

AKRON HOLDING TODAY

AKRON HOLDING is one of the largest vertically integrated companies in Russia full-cycle industrial holdings, which holds leading positions in terms of procurement and processing of ferrous and non-ferrous scrap in the territory of the Russian Federation and the CIS countries.

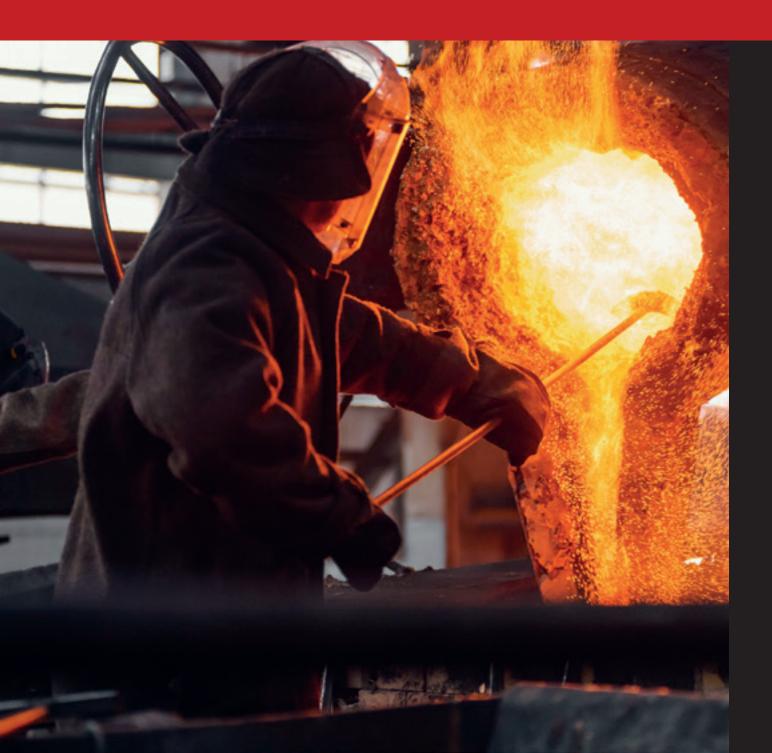
Industrial enterprises of the Holding are engaged in production in the field of non-ferrous metallurgy, cable and wire products, as well as recycling and disposal of secondary resources and all types of electronic waste.

Holding actively invests in the development of its own production capacities, expands and modernizes the fleet of technological equipment. The presence of its own independent scrap collection infrastructure is its competitive advantage, and makes the Holding more flexible in terms of pricing and product delivery times.

Lean production, continuous quality control, focus on environmental friendliness of technological processes, respect for partners and employees - this is the secret of the Holding's success, which allowed it to gain and maintain a leading position and business reputation in the market.







1 093 297 g

annual volume of ferrous scrap procurement

165 725 g

of annual volume of non-ferrous scrap

24

manufacturing plants

13

scrap processing plants

52

regions of presence

16 498 people total staff





ABOUT THE COMPANY



Production company, that combined the assets of the former Pskovkabel, Pskovelectrosvar, Pskovgeokabel and Sevkabel plants

SKT GROUP



production sites



production lines



1300+ employees



35 000 items of manufactured products



partners in Russia, Belarus, Kazakhstan, Kyrgyzstan, Romania, Czech Republic, Baltic countries

SEVKABEL

1879

PSKOVKABEL

1963

PSKOVELECTROSVAR

1973

PSKOVGEOKABEL

1996





PRODUCTION SITES



PSKOV CITY, NOVATOROV STREET, 3



220 000 m²



750 people



10 PRODUCTION SITES

CABLE AND WIRE PRODUCTS

power and control cables, geophysical cables, ship cables, SIPs

PIPE PRODUCTS

flexible polymer reinforced pipes, load-carrying pipes, umbilicals

EQUIPMENT

rail welding and pipe welding machines and complexes, transformers, industrial winches, equipment for coiled tubing and geophysical surveys



