Coaxial SolderSleeve Termination with Pre-Installed Wires or PCB Termination Body, B-044, B-043, B-041, B-040, B-020, B-021, B-046, D-148 Series

Cable Type	Typical RG Cable #	Pre-Installed		
		Stranded Wires	Solid Wires	PCB Terminator Body
-A-	RG 178 RG 404	B-044-22-N B-044-24-N B-044-26-N B-044-30-N	B-043-24-N B-043-26-N B-043-28-N B-043-30-N	B-046-10-N / D-148-0202 B-046-11-N / D-148-0204 B-046-12-N / D-148-0203 B-046-13-N / D-148-0205 B-046-14-N / D-148-0201 B-046-78-N
-B-	RG 179 RG 316	B-040-20-N B-040-22-N B-040-24-N B-040-26-N B-040-28-N B-040-30-N	B-041-24-N B-041-26-N B-041-28-N B-041-30-N	B-046-15-N / D-148-0206 B-046-16-N / D-148-0208 B-046-18-N / D-148-0210 B-046-66-N / D-148-0207 B-046-68-N / D-148-0209
-C-	RG 180 RG 302 RG 303	B-020-20-N B-020-22-N B-020-24-N B-020-26-N	B-021-26-N	n/a
-D-	n/a	n/a	n/a	B-046-10 B-046-14

Sections

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

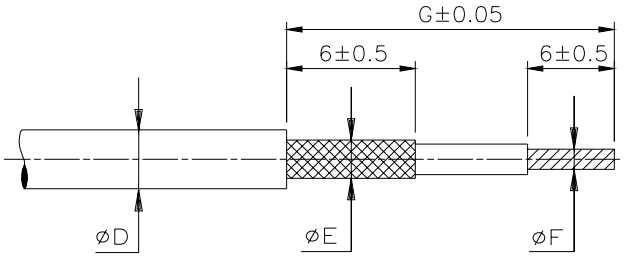
1. Application Equipment:

1.1 The use of Tyco Electronics holding fixture AD-1319-9 is recommended to facilitate the installation.

1.2 Heating tools:
Recommended Tyco Electronics hot air guns and adequate reflectors.

Heating tool	Reflector
AA-400 Superheater	AA-400-94
CV-1981	PR-25D
HL 1910E: 6 on dial (1)	HL1802E-ADAPT and PR25D
HL 2010E: 700°F on LCD (1)	

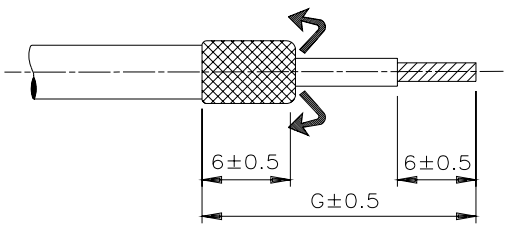
2. Cable Preparation:



Cable Type	øD min	øD MAX	øE min	øE MAX	øF min	G±0.5
A	1.7	3.4	1.3	2.3	0.3	16
B	1.7	4.4	1.5	2.8	0.3	16
C	2.4	6.3	2.4	4.6	0.3	19
D	1.7	2.2	1.3	1.7	0.3	16

For best results, it is recommended to pre-tin the central conductor if the diameter øF $\geq$0.5mm.

Note: If the diameter over the braid (øE) is smaller than the minimum mentioned in the table above, foldback the braid over the cable jacket as shown below.



