

Control Cables



Control cables used in offshore and onshore projects in the oil and gas industry are crucial for transmitting signals and controlling various equipment and processes. These cables need to withstand harsh environmental conditions, including exposure to saltwater, extreme temperatures, mechanical stress, and corrosive substances. Here are some types of control cables commonly used in offshore and onshore projects:

Multi-Conductor Control Cables: These cables consist of multiple insulated conductors within a single cable sheath. They are used for transmitting control signals, power, and data between different components of oil and gas facilities, such as control panels, motors, sensors, and instrumentation.

Armored Control Cables: Armored control cables are reinforced with an additional layer of metal armor, usually made of galvanized steel or aluminum, to provide protection against physical damage, rodent bites, and crushing forces. They are suitable for harsh industrial environments, including offshore platforms and onshore processing plants.

Fire-Retardant Control Cables: Fire-retardant control cables are designed to resist the spread of flames and limit the propagation of fire in case of an emergency. They are essential for ensuring safety in oil and gas installations where fire hazards are a concern.

Chemical Resistant Control Cables: Oil and gas facilities often contain corrosive chemicals that can degrade standard cables over time. Chemical resistant control cables are made from materials that can withstand exposure to harsh chemicals without deteriorating, ensuring reliable performance in corrosive environments.

Submersible Control Cables: Submersible control cables are specifically designed to operate underwater and are used in subsea production systems, offshore drilling rigs, and underwater sensors. They are resistant to water ingress and pressure, making them suitable for submerged applications.

High-Temperature Control Cables: High-temperature control cables are capable of withstanding elevated temperatures commonly encountered in oil and gas processing plants, refineries, and steam injection operations. They are essential for maintaining signal integrity and reliability in high-temperature environments.

Low-Temperature Control Cables: In cold climates or cryogenic applications, low-temperature control cables are used to ensure reliable operation at sub-zero temperatures. They are designed to remain flexible and functional even in extreme cold conditions.

Explosion-Proof Control Cables: In hazardous areas where the risk of explosion is high, explosion-proof control cables are used to prevent sparks or arcs from igniting flammable gases or vapors. These cables are designed to contain any potential explosions within their enclosures, ensuring the safety of personnel and equipment.



Halogen-Free Control Cables: Halogen-free control cables are made from materials that do not contain halogens, which can emit toxic gases when exposed to fire. These cables are preferred in applications where fire safety and the protection of personnel are paramount concerns.

Fiber Optic Control Cables: Fiber optic control cables use optical fibers to transmit control signals and data with high bandwidth and immunity to electromagnetic interference. They are commonly used in modern control systems and automation applications in the oil and gas industry.

These are some of the key types of control cables used in offshore and onshore projects in the oil and gas industry, each tailored to meet specific requirements and standards for reliability, safety, and performance in harsh environments.

Ensure performance and safety in your oil and gas projects with the right control cables. From multi-conductor to fiber optic options, we've got you covered. Contact us to discuss your needs and discover our reliable solutions.