PSKOV CITY, ALMAZNAYA STREET, 3



108 000 m²



500 people



6 PRODUCTION SITES

CABLE AND WIRE PRODUCTS

Power and control cables, geophysical cables



SUPPLY EXPERIENCE



WELDING COMPLEXES



ГАЗСТРОЙПРОМ

FLEXIBLE POLYMER PIPES



ИРКУТСКАЯ НЕФТЯНАЯ КОМПАНИЯ



GEOPHYSICAL CABLES







CABLE PRODUCTION













PRODUCED AND SHIPPED FOR 4 YEARS

22 000 km

POWER CABLES

5 000 km

CONTROL CABLES

3 500 km

WIRES FOR POWER LINES

CAPACITIES AFTER COMPLETION OF THE SEVKABEL PROJECT

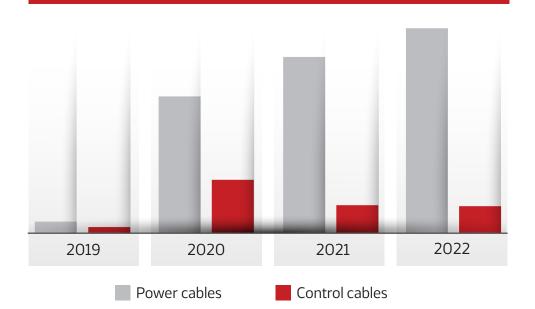
> 30 000 km/year

POWER CABLES

> 7 000 km/year

CONTROL CABLES

IN THE TOP-15 CABLE FACTORIES OF THE RUSSIAN FEDERATION



> 6 000 km/year

WIRES FOR POWER LINES

> 10 000 km/year

INSTALLATION WIRES







PRODUCT CONFIRMATION ALL REQUIREMENTS OF REGULATORY DOCUMENTATION

The testing laboratory exercises control at all stages of production - from the input control of raw materials to acceptance tests of finished products

Active participant of the Association program "Honest position" in the fight against counterfeit and counterfeit products

Active participant in the program of the International Association "Electrokabel" in fight against falsified and counterfeit products

Compliance with contractual obligations in terms of delivery

Demanded items in the warehouse







АВВГнг(A)-LS, ВВГнг(A)-LS for voltage 0.66 and 1 kV

Armored power cables with plastic insulation, flame retardant, with low smoke and gas emission



DESIGN:

- 1 TConductor: aluminum or copper, single or stranded, round or sector-shaped, class 1 or 2 according to GOST 22483.
- Insulation and internal filling: from PVC compound of reduced fire hazard.
- 3 Inner shell: extruded from PVC compound of reduced fire hazard.
- 4 Outer sheath: low fire hazard PVC.

АВБШвнг(A)-LS, ВБШвнг(A)-LS for voltage 0.66 and 1 kV

Armored power cables with plastic insulation, flame retardant, with low smoke and gas emission



- 1 Conductor: aluminum or copper, single or stranded, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation and internal filling: from PVC compound of reduced fire hazard.
- 3 Inner shell: extruded from PVC compound of reduced fire hazard.
- 4 Armor cover: made of two galvanized steel strips.
- 5 Protective hose:
 PVC compound with reduced fire hazard.



АВВГ, ВВГ, АВВГнг(A), ВВГнг(A) for voltage 0.66 and 1 kV

Power cables with plastic insulation, incl. flame retardant



DESIGN:

- 1 Conductor: aluminum or copper, single or stranded, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation and internal filling: PVC compound or low fire hazard PVC compound.
- 3 Inner sheath: extruded PVC or low fire hazard PVC.
- 4 Outer sheath: PVC compound or low fire hazard PVC compound.

АВБШв, ВБШв, АВБШвнг(A), ВБШвнг(A) for voltage 0.66 and 1 kV

Power cables with plastic insulation, incl. flame retardant

- 1 Conductor: aluminum or copper, single or stranded, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation and internal filling: PVC compound or low fire hazard PVC compound.
- 3 Inner sheath: extruded PVC or low fire hazard PVC.
- 4 Armor cover: made of two galvanized steel strips.
- **5** Protective hose: PVC compound with reduced fire hazard.

