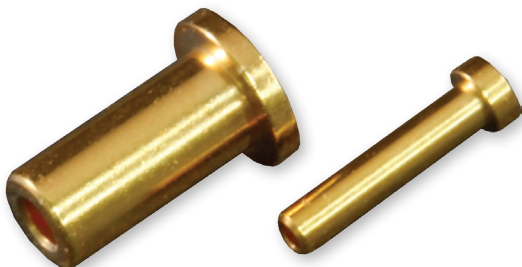




859-015 Wire Barrel Reducer Bushing For Use with Crimp Contacts

Wire Barrel Reducer Bushing



859-015 - Basic
Part Number

**"To" Wire
Accommodation**
See completed part
numbers for list of
available combinations.

**Design
Option**
See Table
I for option
availability

859-015

Z2

8

10

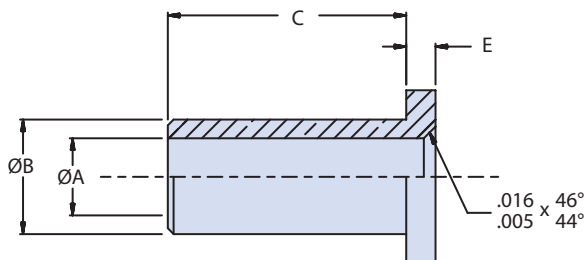
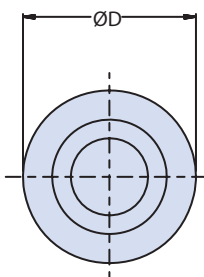
X

Available Finishes

Z2 - Gold Plate
Z3 - Silver Plate

"From" Contact Wire Barrel Size

**0, 4, 6, 8, 10, 12, 16,
20, 22, 22D**



Contact Size	Standard Wire Accommodation (AWG) Without Bushing
0	0
4	4
6	6
8	8
10	10
12	12-14
16	16-20
20	20-24
22	22-26
22D	22-28

WARNING: Using smaller wire may not meet wire sealing requirement in environment resisting assemblies. The bushing may cause crimp barrel to bulge after crimping and may prevent the use of insertion/removal tool.

Material and Finish

Copper alloy per AS39029

Finish code Z2:

Bushings: gold plated per ASTM B488, Type II, Code C, .000050 min thick over nickel plated per AMS-QQ-N-290, Class 2, .000030/.000150 inch thick.

Finish code Z3:

Bushings: silver plated per ASTM B700, Grade A, Class N, thickness .0002000 min inch thick over nickel plated per AMS-QQ-N-290 Class 2 .000030/.000150 inch thick.

Notes

- Bushing must be installed into contact before crimping.
- Bushings are designed to reduce the barrel size of reference AS39029 contacts to accommodate smaller wire size.
- For proper environmental sealing of the grommet, use a shrink sleeve or potting may be required.
- These bushings "to" wire (-28) can be used for both 28 AWG and 30 AWG wires.
- Use the same Crimp Selector No. as intended for barrel wire size without bushing. For example: 859-015XXX-16-22, use the same selector as it is for 16 AWG wire size. User should verify crimpability on specific wire size/type.
- for -16-28, use selector No. 6 for 28 AWG wire and selector No. 5 for 30 AWG wire on crimp tool M22520/1-01.
- Operating Temperature: -55°C to +200°C.

