

## Basic Electrical Tests for Cable

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Electrical tests are required to ensure cables meet performance and safety requirements mandated by regulatory bodies such as CSA and UL. ShawFlex cables are subjected to these tests to ensure that you receive a quality product.

The most important basic electrical tests are conductor continuity, dielectric strength (HiPot), spark test, conductor resistance and insulation resistance (IR). During different stages of manufacturing these tests are performed to ensure a superior product at the end.

These tests are done for the following reasons:

**Conductor Continuity** -

performed to check that none of the insulated wires are broken.

**Dielectric Strength (high voltage)** - performed to verify that the insulation can withstand a rated voltage without breaking down.

**Spark Test** - performed during the extrusion process of the insulation or jacket to detect defects such as small holes, cracks or thin spots.

**Conductor Resistance** - performed to ensure the conductors in a cable are not stretched during manufacturing and to ensure the appropriate wire gauge size is used.

**Insulation Resistance (IR)** - performed to ensure the insulation meets a minimum resistance value required to avoid excessive current leakage.