# ENTRELEC
## Electrical Solutions

# INSULATED WIRE END FERRULES
## Crimp Technology
Connection capacity: from 0.34 mm² to 50 mm² - 22 to 1 AWG

The ENTRELEC ferrules provide an easy, clean and reliable connection of flexible and stranded wires. They are adapted to screw, push-in and spring connections and used worldwide in many industrial or commercial applications where contact precision is key.

## SPEED UP YOUR PROJECTS

- Facilitate wire insertion into terminal clamps of terminal blocks or other control devices
- Save installation time by using the push-in technology of the ENTRELEC SNK Terminal blocks with flexible wires
- Funneled entry for fast and splice-free cable insertion.

## SECURED INSTALLATION

- High level crimp performance with TE tooling
- Conductor protection from breakage due to bending, stress or vibrations
- Multiple re-wiring allowed without damaging the cable performances.

## FOR ALL YOUR NEEDS

- cULus and cCSAus certifications for all products*

- DIN and French color coding on the plastic sleeves
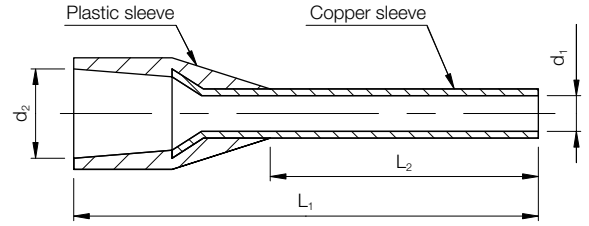- 105°C Max Operating Temperature.

*Except WF003-08-GN with cULus only.

# INSULATED WIRE END FERRULES

## SINGLE WIRE END FERRULES

DIN 46228/4 COLOR CODE
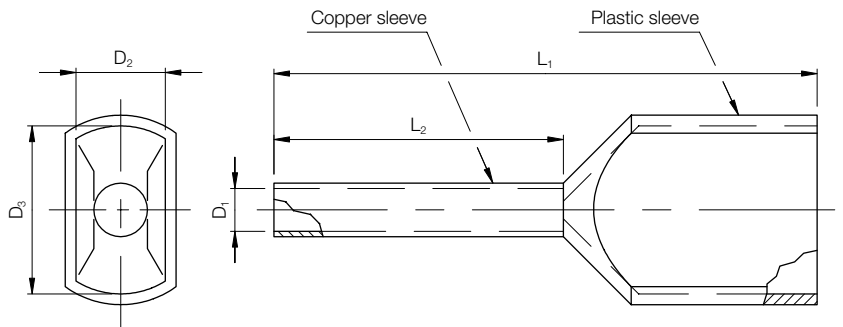
From 0.34 mm² to 50 mm² - *22 to 1 AWG*

