

Installation Procedure for RF-One-Step BNC and TNC Connectors

1.0 Products / Cables

Products	RG Cables (See Note)	Raychem Cables
RBD-50-L-XX RTD-50-L-XX	RG 165 U RG 215 U RG 213 U RG 225 U RG 214 U	
RBD-50-M-XX RTD-50-M-XX	RG 58 CU RG 303 U RG 141 AU RG 400 U RG 142 BU	5019D3318 5020A1311
RBD-50-P-XX RTD-50-P-XX	RG 223	
RBD-50-S-XX RTD-50-S-XX	RG 174 U RG 196 AU RG 178 BU RG 316 U RG 188 AU	5026A1311 5028A1317 5030A1317
RBD-75-L-XX RTD-75-L-XX	RG 6 AU RG 144 U RG 11 AU RG 219 U RG 12 AU RG 59 BU	
RBD-75-M-XX RTD-75-M-XX	RG 179 BU RG 187 AU	7524A1311 7528A1317
RBD-75-S-XX RTD-75-S-XX		7530A1317

Note: The cables listed are normally compatible with the connectors listed. Cable dimensions must meet the dimensions listed in the cable dimensions table in the applicable RBD or RTD connector Specification Control Drawing. User should verify connector / cable compatibility

2.0 Application Equipment

A) CV-1981 with reflector PR 25 (S or M size), or PR 25-D (L size).

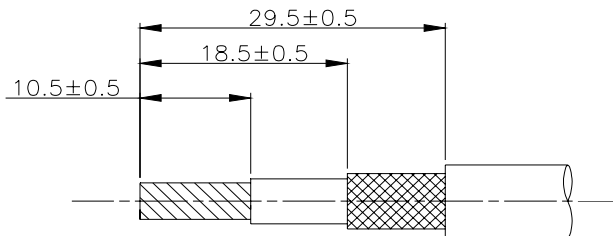
- Setting: 7 - 8.
- Recommended Temperature = 420°C.

B) Steinel HL1802E with Steinel soldering reflector.

PR 25 (S or M size), or PR 25-D (L size) may be used with HL1802E Adapter.

- Setting: 11 to 12, high speed.
- Temperature: 420°C.

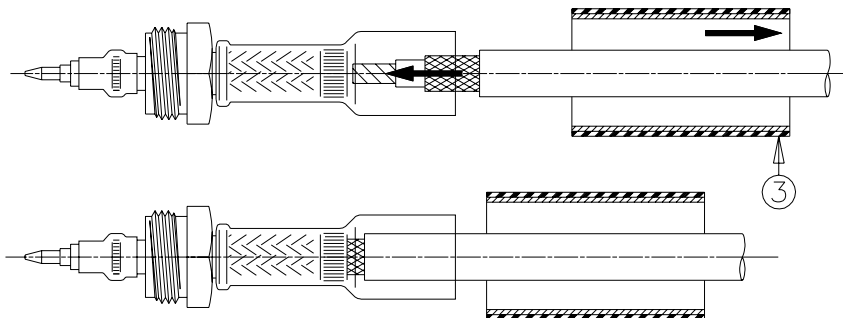
3.0 Cable Preparation



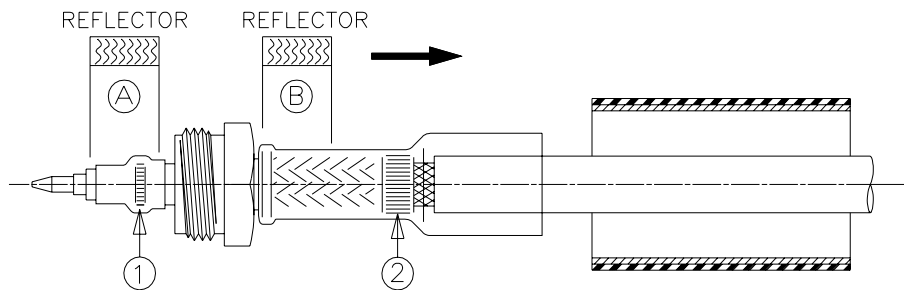
- It is recommended to pre-tin the center conductor before installing S size.
- For RG-303/U, add 1.0 mm to each dimension.

