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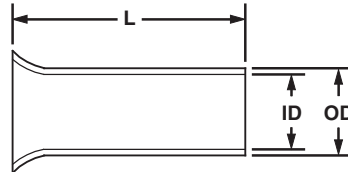
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## Ferrules, Non-Insulated

### Type F

- Designed with a seamless barrel to contain loose wire strands for superior terminations
- Eases insertion of wire into terminal block
- Meets DIN standards for wire containment
- Suitable for limited space panel applications
- Multiple pin lengths available for a variety of terminal blocks



| Part<br>Number | Wire Size |                 | Figure Dimensions |      |      |      |      |     | Wire<br>Strip<br>Length |      | Recommended<br>Installation<br>Tool | Std.<br>Pkg.<br>Qty. |
|----------------|-----------|-----------------|-------------------|------|------|------|------|-----|-------------------------|------|-------------------------------------|----------------------|
|                |           |                 | L                 |      | ID   |      | OD   |     |                         |      |                                     |                      |
|                | AWG       | mm <sup>2</sup> | In.               | mm   | In.  | mm   | In.  | mm  | In.                     | mm   |                                     |                      |
| F73-5-M        | 24 AWG    | 0.25            | 0.20              | 5.0  | 0.03 | 0.80 | 0.04 | 1.1 | 7/32                    | 5.0  | CT-1002,<br>CT-1003                 | 1000                 |
| F73-7-M        |           |                 | 0.28              | 7.0  | 0.03 | 0.80 | 0.04 | 1.1 | 9/32                    | 7.0  |                                     | 1000                 |
| F74-5-M        |           | 0.34            | 0.20              | 5.0  | 0.04 | 0.90 | 0.05 | 1.2 | 7/32                    | 5.0  |                                     | 1000                 |
| F74-7-M        |           |                 | 0.28              | 7.0  | 0.04 | 0.90 | 0.05 | 1.2 | 9/32                    | 7.0  |                                     | 1000                 |
| F75-6-M        | 22 AWG    | 0.50            | 0.24              | 6.0  | 0.04 | 1.0  | 0.05 | 1.3 | 1/4                     | 6.0  | CT-1002,<br>CT-1003,<br>CT-1123     | 1000                 |
| F75-8-M        |           |                 | 0.31              | 8.0  | 0.04 | 1.0  | 0.05 | 1.3 | 5/16                    | 8.0  |                                     | 1000                 |
| F75-10-M       |           |                 | 0.39              | 10.0 | 0.04 | 1.0  | 0.05 | 1.3 | 13/32                   | 10.0 |                                     | 1000                 |
| F76-6-M        | 20 AWG    | 0.75            | 0.24              | 6.0  | 0.05 | 1.2  | 0.06 | 1.5 | 1/4                     | 6.0  |                                     | 1000                 |
| F76-8-M        |           |                 | 0.31              | 8.0  | 0.05 | 1.2  | 0.06 | 1.5 | 5/16                    | 8.0  |                                     | 1000                 |
| F76-10-M       |           |                 | 0.39              | 10.0 | 0.05 | 1.2  | 0.06 | 1.5 | 13/32                   | 10.0 |                                     | 1000                 |
| F76-12-M       |           |                 | 0.47              | 12.0 | 0.05 | 1.2  | 0.06 | 1.5 | 15/32                   | 12.0 |                                     | 1000                 |
| F77-6-M        | 18 AWG    | 1.0             | 0.24              | 6.0  | 0.06 | 1.4  | 0.07 | 1.7 | 1/4                     | 6.0  | CT-1002,<br>CT-1003,<br>CT-1123     | 1000                 |
| F77-7-M        |           |                 | 0.28              | 7.0  | 0.06 | 1.4  | 0.07 | 1.7 | 9/32                    | 7.0  |                                     | 1000                 |
| F77-8-M        |           |                 | 0.31              | 8.0  | 0.06 | 1.4  | 0.07 | 1.7 | 5/16                    | 8.0  |                                     | 1000                 |
| F77-10-M       |           |                 | 0.39              | 10.0 | 0.06 | 1.4  | 0.07 | 1.7 | 13/32                   | 10.0 |                                     | 1000                 |
| F77-12-M       |           |                 | 0.47              | 12.0 | 0.06 | 1.4  | 0.07 | 1.7 | 15/32                   | 12.0 |                                     | 1000                 |
| F78-7-M        | 16 AWG    | 1.5             | 0.28              | 7.0  | 0.07 | 1.7  | 0.08 | 2.0 | 9/32                    | 7.0  | CT-1002,<br>CT-1003,<br>CT-1123     | 1000                 |
| F78-8-M        |           |                 | 0.31              | 8.0  | 0.07 | 1.7  | 0.08 | 2.0 | 5/16                    | 8.0  |                                     | 1000                 |
| F78-10-M       |           |                 | 0.39              | 10.0 | 0.07 | 1.7  | 0.08 | 2.0 | 13/32                   | 10.0 |                                     | 1000                 |
| F78-12-M       |           |                 | 0.47              | 12.0 | 0.07 | 1.7  | 0.08 | 2.0 | 15/32                   | 12.0 |                                     | 1000                 |
| F78-15-M       |           | 1.5             | 0.59              | 15.0 | 0.07 | 1.7  | 0.08 | 2.0 | 19/32                   | 15.0 |                                     | 1000                 |
| F78-18-M       |           |                 | 0.71              | 18.0 | 0.07 | 1.7  | 0.08 | 2.0 | 23/32                   | 18.0 |                                     | 1000                 |
| F78-20-M       |           |                 | 0.79              | 20.0 | 0.07 | 1.7  | 0.08 | 2.0 | 25/32                   | 20.0 |                                     | 1000                 |

