

Determination of the Insulation Resistance of Solid Insulating Materials

Definition: The insulation resistance between two electrodes which are in contact with, or embedded in a specimen, is the ratio of the direct voltage applied to the electrodes to the total current between them at a given time of electrification. It is dependent upon both the volume and the surface resistance of the specimen.

According to IEC 60'167 there are three types of electrodes. The test can be conducted with:

- Taper pin electrodes (for flat plates, tubes and rods)
- Conducting paint electrodes (for flat plates, tubes and rods)
- Bar electrodes (for thin sheets and tapes)

Usually taper pin and conducting path electrodes are used. Only values measured with the same test set and specimen size are comparable.

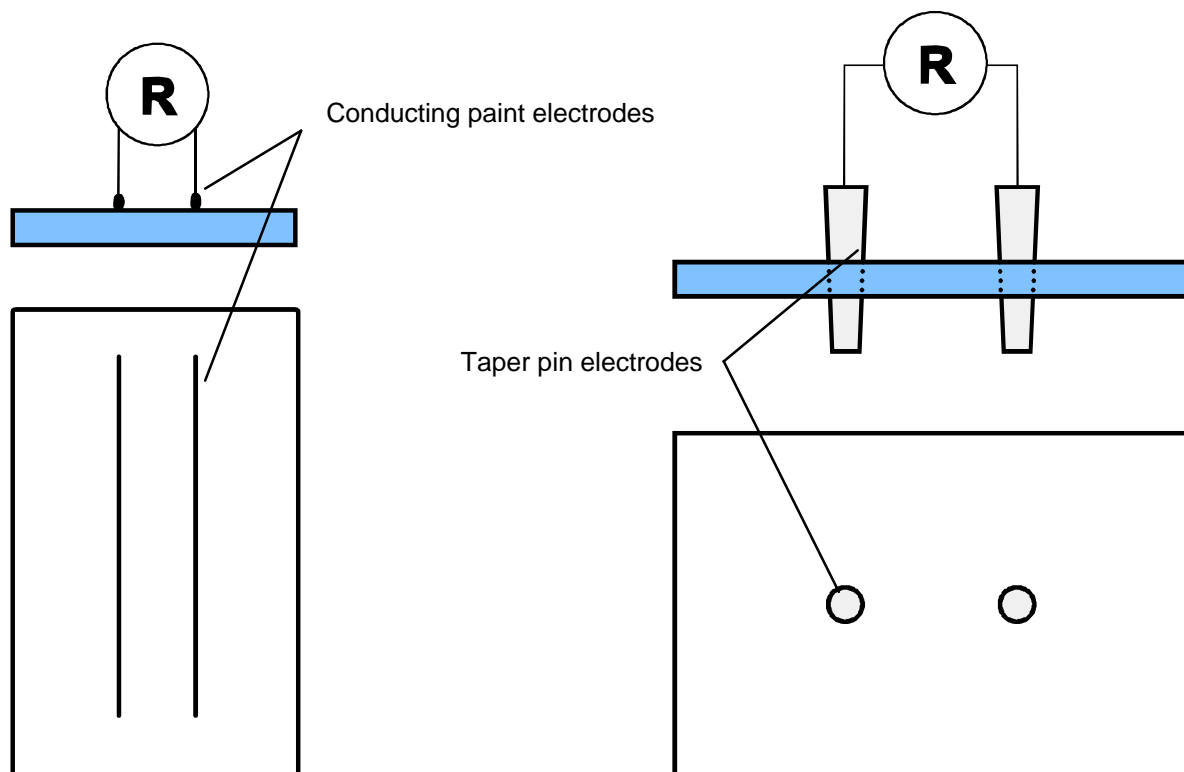


Figure 1: Conducting paint electrodes

Figure 2: Taper pin electrodes