EIA Flange Adapters

For Connecting 3-1/8 inch 50 Ohm EIA to 1-5/8 inch 50 Ohm EIA

Type RLA350-150 Reducer

Notice

The installation, maintenance, or removal of antenna systems requires qualified, experienced personnel. ERI installation instructions are 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 installation practices.

READ THE INSTRUCTIONS THOROUGHLY BEFORE ASSEMBLY

Description

Reducers are designed to join flanged transmission lines of different diameters. The RLA350-150 reducer has a removable 1-5/8” 50 ohm inner connector, but the 3-1/8” 50 ohm side requires a female 3-1/8” connection.

Installation

1. Push inner connectors together to make certain they are fully engaged and inner connector insulators are properly seated in reducer flange insulator grooves.

2. Seat large rubber O-ring gasket into reducer flange groove on 3-1/8” line side. Be sure both gasket and groove are clean, as any foreign matter may prevent assembly from being pressure tight. Apply a thin coating of silicone grease on the gasket and insert into the flange groove. This will also help hold gasket in place during assembly.

3. Join reducer to 3-1/8” transmission line by inserting the reducer’s 3-1/8” inner connector into the female inner conductor of transmission line. See that alignment pins are aligned with alignment holes in flanges. Push assembly together making certain gasket remains in place. Add 3/8”-16 hardware and bolt flanges together. Tighten bolts evenly to 21 lbf·ft (28 N·m) torque.

4. Repeat steps for connecting 1-5/8” line to other side of reducer using procedure and precautions mentioned. Add 5/16”-18 hardware and tighten nuts evenly to 9 lbf·ft (12 N·m) torque.

Special Case

When a 1-5/8 inch 50 Ohm Gas Barrier needs to be connected to this adapter, first remove all four 5/16”-18 threaded studs from adapter. Next remove the 1-5/8 inch inner connector from the adapter by pulling it out. Install gas barrier to adapter. Secure with four 5/16”-18UNC-2A capscrews which are 2 inches long (not provided) and four 5/16” lockwashers (provided).