Cable Simulator

The illustrated cable simulator provides simulated lengths of cable in two sizes.

10 Lb/mi is the equivalent of 0.63 mm copper cable. It was commonly used in both the local distribution network and the junction network. 110 ohm/km. Nominal capacitance is 44 nF/km

The single kilometre section consists of four resistors of $\frac{1}{4}$ of the resistance/km with a parallel capacitor in the centre of the section. The $\frac{1}{2}$ km section has all values one half of the 1 km section.

Longer sections are made up by concatenating the single section such that the intermediate resistors are $\frac{1}{2}$ of the resistance/km.

The values used in the simulator are the nearest preferred values.

10 Lb/mi: series resistor in 1km section = 27R. Capacitor 47 nF. Intermediate resistors = 51R. Half section resistors = 13R.

 $6\frac{1}{4}$ Lb/mi: series resistor in 1km section = 43R. Capacitor 47 nF. Intermediate resistors = 82R. Half section resistors = 22R.



