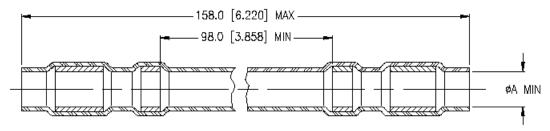
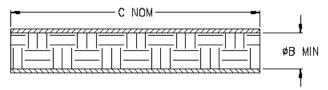
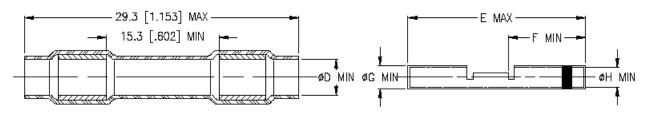
## **CUSTOMER DRAWING**



Item 1: OUTER SOLDERSLEEVE, Qty/kit: 1



Item 2: JUMPER BRAID, Qty/kit: 1



Item 3: SEALING SLEEVE, Qty/kit: see table 1

Item 4: CRIMP, Qty/kit: see table 1

## TABLE 1

Product	Component Dimensions								Gauge	Quantity/Kit	
Name	øΑ	øΒ	C	øD	Е	F	øG	øΗ	Size Range	Item	Item 4/
	MIN	MIN	REF	MIN	MAX	MIN	MIN	MIN	(AWG)	3	ColorCode
D-150-20	4.00	5.95	88.90	2.16	13.00	5.70	1.90	1.20	20 - 26	1	1
D-130-20	(0.157)	(0.234)	(3.500)	(0.085)	(0.512)	(0.224)	(0.075)	(0.047)	20 - 20		Red
				2.16	13.00	5.70	1.90	1.20	20 - 26	3	3
D-150-21	6.85	8.00	84.00	(0.085)	(0.512)	(0.224)	(0.075)	(0.047)	20 - 20	3	Red
	(0.270)	(0.315)	(3.307)	2.80	14.85	6.60	2.55	1.65	16 - 18	1	1
				(0.110)	(0.585)	(0.260)	(0.100)	(0.065)	10 - 18		Blue
D-150-22	2.75	8.70	89.00	2.16	13.00	5.70	1.90	1.20	20 - 26	4	4
	(0.108)	(0.343)	(3.504)	(0.085)	(0.512)	(0.224)	(0.075)	(0.047)	20 - 20		Red
D-150-24	9.40	10.72	76.20	2.80	14.85	6.60	2.55	1.65	16 - 18	4	4
	(0.370)	(0.422)	(3.000)	(0.110)	(0.585)	(0.260)	(0.100)	(0.065)	10 - 16		Blue

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<u>₹TE</u>					TITLE: SPLICING KIT - SHIELDED CABLE					
Unless otherwise specified dimensions are in millimeters.  [Inches dimensions are shown in brackets] Raychem  DIMENSIONING AND TOLERANCING PER ASME  Y14.5-2009  Raychem  Devices						D-150-20/-21/-22/-24				
TOLERANCES: 0.00 N/A 0.0 N/A 0 N/A	00 N/A drawing at any time. Usual notation of the production of th			ving at any time.	rves the right to amend this Users should evaluate the uct for their application.	Revision: D4	Issue Date:	ch 2020		
REVISED BY: T. NGUYEN		06090		ECO: ECO-2	20-003572	SCALE: NTS	SIZE:	SHEET: 1 of 3		

# **MATERIALS**

1. SOLDERSLEEVE:

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

SOLDER: TYPE Sn63 per ANSI J-STD-006. FLUX: TYPE ROL0 per ANSI-J-STD-004.

MELTABLE RINGS: Environment resistant fluorocarbon. Color: Natural.

2. JUMPER BRAID: Tin plated copper wires.

3. SEALING SLEEVE: Heat-shrinkable, transparent blue, with immersion resistant, thermoplastic sealing rings,

4. CRIMP SPLICE: Tin plated copper alloy.

BASE METAL: Copper alloy 101 or 102 per ASTM B-75.

PLATING: Tin per ASTM-B545 and ASTM-B339.

### **APPLICATION**

- 1. These kits are used to provide a shielded immersion resistant in-line splices in shielded cables when installed as outlined herein, rated for at least 125°C minimum.
- 2. Temperature range: -55°C to +150°C.

#### **INSTALLATION PROCEDURE**

1. Cable Preparation.

Strip the cables as shown: (Single conductor shown for clarity)

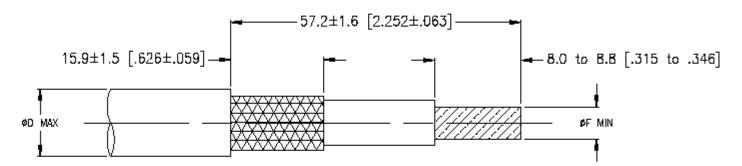


Figure 1:

## TABLE 2

	Cable Dimensions							
Part Name	øD	øF	Gauge	(AWG)	Number			
Tvanic	max	min	Min	Max	of conductors			
D-150-20	4.00 (0.157)	0.650 (0.026)	26	20	1			
D-150-21	6.85 (0.270)	0.650 (0.026)	26	20	2 or 3			
	6.85 (0.270)	0.650 (0.026)	18	16	1			
D-150-22	7.25 (0.285)	0.650 (0.026)	24	20	4			
D-150-24	9.40 (0.370)	0.650 (0.026)	18	16	4			

DOCUMENT NO.	REV:	DATE:	SHEET:	
D-150-20/-21/-22/-24	D4	January 07, 2020	2 of 3	

#### **ASSEMBLY PROCEDURE:**

### **WARNING**

Follow installation instructions carefully. Use adequate ventilation and avoid charring or burning during installation. Charring or burning the product will produce fumes that may cause eye, skin, nose and throat irritation.

#### 1.0 SCOPE

The procedure listed herein must be followed in order to obtain immersion resistant in-line splices in cables having up to four conductors, a single overall tin plated shield and insulation rated for at least 135 °C.

#### 2.0 PROCEDURE

- a) Slide the correct "Outer SolderSleeve" and "Jumper Braid" onto one of the cables to be spliced.
- b) Prepare both cables as shown in Figure 1. All center conductors are prepared the same regardless of size or number.
- c) Slide the appropriate size "Sealing Sleeve" onto one end of each pair of conductors to be spliced.
- d) Insert one conductor into the appropriate crimp barrel and crimp using a Raychem AD-1377 Crimp Tool. Repeat for other wire(s).
- e) When all wires have been spliced, slide each "Sealing Sleeve" into position so that each splice is centered between the inserts of the sealing sleeve.
- f) Apply heat using an approved heat source, first to one of the inserts and then along the other. Heat should be applied until the insert melts and flows axially along the wire.
- g) Slide the "Jumper Braid" onto the splices so that it is approximately centered.
- h) "Milk" the braid from center to edges using an outward wiping motion. This will work the jumper into contact with the cable shield; jumper braid ends should extend over the cable insulation and be forced down with a twisting motion to allow clearance for the SolderSleeve.
- i) Center the "Outer SolderSleeve" over the assembly and apply heat to one solder ring and then its adjacent sealing ring. Heat should be applied until the solder ring melts and flows into the braid and the sealing ring flows axially along the cable. Move the sleeve slowly in the heated area so that insulation recover and heat the second solder ring and insert as described above.

### **WARNING**

The heating tool and the assembly become hot during the installation of the SolderSleeve/Sealing Sleeve. To prevent burns, allow tool and the assembly to cool down before handling.