



NEXANS AND THE SEISMIC EXPLORATION

Nexans, with its Filotex® products, has developed a wide range of seismic exploration cables for oil, gas and mining industries.

Used in hostile conditions (lands, mountain, arctic, desert, transition zone and shallow water, water table, etc.) Filotex® cables are designed to meet stringent mechanical requirements and electrical performances.

GEOPHYSICAL CABLES

USED IN HOSTILE CONDITIONS

This cables can be used in very harsh and hostile conditions. They are designed to meet stringent mechanical requirements: resistance to cut-through, to tension and torsion, to chemicals, to solvents, and had to conserve all their flexibility in low or high ambient temperature.



PERFORMANCES

Accurate data recording greatly depends on the high quality of the cables used.

The high quality of our geophysical cables is ensure by the use of high grade materials in manufacturing process.

The cable construction can be adapted to meet customer' specific needs.

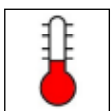
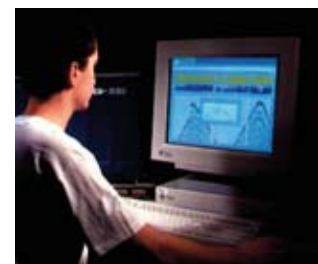
MAIN CHARACTERISTICS



Tests results on the Filotex® geophysical cables have proved their excellent reliability in seismic exploration for many types of data measurement and most types of electrical and mechanical requirements.

Our cables answer to main challenges of the market in terms of weight and space saving.

Our cables are available in many different styles: cables for land applications for high frequency transmission, cables for marine application (up to 100m depth).



-45°C to +70°C



Flexible

CABLE PROPERTIES

CABLE DESIGN TO PERFORM UNDER VERY HARSH AMBIENT CONDITIONS

MECHANICAL REQUIREMENTS

- Resistance to wear and cut-through: polyurethane external jacket
- Resistance to corrosion: stainless steel braid in option
- High tensile strength: from 50 DaN to 3500 DaN, with mechanical reinforcement, central strength member and/or braid (aramid, steel, stainless steel or specific material)
- Water resistant cables from 0.5 to 5 bars
- Low ambient temperature cables: good flexibility and mechanical resistance.

PHYSICAL REQUIREMENTS

- Cylindrical cross section and ease of moulding
- Low bulk volume and low weight adapted to air transport and ease of handling
- Matte or gloss appearance
- Water resistant by a waterproof compound
- Very resistant external jacket in PUR or TPE.

ELECTRICAL AND TRANSMISSION REQUIREMENTS

Customized cables with:

- High frequency transmission pairs or quads de transmission (typically 10 MHz),
- Geopone pairs,
- Feeder cables,
- One or several optical elements in option,
- Different insulations: PP or PE solid, foam or foam skin.

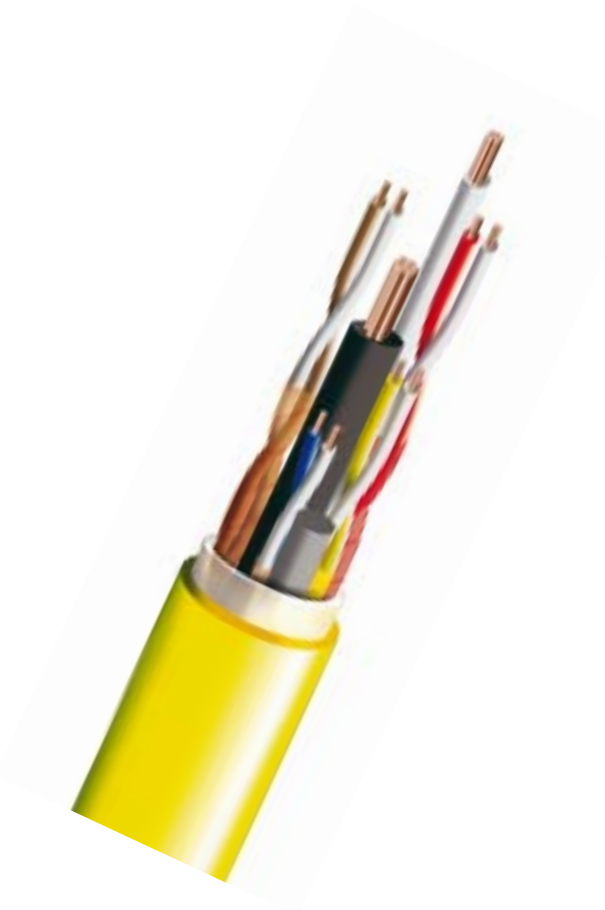
Nexans cables meet the usual electrical requirements of the market:

- Attenuation at 10 MHz : from 5 to 8 dB/100 m,
- Characteristic impedance about 120 Ω.

