

# Swivel and Fixed Flange Kits For Rigid Coaxial Transmission Lines

Types RLA000-, RLA100-, RLA300-, RLA400-, RLA600B-, RLA700-, & RLA800B- 27 and 28

## Description

The kits in this series are for use with all ERI rigid coaxial lines. The kits include flange components, silver solder, and solder flux.

## Flange Installation Instructions

Read the instructions thoroughly before assembly.

- 1. Outer Conductor Length.** Determine exact length of transmission line required. Deduct "A" dimension (see table 1) to allow for flange. If you will be attaching flanges to both ends of the line, deduct two times dimension "A".
- 2. Preparation.** Remove inner conductor to protect it from damage. Wrap straight edge paper around outer conductor and scribe a line to use as a guide for making a square cut.
- 3. Cutting.** Cut outer conductor with hacksaw. Make certain cut is square for proper seating of flange. Do not use tubing or pipe cutter (it will deform edge of conductor and make it unsuitable for flanging).
- 4. Cleaning.** Remove all burrs and clean end of tubing with garnet cloth (non-carbon sandpaper). Do not use emery cloth or steel wool. Keep all foreign matter from entering tubing.
- 5. Assembly.** For swivel flange kits, place sliding ring on tubing with recess toward end to be flanged. Insert silver solder ring into solder groove of fixed ring or flange. Add silver solder flux to solder groove and to cleaned end of tubing. Seat fixed ring or flange onto tubing and solder assembly with even heat around area permitting even flow of silver solder. Remove excess flux from assembly with hot water, then clean assembly again with garnet cloth.
- 6. Inner Conductor.** To allow for standard inner connector, deduct dimension "B" (see table 1) from overall length of outer conductor with flanges in place. If you are attaching flanges to both ends of the line, deduct two times dimension "B". Cut inner conductor to length using the scribing, cutting, and cleaning procedure described in steps 2, 3, and 4. Replace inner conductor and assemble transmission line.

| Line Size, in. | Swivel Flange, Type No. (Old No.) | Fixed Flange, Type No. (Old No.) | Dimension A, in (mm) | Dimension B, in. (mm)              |
|----------------|-----------------------------------|----------------------------------|----------------------|------------------------------------|
| 7/8            | RLA000-27 (18096)                 | RLA000-28 (18630)                | 11/64 (4.37)         | 15/32 to 1/2 (11.91 to 12.70)      |
| 1-5/8          | RLA100-27 (18041)                 | RLA100-28 (18631)                | 13/64 (5.16)         | 19/32 to 5/8 (15.08 to 15.88)      |
| 3-1/8          | RLA300-27 (18200)                 | RLA300-28 (15840)                | 17/64 (6.75)         | 29/32 to 15/16 (23.02 to 23.81)    |
| 4-1/16         | RLA400-27                         | RLA400-28                        | 3/8 (9.53)           | 1-7/32 to 1-1/4 (30.96 to 31.75)   |
| 6-1/8          | RLA600B-27                        | RLA600B-28                       | 7/16 (11.11)         | 1-1/4 to 1-9/32 (31.75 to 32.54)   |
| 7-3/16         | RLA700-27                         | RLA700-28                        | 11/32 (8.73)         | 1-5/16 to 1-11/32 (33.34 to 34.13) |
| 8-3/16         | RLA800B-27                        | RLA800B-28                       | 1/2 (12.70)          | 1-9/16 to 1-19/32 (39.69 to 40.48) |

Table 1.

Swivel Flange

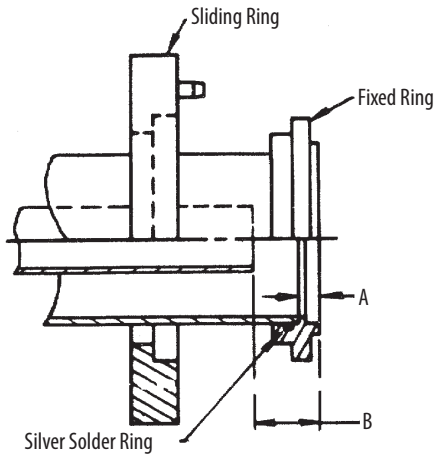


Figure 1.

Fixed Flange

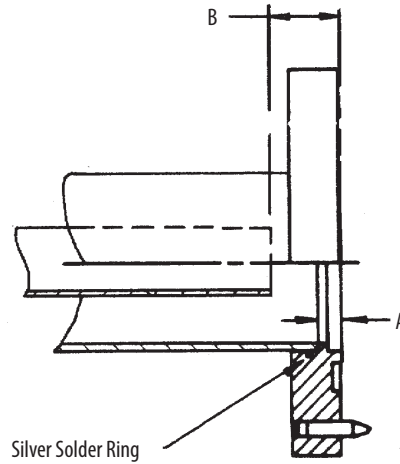


Figure 2.

**NOTICE**

The installation, maintenance, or removal of antenna systems requires qualified, experienced personnel. Antenna systems should be inspected once per year by qualified personnel to verify proper installation, maintenance, and condition of equipment. ERI DISCLAIMS LIABILITY OR RESPONSIBILITY FOR THE RESULTS OF IMPROPER OR UNSAFE INSTALLATION PRACTICES.

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