859-015

Wire Barrel Reducer Bushing

For Use with Crimp Contacts



Special
Purpose

Table I: Contact Reference

PART NUMBER	ø A	ø B	C MAX	ø D	E	REFERENCE TO USE WITH:
859-015**-10-12-1	.103 (2.62) .098 (2.49)	.130 (3.30) .125 (3.18)	.287 (7.29) .254 (6.45)	.186 (4.72) .154 (3.91)	.036 (0.91) .026 (0.66)	EQUIVALENT TO M39029/112
859-015**-8-10	.138 (3.51) .133 (3.38)	.175 (4.44) .170 (4.32)	.397 (10.08) .364 (9.25)	.266 (6.76) .234 (5.94)	.036 (0.91) .026 (0.66)	
859-015**-6-10L	.138 (3.51) .133 (3.38)	.227 (5.77) .222 (5.64)	.717 (18.21) .684 (17.37)	.313 (7.95) .281 (7.14)	.036 (0.91) .026 (0.66)	ONLY FOR M39029/48 & 49- EQUIVALENT TO M39029/112
859-015**-6-9L	.157 (3.99) .152 (3.86)	.227 (5.77) .222 (5.64)	.717 (18.21) .684 (17.37)	.313 (7.95) .281 (7.14)	.036 (0.91) .026 (0.66)	
859-015**-6-8L	.187 (4.75) .182 (4.62)	.277 (7.04) .222 (5.64)	.717 (18.21) .684 (17.37)	.313 (7.95) .281 (7.14)	.036 (0.91) .026 (0.66)	
859-015**-4-8L	.187 (4.75) .182 (4.62)	.274 (6.96) .269 (6.83)	.717 (18.21) .684 (17.37)	.360 (9.14) .328 (8.33)	.036 (0.91) .026 (0.66)	
859-015**-4-6	.227 (5.77) .222 (5.64)	.274 (6.96) .269 (6.83)	.397 (10.08) .364 (9.25)	.360 (9.14) .328 (8.33)	.036 (0.91) .026 (0.66)	EQUIVALENT TO M39029/112
859-015**-4-6L	.227 (5.77) .222 (5.64)	.274 (6.96) .269 (6.83)	.717 (18.21) .684 (17.37)	.360 (9.14) .328 (8.33)	.036 (0.91) .026 (0.66)	ONLY FOR M39029/48 and 49- EQUIVALENT TO M39029/112
859-015**-4-5L	.252 (6.40) .247 (6.27)	.274 (6.96) .269 (6.83)	.717 (18.21) .684 (17.37)	.360 (9.14) .328 (8.33)	.036 (0.91) .026 (0.66)	
859-015**-1-6L	.227 (5.77) .222 (5.64)	.398 (10.11) .393 (9.98)	.717 (18.21) .684 (17.37)	.532 (13.51) .500 (12.70)	.036 (0.91) .026 (0.66)	
859-015**-1-2L	.361 (9.17) .356 (9.04)	.398 (10.11) .393 (9.98)	.717 (18.21) .684 (17.37)	.532 (13.51) .500 (12.70)	.036 (0.91) .026 (0.66)	
859-015**-0-2	.361 (9.17) .356 (9.04)	.446 (11.33) .441 (11.20)	.553 (14.05) .520 (13.21)	.532 (13.51) .500 (12.70)	.036 (0.91) .026 (0.66)	EQUIVALENT TO M39029/112
859-015**-4/0-2/0L	.502 (12.75) .497 (12.62)	.631 (16.03) .626 (15.90)	.717 (18.21) .684 (17.37)	.735 (18.67) .703 (17.86)	.036 (0.91) .026 (0.66)	ONLY FOR M39029/48 & 49- EQUIVALENT TO M39029/112
