

## DuraSeal Heat-Shrinkable Environmentally Sealed, Nylon Insulated Crimp Terminals and Disconnects

### Product Facts

- Resistance to moisture and abrasion
- Strain relief
- Protection from wire pull-out
- Easy installation
- UL and CUL listed



### Applications

DuraSeal products insulate and protect electrical connections from mechanical abuse, wire pull-out, and abrasion while resisting water, salt, and other contaminant's.

DuraSeal devices provide a tough, environmentally sealed wire connection. Their crimp barrel or terminal, encased in rugged, heat-shrinkable nylon tubing lined with a special hot-melt adhesive, resists damage from abrasions and cuts.

DuraSeal devices retain flexibility and impact-resistance long after similar products have become brittle.

DuraSeal devices accommodate wire gauge sizes 22 to 10. They are color-coded for easy identification of gauge sizes, yet transparent for inspection of the finished splice.

### Approvals and Reference Documents

|                     |                                                                                                                                                    |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Agency approvals    | UL listed component, file E87681, terminals except quick connect terminals; file E157833, quick connect terminals                                  |
| Reference documents | TE specifications RB-108, Specification DuraSeal crimp terminals<br>DuraSeal selection guide (H54153)<br>DuraSeal installation guidelines (H54154) |

#### Available in:

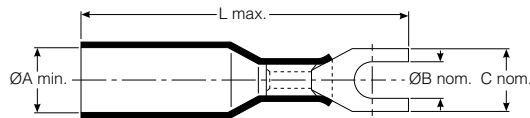
- Americas ■
- Europe ■
- Asia Pacific ■

## DuraSeal Heat-Shrinkable Environmentally Sealed, Nylon Insulated Crimp Terminals and Disconnects (Continued)

### Product Characteristics

|                       | Property                         | Unit       | Requirement                                                        | Method of Test                                                                                                                                                                                                                                                |
|-----------------------|----------------------------------|------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical              | Dimensions                       | Inches     | None                                                               | See product dimensions                                                                                                                                                                                                                                        |
|                       | Tensile strength                 | Pounds     | 8 to 40 lbs depending on AWG                                       | UL486C, IEC512-8                                                                                                                                                                                                                                              |
|                       | Property                         | Unit       | Typical value                                                      | Method of Test                                                                                                                                                                                                                                                |
| Electrical            | Voltage drop                     | Millivolts | Less than equal length of wire                                     | MIL-S-81824, IEC512-2                                                                                                                                                                                                                                         |
|                       | Insulation resistance            | Megohms    | 103 min.                                                           | MIL-STD-202 method 302                                                                                                                                                                                                                                        |
|                       | Dielectric withstand voltage     | Kilovolts  | 2.5                                                                | MIL-STD-202F method 301, IEC512-2                                                                                                                                                                                                                             |
|                       |                                  |            |                                                                    |                                                                                                                                                                                                                                                               |
|                       | Property                         | Unit       | Requirement                                                        | Method of Test                                                                                                                                                                                                                                                |
| Chemical              | Diesel fuel                      | —          | Meet electrical test listed above after conditioning.              | ASTM D 3032, ESA-603D                                                                                                                                                                                                                                         |
|                       | Brake fluid                      | —          |                                                                    |                                                                                                                                                                                                                                                               |
|                       | Antifreeze                       | —          |                                                                    |                                                                                                                                                                                                                                                               |
|                       | 5% salt water                    | —          |                                                                    |                                                                                                                                                                                                                                                               |
| Environmental (Fluid) | Motor oil                        | —          | Meet electrical test listed above after conditioning.              | MIL-STD-202F method 106, IEC68-2-30<br>MIL-STD-202F condition C, IEC68-2-14 test NC<br>MIL-STD-202F method 201, IEC68-2-6<br>UL486C, IEC512-8<br>MIL-STD-202F method 107, IEC68-2-14 test N<br>MIL-STD-202F, IEC68-2-2<br>MIL-STD-202F method 101, IEC68-2-11 |
|                       | Humidity                         | —          |                                                                    |                                                                                                                                                                                                                                                               |
|                       | Immersion                        | —          |                                                                    |                                                                                                                                                                                                                                                               |
|                       | Vibration                        | —          |                                                                    |                                                                                                                                                                                                                                                               |
| Operating conditions  | Bending                          | —          | -55°C to +125°C [-67°F to -257°F]<br>180°C [356°F]<br>600 Volt max | None<br>None<br>None                                                                                                                                                                                                                                          |
|                       | Thermal shock                    | —          |                                                                    |                                                                                                                                                                                                                                                               |
|                       | Heat aging (168h @ 85°C [185°F]) | —          |                                                                    |                                                                                                                                                                                                                                                               |
|                       | Salt spray                       | —          |                                                                    |                                                                                                                                                                                                                                                               |
| Operating conditions  | Temperature rating               | —          | -55°C to +125°C [-67°F to -257°F]<br>180°C [356°F]<br>600 Volt max | None<br>None<br>None                                                                                                                                                                                                                                          |
|                       | Minimum shrink temperature       | —          |                                                                    |                                                                                                                                                                                                                                                               |
|                       | Voltage rating                   | —          |                                                                    |                                                                                                                                                                                                                                                               |