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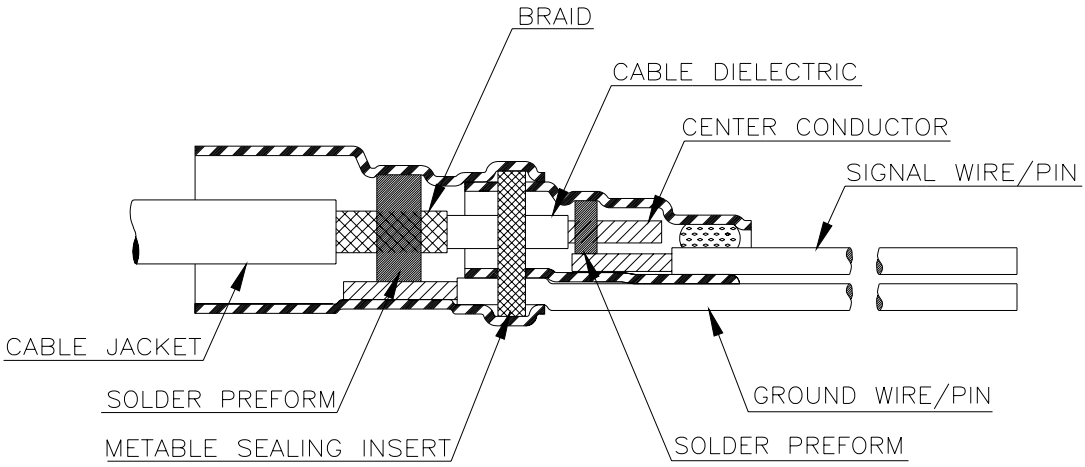
3. Assembly:

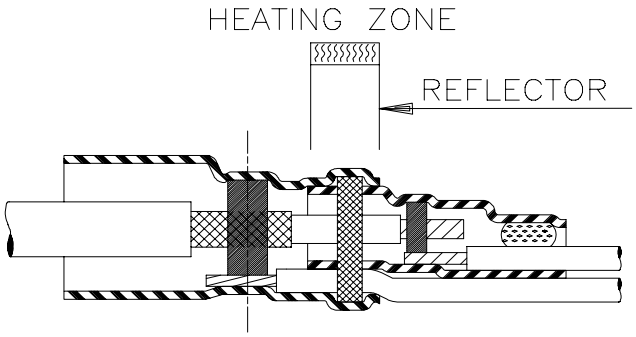
Insert the prepared coaxial cable into the open end of the coaxial SolderSleeve termination so that the ground wire/pin is almost touching the cable jacket. The solder preforms are thus positioned in the middle of the braid and in the middle of the stripped part of the center conductor.



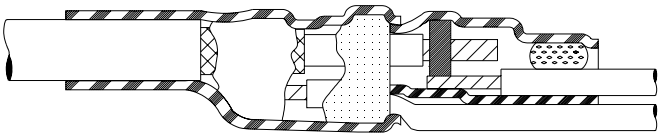
4. Termination Procedure:

4.1 Select the heating tool and fit it with the appropriate reflector.Allow the hot air generator to warm up and reach operating temperature.

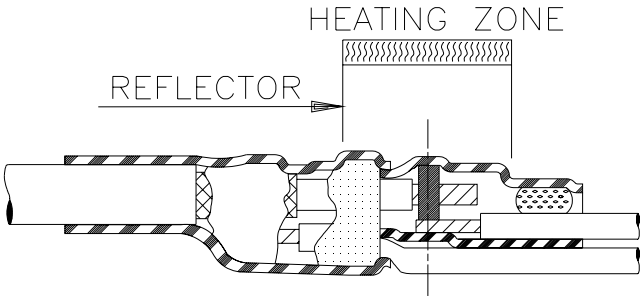
4.2 Place the coaxial SolderSleeve termination assembly in the front of the heating tool.



Position the center sealing insert of the SolderSleeve termination assembly whithin the heating tool reflector and apply heat until soldersleeve tubing collapses onto cable dielectric.
Move assembly whithin the reflector to the large solder preform and apply heat until it melts and flows forming a solder fillet between the cable shield and the ground wire and then shrink the tubing onto the cable jacket.