Plastic sleeve — Copper sleeve

| Wire size | | Color | Type | Part Number | | Dimensions (mm) | | | | Packing | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| mm² | AWG | | | | | L1 | L2 | d1 | d2 | Bag | Shipping Box |
| 0.34 | 22 | Turquoise | WF003-08-TR | 1SET111026R0000 | | 12.0 | 8.0 | 0.8 | 2.0 | 500 | 5000 |
| 0.50 | 20 | White | WF005-08-WH | 1SET111002R0000 | | 14.0 | 8.0 | 1.0 | 2.6 | 500 | 5000 |
| 0.75 | 18 | Grey | WF007-08-GR | 1SET111027R0000 | | 14.0 | 8.0 | 1.2 | 2.8 | 500 | 5000 |
| | | | WF007-12-GR | 1SET111028R0000 | | 18.0 | 12.0 | 1.2 | 2.8 | 500 | 5000 |
| 1 | 17 | Red | WF010-08-RD | 1SET111005R0000 | | 14.0 | 8.0 | 1.4 | 3.0 | 500 | 5000 |
| | | | WF010-12-RD | 1SET111006R0000 | | 18.0 | 12.0 | 1.4 | 3.0 | 500 | 5000 |
| 1.5 | 16 | Black | WF015-08-BK | 1SET111007R0000 | | 14.0 | 8.0 | 1.7 | 3.5 | 500 | 5000 |
| | | | WF015-12-BK | 1SET111008R0000 | | 18.0 | 12.0 | 1.7 | 3.5 | 500 | 5000 |
| | | | WF015-18-BK | 1SET111009R0000 | | 24.0 | 18.0 | 1.7 | 3.5 | 500 | 5000 |
| 2.5 | 14 | Blue | WF025-08-BL | 1SET111029R0000 | | 14.0 | 8.0 | 2.2 | 4.2 | 500 | 5000 |
| | | | WF025-12-BL | 1SET111030R0000 | | 18.0 | 12.0 | 2.2 | 4.2 | 500 | 5000 |
| | | | WF025-18-BL | 1SET111031R0000 | | 24.0 | 18.0 | 2.2 | 4.2 | 500 | 5000 |
| 4 | 12 | Grey | WF040-10-GR | 1SET111032R0000 | | 17.0 | 10.0 | 2.8 | 4.8 | 500 | 3000 |
| | | | WF040-12-GR | 1SET111033R0000 | | 20.0 | 12.0 | 2.8 | 4.8 | 500 | 3000 |
| | | | WF040-18-GR | 1SET111034R0000 | | 26.0 | 18.0 | 2.8 | 4.8 | 500 | 3000 |
| 6 | 10 | Yellow | WF060-12-YL | 1SET111035R0000 | | 20.0 | 12.0 | 3.5 | 6.3 | 100 | 1000 |
| | | | WF060-18-YL | 1SET111036R0000 | | 26.0 | 18.0 | 3.5 | 6.3 | 100 | 1000 |
| 10 | 8 | Red | WF100-12-RD | 1SET111037R0000 | | 22.0 | 12.0 | 4.5 | 7.6 | 100 | 1000 |
| | | | WF100-18-RD | 1SET111038R0000 | | 28.0 | 18.0 | 4.5 | 7.6 | 100 | 1000 |
| 16 | 6 | Blue | WF160-12-BL | 1SET111039R0000 | | 24.0 | 12.0 | 5.8 | 8.8 | 100 | 1000 |
| | | | WF160-18-BL | 1SET111040R0000 | | 28.0 | 18.0 | 5.8 | 8.8 | 100 | 1000 |
| 25 | 4 | Black | WF250-16-BK | 1SET111022R0000 | | 30.0 | 16.0 | 7.3 | 11.2 | 50 | 500 |
| | | | WF250-22-BK | 1SET111023R0000 | | 36.0 | 22.0 | 7.3 | 11.2 | 50 | 500 |
| 35 | 2 | Red | WF350-16-RD | 1SET111024R0000 | | 30.0 | 16.0 | 8.3 | 12.7 | 50 | 500 |
| 50 | 1 | Blue | WF500-20-BL | 1SET111025R0000 | | 36.0 | 20.0 | 10.3 | 15.0 | 50 | 500 |

## TWIN WIRE END FERRULES

DIN 46228/4 COLOR CODE

From 0.5 mm² to 6 mm² - *20 to 10 AWG*

Copper sleeve — Plastic sleeve

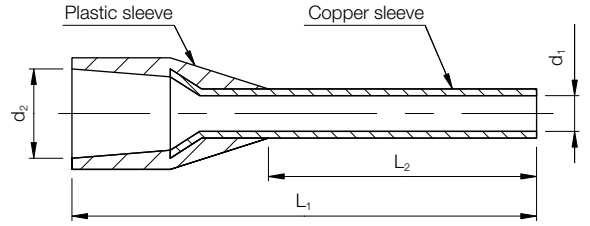| Wire size | | Color | Type | Part Number | | Dimensions (mm) | | | | | Packing | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm² | AWG | | | | | L1 | L2 | D1 | D2 | D3 | Bag | Shipping Box |
| 2 x 0.5 | 2 x 20 | White | WFD005-08-WH | 1SET112001R0000 | | 15.0 | 8.0 | 1.4 | 2.5 | 4.7 | 500 | 5000 |
| 2 x 0.75 | 2 x 18 | Grey | WFD007-08-GR | 1SET112011R0000 | | 15.0 | 8.0 | 1.7 | 2.8 | 5.0 | 500 | 5000 |
| | | | WFD007-10-GR | 1SET112012R0000 | | 17.0 | 10.0 | 1.7 | 2.8 | 5.0 | 500 | 5000 |
| 2 x 1 | 2 x 17 | Red | WFD010-08-RD | 1SET112004R0000 | | 15.0 | 8.0 | 2.0 | 3.4 | 5.4 | 500 | 5000 |
| 2 x 1.5 | 2 x 16 | Black | WFD015-08-BK | 1SET112005R0000 | | 16.0 | 8.0 | 2.2 | 3.6 | 6.6 | 500 | 5000 |
| | | | WFD015-12-BK | 1SET112006R0000 | | 20.0 | 12.0 | 2.2 | 3.6 | 6.6 | 500 | 5000 |
| 2 x 2.5 | 2 x 14 | Blue | WFD025-10-BL | 1SET112013R0000 | | 18.5 | 10.0 | 2.8 | 4.2 | 7.8 | 500 | 3000 |
| | | | WFD025-13-BL | 1SET112014R0000 | | 21.5 | 13.0 | 2.8 | 4.2 | 7.8 | 500 | 3000 |
| 2 x 4 | 2 x 12 | Grey | WFD040-12-GR | 1SET112015R0000 | | 23.0 | 12.0 | 3.7 | 4.9 | 8.8 | 100 | 1000 |
| 2 x 6 | 2 x 10 | Yellow | WFD060-14-YL | 1SET112016R0000 | | 26.0 | 14.0 | 4.8 | 6.9 | 10.0 | 100 | 1000 |