859-015**-22D-30	.017 (0.43) .013 (0.33)	.033 (0.84) .029 (0.74)	.135 (3.43) .130 (3.30)	.046 (1.17) .042 (1.07)	.030 (0.76) .020 (0.51)	FOR M39029/29, 30, 56, 57, 58, 117, 118, 121 & 122 (Continues on following page) See Note 6
859-015**-20-28	.023 (0.58) .015 (0.38)	.046 (1.17) .042 (1.07)	.204 (5.18) .199 (5.05)	.068 (1.73) .064 (1.63)	.030 (0.76) .020 (0.51)	
859-015**-20-26	.028 (0.71) .020 (0.51)	.046 (1.17) .042 (1.07)	.204 (5.18) .199 (5.05)	.068 (1.73) .064 (1.63)	.030 (0.76) .020 (0.51)	
859-015**-16-22	.038 (0.97) .030 (0.76)	.066 (1.68) .062 (1.57)	.204 (5.18) .199 (5.05)	.101 (2.57) .097 (2.46)	.030 (0.76) .020 (0.51)	
859-015**-16-20	.059 (1.50) .039 (0.99)	.066 (1.68) .062 (1.57)	.204 (5.18) .199 (5.05)	.122 (3.10) .082 (2.08)	.030 (0.76) .020 (0.51)	
859-015**-16-24	.033 (0.84) .025 (0.64)	.066 (1.68) .062 (1.57)	.204 (5.18) .199 (5.05)	.101 (2.57) .097 (2.46)	.030 (0.76) .020 (0.51)	
859-015**-16-26	.028 (0.71) .020 (0.51)	.066 (1.68) .062 (1.57)	.204 (5.18) .199 (5.05)	.101 (2.57) .097 (2.46)	.030 (0.76) .020 (0.51)	
859-015**-16-28	.023 (0.58) .015 (0.38)	.066 (1.68) .062 (1.57)	.204 (5.18) .199 (5.05)	.101 (2.57) .097 (2.46)	.030 (0.76) .020 (0.51)	
859-015**-12-16	.071 (1.80) .063 (1.60)	.098 (2.49) .094 (2.39)	.204 (5.18) .199 (5.05)	.148 (3.76) .144 (3.66)	.030 (0.76) .020 (0.51)	
859-015**-12-18	.060 (1.52) .052 (1.32)	.098 (2.49) .094 (2.39)	.204 (5.18) .199 (5.05)	.148 (3.76) .144 (3.66)	.030 (0.76) .020 (0.51)	
859-015**-12-20	.051 (1.30) .043 (1.09)	.098 (2.49) .094 (2.39)	.204 (5.18) .199 (5.05)	.148 (3.76) .144 (3.66)	.030 (0.76) .020 (0.51)	
859-015**-12-22	.038 (0.97) .030 (0.76)	.098 (2.49) .094 (2.39)	.204 (5.18) .199 (5.05)	.148 (3.76) .144 (3.66)	.030 (0.76) .020 (0.51)	
859-015**-12-28	.023 (0.58) .015 (0.38)	.098 (2.49) .094 (2.39)	.204 (5.18) .199 (5.05)	.148 (3.76) .144 (3.66)	.030 (0.76) .020 (0.51)	
859-015**-10-12	.104 (2.64) .096 (2.44)	.134 (3.40) .130 (3.30)	.350 (8.89) .345 (8.76)	.177 (4.50) .173 (4.39)	.030 (0.76) .020 (0.51)	