4.0 Assembly

- Pass the black tubing (3) over the prepared cable.
- Slide the cable into the transition until it bottoms.



5.0 Termination of the Transition



Note: Gently hold or support the connector during heating so it does not change position on the cable. Holding the cable too tightly against the transition while heating may seal the cable dielectric to the connector insulator. This may prevent solder flow into center conductor termination area, causing solder to squirt outside the insulation sleeve. Allow hot air gun, fitted with the appropriate reflector (see paragraph 2), to warm up.

- A) Position the solder ring (1) in the reflector at position (A), and heat it until the ring melts, flows into the solder delivery holes, and completely disappears. Continue heating for 3 to 5 seconds.
- B) Move the reflector to position (B), butting it against the Hex flange.
Heat until - the SolderShield collapses and the solder melts and flows.
- the solder ring (2) melts and flows (L or M size).
- C) Shrink the sleeve down on the cable insulation. Let the assembly cool down before handling. Avoid direct heat to low temperature cable jackets.

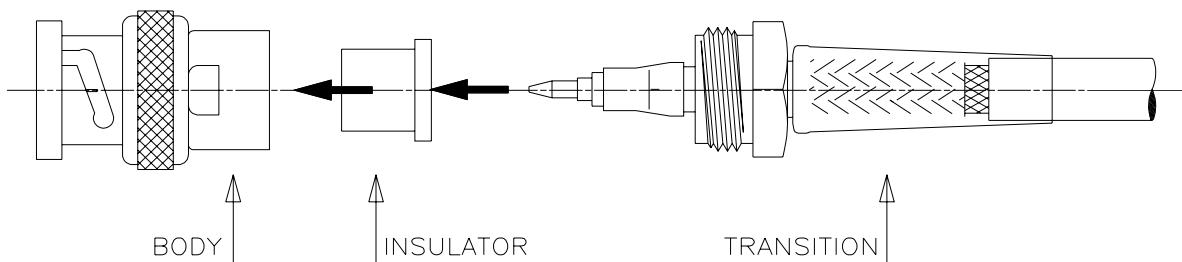
6.0 Inspection

- Check: - Solder rings (1) and (2) have melted and flowed, and no ring shape is visible.
- The sleeve and wire insulation show no signs of mechanical damage or overheating.

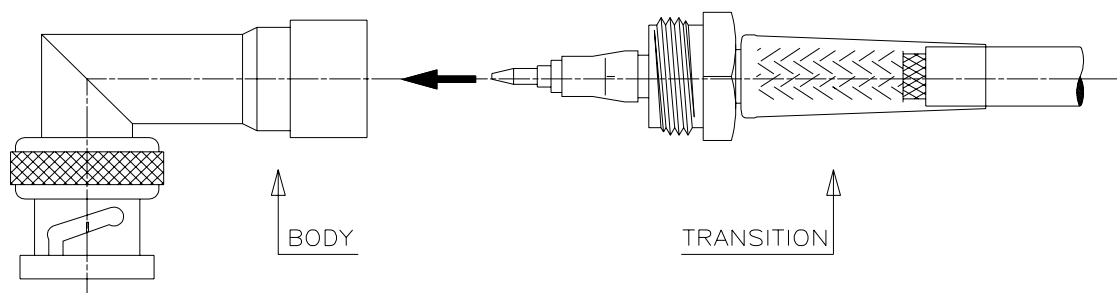
7.0 Connector Assembly

- Push the insulator into the body (straight body only).
- Install O-ring into the connector body, if provided in the kit.
- Screw the transition into the connector until the Hex flange of the transition bottoms on the body.
- Recommended tightening torque: 3 N.m. (26 in.lbs.).

