

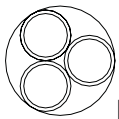
2. Construction

2.1 Conductor

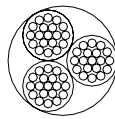
IEC 60228 specifies four different classes of conductors; classes 1, 2, 5 and 6. Power and control cables normally have conductors of class 1 (solid conductors) or class 2 (stranded conductors).

Power and control cables have plain annealed copper conductors.

Conductor forms:



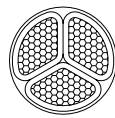
RE = circular solid



RM = circular stranded



SE = sector shaped solid



SM = sector shaped stranded

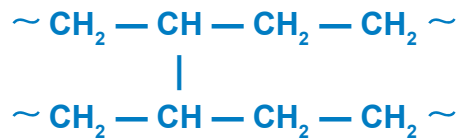
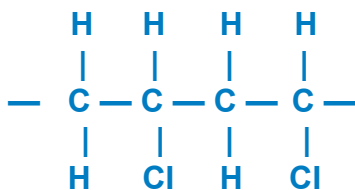
2.2 Insulation

The insulation materials for power and control cables are

polyvinyl chloride (PVC)

or

cross-linked polyethylene (XLPE).



2.3 Laying Up

The cores of cables are laid up with suitable filling elements (if necessary) to form a compact circular assembly. Suitable binder tape(s) may be applied.

2.4 Bedding

Cables incorporating an armour layer have an extruded bedding of polyvinyl chloride (PVC) or zero halogen material (LSZH).

2.5 Armour

The primary purpose of armour is to protect the cable against mechanical damage during installation and operation. Apart from this mechanical armour, it can also fulfil various electrical functions, e.g. earth conductor, screen of inductive protection.

Armouring of single core cables is provided by round aluminium wires, multicore cables will have galvanized round steel wires.

2.6 Outer Sheath

The outer sheath of cables consists of extruded polyvinyl chloride (PVC) or zero halogen material (LSZH). The colour is primarily black.