For crimping tool information, see page D1.85.

## Ferrules, Non-Insulated (continued)

### Type F

| Part Number | Wire Size |      | Figure Dimensions |      |      |      |      |      | Wire Strip Length |      | Recommended Installation Tool | Std. Pkg. Qty. |
|-------------|-----------|------|-------------------|------|------|------|------|------|-------------------|------|-------------------------------|----------------|
|             |           |      | L                 |      | ID   |      | OD   |      |                   |      |                               |                |
|             |           |      | In.               | mm   | In.  | mm   | In.  | mm   | In.               | mm   |                               |                |
| F80-7-M     | 14 AWG    | 2.5  | 0.28              | 7.0  | 0.09 | 2.2  | 0.10 | 2.5  | 9/32              | 7.0  | CT-1002, CT-1003, CT-1123     | 1000           |
| F80-8-M     |           |      | 0.31              | 8.0  | 0.09 | 2.2  | 0.10 | 2.5  | 5/16              | 8.0  |                               | 1000           |
| F80-10-M    |           |      | 0.39              | 10.0 | 0.09 | 2.2  | 0.10 | 2.5  | 13/32             | 10.0 |                               | 1000           |
| F80-12-M    |           |      | 0.47              | 12.0 | 0.09 | 2.2  | 0.10 | 2.5  | 15/32             | 12.0 |                               | 1000           |
| F80-15-M    |           |      | 0.59              | 15.0 | 0.09 | 2.2  | 0.10 | 2.5  | 19/32             | 15.0 |                               | 1000           |
| F80-18-M    |           |      | 0.71              | 18.0 | 0.09 | 2.2  | 0.10 | 2.5  | 23/32             | 18.0 |                               | 1000           |
| F80-20-M    |           |      | 0.79              | 20.0 | 0.09 | 2.2  | 0.10 | 2.5  | 25/32             | 20.0 |                               | 1000           |
| F81-9-M     |           |      | 12 AWG            | 4.0  | 0.35 | 9.0  | 0.11 | 2.8  | 0.13              | 3.2  |                               | 11/32          |
| F81-10-M    | 0.39      | 10.0 |                   |      | 0.11 | 2.8  | 0.13 | 3.2  | 13/32             | 10.0 | 1000                          |                |
| F81-12-M    | 0.47      | 12.0 |                   |      | 0.11 | 2.8  | 0.13 | 3.2  | 15/32             | 12.0 | 1000                          |                |
| F81-15-M    | 0.59      | 15.0 |                   |      | 0.11 | 2.8  | 0.13 | 3.2  | 19/32             | 15.0 | 1000                          |                |
| F81-18-M    | 0.71      | 18.0 |                   |      | 0.11 | 2.8  | 0.13 | 3.2  | 23/32             | 18.0 | 1000                          |                |
| F81-20-M    | 0.79      | 20.0 |                   |      | 0.11 | 2.8  | 0.13 | 3.2  | 25/32             | 20.0 | 1000                          |                |
| F82-10-M    | 10 AWG    | 6.0  | 0.39              | 10.0 | 0.14 | 3.5  | 0.15 | 3.9  | 13/32             | 10.0 | CT-1002, CT-1003, CT-1123     | 1000           |
| F82-12-M    |           |      | 0.47              | 12.0 | 0.14 | 3.5  | 0.15 | 3.9  | 15/32             | 12.0 |                               | 1000           |
| F82-15-M    |           |      | 0.59              | 15.0 | 0.14 | 3.5  | 0.15 | 3.9  | 19/32             | 15.0 |                               | 1000           |
| F82-18-M    |           |      | 0.71              | 18.0 | 0.14 | 3.5  | 0.15 | 3.9  | 23/32             | 18.0 |                               | 1000           |
| F82-20-M    |           |      | 0.79              | 20.0 | 0.14 | 3.5  | 0.15 | 3.9  | 25/32             | 20.0 |                               | 1000           |
| F83-12-D    | 8 AWG     | 10.0 | 0.47              | 12.0 | 0.18 | 4.5  | 0.19 | 4.9  | 15/32             | 12.0 | CT-1003, CT-1004, CT-1123     | 500            |
