

## Types RLA150-39 (4861A), RLA350-39 (4862A) and RLA450-39



# Unpressurized Couplings

The Types RLA150-39 (4861A), RLA350-39 (4862A) and RLA450-39 unpressurized couplings are made for use with 50-Ohm, 1-5/8", 3-1/8", and 4-1/16" transmission lines, respectively, and are designed to connect unflanged line sections. The outer conductors are held in place with a coupling sleeve and clamps, while the inner conductors are joined by an inner connector. The couplings do not hold gas pressure and are recommended for indoor use only.

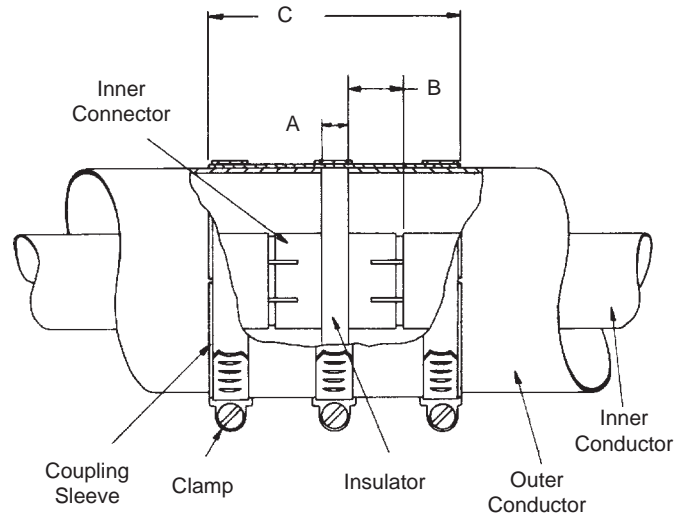
### NOTICE

The installation, maintenance, or removal of antenna systems requires qualified, experienced personnel. ERI installation instructions have been written for such personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

ERI disclaims any liability or responsibility for the results of improper or unsafe installation practices.

### Read the Instructions Thoroughly Before Assembly

- Determine the exact length of the transmission line required and deduct A dimension to allow for inner conductor insulator. This is the cutting length. Remove the inner conductor to protect it from any damage while cutting the outer conductor. Refer to chart and illustration.
- Scribe a line completely around the outer conductor at the cutting point to help make a square cut. Wrap a sheet of straight-edged paper around the outer conductor at the cutting point to aid in scribing.
- Cut the outer conductor with a hacksaw. Do not use tube or pipe cutter, as edge of outer conductor will be forced inward and will result in poor connection mechanically and electrically. Make certain cut is square to permit edge to fit properly against insulator. Plumber's cutting box (square end sawing vise), if available, should be used to guide the hacksaw. If outer conductors of both sections to be coupled are cut, see that A dimension is deducted only once from total required length.
- Remove all burrs and clean at least 2 in (51 mm) on both ends of outer conductors so good electrical contact can be made with coupling sleeve. Use garnet cloth (non-carbon sandpaper). Do not use emery cloth or steel wool. Keep all foreign matter from entering the outer conductor.



Type No. (Old No.)	A in (mm)		B in (mm)		C in (mm)
	Under 60"	60"-120"	60"-120"	120"-240"	
RLA150-39 (4861A)	1/4 (6)	7/16-1/2 (10.9-12.5)	1/2-9/16 (12.4-14)	5/8-11/16 (15.6-17.2)	2-1/2 (64)
RLA350-39 (4862A)	3/8 (10)	11/16-3/4 (17.1-18.7)	3/4-13/16 (18.7-20.3)	7/8-15/16 (21.9-23.5)	3-1/2 (89)
RLA450-39	3/8 (10)	15/16-1 (23.2-24.8)	1-1-1/16 (24.8-26.4)	1-1/16-1-1/8 (28-29.6)	4-1/4 (108)

- The inner conductor at each side of inner connector must be B dimension shorter than outer conductor. Allowance is made for thermal expansion and contraction. Cut inner conductors to proper length using scribing and cutting procedure outlined in previous steps. Insert cut inner conductors into outer conductors. **Note:** If cut is less than 2" (51 mm) from an inner conductor support, trim the opposite end of inner conductor instead. Both ends of the inner conductor should be a minimum of 2" (51 mm) from an inner conductor support to allow for installation of an inner connector.
- Slip coupling sleeve and three clamps over end of one section. Insert inner connector fully into both inner conductors. Bring outer conductors flush against insulator and center sleeve directly over connection. Place clamps over sleeve, as shown in line drawing, and tighten.