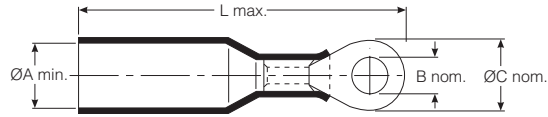
### Fork Terminals



| Part No.   | Fork Terminal Dimensions |           |          |            |              | Color  | Insulation Conductor (AWG) | Wire Dimensions        |             |
|------------|--------------------------|-----------|----------|------------|--------------|--------|----------------------------|------------------------|-------------|
|            | A Min.                   | Stud Size |          | C Nom.     | L Max.       |        |                            | Insulation O.D. (Max.) | O.D. (Min.) |
|            |                          | Metric    | Imperial |            |              |        |                            |                        |             |
| B-106-2401 | 3.81 [.15]               | M4        | 8        | 7.87 [.31] | 32.00 [1.26] | Red    | 22–18                      | 3.81 [.150]            | 1.40 [.055] |
| B-106-2402 | 4.57 [.18]               | M4        | 8        | 7.87 [.31] | 35.05 [1.38] | Blue   | 16–14                      | 4.45 [.175]            | 2.00 [.080] |
| B-106-2403 | 6.35 [.25]               | M4        | 8        | 7.87 [.31] | 38.10 [1.50] | Yellow | 12–10                      | 6.35 [.250]            | 2.79 [.110] |
| B-106-2502 | 4.57 [.18]               | M5        | 10       | 9.91 [.39] | 35.05 [1.38] | Blue   | 16–14                      | 4.45 [.175]            | 2.00 [.080] |
| B-106-2503 | 6.35 [.25]               | M5        | 10       | 9.91 [.39] | 40.15 [1.58] | Yellow | 12–10                      | 6.35 [.250]            | 2.79 [.110] |