# INSULATED WIRE END FERRULES

## SINGLE WIRE END FERRULES

NFC 63023 COLOR CODE

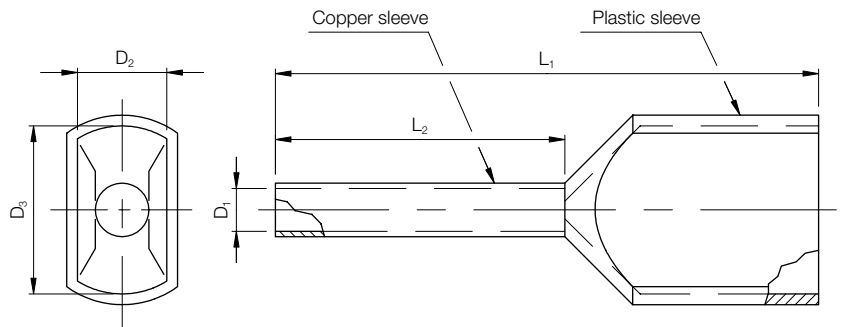From 0.34 mm² to 50 mm² - *22 to 1 AWG*



| Wire size | | Color | Type | Part Number | | Dimensions (mm) | | | | Packing | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| mm² | AWG | | | | | L1 | L2 | d1 | d2 | Bag | Shipping Box |
| 0.34 | 22 | Green | WF003-08-GN | 1SET111001R0000 | | 12.0 | 8.0 | 0.8 | 2.0 | 500 | 5000 |
| 0.50 | 20 | White | WF005-08-WH | 1SET111002R0000 | | 14.0 | 8.0 | 1.0 | 2.6 | 500 | 5000 |
| 0.75 | 18 | Blue | WF007-08-BL | 1SET111003R0000 | | 14.0 | 8.0 | 1.2 | 2.8 | 500 | 5000 |
| | | | WF007-12-BL | 1SET111004R0000 | | 18.0 | 12.0 | 1.2 | 2.8 | 500 | 5000 |
| 1 | 17 | Red | WF010-08-RD | 1SET111005R0000 | | 14.0 | 8.0 | 1.4 | 3.0 | 500 | 5000 |
| | | | WF010-12-RD | 1SET111006R0000 | | 18.0 | 12.0 | 1.4 | 3.0 | 500 | 5000 |
| 1.5 | 16 | Black | WF015-08-BK | 1SET111007R0000 | | 14.0 | 8.0 | 1.7 | 3.5 | 500 | 5000 |
| | | | WF015-12-BK | 1SET111008R0000 | | 18.0 | 12.0 | 1.7 | 3.5 | 500 | 5000 |
| | | | WF015-18-BK | 1SET111009R0000 | | 24.0 | 18.0 | 1.7 | 3.5 | 500 | 5000 |
| 2.5 | 14 | Grey | WF025-08-GR | 1SET111010R0000 | | 14.0 | 8.0 | 2.2 | 4.2 | 500 | 5000 |
| | | | WF025-12-GR | 1SET111011R0000 | | 18.0 | 12.0 | 2.2 | 4.2 | 500 | 5000 |
| | | | WF025-18-GR | 1SET111012R0000 | | 24.0 | 18.0 | 2.2 | 4.2 | 500 | 5000 |
| 4 | 12 | Orange | WF040-10-OR | 1SET111013R0000 | | 17.0 | 10.0 | 2.8 | 4.8 | 500 | 3000 |
| | | | WF040-12-OR | 1SET111014R0000 | | 20.0 | 12.0 | 2.8 | 4.8 | 500 | 3000 |
| | | | WF040-18-OR | 1SET111015R0000 | | 26.0 | 18.0 | 2.8 | 4.8 | 500 | 3000 |
| 6 | 10 | Green | WF060-12-GN | 1SET111016R0000 | | 20.0 | 12.0 | 3.5 | 6.3 | 100 | 1000 |
| | | | WF060-18-GN | 1SET111017R0000 | | 26.0 | 18.0 | 3.5 | 6.3 | 100 | 1000 |
| 10 | 8 | Brown | WF100-12-BR | 1SET111018R0000 | | 22.0 | 12.0 | 4.5 | 7.6 | 100 | 1000 |
| | | | WF100-18-BR | 1SET111019R0000 | | 28.0 | 18.0 | 4.5 | 7.6 | 100 | 1000 |
| 16 | 6 | Ivory | WF160-12-IV | 1SET111020R0000 | | 24.0 | 12.0 | 5.8 | 8.8 | 100 | 1000 |
| | | | WF160-18-IV | 1SET111021R0000 | | 28.0 | 18.0 | 5.8 | 8.8 | 100 | 1000 |
| 25 | 4 | Black | WF250-16-BK | 1SET111022R0000 | | 30.0 | 16.0 | 7.3 | 11.2 | 50 | 500 |
| | | | WF250-22-BK | 1SET111023R0000 | | 36.0 | 22.0 | 7.3 | 11.2 | 50 | 500 |
| 35 | 2 | Red | WF350-16-RD | 1SET111024R0000 | | 30.0 | 16.0 | 8.3 | 12.7 | 50 | 500 |
| 50 | 1 | Blue | WF500-20-BL | 1SET111025R0000 | | 36.0 | 20.0 | 10.3 | 15.0 | 50 | 500 |

