

Heat Shrink

Airfield Lighting Heat Shrink Kits



Uses

Provides environmental sealing protection for the FAA L-823 style primary plug and receptacle connector used in the wiring of airfield lighting circuits.

Features

- **Mechanical Protection** – The high impact and abrasion resistance of the heat shrink provides excellent mechanical protection
- **Environmental Seal** – Heat shrink is coated internally with a dual-purpose thermoplastic liner. When heated, the liner will encapsulate the connector/cable termination, providing the mechanical strength of a superior adhesive with the environmental sealing capability and corrosion protection of a high-quality mastic.
- **Easy Installation** – When heated above 248 °F (120 °C), the heat shrink tubing shrinks rapidly to seal and encapsulate electrical connections, providing a fast, simple and clean insulation system that can also be removed.
- **Permanent Seal** – Provides protection against water intrusion, abrasion damage, and accidental disconnection and added strain relief for the connector/cable assembly. The kit installs in minutes, providing a permanent environmental seal.
- **Easily Removed Waterproof Seal** – The 16-inch long heat shrink tubing has sealant coating the entire length of the tube (Part No. 71A0088-U). Heat shrink tubing can also be supplied with three inches of sealant applied internally on each end of the sleeve (Part No. 71A0052 or APL-L823A). This allows for easy removal in the event of connector maintenance while providing a seal between cable and sleeve.

Installation - Full 16-Inch Length

Prepare Cable

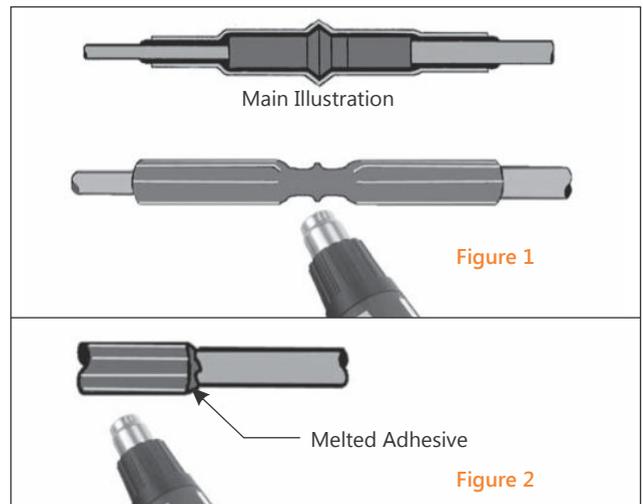
1. Clean all dirt and debris from the cable and connector for the entire length of the sleeve. Use an appropriate solvent to clean cable and follow the solvent manufacturer's instructions. Failure to follow the instructions could lead to product failure. Some newer solvents do not evaporate quickly and need to be removed with a clean, lint-free cloth. Failure to do so could change the volume resistivity of the substrate, or leave a residue on the surface.
2. Slide sleeve over cable before making electrical connection.
3. Mate connector sections per manufacturer's instructions.

Apply Heat Shrinkable Sleeve

1. Preheat cable jacket.
2. Center sleeve over primary series circuit connector.
3. Begin shrinking at center, working toward both ends. **A heat gun is the preferred heating method.** The minimum shrink temperature is 248 °F (120 °C). If a torch is used (not preferred), use a torch that produces a long, broad colorless or yellow flame that blankets the sleeve with heat.

Note: Do not use a concentrated blue flame. It is important that the heat shrink not be burned by the flame.

4. Use a back-and-forth motion with the heating device (Figure 1).
5. Continue heating until shrinking is complete. Visually inspect the heat shrink to ensure there is a smooth, tight fit, uniform wall thickness, and melted adhesive/sealant is squeezed from the ends (Figure 2).
6. To prevent the glued interface from detaching, allow the heat shrink to cool completely before moving it.



TRANSFORMERS & CABLES

Heat Shrink

Installation - Heat Shrink Cut in Half

Note: Only for applications where the heat shrink is cut in half. It is recommended that this method only be used with sealant coating the entire length of the tube (Part No. 71A0088-U).