## DuraSeal Heat-Shrinkable Environmentally Sealed, Nylon Insulated Crimp Terminals and Disconnects (Continued)

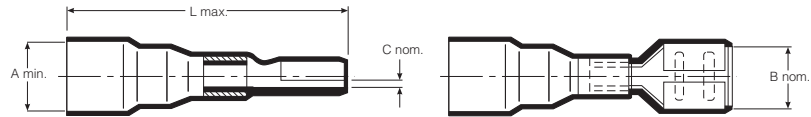
### Ring Terminals



| Part No.   | Ring Terminal Dimensions |           |          |             |              | Color  | Wire Dimensions            |                        |             |
|------------|--------------------------|-----------|----------|-------------|--------------|--------|----------------------------|------------------------|-------------|
|            | A Min.                   | Stud Size |          | C Nom.      | L Max.       |        | Insulation Conductor (AWG) | Insulation O.D. (Max.) | O.D. (Min.) |
|            |                          | Metric    | Imperial |             |              |        |                            |                        |             |
| B-106-1401 | 3.81 [.15]               | M4        | 8        | 7.88 [.31]  | 32.00 [1.26] | Red    | 22-18                      | 3.81 [.150]            | 1.40 [.055] |
| B-106-1501 | 3.81 [.15]               | M5        | 10       | 9.91 [.39]  | 34.04 [1.34] | Red    | 22-18                      | 3.81 [.150]            | 1.40 [.055] |
| B-106-1601 | 3.81 [.15]               | M6        | 1/4      | 11.94 [.47] | 36.07 [1.42] | Red    | 22-18                      | 3.81 [.150]            | 1.40 [.055] |
| B-106-1801 | 3.81 [.15]               | M8        | 5/16     | 13.97 [.55] | 39.12 [1.54] | Red    | 22-18                      | 3.81 [.150]            | 1.40 [.055] |
| B-106-1991 | 3.81 [.15]               | M10       | 3/8      | 17.78 [.70] | 43.18 [1.70] | Red    | 22-18                      | 3.81 [.150]            | 1.40 [.055] |
| B-106-1402 | 4.57 [.18]               | M4        | 8        | 7.88 [.31]  | 33.02 [1.30] | Blue   | 16-14                      | 4.45 [.175]            | 2.00 [.080] |
| B-106-1502 | 4.57 [.18]               | M5        | 10       | 9.91 [.39]  | 35.05 [1.38] | Blue   | 16-14                      | 4.45 [.175]            | 2.00 [.080] |
| B-106-1602 | 4.57 [.18]               | M6        | 1/4      | 11.94 [.47] | 36.58 [1.44] | Blue   | 16-14                      | 4.45 [.175]            | 2.00 [.080] |
| B-106-1802 | 4.57 [.18]               | M8        | 5/16     | 13.97 [.55] | 40.13 [1.58] | Blue   | 16-14                      | 4.45 [.175]            | 2.00 [.080] |
| B-106-1992 | 4.57 [.18]               | M10       | 3/8      | 17.78 [.70] | 43.94 [1.73] | Blue   | 16-14                      | 4.45 [.175]            | 2.00 [.080] |
| B-106-1403 | 6.35 [.25]               | M4        | 8        | 7.88 [.31]  | 38.10 [1.50] | Yellow | 12-10                      | 6.35 [.250]            | 2.79 [.110] |
| B-106-1503 | 6.35 [.25]               | M5        | 10       | 9.91 [.39]  | 40.13 [1.58] | Yellow | 12-10                      | 6.35 [.250]            | 2.79 [.110] |
| B-106-1603 | 6.35 [.25]               | M6        | 1/4      | 11.94 [.47] | 41.66 [1.64] | Yellow | 12-10                      | 6.35 [.250]            | 2.79 [.110] |
| B-106-1803 | 6.35 [.25]               | M8        | 5/16     | 13.97 [.55] | 45.21 [1.78] | Yellow | 12-10                      | 6.35 [.250]            | 2.79 [.110] |
| B-106-1993 | 6.35 [.25]               | M10       | 3/8      | 17.78 [.70] | 46.99 [1.85] | Yellow | 12-10                      | 6.35 [.250]            | 2.79 [.110] |

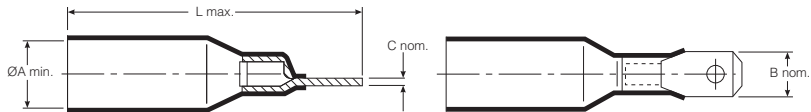
## DuraSeal Heat-Shrinkable Environmentally Sealed, Nylon Insulated Crimp Terminals and Disconnects (Continued)

