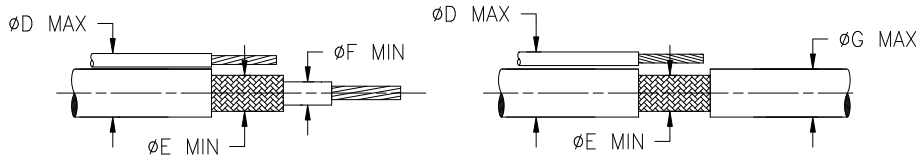


## B-150-XX (-S) and B-155-XX SolderSleeves

### 1.0 CABLE DIMENSIONS



Product Name	Cable Dimensions			
	D max	E min	F min	G max
B-150-03 (-S), B-155-03	3.0 (0.118)	1.5 (0.060)	1.0 (0.040)	2.5 (0.098)
B-150-05 (-S), B-155-05	4.8 (0.189)	2.0 (0.079)	1.5 (0.060)	4.3 (0.170)
B-155-06	6.7 (0.264)	3.3 (0.130)	2.8 (0.110)	6.0 (0.236)
B-150-07 (-S), B-155-07	7.3 (0.287)	3.3 (0.130)	2.8 (0.110)	6.8 (0.268)
B-155-09	9.2 (0.264)	4.5 (0.177)	4.0 (0.157)	8.7 (0.343)
B-150-11 (-S), B-155-11	11.5 (0.453)	4.5 (0.177)	4.0 (0.157)	10.8 (0.425)
B-150-13, B-155-13	15.1 (0.594)	7.0 (0.276)	6.5 (0.260)	13.3 (0.524)
B-150-17, B-155-17	18.0 (0.709)	9.0 (0.354)	8.0 (0.315)	16.0 (0.630)
B-150-23, B-155-23	23.5 (0.925)	12.0 (0.472)	11.0 (0.433)	21.5 (0.846)
B-150-33, B-155-33	34.0 (1.340)	19.0 (0.748)	17.5 (0.690)	32.0 (1.260)

### 2.0 APPLICATION EQUIPMENT

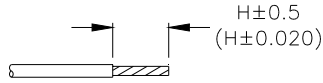
Product Name	Configurations	
	Reflector	Hot Air Gun
B-150-03 (-S), B-155-03	PR25	CV-1981 (220V or 110V) - 1460W (Setting between 7 and 7.5, temperature: 650-750°F) • See Warning Note below for low temperature applications and uncross linked wires and cables.
B-150-05 (-S), B-155-05	PR25 or PR25D	
B-155-06		
B-150-07 (-S), B-155-07		
B-155-09	PR25D or PR34	
B-150-11 (-S), B-155-11	PR33 or PR34	
B-150-13, B-155-13		
B-150-17, B-155-17		
B-150-23, B-155-23		
B-150-33, B-155-33		

#### WARNING

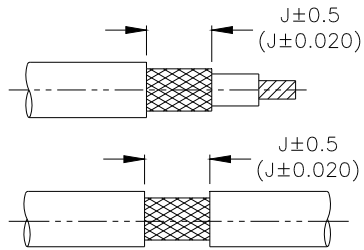
- IR tools are not recommended for use with black wire or cable insulations and must not be used for TE/Raychem 99 wire uncross linked wires.
- Hot Air guns shall be set to a temperature as low as 300°C (570°F) to avoid thermal damage on uncross linked wires, such as TE/Raychem 99 wire.
- TE recommends controlling temperature of application equipment such as hot air guns regularly.

### 3.0 CABLE / WIRE PREPARATION

#### 3.1 Strip the ground lead wire insulation as shown



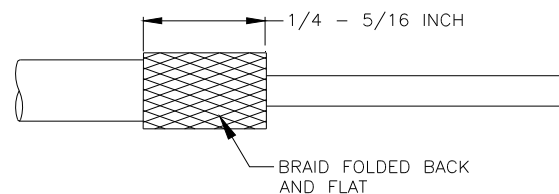
#### 3.2 Prepare the cable as shown



Product Name	H±0.5(±0.020)	J±0.5 (±0.020)
B-150-03 B-155-03	6.0 (0.236)	7.0 (0.276)
B-150-05 B-155-05	8.0 (0.315)	9.0 (0.354)
B-155-06	9.0 (0.354)	10.0 (0.394)
B-150-07 B-155-07	10.0 (0.394)	11.0 (0.433)
B-155-09	11.0 (0.433)	12.0 (0.172)
B-150-11 B-155-11	12.0 (0.472)	13.0 (0.512)
B-150-13 B-155-13	16.0 (0.630)	17.0 (0.670)
B-150-17 B-155-17	21.0 (0.827)	23.0 (0.906)
B-150-23 B-155-23	29.0 (1.142)	31.0 (1.220)
B-150-33 B-155-33	29.0 (1.142)	31.0 (1.220)
B-150-03-S	6.0 (0.236)	7.0 (0.276)
B-150-05-S	6.0 (0.236)	7.0 (0.276)
B-150-07-S	8.0 (0.315)	9.0 (0.354)
B-150-11-S	8.0 (0.315)	9.0 (0.354)