Nexans can meet many other specifications adapted to the cabling system:

- High reliability of data transmission,
- longer lengths > 1 Km,
- low attenuation.

Optical and reinforced optical solutions (Mono or multimode) can be proposed for longer lengths applications.



TYPICAL USE

LAND COPPER CABLES FOR DIGITAL TRANSMISSION

Main characteristics

- High mechanical resistance
- Cylindrical and easy to mould
- Operating temperature : -45°C to +70°C
- External jacket in PUR

Typical cables

- Quad land cables
- Quad water resistant cables
- Cables for transversal applications
- Geophone and data transmission multipair cables
- Geophone and data transmission multipair cables with mechanical reinforcement
- Low diameter land pairs
- Digital and analogical multipair cables



LAND OPTICAL CABLES FOR DIGITAL TRANSMISSION

Main characteristics

- Longer length
- Température de service : -40°C à +70°C
- External jacket in PUR
- High resistance to compression and impact

Typical cables

- Optical cables for data transmission
- Reinforced optical cables for land applications

GEOPHONE LEADER CABLES

Main characteristics

- High mechanical resistance
- Cylindrical and easy to mould
- Very flexible
- Operating temperature : -40°C to + 70°C
- External jacket in PUR
- High tension resistance

Typical cables

- Water resistant cables
- Data transmission cables 2 or 4 conductors



CABLES FOR MARINE APPLICATION

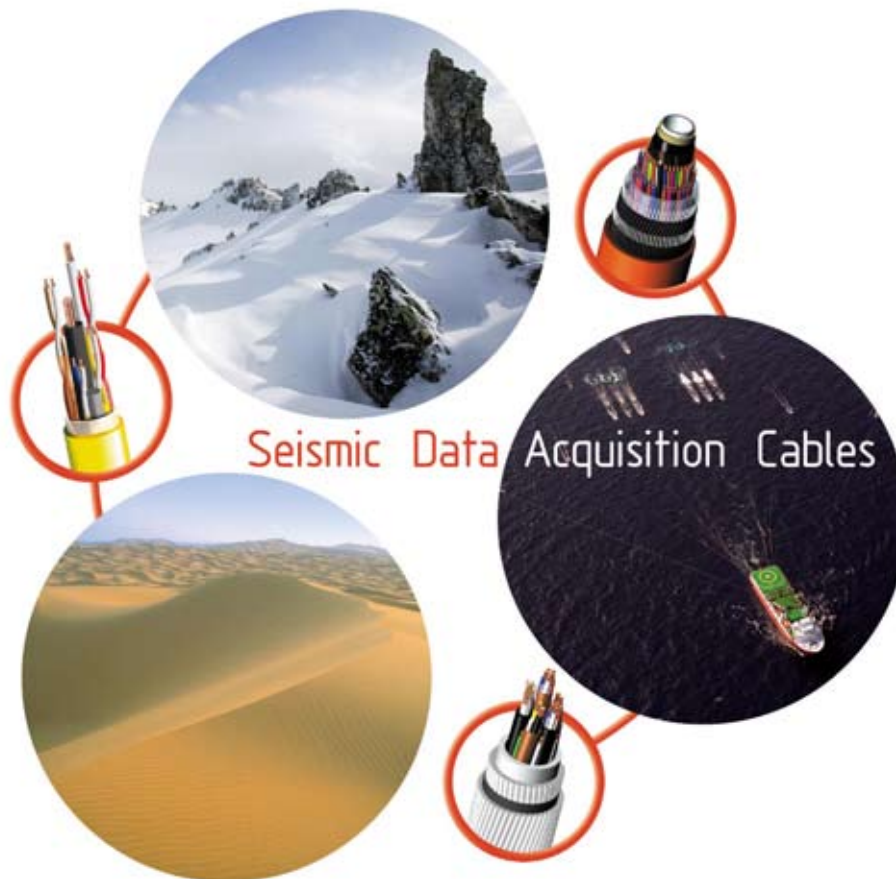
Main characteristics

- Very flexible
- High oil resistance

Typical cables

- Oil and solvents resistance pairs
- Oil and solvents resistance quads

EFFICIENT AND EFFECTIVE SOLUTIONS



Nexans is an established supplier of cables for seismic operations cooperating with the main organisations within the industry world wide.
Nexans design and manufactures cables tailor made for specific applications in accordance with customer specifications.
Our cable designs are characterised by very high mechanical behaviour, electrical and optical hybrid constructions with optimised data transmission, flexibility, and durability.