

## Electrical Continuity of Composite Hoses

### Applications

When a hose is used to convey a non-conductive fluid, electrostatic charge is transferred from the fluid to the hose wall. To prevent the occurrence of a static discharge all metal components of the hose assembly must be earthed.

Amnitec composite hoses consist of a hose wall of thermoplastic fabrics and films with internal and external wire helices. The standard method of end fitting attachment is by external swaging. The end fitting tailpiece is designed specifically for this type of hose, having a scrolled section which screws into the hose locating positively on the inner wire. The ferrule is swaged down onto the outer wire and tailpiece, ensuring good electrical contact.

All Amnitec hoses are checked for full electrical continuity before dispatch and are certified as such. It is recommended that electrical continuity be checked periodically while hoses are in service, to ensure continued safe operation. This check should be made every six months.

- Lay the hose flat on the ground. Avoid contact on metallic parts to earth.
- The electric resistance is measured from coupling to coupling.
- Use for optimal measurement an Ohm meter (picture).
- Typically, a hose assembly will have a resistance value, acc to EN13765:2010, between the end fittings for:
  - < 2,5 ohm/m for sizes less than 50mm
  - < 1,0 ohm/m for the 50mm size and above sizes



All information in this document is without any obligation, dimensions and weight are approximate only and the specifications are subject to change without any notice.