

Type MACX350-29-(\*)

## MACXLine® Inner Conductors for Marmon Flanged Rigid Coaxial Transmission Lines



\* Length of mating outer conductor in whole inches.

### Description

MACXLine® inner conductors are factory trimmed according to the specified outer conductor length. No field culling is required. Inner conductors must be installed with the bellows and captivated inner connector towards the antenna.

### 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.

### Determination of Mating Outer Length

Refer to Figure 1. The correct mating outer conductor length can be determined by measuring the inner conductor length (with the bellows compressed) and adding 2.0 inches. The following example shows how this is done for a type MACX350-29-240.

Measured Length of Inner Conductor + 2.0"

= Length of Outer Conductor

Example: 238.0" + 2.0" = 240.0"

**Note:** To obtain the accurate length of the inner conductor, the bellows must be fully compressed to its mechanical stop position (the bellows have a travel of approximately 0.3 inches). The measurement can be done by placing one end of the inner conductor against a wall, running a tape measure to the opposite end and taking the measurement while pushing in on the end of the inner conductor with approximately 50 lbs of force.

### Inner Conductor Assembly

The inner conductor must be handled with care to avoid damage to the bellows and copper tube assemblies. The inner conductor and insulator should be kept free of dirt, moisture and grease. Install insulators according to Figure 1. Carefully insert the inner conductor into the outer conductor with the bellows end towards the antenna end of the outer conductor. Extend the inner conductor, at the female flange end, beyond the flange face by a few inches and fully insert the inner connector into the inner conductor with the pro-

ective washer and 3/8" bolt head exposed and towards the antenna. The shoulder of the inner connector should "bottom out" on the end of the inner conductor. Use a hand wrench to tighten the 3/8" bolt on the end of the captivated inner connector until it reaches the mechanical stop position. Push the inner conductor back into the outer conductor with the insulator fully inserted into the flange.

**Note:** After assembly, captivated inner connector should not be removed. Installation of assembled rigid line section must be done with the bellows end toward the antenna.

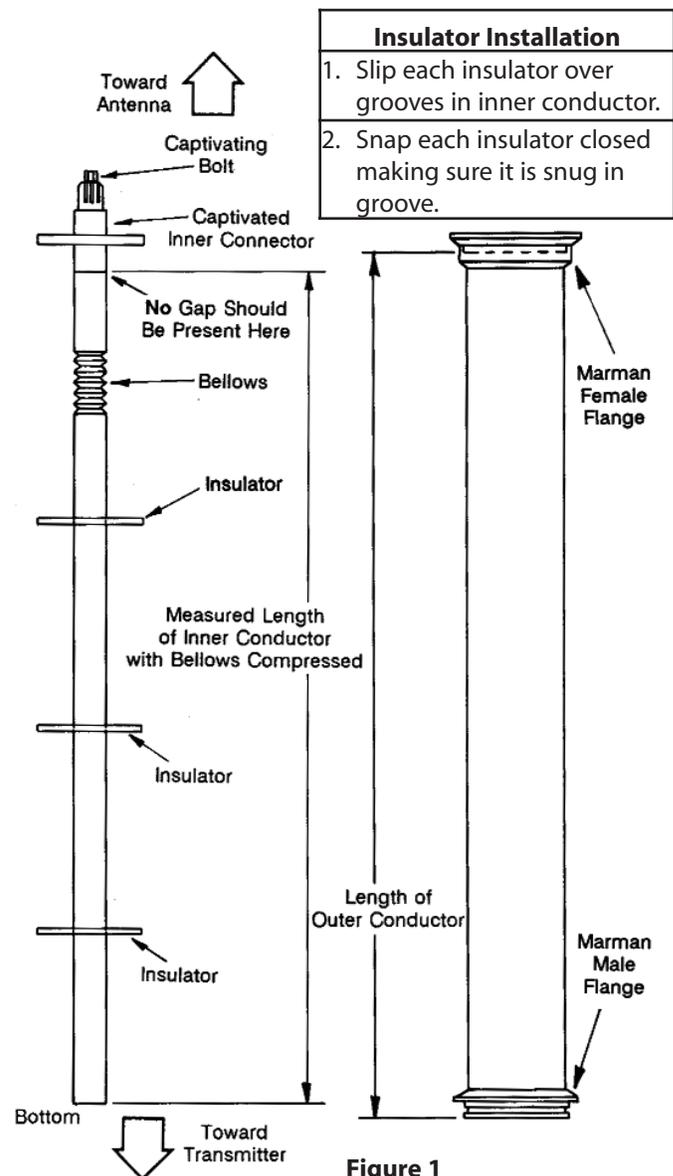


Figure 1