CUSTOMER DRAWING



* I.D.: a) As received; b) After unrestricted recovery thru meltable insert.

MATERIALS

- 1. INSULATION SLEEVE: Heat-shrinkable, transparent blue, radiation cross-linked modified polyvinylidene fluoride.
- 2. SEALING RINGS: Immersion resistant thermoplastic. Color: one clear, one color coded (see table below).
- 3. CRIMP SPLICER:

Base Metal: Copper alloy 101 or 102 per ASTM B-75.

Plating: Tin, per ASTM B545.

Stamp marking XX approximately as shown on the back of inspection window. Color code: See table I.

TE Connectivity				TITLE: SEALED IN-LINE CRIMP SPLICE, SAE AS81824/1			
Unless otherwise specified dimensions are in millimeters.Raychem[Inches dimensions are shown in brackets]Devices				DOCUMENT NO.: D-436-36/-37/-38			
TOLERANCES: 0.00 N/A 0.0 N/A 0 N/A	ANGLES: N/A ROUGHNESS IN MICRON	Tyco Electronics reser amend this drawing at should evaluate the su product for their appli	any time. Users itability of the	REV: F	DATE: Aug	gust 19, 2016	
PREPARED BY: TNGUYEN	CAGE CODE: 06090	ECO NUMBER: ECO-16-012043		SCALE: NTS	SIZE: A	SHEET: 1 of 3	

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CUSTOMER DRAWING

TABLE I - DIMENSIONS

Part Name	I.D.* <u>a_min</u> b max	Crimp Splicer							
		øA	øB	С	D	E max	Color Code	Wgt. Lbs/Mpc max	
D-436-36	$\frac{2.16}{0.64} \frac{(0.085)}{(0.025)}$	$\frac{1.27}{1.14} \frac{(0.050)}{(0.045)}$	<u>2.03 (0.080)</u> 1.91 (0.075)	$\frac{12.95}{12.45} \frac{(0.510)}{(0.490)}$	$\frac{6.22}{5.72} \frac{(0.245)}{(0.225)}$	0.38 (0.015)	Red	1.02	
D-436-37	$\frac{2.79}{0.64} \underbrace{(0.110)}_{(0.025)}$	$\frac{1.75\ (0.069)}{1.63\ (0.064)}$	<u>2.70 (0.106)</u> 2.57 (0.101)	$\frac{14.86}{14.35} \underbrace{(0.585)}_{(0.565)}$	$\frac{7.11}{6.60} \underbrace{(0.280)}_{(0.260)}$	0.51 (0.020)	Blue	1.61	
D-436-38	$\frac{4.32}{0.64} \frac{(0.170)}{(0.025)}$	$\frac{2.60}{2.46} \frac{(0.102)}{(0.097)}$	<u>3.89 (0.153)</u> 3.73 (0.147)	$\frac{14.86}{14.35} \underbrace{(0.585)}_{(0.565)}$	$\frac{7.11}{6.60} \underbrace{(0.280)}_{(0.260)}$	1.27 (0.050)	Yellow	2.72	

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TABLE II – RECOMMENDED WIRE RANGE BASED ON CONDUCTOR CMA (mm²) (REFERENCE)

PART NUMBER	MIL SPEC EQIVALENT SIZE	SINGLE WIRE	MULTIPLE WIRE RANGE CMA (mm ²)	$\begin{array}{c} MULTIPLE \ WIRE \ TOTAL \\ OD \ (OD_{1} + OD_{2}) \ MAX \end{array}$
D-436-36	M81824/1-1	26-24-22-20	304 - 1510 (0.15 - 0.75)	0.085 (2.16)
D-436-37	M81824/1-2	20-18-16	1058 - 2680 (0.53 - 1.34)	0.110 (2.79)
D-436-38	M81824/1-3	16-14-12	2375 - 6755 (1.19 - 3.37)	0.170 (4.32)

TABLE III – STANDARD CONDUCTOR CMA (REFERENCE)

CONDUCTOR		SIZE						
CONFIGURATION	26	24	22	20	18	16	14	12
STRANDS	19	19	19	19	19	19	19	37
CMA	304	475	754	1216	1900	2426	3831	5874
(MM ²)	(0.15)	(0.24)	(0.38)	(0.61)	(0.95)	(1.21)	(1.92)	(2.94)

APPLICATION

- 1. These parts are designed to provide immersion resistant in-line splices, maximum of two wires per side of crimp and falling within the diameter range specified in this customer drawing, and having insulations rated for 135°C.
- 2. Parts will meet all requirements of SAE AS81824/1 when installed as outlined below. Assembly is not required for acceptance testing inspection.
- 3. Acceptance sampling shall be in accordance with Paragraph 4.6.1 of AS81824Tm.
- 4. Packing and packaging shall be in accordance with Sections 5, Level C, of AS81824Tm.
- 5. This document takes precedence over documents reference herein.

ETE TE Connectivity				SEALED IN-LINE CRIMP SPLICE, SAE AS81824/1			
Unless otherwise specified dimensions are in millimeters. [Inches dimensions are shown in brackets] Raychem Devices TOLERANCES: ANGLES: N/A Tyco Electronics reserves the right to				DOCUMENT NO.: D-436-36/-37/-38			
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PREPARED BY: TNGUYEN	CAGE CODE: 06090		: 4-012043	SCALE: NTS	SIZE: A	SHEET: 2 of 3	

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CUSTOMER DRAWING

ASSEMBLY PROCEDURE:

- 1. Strip wires 5/16" to 11/32".
- 2. Insert one or two wires on one side of the crimp barrel and crimp using a Raychem AD-1377 crimp tool. Repeat on the opposite side of the crimp.
- 3. Center sealing sleeve over the splice.
- 4. Slide sealing sleeve over both wires on one side of the crimp if two wires will be use.
- 5. Apply heat, using an approved heat source, first to one of the inserts and then the other. Heat should be applied until insert melts and flows axially along the wire.

= <i>T</i>		SEALED IN-LINE CRIMP SPLICE, SAE AS81824/1					
Unless otherwise specified dimensions are in millimeters. Raychem [Inches dimensions are shown in brackets] Devices				DOCUMENT NO.: D-436-36/-37/-38			
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PREPARED BY:	CAGE CODE:	ECO NUMBER:		SCALE:		SIZE:	SHEET:
TNGUYEN	06090	ECO-14	ECO-14-012043		S	A	3 of 3
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