#### 3.3 End Strip with Braid Fold Back

This procedure is recommended for cables rated less than 125°C such as TE/Raychem 99 wire when installing SolderSleeve devices. This is to reduce the heating time and the possibility of damage to the primary insulation.

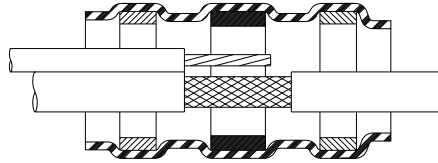


## 4.0 ASSEMBLY

### 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. Consult Material Safety Data Sheets **RAY5103** for further information.

- 4.1 Position stripped portion of ground lead over the exposed cable braid. Slide the SolderSleeve device over the exposed braid. Center the solder preform over the stripped area of cable as shown



- 4.2 Heating Procedure

### WARNING

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

Allow the hot air gun to reach its operating temperature. Place the assembly centrally in the appropriate reflector (see section 2) so the heat is concentrated on the solder preform.

When heat is applied the tubing shrinks, the inserts melt, flow and form a seal. Continue heating until the solder melts and flows, and not any longer. A solder fillet between the ground lead and the cable braid must be visible. Allow the assembly to cool down before handling.

- 4.3 If it is necessary to bend the ground lead after the installation, a minimum bend radius of 1 diameter of the wire should be allowed

## 5.0 Inspection

- 5.1 Inspection for proper assembly

- 5.1.1 The exposed ground lead must not overlap the cable jacket.  
5.1.2 The insulation sleeve must overlap the cable jacket so that there is no exposed braid.

- 5.2 Inspection for proper heating

- 5.2.1 The solder preform must be completely melted and have flowed along the conductor

- 5.2.2 A solder fillet must be visible between the ground lead and the braid.

- Visible remnants of the original shape of the solder preform indicate an under heated termination.
- Lack of solder fillet indicates an overheated termination.

- 5.2.3 The sleeve must be shrunk onto the cable jacket.

- An incomplete shrunk sleeve indicates an under-heated termination.
- A discolored dark brown sleeve indicates an overheated termination.

### 5.3 Inspection for damage

5.3.1 The sleeve must not be cut or split.

5.3.2 There must be no braid poking through the sleeve.

5.3.3 The cable jacket and the shield termination should not exhibit signs of mechanical damage or overheating such as cuts, melting, charring.

### 6.0 **Repair:** (if necessary)

#### 6.1 Repair of under-heated termination:

- Reheat under-heated termination to obtain proper solder flow (see section 4.2)

#### 6.2 Repair of overheated termination - Remove the shield termination as follows;

6.2.1 Score the full length of the sleeve with a sharp blade. Be careful not to cut the cable or wire jacket.

6.2.2 By using the same heating tool as for the installation, heat the shield termination to soften it, and strip it off with pliers or tweezers.

6.2.3 Install a new shield termination in accordance with the procedure (see section 4).

## Appendix to the RPIP-688-00

### -Guide for Visual Inspection-

#### 1. Underheated Installation

- Contour of solder preform is visually in joint area.
- Contour of cable braid, in solder area, is obscured by solder.

Unacceptable



#### 2. Acceptable Installation

- Solder joint is clearly visible through the sleeve.
- Solder preform has lost all appearance of ring shape.
- Contour of cable braid is visible through Solder.
- Fillet is clearly visible along the cable braid.
- Insert have melted along the cables.

Acceptable



### 3. Over-Heated Installation

- Solder Joint is not visible because of severe darkening
- Solder fillet is not visible along the solder joint area
- Cable insulation is damage outside the sleeve

Unacceptable



All of the above information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. TE Connectivity Corporation makes no warranties as to the accuracy or completeness of the information and disclaims any liability regarding its use. TE Connectivity Corporation's only obligations are those in the Standard Terms and Conditions of Sale for this product, and in no case will TE Connectivity Corporation be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use or misuse of the product.