

## RT-555-X/X-YYY-A260-0 Sealing Sleeves

### 1.0 Scope

This document defines the recommended installation procedure for RT-555-X/X-YYY-A260-0 sealing sleeves. Sleeves are intended to be installed and seal cables spliced or terminated with crimp splices or terminals having a wire insulation jacket diameter from 0.137" to 0.900".

### 2.0 Related Documents

RT-555-X/X-YYY-A260-0 Sealing Sleeve. Tyco Electronics CD Customer Drawing.

### 3.0 Recommended Tools And Miscellaneous Equipment:

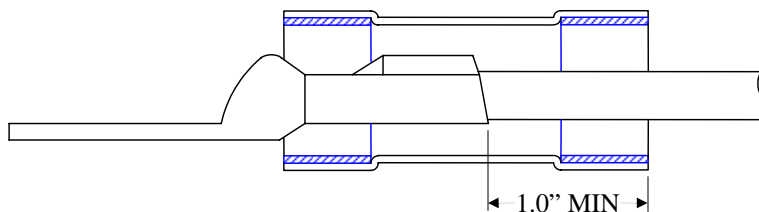
- Protective gloves and eye wear
- IPA or American Polywater Corp. Type HP solvent wipes
- #320 to #150 grit emery cloth
- Wiping rags or towels
- Tyco Electronics hot air gun CV-1981 (1,600 W) with Master Appliance reflector #40060, or
- Tyco Electronics hot air gun CV-1983 (2,200 W) with TG-23 or TG-136 reflector, or equivalent

### 4.0 Process / Procedure

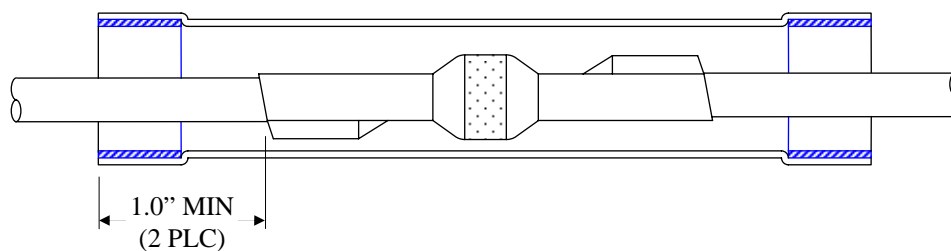
4.1 Select appropriate sealing sleeve based on applicable Tyco Electronics Customer Drawing or table below.

Part Description	Sleeve Dimensions		Cable ØOD Min	Splice Ø OD Max
	Length Max	ØID Min		
RT-555-3/8-2.75-A260-0	2.750	0.330	0.187	0.330
RT-555-3/8-4.75-A260-0	4.750	0.330	0.187	0.330
RT-555-1/2-2.75-A260-0	2.750	0.450	0.250	0.450
RT-555-1/2-5.75-A260-0	5.750	0.450	0.250	0.450
RT-555-3/4-3.00-A260-0	3.000	0.700	0.375	0.700
RT-555-3/4-6.75-A260-0	6.750	0.700	0.375	0.700
RT-555-1.0-3.75-A260-0	3.750	0.900	0.500	0.900
RT-555-1.0-6.75-A260-0	6.750	0.900	0.500	0.900

- 4.2 For PTFE tape wrapped and extruded TFE insulated wires, lightly abrade to a dull finish, using a circumferential motion, the bonding area of cable jacket with #320 to #150 emery cloth, wipe off loose particles with a solvent dampened tissue or clean cloth. Use isopropyl alcohol or other shop approved solvent. Abrade beyond where the sealing sleeves are expected to end by at least one inch. Extruded ETFE insulated wires do not require abrading, clean the area for sealing bonding using isopropyl alcohol other approved solvent. Do not touch cleaned areas with fingers.
- 4.3 Install TG-23 or TG-136 reflector on Tyco Electronics CV-1983 hot air gun and set the dial at maximum. When Tyco Electronics CV-1981 tool is used, install Master Appliance reflector #40060, and set dial at 8-9. Allow hot air gun to warm up for at least 3 minutes.
- 4.4 Select appropriate RT-555 sealing sleeve from table above so that the ends of the sleeve overlap the cable jacket or the harness insulating sleeve by a minimum of 1 inch after fully recovery.
- 4.5 Position one end of the sealing sleeve to the desired location on terminal or center the sealing sleeve over the in-line splice as shown below. If properly sized and positioned, the sealing sleeve should be somewhat larger than the splice being sealed.



**Figure 1.** RT-555 sealing sleeve location on terminals



**Figure 2.** RT-555 sealing sleeve location on in-line splices

- 4.6 When installing sealing sleeves onto in-line splices, begin to apply heat with hot air gun to the center of the sealing sleeve (see caution notes). When installing sealing sleeves onto terminals, begin to apply heat with hot air gun to the end of the sealing sleeve where the terminal is located. Position the assembly at the center of the heating tool reflector. Rotate the assembly slowly back and forth and fully recover each section of the sleeve from the center out to each end for in-line splices, and from one end to the opposite end, for terminals. Continue heating area where adhesive is located for 2 to 3 minutes, depending on cable size, until adhesive melts and flows. Adhesive will form a bead or fillet around sleeve end, and will no longer show shape definition. Do not remove any excess of adhesive that flows from the sleeve.

**Final Inspection**

- 4.7 Visual inspection should produce evidence that the adhesive is located around both ends of the sleeve. The adhesive should not appear scorched or over-heated and there should be no excessive porosity in the adhesive.
- 4.8 Electrical/Mechanical Inspection. Any electrical or mechanical testing required by the purchaser shall be performed on the harness after it has cooled completely to ambient room temperature. Mechanical inspections for bending or flexing the adhesive joint shall be limited to the traditional cable standards requiring at least a "5X cable OD" for determining the diameter of the bending fixture. For example, a 1/2" cable would be flexed over a 2.5" diameter mandrel. Inspection shall include a check for cracks and splits in the jacket and sealing sleeve materials as well as disbonding of the adhesive from either the sleeve or the cable jacket.



**Picture 1.** Installed RT-555 sealing sleeve on terminals



**Picture 2.** Installed RT-555 sealing sleeve on splices

## 5.0 Record Retention

Adequate records shall be maintained of the lot numbers of the component parts on each harness. It is up to the individual users to determine the appropriate level of record retention for their respective program and facility. As a minimum, records identifying the batch number of sealing sleeves shall be maintained for each completed harness assembly.



### **CAUTION:**

- Overheating the product to charring or burning may produce vapors that may cause eyes, skin, nose or throat irritation. Persons with pre-existing eye, skin or respiratory disorders (e.g., asthma conditions) may be more susceptible to the effects of these vapors.
- Shrink products in a well-ventilated area.
- Wear eye protection.
- Tubing and visible sealant (if applicable) may be HOT immediately after shrinking. Hot sealant may stick to unprotected skin and may cause injury.

For assistance or more information, call Tyco Electronics/Raychem: 1-800-926-2425

Product Name	MSDS References
American Polywater Corporation solvent wipes	Type HP Cleaner / Degreaser

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