Straight Plug Connector



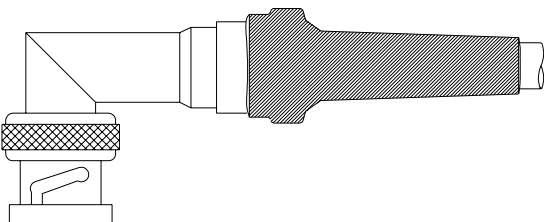
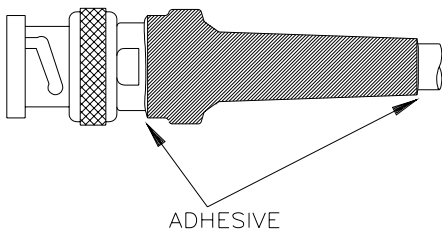
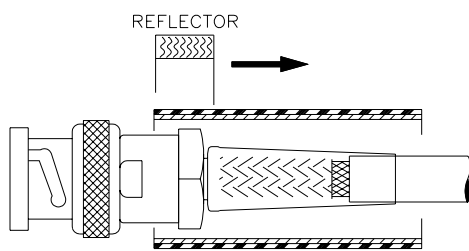
Angle Plug Connector



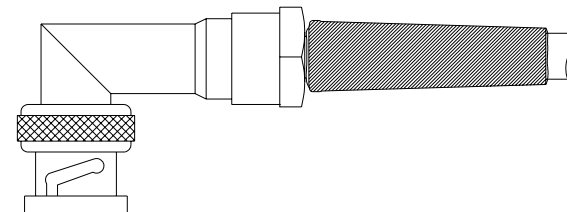
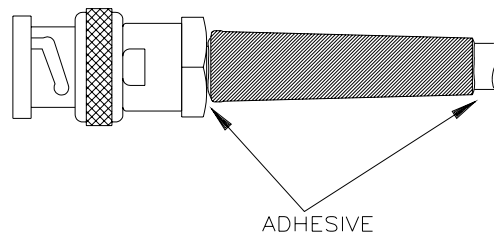
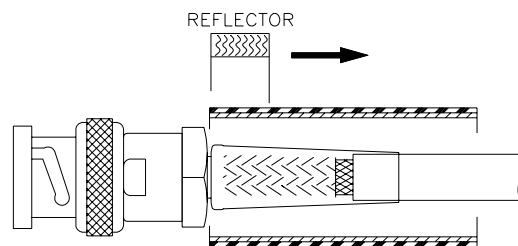
8.0 Protection of the Transition

- For sizes L and M, you can position the black tubing on the connector body or on the transition.
- For size S, position the black tubing on the transition.
- Heat until the tubing shrinks down on the cable insulation and the adhesive melts. Allow the assembly to cool down before handling.

Tubing on the Connector Body (M, L)



Tubing on the Transition (S, M, L)



9.0 Repair Procedure

Transitions can be usually replaced without cutting the cable, if the cable used has the following characteristics:

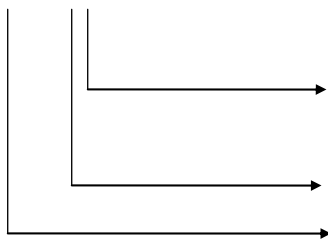
- The temperature rating is greater than 125°C, and
- The dielectric is a solid (non-foam) material, such as FEP or TFE.

Transition Removal and Replacement:

- Score the black strain relief tubing lengthwise. It is not necessary to cut all the way through.
- Heat the tubing. The tubing will separate along the score line. Pull the tubing off with pliers.
- Unscrew the connector body from the transition and remove the insulator and O-ring, if present.
- Score the tubing over the shield. Heat the transition as in (5) until the solder melts and flows.
- Pull the transition off the cable.
- Inspect the cable for damage and re-strip if necessary.
- Reassemble per sections (4) and (5). Replace any damage components.

10.0**Replacement Parts:**

TRA - NN - XY - 00 - KT*

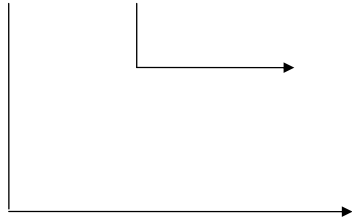


M Male (Pin)
 F Female (Socket)
 S Small
 M Medium
 L Large
 50 = 50 ohm
 75 = 75 ohm

* Includes Teflon insulator and strain relief tubing.

Connector Bodies:

RXD - B - 0Y



0 - Straight Plug.
 1 - Right Angle Plug.**
 2 - Straight Bulkhead Jack.
 3 - Straight Jack.
 4 - Straight Panel Jack.
 B - Bayonet.
 T - Threaded.

** Accepts male (pin) transition only. Teflon insulator supplied in transition kit is not used with right angle plug body.