АВВГ-ХЛ, ВВГ-ХЛ, АВВГнг(A)-ХЛ, ВВГнг(A)-ХЛ for voltage 0.66 and 1 kV

Power cables with plastic insulation in cold-resistant design, incl. flame retardant



DESIGN:

- 1 Conductor aluminum or copper single- or multi-wire, round or sector-shaped, class 1 or 2 according to GOST 22483.
- Insulation and internal filling: PVC compound or low fire hazard PVC compound with low glass transition temperature.
- 3 Inner sheath: PVC compound or low fire hazard PVC compound with low glass transition temperature.
- 4 Outer sheath: PVC compound or low fire hazard PVC compound with low glass transition temperature.

АВБШв-ХЛ, ВБШв-ХЛ, АВБШвнг(A)-ХЛ, ВБШвнг(A)-ХЛ for voltage 0.66 and 1 kV

Power cables with plastic insulation in cold-resistant design, incl. flame retardant



- 1 Conductor: aluminum or copper, single or stranded, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation and internal filling: PVC compound or low fire hazard PVC compound with low glass transition temperature.
- 3 Inner sheath: PVC compound or low fire hazard PVC compound with low glass transition temperature.
- 4 Armor cover: made of two galvanized steel strips.
- **5** Protective hose: PVC compound or low fire hazard PVC compound with low glass transition temperature.



ППГнг(A)-HF, ППГЭнг(A)-HF, ПБПнг(A)-HF for voltage 0.66 and 1 kV

Flame retardant power cables insulated and sheathed in halogen-free polymer compositions



DESIGN:

- 1 Conductor: copper single or multi-wire, round or sector shape, corresponds to class 1 or 2 according to GOST 22483.
- 2 Insulation and filling: Halogen-free polymer composition.
- 3 Inner sheath: extruded from a halogen-free polymer composition.
- **4** Outer sheath: halogen-free polymer composition.

АВВГЭ, ВВГЭ, АВВГЭнг(A), ВВГЭнг(A), ABBГЭнг(A)-LS, BBГЭнг(A)-LS for voltage 0.66 and 1 kV

Shielded plastic insulated power cables for power supply lines of equipment with frequency-controlled drive



- 1 Conductor: aluminum or copper, single or multi-wire, round or sector shape, class 1 or 2 according to GOST 22483.
- 2 Insulation and internal filling: PVC compound or low fire hazard PVC compound.
- 3 Inner sheath: extruded PVC or low fire hazard PVC.
- 4 Outer sheath: PVC compound or low fire hazard PVC compound.

ВВГнг(A)-FRLS for voltage 0.66 and 1 kV

Power cables with plastic insulation, flame retardant, with low smoke and gas emission, fire-resistant



DESIGN:

- 1 Conductor: copper, single or stranded, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Thermal barrier: made of mica tapes.
- **3** Insulation: low fire hazard PVC.
- 4 Inner sheath: extruded PVC compound of reduced fire hazard.
- **5** Outer sheath: low fire hazard PVC.

ВБШвнг(A)-FRLS for voltage 0.66 and 1 kV

Armored power cables with plastic insulation, flame retardant, with low smoke and gas emission



- 1 Conductor: copper, single or stranded, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Thermal barrier: made of mica tapes.
- 3 Insulation: low fire hazard PVC.
- 4 Inner sheath: extruded PVC compound of reduced fire hazard.
- **5** Armor cover: made of two galvanized steel strips.
- **6** Protective hose: made of fire-retardant PVC compound.



ABBΓHΓ(A)-LSLTX, BBΓHΓ(A)-LSLTX for voltage 0.66 and 1 kV

Power cables with plastic insulation, flame retardant, low toxicity



DESIGN:

- 1 Conductor aluminum or copper single- or multi-wire, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation and inner filling: low fire hazard PVC compound.
- 3 Inner sheath: extruded PVC of low fire hazard.
- 4 Outer sheath: low fire hazard PVC with low toxicity of combustion products.

