

Inner Conductors

for MACXLine® Rigid Coaxial Transmission Lines

Types MACX675B-25-(1, 2, 3, 6, 11) and MACX450-25-(1, 2, 3, 6, 11)

Description

ERI MACXLine inner conductors are factory trimmed according to the specified outer conductor length. No field cutting is required. Inner conductors are installed with the bellows and captivated inner connector toward the antenna.

NOTICE

The installation, maintenance, or removal of antenna and transmission line 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.

Confirm Mating Outer Length

Confirm the correct mating outer conductor length by measuring the inner conductor length (with the bellows compressed) and adding 1.44 inches.

Take the measurement from the end of the inner conductor to the center of the connector insulator. See Figure 1 for measurement points.

Note: To obtain the accurate length of the inner conductor, the bellows must be fully compressed to its mechanical stop position (the bellows must 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 pounds of force.

Assemble the Inner Conductor

Handle the inner conductor with care to avoid damage to the bellows and copper tube assemblies. The inner conductor and insulators should be kept free of dirt, moisture, and grease.

1. Slide support insulators to groove locations on inner conductor.
2. Push flange insulator over tapered end of inner connector and seat in the groove.
3. Carefully insert the inner conductor assembly into the outer conductor with the bellows toward the antenna end of the outer conductor. Push the inner conductor into the outer conductor until the connector insulator is fully seated in the flange.

Type Numbers	Outer Length (in)	Inner Length (in)
MACX675B-25-1, MACX450-25-1	240	238.56
MACX675B-25-2, MACX450-25-2	237	235.56
MACX675B-25-3, MACX450-25-3	234	232.56
MACX675B-25-6, MACX450-25-6	228	226.56
MACX675B-25-11, MACX450-25-11	211	208.56

Figure 1.