D

Table I: Contact Reference						
PART NUMBER	ø A	ø B	C MAX	ø D	E	REFERENCE TO USE WITH:
859-015**-10-16	.071 (1.80) .063 (1.60)	.134 (3.40) .130 (3.30)	.350 (8.89) .345 (8.76)	.177 (4.50) .173 (4.39)	.030 (0.76) .020 (0.51)	FOR M39029/29, 30, 56, 57, 58,117,118,121&122
859-015**-10-20	.051 (1.30) .043 (1.09)	.134 (3.40) .130 (3.30)	.350 (8.89) .345 (8.76)	.177 (4.50) .173 (4.39)	.030 (0.76) .020 (0.51)	
859-.015**-20-30	.017 (0.43) .013 (0.33)	.041 (1.04) .039 (0.99)	.142 (3.61) .138 (3.51)	.068 (1.73) .064 (1.63)	.030 (0.76) .020 (0.51)	FOR M39029/4, 5, 63, & 64
859-015**-20-28-1	.022 (0.56) .016 (0.41)	.041 (1.04) .039 (0.99)	.142 (3.61) .138 (3.51)	.068 (1.73) .064 (1.63)	.030 (0.76) .020 (0.51)	
859-015**-20-26-1	.027 (0.69) .021 (0.53)	.041 (1.04) .039 (0.99)	.142 (3.61) .138 (3.51)	.068 (1.73) .064 (1.63)	.030 (0.76) .020 (0.51)	
859-015**-16-22-1	.0355 (0.90) .0335 (0.85)	.062 (1.57) .057 (1.45)	.128 (3.25) .124 (3.15)	.101 (2.57) .091 (2.31)	.030 (0.76) .020 (0.51)	FOR M39029/22
859-015**-12-16-1	.068 (1.73) .066 (1.68)	.093 (2.36) .088 (2.24)	.164 (4.17) .159 (4.04)	.147 (3.73) .137 (3.48)	.030 (0.76) .020 (0.51)	
859-015**-12-20-1	.048 (1.22) .046 (1.17)	.093 (2.36) .088 (2.24)	.164 (4.17) .159 (4.04)	.147 (3.73) .137 (3.48)	.030 (0.76) .020 (0.51)	
859-015**-16-22-2	.0355 (0.90) .0335 (0.85)	.062 (1.57) .057 (1.45)	.185 (4.70) .180 (4.57)	.101 (2.57) .091 (2.31)	.030 (0.76) .020 (0.51)	FOR ARINC 404
859-015**-12-16-2	.068 (1.73) .066 (1.68)	.093 (2.36) .088 (2.24)	.185 (4.70) .180 (4.57)	.147 (3.73) .137 (3.48)	.030 (0.76) .020 (0.51)	
859-015**-12-20-2	.048 (1.22) .046 (1.17)	.093 (2.36) .088 (2.24)	.185 (4.70) .180 (4.57)	.147 (3.73) .137 (3.48)	.030 (0.76) .020 (0.51)	
859-015**-16-22-3	.0355 (0.90) .0335 (0.85)	.057 (1.45) .052 (1.32)	.145 (3.68) .140 (3.56)	.091 (2.31) .081 (2.06)	.030 (0.76) .020 (0.51)	FOR M39029/16, 17 &18
859-015**-12-16-3	.068 (1.73) .066 (1.68)	.093 (2.36) .088 (2.24)	.169 (4.29) .164 (4.17)	.147 (3.73) .137 (3.48)	.030 (0.76) .020 (0.51)	
859-015**-12-20-3	.048 (1.22) .046 (1.17)	.093 (2.36) .088 (2.24)	.169 (4.29) .164 (4.17)	.147 (3.73) .137 (3.48)	.030 (0.76) .020 (0.51)	
859-015**-8-10-1	.138 (3.51) .133 (3.38)	.175 (4.44) .170 (4.32)	.412 (10.46) .407 (10.34)	.262 (6.65) .252 (6.40)	.036 (0.91) .026 (0.66)	FOR M39029/16, 17 &18 FOR M39029/29 & M39029/30
859-015**-8-12	.102 (2.59) .098 (2.49)	.175 (4.44) .170 (4.32)	.412 (10.46) .407 (10.34)	.262 (6.65) .252 (6.40)	.036 (0.91) .026 (0.66)	
859-015**-8-16	.068 (1.73) .066 (1.68)	.175 (4.44) .170 (4.32)	.412 (10.46) .407 (10.34)	.262 (6.65) .252 (6.40)	.036 (0.91) .026 (0.66)	
859-015**-8-20	.048 (1.22) .046 (1.17)	.175 (4.44) .170 (4.32)	.412 (10.46) .407 (10.34)	.262 (6.65) .252 (6.40)	.036 (0.91) .026 (0.66)	
859-015**-4-6-1	.227 (5.77) .222 (5.64)	.274 (6.96) .269 (6.83)	.412 (10.46) .407 (10.34)	.360 (9.14) .350 (8.89)	.036 (0.91) .026 (0.66)	
859-015**-4-8	.187 (4.75) .182 (4.62)	.274 (6.96) .269 (6.83)	.412 (10.46) .407 (10.34)	.360 (9.14) .350 (8.89)	.036 (0.91) .026 (0.66)	
859-015**-0-8	.185 (4.70) .175 (4.44)	.446 (11.33) .441 (11.20)	.500 (12.70) .495 (12.57)	.532 (13.51) .522 (13.26)	.036 (0.91) .026 (0.66)	
859-015**-0-4	.283 (7.19) .279 (7.09)	.446 (11.33) .441 (11.20)	.500 (12.70) .495 (12.57)	.532 (13.51) .522 (13.26)	.036 (0.91) .026 (0.66)	
859-015**-0-2-1	.361 (9.17) .356 (9.04)	.446 (11.33) .441 (11.20)	.500 (12.70) .495 (12.57)	.532 (13.51) .522 (13.26)	.036 (0.91) .026 (0.66)	
859-015**-20-28-HD	.023 (0.58) .015 (0.38)	.046 (1.17) .042 (1.07)	.124 (3.15) .120 (3.05)	.068 (1.73) .064 (1.63)	.030 (0.76) .020 (0.51)	FOR SERIES 806
859-015**-16-22-4	.0355 (0.90) .0335 (0.85)	.062 (1.57) .057 (1.45)	.204 (5.18) .200 (5.08)	.101 (2.57) .091 (2.31)	.030 (0.76) .020 (0.51)	FOR M39029/92