ABБШвнг(A)-LSLTX, BБШвнг(A)-LSLTX for voltage 0.66 and 1 kV

Armored power cables with plastic insulation, flame retardant, low toxicity



- 1 Conductor: aluminum or copper, single or stranded, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation and internal filling: from PVC compound of reduced fire hazard.
- 3 Inner sheath: extruded PVC with low fire hazard and low toxicity combustion products.
- 4 Armor cover: made of two galvanized steel strips.
- **5** Protective hose: low fire hazard PVC compound with low product toxicity burning.

АПвВГ, ПвВГ, АПвГнг(A), ПвВГнг(A) for voltage 0.66 and 1 kV

Power cables with plastic insulation, incl. flame retardant



DESIGN:

- 1 Conductor: aluminum or copper, single or multi-wire, round or sector shape, class 1 or 2 according to GOST 22483.
- 2 Insulation: XLPE.
- 3 Inner sheath: extruded PVC or low fire hazard PVC.
- 4 Outer sheath: low fire hazard PVC

АПвБШв, ПвБШв, АПвБШвнг(A), ПвБШвнг(A) for voltage 0.66 and 1 kV

Power cables with plastic insulation, armored, incl. flame retardant



- 1 Conductor: aluminum or copper, single or stranded, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation: XLPE.
- 3 Inner sheath: extruded PVC of low fire hazard.
- 4 Armor cover: made of two galvanized steel strips.
- **5** Protective hose: PVC compound of reduced fire hazard



АПвБШп, ПвБШп for voltage 0.66 and 1 kV

Armored power cables with plastic insulation for conditions with high humidity



DESIGN:

- 1 Conductor: aluminum or copper, single or stranded, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation: XLPE.
- 3 Inner sheath: extruded PVC of low fire hazard.
- 4 Armor cover: made of two galvanized steel strips.
- **5** Protective hose: made of polyethylene with low water absorption.

АПвБШп(г), ПвБШп(г) for voltage 0.66 and 1 kV

Armored power cables with plastic insulation for conditions with high humidity



- 1 Conductor: aluminum or copper, single or stranded, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation: XLPE.
- 3 Water blocking elements.
- 4 Inner sheath: extruded PVC of low fire hazard.
- 5 Armor cover: made of two galvanized steel bands.
- **6** Protective hose: made of polyethylene with low water absorption

CONTROL CABLES

КВВГ, КВВГнг(A), КВВГнг(A)-LS LS for voltage 0.66 kV

Control cables with plastic insulation, incl. flame retardant, with low smoke and gas emission



КВБШв, КВБШвнг(A), КВБШвнг(A)-LS LS for voltage 0.66 kV

Control cables with plastic insulation, incl. flame retardant, with low smoke and gas emission



DESIGN:

- 1 Conductor: copper, single-wire, round, class 1 or 2 according to GOST 22483.
- 2 Insulation: PVC compound or low fire hazard PVC compound.
- 3 Outer sheath: PVC or PVC compound of reduced fire hazard.

- 1 Conductor: copper, single-wire, round, class 1 or 2 according to GOST 22483.
- 2 Insulation: PVC or low fire hazard PVC.
- 3 Inner sheath: extruded PVC or low fire hazard PVC.
- 4 Armor cover: made of two galvanized steel strips.
- **5** Protective hose: made of PVC compound or low fire hazard PVC compound.



КВВГЭ, КВВГЭнг(A), КВВГЭнг(A)-LS for voltage 0.66 kV

Shielded control cables with plastic insulation, incl. flame retardant, with low smoke and gas emission



КВВГЭнг(A)-FRLS for voltage 0.66 kV

Shielded control cables with plastic insulation, flame retardant, low smoke and gas emission, fire resistant



DESIGN:

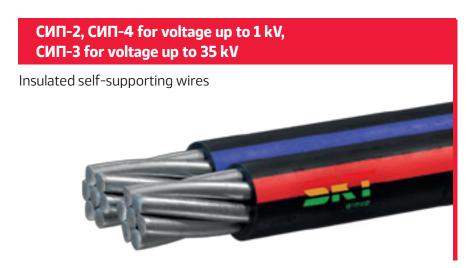
- 1 Conductor: copper, single-wire, round, class 1 or 2 according to GOST 22483.
- 2 Insulation: PVC compound or low fire hazard PVC compound.
- 3 Inner sheath: extruded PVC or low fire hazard PVC.
- 4 Screen: made of copper tapes or aluminoflex.
- 5 Outer sheath: PVC or PVC plastic compound of low fire hazard

- 1 Conductor: copper, single-wire, round, class 1 or 2 according to GOST 22483.
- **2** Thermal barrier: made of mica tapes.
- 3 Insulation: low fire hazard PVC.
- 4 Inner sheath: extruded from PVC compound of reduced fire hazard.
- **5** Screen: made of copper tapes or aluminum flex.
- 6 Outer sheath: low fire hazard PVC.



WIRES FOR OVERHEAD POWER LINES





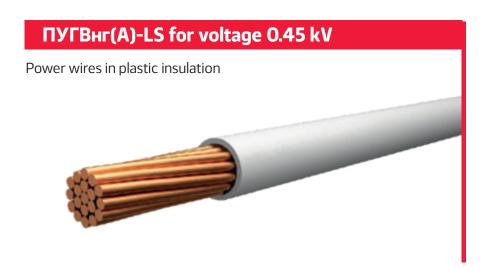
DESIGN:

- 1 Conductor: aluminum, multiwire, round shape, class 1 or 2 according to GOST 22483.
- 2 Central element: made of aluminum or steel wires.

- 1 Conductor: made of aluminum or aluminum alloy, stranded, round, class 1 or 2 according to GOST 22483.
- 2 Insulation: light-stabilized cross-linked polyethylene.







DESIGN:

- 1 Conductor: copper, single-wire, round, class 1 or 2 according to GOST 22483
- 2 Insulation: low fire hazard PVC.

- 1 Conductor: copper stranded, round, class 5 according to GOST 22483.
- 2 Insulation: low fire hazard PVC.







INKATEH LLC is a manufacturer of cable and wire products

Why INKATEH?

Products comply with GOST

Wide range

High quality guarantee

Full production cycle

High production speed

Prompt delivery

Full production cycle

Experienced and qualified engineering staff

Just in time

All products are durable and save ultimately your money and time

Experience in delivering to industry leaders



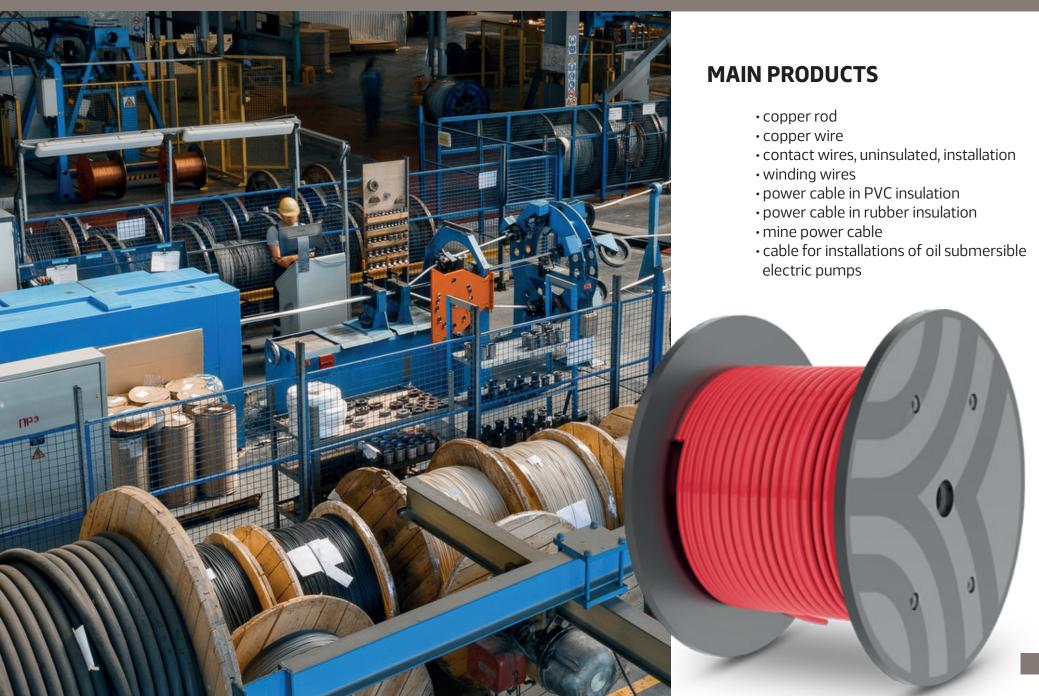
The company continues the tradition of quality production of ROSSKAT JSC, is focused on the successful development of production and promotion of cable and wire products in the market by maintaining and increasing the technical and commercial potentials achieved over the many years of operation of the production site.