### Push-on Terminals



| Part No.   | Tab Size (inches) | Push-on Terminal Dimensions |             |            |               | Color  | Insulation Conductor (AWG) | Wire Dimensions        |             |
|------------|-------------------|-----------------------------|-------------|------------|---------------|--------|----------------------------|------------------------|-------------|
|            |                   | A Min.                      | B Nom.      | C Nom.     | L Max.        |        |                            | Insulation O.D. (Max.) | O.D. (Min.) |
| B-106-3631 | .250 x .032       | 3.81 [.150]                 | 6.35 [.250] | .81 [.032] | 30.48 [1.200] | Red    | 22-18                      | 3.81 [.150]            | 1.40 [.055] |
| B-106-3632 | .250 x .032       | 4.57 [.180]                 | 6.35 [.250] | .81 [.032] | 32.00 [1.260] | Blue   | 16-14                      | 4.45 [.175]            | 2.00 [.080] |
| B-106-3633 | .250 x .032       | 6.35 [.250]                 | 6.35 [.250] | .81 [.032] | 33.02 [1.300] | Yellow | 12-10                      | 6.35 [.250]            | 2.79 [.110] |
| B-106-3281 | .110 x .020       | 3.81 [.150]                 | 2.79 [.110] | .51 [.020] | 22.86 [.900]  | Red    | 22-18                      | 3.81 [.150]            | 1.40 [.055] |
| B-106-3481 | .187 x .020       | 3.81 [.150]                 | 4.75 [.187] | .51 [.020] | 30.48 [1.200] | Red    | 22-18                      | 3.81 [.150]            | 1.40 [.055] |

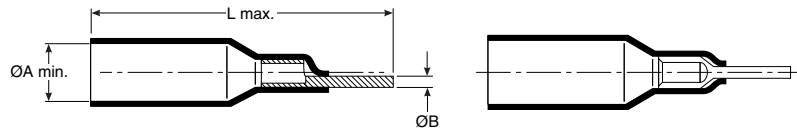
### Tab Terminals



| Part No.   | Tab Size (inches) | Tab Terminal Dimensions |             |            |              | Color | Insulation Conductor (AWG) | Wire Dimensions        |             |
|------------|-------------------|-------------------------|-------------|------------|--------------|-------|----------------------------|------------------------|-------------|
|            |                   | A Min.                  | B Nom.      | C Nom.     | L Max.       |       |                            | Insulation O.D. (Max.) | O.D. (Min.) |
| B-106-4631 | .250 x .032       | 3.81 [.150]             | 6.35 [.250] | .81 [.032] | 30.48 [1.20] | Red   | 22-18                      | 3.81 [.150]            | 1.40 [.055] |
| B-106-4632 | .250 x .032       | 4.57 [.180]             | 6.35 [.250] | .81 [.032] | 32.00 [1.26] | Blue  | 16-14                      | 4.45 [.175]            | 2.00 [.080] |

## DuraSeal Heat-Shrinkable Environmentally Sealed, Nylon Insulated Crimp Terminals and Disconnects (Continued)

### Pin Terminals



| Part No.   | Pin Terminal Dimensions |             |               | Color | Conductor (AWG) | Wire Dimensions        |                        |
|------------|-------------------------|-------------|---------------|-------|-----------------|------------------------|------------------------|
|            | A Min.                  | B Nom.      | L Max.        |       |                 | Insulation O.D. (Max.) | Insulation O.D. (Min.) |
| B-106-6201 | 3.81 [.150]             | 2.00 [.080] | 30.99 [1.220] | Red   | 22-18           | 3.81 [.150]            | 1.40 [.055]            |

### Bullet Terminals

Fig. 1

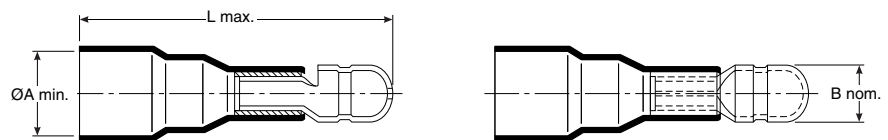
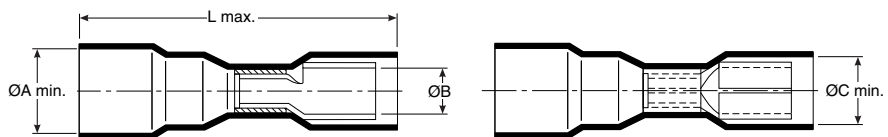