## TWIN WIRE END FERRULES

NFC 63023 COLOR CODE

From 0.5 mm² to 6 mm² - *20 to 10 AWG*



| Wire size | | Color | Type | Part Number | | Dimensions (mm) | | | | | Packing | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm² | AWG | | | | | L1 | L2 | D1 | D2 | D3 | Bag | Shipping Box |
| 2 x 0.5 | 2 x 20 | White | WFD005-08-WH | 1SET112001R0000 | | 15.0 | 8.0 | 1.4 | 2.5 | 4.7 | 500 | 5000 |
| 2 x 0.75 | 2 x 18 | Blue | WFD007-08-BL | 1SET112002R0000 | | 15.0 | 8.0 | 1.7 | 2.8 | 5.0 | 500 | 5000 |
| | | | WFD007-10-BL | 1SET112003R0000 | | 17.0 | 10.0 | 1.7 | 2.8 | 5.0 | 500 | 5000 |
| 2 x 1 | 2 x 17 | Red | WFD010-08-RD | 1SET112004R0000 | | 15.0 | 8.0 | 2.0 | 3.4 | 5.4 | 500 | 5000 |
| 2 x 1.5 | 2 x 16 | Black | WFD015-08-BK | 1SET112005R0000 | | 16.0 | 8.0 | 2.2 | 3.6 | 6.6 | 500 | 5000 |
| | | | WFD015-12-BK | 1SET112006R0000 | | 20.0 | 12.0 | 2.2 | 3.6 | 6.6 | 500 | 5000 |
| 2 x 2.5 | 2 x 14 | Grey | WFD025-10-GR | 1SET112007R0000 | | 18.5 | 10.0 | 2.8 | 4.2 | 7.8 | 500 | 3000 |
| | | | WFD025-13-GR | 1SET112008R0000 | | 21.5 | 13.0 | 2.8 | 4.2 | 7.8 | 500 | 3000 |
| 2 x 4 | 2 x 12 | Orange | WFD040-12-OR | 1SET112009R0000 | | 23.0 | 12.0 | 3.7 | 4.9 | 8.8 | 100 | 1000 |
| 2 x 6 | 2 x 10 | Green | WFD060-14-GN | 1SET112010R0000 | | 26.0 | 14.0 | 4.8 | 6.9 | 10.0 | 100 | 1000 |

## MANUAL HAND TOOLING

The tools below are compatible for all the ferrules mentioned in this brochure (with respect to their maximum wire capacity).

To crimp wire end ferrule above 16 mm² (6 AWG) and keep the UL and CSA certification, please use the crimping tool from alternative manufacturer: Klauke K28 [1].

(1) This tool is not available at TE. Please contact your local distributor.

### Side entry tool
**Part Nbr.: 1SET191003R0000**



- For 0.08 up to 10 mm² (28 to 8 AWG) wire crimping
- Square crimp profile with 4 serrated crimp surfaces
- Certified for UL and CSA Applications.

### Front entry tool
**Part Nbr.: 1SET191004R0000**



- For 0.08 up to 16 mm² (28 to 6 AWG) wire crimping
- Pre-selection of crimping wire ranges by a change over switch
- Releasable ratchet
- Square crimp profile with 4 serrated crimp surfaces
- Certified for UL and CSA applications.