Prepare Cable

1. Clean all dirt and debris from the cable and connector for the entire length of the sleeve. Use an appropriate solvent to clean cable and follow the solvent manufacturer's instructions. Failure to follow the instructions could lead to product failure. Some newer solvents do not evaporate quickly and need to be removed with a clean, lint-free cloth. Failure to do so could change the volume resistivity of the substrate, or leave a residue on the surface.
2. Cut the 71A0088-U heat shrink in half with a clean, straight cut.
3. Slide sleeve over cable before making electrical connection.
4. Mate connector sections per manufacturer's instructions.

Tape Connection Joint

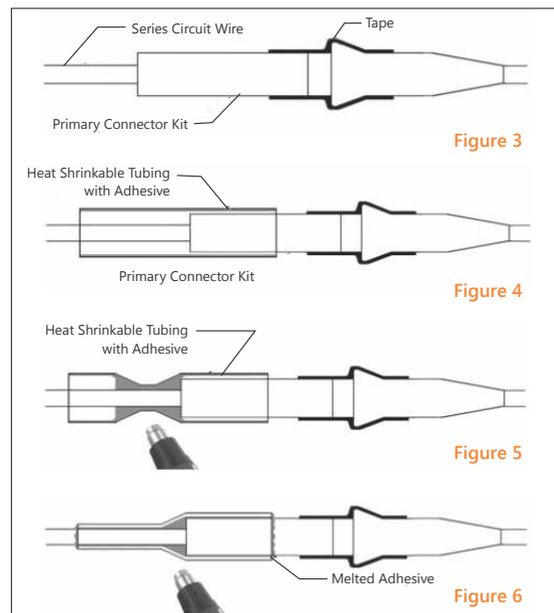
1. Wrap with at least one layer of Scotch[®] 23 (or equivalent) rubber splicing tape, half lapped, followed by one layer of Scotch[®] 33 (or equivalent) electrical tape, half-lapped across connector joint. Tape must extend 1.5 in (38.1 mm) on either side of the connector joint (Figure 3).

Apply Heat Shrinkable Sleeve

1. Preheat cable jacket.
2. Center sleeve over wire-to-connector kit entry point (Figure 4).
3. Begin shrinking at center, working toward both ends. **A heat gun is the preferred heating method.** The minimum shrink temperature is 248 °F (120 °C). If a torch is used (not preferred), use a torch that produces a long, broad colorless or yellow flame that blankets the sleeve with heat.

Note: Do not use a concentrated blue flame. It is important that the heat shrink not be burned by the flame.

4. Use a back-and-forth motion with the heating device (Figure 5).
5. Continue heating until shrinking is complete. Visually inspect the heat shrink to ensure there is a smooth, tight fit, uniform wall thickness, and melted adhesive/sealant is squeezed from the ends (see Figure 6).
6. To prevent the glued interface from detaching, allow the heat shrink to cool completely before moving it.
7. Repeat the process for the other primary connection using the other half of the heat shrink.



Airfield Lighting Kit Ordering Codes

Airfield Lighting Kit Part No.	Expanded Internal Diameter (Min.) in (mm)	Reovered Internal Diameter (Max.) in (mm)	Recovered Wall Thickness (Nominal) in (mm)	Approximate Sleeve Length in (mm)	Sealant Length In Tubing
71A0052	1.3 (33)	0.315 (8)	0.126 (3.2)	16 (406.4)	Three inches
APL-L823A*	1.5 (38.1)	0.375 (9.5)	0.08 (2.03)	16 (406.4)	Three inches
71A0088-U	1.3 (33)	0.43 (10.9)	0.10 (2.5)	16 (406.4)	Entire length

Note:

Custom-sized kits are available from the factory upon request.

* This larger diameter heat shrink is typically used if heat shrink is applied to an Amerace Superkit.