Description of the construction of some big probe measuring coils

For measuring radiation (EMC) from big cable truncs or cabinets

Or to detect location of radiating cables in the street.









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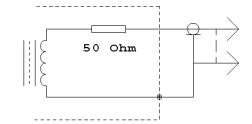
big sniffer

coil form = 4 halves FT114-61 or TDK clone or 4C65 – 28 or 36 mm in an open PCB mounting frame.

N = 4, multi conductor, completely screened with copper foil except toroidal fracture side, it is a voltage probe, series terminator = 50 Ohm.

Isolated and protected with vulcanizing tape.

Usable range = 10 kHz to 100 MHz



coil form = 2 halves 4C65 - 36 mm.

N = 10, current terminated with 10 Ohm, series to coax with 39 Ohm. This version with open construction.

Usable range = 10k to 100 MHz

coil form = 2 halves 4C65 – 36 mm.



N = 5, With double wire and current terminated with 5 Ohm, series to coax with 39 Ohm. Screened with a tiny tomato can.

Usable range = 10k to 100 MHz



Coil form = plastic pipe. NO magnetic medium. N depends on pipe diameter, N should be equivalent to $25 \times 25 \text{ cm}$ square. 1/16 sq. Meter. With 70 mm pipe N = 16.2.

Winding is coax short circuit loop, but series terminated with 50 Ohm on point where N = 16.2. Like mini drawing above.

With a 85 mm bottle, N = 11