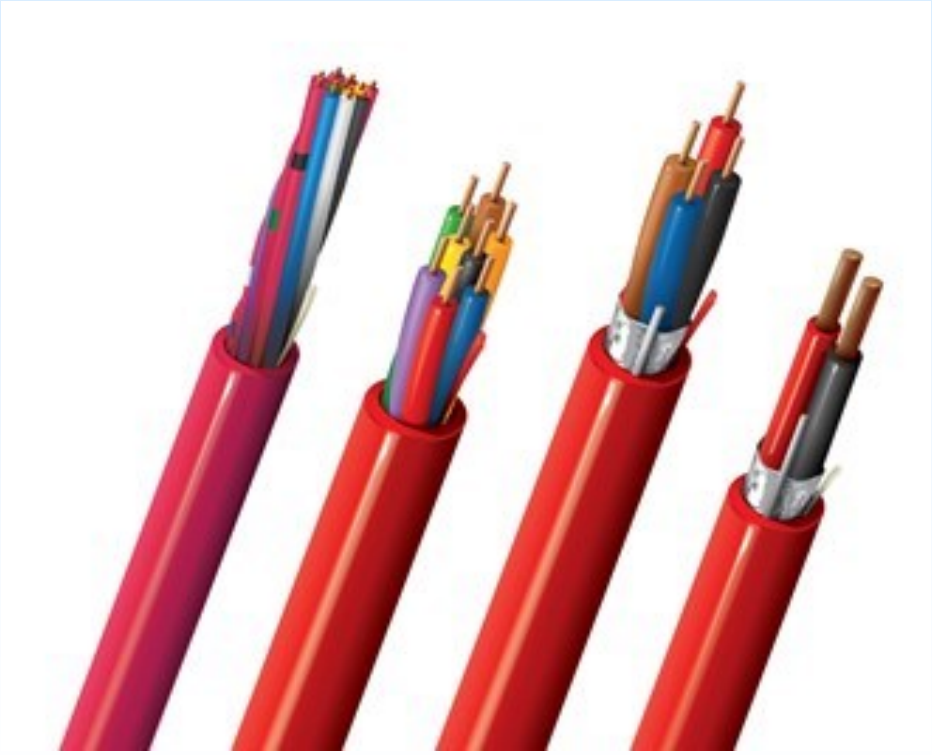

What are wires and cables?

It should be stated that a wire is an electrical conductor, while a cable is a group of intertwined wires and an integrated device. The term cable is used in the electrical field to transmit electric current. Proper wire and cable installation in closed and open spaces are extremely important, and ensuring a safe power supply is very important.

Types of cables in terms of application

Instrumentation cables

Low voltage cables

High voltage cables

.1Instrumentation cables

Today, in oil, gas, and petrochemical systems, military, defense, aerospace, and missile industries, medical and food industries, and any industry that requires control, and measurement of flow parameters, measurement of fluid volume and temperature, we will be directly in touch with the category of control and the instrumentation.

1.Instrumentation cables

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In instrumentation systems, to transfer the measured values, we need cables that match the measurements in control and instrumentation systems, and instrumentation cables are an essential part of measurement systems. The appropriate type of instrumentation cable is selected according to the kind of equipment, environmental conditions, and other electrical, magnetic, and mechanical parameters.

2.Low voltage cables

The low voltage cable is for voltages in the range of 300 to 3000 V. It is made with coatings of different materials and many variable conductor strings. Thus, according to the type of material used in the insulation and the number of conductor strands of these cables, which can be 2 or 5 strands, what passes through these cables is low voltage (LV) electricity, which in its simplest form, it comes to lighting and electrification of buildings.

3.High voltage cables

Usually, among users, cables above 1 kV are defined as high voltage cables, but according to global standards, 32 kV and 63 kV cables are considered high voltage cables.

The structure of these cables is different according to their application. A series of marks on it indicates the specification of the high-voltage cable.

In general, cables always consist of two main parts: conductor and insulation. The difference in their price and types is due to their application, which means that their kind of application causes the material, shape, cross-sectional area, and the number of conductors and insulators to differ.

The conductor used in the electric cable can be wire, strand, flexible, and very flexible. Choosing the electric cable's flexibility depends on the electrical conditions, the required amount of flexibility, the way the system is connected, and the installation conditions.

Services by IRUS Energy Co.

Today, electric cables and wires play an important role in the fire safety of buildings and facilities. Excessive heating of wires and cables, arcing, short circuit, or electrical fault can cause an accident. Electrical insulation and coating compound will generally catch fire unless it is fireproof or fire resistant. Cables significantly contribute to the spread of fire and heat release, increased smoke emission, increased carbon monoxide levels, and the production and release of corrosive gases.

In order to create safety in the construction industry and the electricity industry, IRUS Energy Co. has provided environmentally friendly cables with increased safety during fire and accidents, and in this field, it has been able to meet part of the country's needs in accordance with the existing standards.