

MATERIALS

- 1. OUTER INSULATION SLEEVE: Heat-shrinkable, radiation cross-linked modified fluoropolymer. Color: black.
- 2 & 3. SHIM SLEEVE: Heat-shrinkable, radiation cross-linked fluoroelastomer. Color: black.
- 4. SEALING SLEEVE: Qty: 3

INSULATION SLEEVE: Heat-shrinkable, transparent blue, radiation cross-linked modified polyvinylidene fluoride.

SEALING RINGS: Immersion resistant thermoplastic. Color: one clear, one yellow.

5. CRIMP SPLICE: Nickel-plated copper alloy. Color code: yellow, Qty: 3 BASE METAL: Copper Alloy 101 or 102 per ASTM B-75. PLATING: Ductile Nickel per QQ-N-290.

APPLICATION

1. This kit is used to provide an environmentally protected 1 to 1 splice in twisted triad cables having nickel-plated conductor and shield, and having an insulation rated for at least 135°C, (eg. 1-Raychem 55PC4136-20-9/0/2-9 to 1-Raychem 55PC4133-12-9/0/2-9).

Primary: 12 AWG – 16AWG (CMA¹: 6755 – 1900)

¹ For smaller primaries, CMA can be achieved by folding back wire strands.

Jacket diameter²: ø9.53 (ø0.375) max.

²Cable jacket can be built up for smaller cable with the use of a shim sleeve or two shim sleeves. In this case, jacket diameter should be 4.75 (0.187) max.

2. Temperature range: -55°C to +150°C.

Electronics		30 M	Raychem 05 Constitution Drive Ienlo Park, CA 94025,	Products ^{USA}	TITLE 1 SI	TITLE : 1 TO 1 TWISTED TRIAD, IN-LINE CRIMP SPLICE KIT, LARGE, NI-PLATED SPLICE				
Unless otherwise sp Inches dimensions	pecified dimen are in between	sions ar bracket	e in millimeters. s.		DOCUMENT NO.: D-150-0295					
TOLERANCES: 0.00 N/A 0.0 N/A 0 N/A	ANGLES: N/A ROUGHNESS IN MICRON		Tyco Electronics reserves the right to amend this drawing at any time. Users should evaluate the suitability of the product for their application.			DCR NUMBER: D020249		REPLACES: D010296		
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SPECIFICATION CONTROL DRAWING

INSTALLATION PROCEDURE

1. Cable preparation. See figure below.

Tolerances: All lengths ± 0.50 (0.020).

- A For cables that requires primary wire strands fold-back; see Cable Side A:
 - a) Remove cable jacket and shield: 54.60 (2.150).
 - b) Cut 2 primaries on cable: 25.40 (1.000) from cable jacket.
 - Note: The short primary on this cable side is to be crimped with the long primary on the other cable.
 - c) Strip primaries: 16.50 (0.650).
 - d) Fold back wire strands as shown to fit crimp barrel.
- B For cables that does not require primary wire strands fold-back; see Cable Side B:
 - a) Remove cable jacket and shield: 47.65 (1.875).
 - b) Cut 1 primary: 18.40 (0.725) from cable jacket.
 - c) Strip primary: 8.25 (0.325).



2. Application Equipment

a) AD-1377 crimp tool or equivalent.

b) Steinel HL1802E Heat Gun with a soldersleeve reflector (Setting of 13 - 14)

3. Assembly Procedure



- a) Place the tubing on one end of the assembly.
- b) If necessary to build up cable jacket, place two pieces of shim tubing onto the small cable, position shim sleeve #1 (3" pc.) flush with the jacket and recover. Repeat for the shim sleeve #2 (2.5" pc.).
- c) Primary Conductor Splice:
 - 1) Place a sealing sleeve onto the longer lead cable.
 - 2) Crimp primaries into opposite ends of the crimp splices using a calibrated Raychem AD-1377 crimp tool or equivalent.
 - 3) Center the sealing sleeves over the splices.
 - 4) Apply heat to the center of the sleeve until it recovers, and then heat ends until sealing rings melt and flow along wires.

d) Inspection:

- 1) Conductors must be visible at point where they enter the crimp barrel.
- 2) Both indentations of a crimp must be on the crimp barrel.
- 3) Sealing sleeve inserts must have flowed along wire insulation.
- 4) Sleeve must not have discolored to the degree that the crimp barrel cannot be inspected.
- 5) Sleeve must not be cut or split.

e) Position the tubing and center to overlap the splice equally on each end and apply heat to shrink the tubing.

Unless otherwise specified dimensions are in millimeters. Inches dimensions are in between brackets.

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D-150-0295	А	1	D020249	18-Jul-02	2 of 2

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