14.5M.
2. MATERIAL: COPPER ALLOY: ANNEAL TO ROCKWELL HARDNESS 15T 70 MAXIMUM IN ACCORDANCE WITH ASTM E18, EXCEPT THAT -1-6L SHALL BE ANNEALED TO ROCKWELL HARDNESS 15T 55 MAXIMUM IN ACCORDANCE WITH ASTM E18.
3. FINISH: BUSHINGS SHALL BE SILVER PLATED TO A MINIMUM THICKNESS OF .0002 INCH (0.005 MM) IN ACCORDANCE WITH ASTM B700 OR AMS-QQ-S-365 (AS AVAILABLE) OVER ELECTROLYTIC NICKEL UNDERPLATE OF 30 TO 150 (0.00076 TO 0.0038) MICRONS THICK PER AMS-QQ-N-290 OR OVER COPPER PLATE IN ACCORDANCE WITH AMS2418, .000050 INCH (0.00127 MM) THICK MINIMUM.
4. SURFACE TEXTURE: ALL EXTERNAL SURFACES SHALL BE 63 MICRO-INCHES OR LESS IN ACCORDANCE WITH ASME B46.1.
5. CONTACT BUSHINGS SHALL BE FREE OF ALL BURRS. BREAK ALL SHARP EDGES .005R MAXIMUM.
6. PART NUMBER CROSS REFERENCE: SEE TABLE 3.

TABLE 3 - PART NUMBER CROSS REFERENCE

DETAIL SHEET/DASH NUMBER (RECOMMENDED FOR NEW DESIGN)	REPLACEMENT APPLICATION PART NUMBER
M39029/112-8-10	MS3348-8-10
M39029/112-4-6	MS3348-4-6
M39029/112-0-2	MS3348-0-2
M39029/112-1-2L	MS3348-1-2L
M39029/112-4-5L	MS3348-4-5L
M39029/112-4-6L	MS3348-4-6L
M39029/112-6-8L	MS3348-6-8L
M39029/112-6-9L	MS3348-6-9L
M39029/112-1-6L	MS3348-1-6L
M39029/112-4/0-2/0L	MS3348-4/0-2/0L
M39029/112-4-8L	MS3348-4-8L
M39029/112-6-10L	MS3348-6-10L

7. QUALIFICATION REQUIREMENTS: QUALIFICATION SHALL BE BY CERTIFICATION IN ACCORDANCE WITH AS39029 AND HEREIN. CONTACT-SLEEVE COMBINATIONS SHALL MEET THE FOLLOWING REQUIREMENTS.
 - a. MATERIAL AND FINISH CERTIFICATIONS (SLEEVE ONLY)
 - b. EXAMINATION OF PRODUCT (SLEEVE ONLY)
 - c. AXIAL CONCENTRICITY-WIRED
 - d. CRIMP TENSILE STRENGTH
 - e. CONTACT RESISTANCE
 - f. CRIMP TOOL: IN ACCORDANCE WITH THE APPLICABLE CONTACT DETAIL SPECIFICATION FOR SIZES 8 TO 4/0 (SEE 8a).
 - g. PART NUMBER: THE M39029/112 PART NUMBER IS RECOMMENDED FOR NEW DESIGN AND THE MS3348 PART NUMBER IS RECOMMENDED FOR REPLACEMENT APPLICATIONS ONLY. SEE TABLE 3 FOR PART NUMBER CROSS REFERENCE.

REPLACEMENT PART NUMBER:



LETTER DESIGNATOR L MEANS APPLICABLE ONLY TO AS39029/48 AND /49 CONTACTS (SEE 8e)