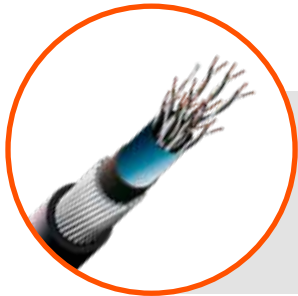


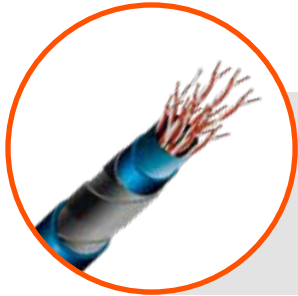
Mechanical and chemical cable protection

The primary purpose of armor is to protect the cable against mechanical damage during installation and operation. The most common armor designs with their most important features are the following:



Armor of galvanized round steel wires

Armor with good mechanical protection, suitable for tensile loads. It allows a good cable flexibility; the coverage degree is up to 90%. It is possible to add a counterspiral in galvanized steel tape for a better mechanical protection.



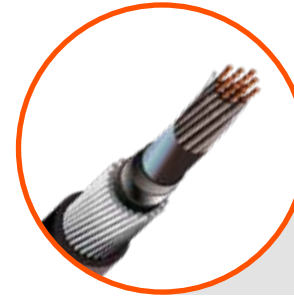
Armour of galvanized steel tapes

Dual helicoid armor with overlap. Excellent protection against shocks, compression and rodents, but not suitable for tensile loads. It imparts the best protection from electromagnetic fields with compared to other armors.



Armour of galvanized steel wire braid

Lightweight armor to withstand tensile loads; permits the smallest bending radius of all armor designs. A coverage of at least 80 % and a wire diameter of 0.3 mm are recommended to achieve sufficient mechanical protection.



Lead sheath

The safest, though most expensive protection against aggressive chemicals. It increase weight and bending radius of the cable. Normally and additional armoring is required to protect it from crushing.



Multilayer AL/HDPE/PA sheath

Same as lead protection against aromatic hydrocarbons and aggressive chemicals. This design combining aluminum tape and high-density polyethylene HDPE sheath with a covering of polyamide PA (Nylon), represents an excellent barrier against penetrating chemicals, corrosion and humidity. It can be used as an alternative to lead sheath. Advantage: lighter, smaller diameter, environment protection