Fig. 2



| Part No.   | Fig. | Type | Bullet Terminal Dimensions |             |             |              | Color | Conductor (AWG) | Wire Dimensions        |                        |
|------------|------|------|----------------------------|-------------|-------------|--------------|-------|-----------------|------------------------|------------------------|
|            |      |      | A Min.                     | B Nom.      | C Min.      | L Max.       |       |                 | Insulation O.D. (Max.) | Insulation O.D. (Min.) |
| B-106-7401 | 1    | M    | 3.81 [.150]                | 3.81 [.150] | —           | 33.53 [1.32] | Red   | 22-18           | 3.81 [.150]            | 1.40 [.055]            |
| B-106-7502 | 1    | M    | 4.57 [.180]                | 5.08 [.200] | —           | 34.54 [1.36] | Blue  | 16-14           | 4.45 [.175]            | 2.00 [.080]            |
| B-106-8401 | 2    | F    | 3.81 [.150]                | 3.81 [.150] | 5.59 [.220] | 30.48 [1.20] | Red   | 22-18           | 3.81 [.150]            | 1.40 [.055]            |
| B-106-8502 | 2    | F    | 4.57 [.180]                | 5.08 [.200] | 6.10 [.240] | 32.51 [1.28] | Blue  | 16-14           | 4.45 [.175]            | 2.00 [.080]            |

## DuraSeal Heat-Shrinkable Environmentally Sealed, Nylon Insulated Crimp Terminals and Disconnects (Continued)

### Product Characteristics (Typical)

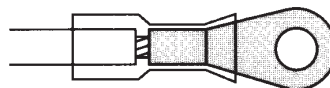
|                       |                                                                                                                                                                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating temperature | -55°C to 125°C [-67°F to 257°F]                                                                                                                                                                                                              |
| Shrink ratio          | Approximately 2:1                                                                                                                                                                                                                            |
| Physical properties   | Cut-through resistance: 31.7 kg [70 lb]<br>Wire pullout after crimping and recovery: red: 11.3 kg [25 lb]; blue: 22.7 kg [50 lb]; yellow: 27.2 kg [60 lb]<br>Not flame-retardant<br>No cracking after heat aging for 168 hr at 160°C [320°F] |
| Chemical properties   | Solvent resistance: isopropyl alcohol, trichloroethylene, gasoline, battery acid, diesel fuel, motor oil, antifreeze, brake fluid, 5% salt water                                                                                             |
| Electrical properties | Dielectric strength: 1000 V<br>Insulation resistance: 10 megohms                                                                                                                                                                             |

### Specifications/Approvals

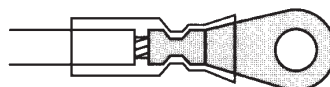
| Series | Agency                                                                                                                | TE     |
|--------|-----------------------------------------------------------------------------------------------------------------------|--------|
| B-106  | UL and CUL 91J4, File E87681<br>Lloyd's listed, File 65 247 HH 02-93<br>UL and CUL E157833<br>(B-106-3XXX/B-106-4XXX) | RB-108 |

### Installation

1. Select appropriate size.  
For terminal and disconnect terminations, strip wire 6.5 mm (1/4 inch).



2. Crimp using AD-1522 crimp tool for preinsulated crimps.



3. Heat terminal or disconnect with heat gun until tubing recovers and adhesive flows. Avoid heating ring or fork metallic parts.



For proper installation of these devices, the correct crimp tool and heating tool with reflector attachment must be used. The AD-1522 crimp tool and HL1910E/HL2010E heating tools are recommended. You will find ordering information for these tools in Section 10. Refer to TE installation procedure RPIP-684-00 for detailed instructions.