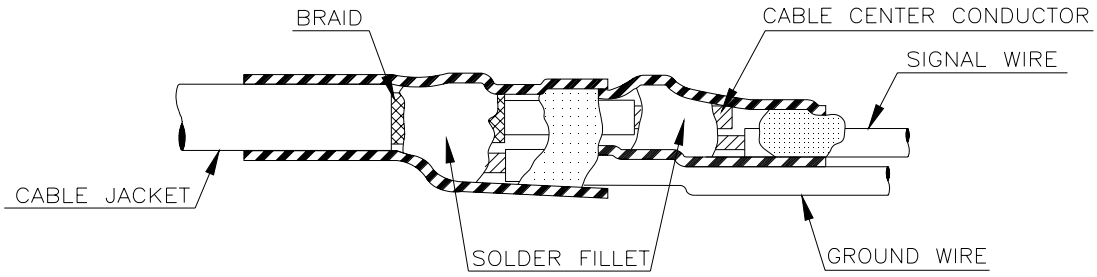


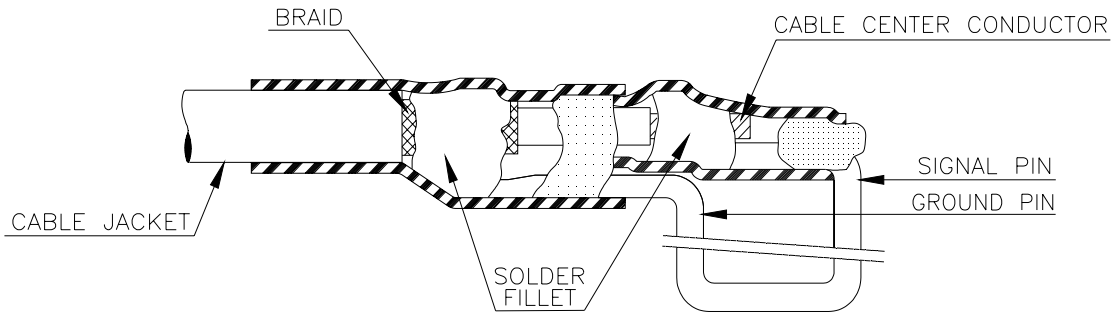
4.3 Move the reflector to center the small solder preform in the heating zone



- Apply heat to the small preform until it melts and flows forming a solder fillet between the two conductors.

4.4 Hold the assembly steady while cooling down (the figures below show a typical completed termination).





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5. Inspection:

5.1 Inspection for proper assembly.

5.1.1 There must be no solder bridge between the ground wire/pin and the center conductor.

5.1.2 The signal wire/pin must not overlap the cable dielectric.

5.1.3 The ground wire/pin must not overlap the cable jacket.

5.1.4 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 two solder preforms must be completely melted and have flowed along the conductors.
A solder fillet must be visible between the ground wire/pin and the braid, and between the signal wire/pin and the center conductor.

- Visible remnants of the original shape of the solder preforms indicate an underheated termination.
- Lack of solder fillets indicates an overheated termination.

5.2.2. The sleeve must be fully shrunk onto the cable jacket.

- An incompletely shrunk sleeve indicates an underheated 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 or center conductor strands poking through the sleeve.

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

6. Repair: (if necessary)

6.1 Repair of underheated termination.

6.1.1 Reheat underheated termination to obtain proper solder flow (see section 4).

6.2 Repair of overheated or damaged termination.

6.2.1 If the coaxial cable jacket is not damaged, remove the coaxial SolderSleeve termination as follows:

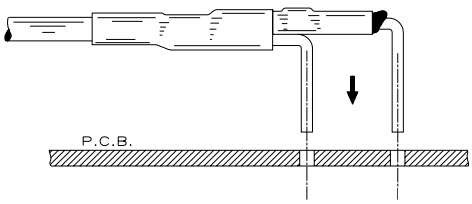
6.2.1.1 Score the full length of the sleeve with a sharp blade.
Be careful not to cut the cable jacket or the dielectric.

6.2.1.2 By using the same heating tool as for installation, heat the coaxial Soldersleeve termination to soften it, and strip it off with pliers or twizzers.

6.2.1.3 Install a new coaxial SolderSleeve termination in accordance with the procedure (see section 3).

6.2.2 If the coaxial cable jacket or the dielectric is damaged, cut off the assembly, re-strip and install a new coaxial SolderSleeve termination (see section 2).

7. Connection to PCB: (For PINPAK device only)
Trim the pins with a side cutter.
Insert the pins into the PCB and proceed with other necessary procedures.



[1] These values are for reference only and may change based on other variables (i.e. reflector type, sleeve's relative distance to the reflector, etc.)

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