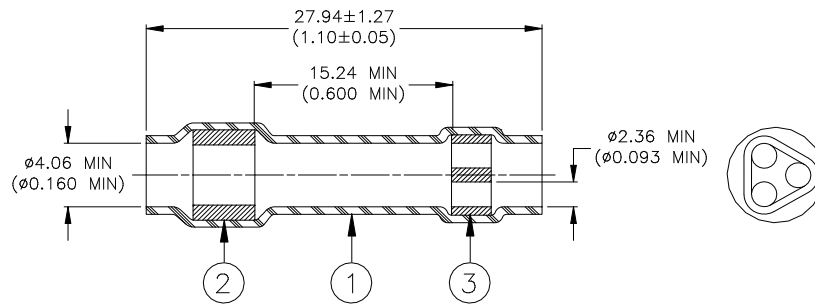
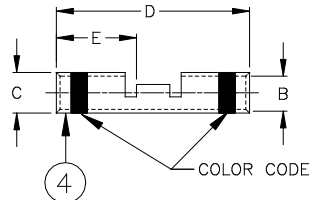


## CUSTOMER DRAWING



**ITEM #1: SEALING SLEEVE**



**ITEM #2: CRIMP SPLICE**

### **MATERIALS**

1. INSULATION SLEEVE: Heat-shrinkable, transparent blue, radiation cross-linked modified polyvinylidene flouride.
2. SINGLE-WIRE SEAL: Low outgassing immersion resistant thermoplastic fluoroelastomer. Color: BLUE.
3. INTEGRAL-WIRE SEAL: Low outgassing immersion resistant thermoplastic fluoroelastomer. Color: BLUE.
4. CRIMP SPLICE: Base Metal: Copper Alloy 101 or 102 per ASTM B-75.  
Plating: Nickel per QQ-N-290.

### Dimensions:

| Part Name | Prod. Rev. | Size | Crimp Splice |              |               |              |            |
|-----------|------------|------|--------------|--------------|---------------|--------------|------------|
|           |            |      | ØB           | ØC           | D             | E            | Color Code |
| D-436-85  | A          | 20   | 1.27 (0.050) | 2.03 (0.080) | 12.95 (0.510) | 6.22 (0.245) | Red        |
|           |            |      | 1.14 (0.045) | 1.91 (0.075) | 12.45 (0.490) | 5.72 (0.225) |            |
| D-436-86  | B          | 16   | 1.75 (0.069) | 2.70 (0.106) | 14.86 (0.585) | 7.11 (0.280) | Blue       |
|           |            |      | 1.63 (0.064) | 2.57 (0.101) | 14.35 (0.565) | 6.60 (0.260) |            |
| D-436-87  | A          | 12   | 2.60 (0.102) | 3.91 (0.154) | 14.86 (0.585) | 7.11 (0.280) | Yellow     |
|           |            |      | 2.46 (0.097) | 3.73 (0.147) | 14.35 (0.565) | 6.60 (0.260) |            |

### Installation Data:

| Splicer Size | Wire Size Range of Crimp Splice |         |           |         |             |         |
|--------------|---------------------------------|---------|-----------|---------|-------------|---------|
|              | One Wire                        |         | Two wires |         | Three wires |         |
|              | Minimum                         | Maximum | Minimum   | Maximum | Minimum     | Maximum |
| 20           | 24                              | 20      | 26        | 24      | 28          | 24      |
| 16           | 20                              | 16      | 24        | 20      | 24          | 22      |
| 12           | 16                              | 12      | 22        | 16      | 22          | 18      |

|                                                                                                      |                                           |                                                                                                                                                                |                              |  |                                                                                                                                         |  |                 |                  |
|------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------|--|-----------------|------------------|
|  TE Connectivity  |                                           |                                                                                                                                                                | Raychem<br>Devices           |  | TITLE : (Low Outgassing)<br>IN-LINE SPLICE SEALING SYSTEM,<br>2 OR 3 TO 1 SPLICER: Nickel Plated,<br>Color Coded, with Inspection Slots |  |                 |                  |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS.<br>INCHES DIMENSIONS ARE BETWEEN BRACKETS. |                                           |                                                                                                                                                                |                              |  | DOCUMENT NO. :<br>D-436-85/-87                                                                                                          |  |                 |                  |
| TOLERANCES:<br>0.00 N/A<br>0.0 N/A<br>0 N/A                                                          | ANGLES: N/A<br><br>ROUGHNESS IN<br>MICRON | TE CONNECTIVITY (TE) RESERVES THE RIGHT TO<br>CHANGE THIS DRAWING AT ANYTIME. USER<br>SHOULD EVALUATE THE SUITABILITY OF THE<br>PRODUCT FOR THEIR APPLICATION. |                              |  | DATE:<br>June 16, 2017                                                                                                                  |  | REVISION:<br>B2 |                  |
| DRAWN BY:<br>M. FORONDA                                                                              |                                           | ECO APPROVED:<br>L. RODRIGUEZ                                                                                                                                  | ECO NUMBER:<br>ECO-17-008496 |  | SCALE:<br>None                                                                                                                          |  | SIZE:<br>A      | SHEET:<br>1 of 2 |