| F83-15-D    |           |      | 0.59              | 15.0 | 0.18 | 4.5  | 0.19 | 4.9  | 19/32             | 15.0 |                               | 500            |
| F83-18-D    |           |      | 0.71              | 18.0 | 0.18 | 4.5  | 0.19 | 4.9  | 23/32             | 18.0 |                               | 500            |
| F83-20-D    |           |      | 0.79              | 20.0 | 0.18 | 4.5  | 0.19 | 4.9  | 25/32             | 20.0 |                               | 500            |
| F83-25-D    |           |      | 0.98              | 25.0 | 0.18 | 4.5  | 0.19 | 4.9  | 31/32             | 25.0 |                               | 500            |
| F84-12-TL   | 6 AWG     | 16.0 | 0.47              | 12.0 | 0.23 | 5.8  | 0.24 | 6.2  | 15/32             | 12.0 | CT-1004                       | 250            |
| F84-15-TL   |           |      | 0.59              | 15.0 | 0.23 | 5.8  | 0.24 | 6.2  | 19/32             | 15.0 |                               | 250            |
| F84-18-TL   |           |      | 0.71              | 18.0 | 0.23 | 5.8  | 0.24 | 6.2  | 23/32             | 18.0 |                               | 250            |
| F84-20-TL   |           |      | 0.79              | 20.0 | 0.23 | 5.8  | 0.24 | 6.2  | 25/32             | 20.0 |                               | 250            |
| F84-25-TL   |           |      | 0.98              | 25.0 | 0.23 | 5.8  | 0.24 | 6.2  | 31/32             | 25.0 |                               | 250            |
| F84-32-TL   |           |      | 1.26              | 32.0 | 0.23 | 5.8  | 0.24 | 6.2  | 1 1/4             | 32.0 |                               | 250            |
| F85-12-C    | 4 AWG     | 25.0 | 0.47              | 12.0 | 0.29 | 7.3  | 0.30 | 7.7  | 15/32             | 12.0 | CT-1005                       | 100            |
| F85-15-C    |           |      | 0.59              | 15.0 | 0.29 | 7.3  | 0.30 | 7.7  | 19/32             | 15.0 |                               | 100            |
| F85-18-C    |           |      | 0.71              | 18.0 | 0.29 | 7.3  | 0.30 | 7.7  | 23/32             | 18.0 |                               | 100            |
| F85-25-C    |           |      | 0.98              | 25.0 | 0.29 | 7.3  | 0.30 | 7.7  | 31/32             | 25.0 |                               | 100            |
| F85-32-C    |           |      | 1.26              | 32.0 | 0.29 | 7.3  | 0.30 | 7.7  | 1 1/4             | 32.0 |                               | 100            |
| F86-18-C    | 2 AWG     | 35.0 | 0.71              | 18.0 | 0.33 | 8.3  | 0.34 | 8.7  | 23/32             | 18.0 | CT-1005                       | 100            |
| F86-20-C    |           |      | 0.79              | 20.0 | 0.33 | 8.3  | 0.34 | 8.7  | 25/32             | 20.0 |                               | 100            |
| F86-25-C    |           |      | 0.98              | 25.0 | 0.33 | 8.3  | 0.34 | 8.7  | 31/32             | 25.0 |                               | 100            |
| F86-32-C    |           |      | 1.26              | 32.0 | 0.33 | 8.3  | 0.34 | 8.7  | 1 1/4             | 32.0 |                               | 100            |
| F87-18-C    | 1 AWG     | 50.0 | 0.71              | 18.0 | 0.41 | 10.3 | 0.43 | 10.9 | 23/32             | 18.0 | CT-1006                       | 100            |
| F87-22-C    |           |      | 0.87              | 22.0 | 0.41 | 10.3 | 0.43 | 10.9 | 7/8               | 22.0 |                               | 100            |
| F87-25-C    |           |      | 0.98              | 25.0 | 0.41 | 10.3 | 0.43 | 10.9 | 31/32             | 25.0 |                               | 100            |
| F87-32-C    |           |      | 1.26              | 32.0 | 0.41 | 10.3 | 0.43 | 10.9 | 1 1/4             | 32.0 |                               | 100            |

For crimping tool information, see page D1.85.

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