

## Types 874-VC and 874-VCL Variable Capacitors

The Type 874-VC Variable Capacitor is a general-purpose tuning element for resonant-line circuits, matching transformers, and baluns at low frequencies where line-type elements are an awkward size to use. The Type 874-VC also serves as a general-purpose shielded capacitor at low frequencies.

Among its features are: low loss; high-temperature polystyrene insulation; good shielding; small, precision ball bearings; insulated shaft; milled-aluminum rotor and stator; and an accurately engraved drum dial.

The Type 874-VCL Variable Capacitor is identical to the Type 874-VC except that it employs a Type 874-BL Locking Coaxial Connector. This connector is compatible with both locking and nonlocking Type 874 Connectors. When two locking connectors are mated with each other, a firm mechanical coupling is achieved. Also, the shielding is improved significantly over that of the standard connectors, and, in general, the leakage is reduced by at least 50 db.

In terms of VSWR, a locking connector mated with a nonlocking connector is equivalent to two nonlocking connectors mated. The VSWR characteristics of the basic Type 874-BL Locking Connector are similar to those of the basic Type 874-B (nonlocking) Connector, and both are described in General Radio Catalog.

The quick-disconnect feature of the standard Type 874 Coaxial Connectors is retained in the locking type if the coupling nut is not engaged. However, in this case, the shielding is less effective.

### Specifications

**Incremental Capacitance Range:** 56 pf at 1000 cps.

**Effective Capacitance Range:** High frequencies, see curve. Low frequencies at Type 874 Connector, 14 to 70 pf; at Tee junction, (see curve), 16.5 to 72.5 pf.

**Dial Calibration:** 0 to 100 (not calibrated in pf).

**Capacitance Variation:** Linear.

**Dimensions:** Diameter 2-1/2 inches (62 mm), height 5-1/4 inches (135 mm).

**Weight:** 12 ounces (340 gm).