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## CUSTOMER DRAWING

### APPLICATION

1. These parts are designed to provide an immersion resistant in-line splices of 2 or 3 to 1 wires falling within the size range listed on sheet 1, having insulations rated for at least 135°C.
2. Parts are available only as an assembly of one of each Item #1 and Item #2.
3. Parts are to be installed per Thermofit Assembly Procedure, see below.
4. Inside diameter and outside diameter of splice are to be measured in crimp areas, 2.54 to 5.08 (0.100 to 0.200) from ends of part. Slight burr permitted on parted surfaces.
5. Acceptance sampling shall be in accordance with Paragraph 4.6.1 of MIL-T-7928.
6. Packing and packaging shall be in accordance with Section 5, Level C, of MIL-T-7928.
7. This document takes precedence over documents referenced herein.

### THERMOFIT ASSEMBLY PROCEDURE

#### 1.0 SCOPE

This document outlines the procedure to be followed to obtain immersion resistant 3 or 2 to 1 in-line splices using Thermofit In-Line Splice Sealing System D-436-85/-87.

#### 2.0 PROCEDURE:

- a) Strip all wires 7.92 (0.312) to 8.74 (0.344).
- b) Attach the single lead to the appropriate size crimp splice using a Raychem AD-1377 Crimp Tool.
- c) Pass the wires to be attached to other barrel through the sealing sleeve from the three hole insert end.
- d) Insert wires into barrel and crimp. Care must be taken so that the wires remain untwisted between the crimp splice and the three wire seal or the sealing sleeve cannot be positioned properly.
- e) Apply heat, using a recommended heat source, first to the three-hole insert and then to the other. Heat should be applied until insert melts and flows axially along the wire.

#### 3.0 RECOMMENDED RAYCHEM HEATING TOOLS

| <u>HEATER</u>            | <u>REFLECTOR</u> | <u>RECOMMENDED TEMPERATURE SETTING</u> |
|--------------------------|------------------|----------------------------------------|
| Steinel HL-2010E         | 832011-000       | 316°C-371°C (600°F-700°F)              |
| Thermogun #500A          | TG-14            | 316°C-371°C (600°F-700°F)              |
| Shop Air Heater #CV-4504 | 991180-000       | 316°C-371°C (600°F-700°F)              |
| Mini-Gun #CV-5300        | 991319-000       | 316°C-371°C (600°F-700°F)              |

|                                                                                                            |                                                          |                                                                                                                                                                          |                                                                                                                                                   |                               |                         |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------|
|  <b>TE Connectivity</b> |                                                          | <b>Raychem<br/>Devices</b>                                                                                                                                               | <b>TITLE : (Low Outgassing)<br/>IN-LINE SPLICE SEALING SYSTEM,<br/>2 OR 3 TO 1 SPLICER: Nickel Plated,<br/>Color Coded, with Inspection Slots</b> |                               |                         |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS.<br>INCHES DIMENSIONS ARE BETWEEN BRACKETS.       |                                                          |                                                                                                                                                                          | <b>DOCUMENT NO. : D-436-85/-87</b>                                                                                                                |                               |                         |
| <b>TOLERANCES:</b><br>0.00 N/A<br>0.0 N/A<br>0 N/A                                                         | <b>ANGLES:</b> N/A<br><br><b>ROUGHNESS IN<br/>MICRON</b> | <b>TE CONNECTIVITY (TE) RESERVES THE RIGHT TO<br/>CHANGE THIS DRAWING AT ANYTIME. USER<br/>SHOULD EVALUATE THE SUITABILITY OF THE<br/>PRODUCT FOR THEIR APPLICATION.</b> |                                                                                                                                                   | <b>DATE:</b><br>June 16, 2017 | <b>REVISION:</b><br>B2  |
| <b>DRAWN BY:</b><br>M. FORONDA                                                                             | <b>ECO APPROVED:</b><br>L. RODRIGUEZ                     | <b>ECO NUMBER:</b><br>ECO-17-008496                                                                                                                                      | <b>SCALE:</b><br>None                                                                                                                             | <b>SIZE:</b><br>A             | <b>SHEET:</b><br>2 of 2 |

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