INKATEH LLC manufactures a wide range of cable products: mine and excavator cable, power cable, winding wire, cable for oil submersible pumps, contact wire for overhead contact network of electric transport.

The manufactured products are in great demand among the leading industrial enterprises and distributors of electrical products in Russia, all products are certified and undergo the strictest quality control.

The high quality of products is largely ensured by modern equipment such as Niehoff, Troester (Germany), Rosendahl (Austria), SouthWire (USA), Technocable, Caballe (Spain), AGIE (Switzerland), LloydInstruments Ltd (England), Maerz (Germany)), professionally oriented management of the company, as well as quality control of manufacturing at the full cycle of the production chain.





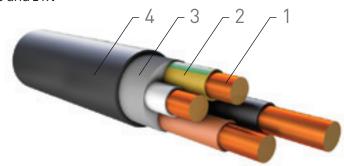


BBF for voltage 0.66 and 1 kV

Power cables with plastic insulation for voltage 0.66 and 1 kV

ВВГнг(A) for voltage 0.66 and 1 kV

Power cables with plastic insulation, flame retardant for voltages of 0.66 and 1 \mbox{kV}



DESIGN:

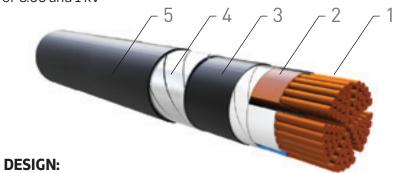
- 1 Conductor copper single- or multi-wire, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation made of polyvinyl chloride compound of reduced fire hazard. Core insulated wires twisted together. Internal spacing of the core made of insulated the core is filled with a bundle, pressed out of polyvinyl chloride plastic compound of reduced fire hazard. Multi-core cables have all cores of equal cross section. Four-core cables with a cross section of 25 mm² or more can have one core of a smaller cross section (earth core or neutral core).
- 3 The inner sheath is made of polyvinyl chloride compound of reduced fire hazard, is applied with filling the gaps between the insulated cores.
- 4 The outer shell is made of low fire hazard PVC.

ВБШв for voltage 0.66 and 1 kV

Power cables with plastic insulation for voltage 0.66 and 1 kV

ВБШвнг(A) for voltage 0.66 and 1 kV

Power cables with plastic insulation, flame retardant for voltages of 0.66 and 1 kV



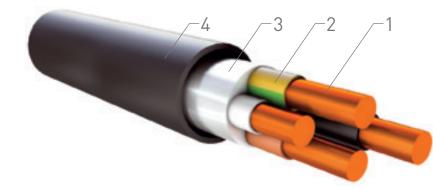
- 1 Conductor copper single-wire or multi-wire, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation made of polyvinyl chloride compound of reduced fire hazard. The core is insulated strands twisted together. The inner gap of the core made of insulated cores is filled with a bundle pressed out of polyvinyl chloride plastic compound of reduced fire hazard. Multi-core cables have all cores of equal cross section. Four-core cables with a cross section of 25 mm² or more can have one core of a smaller cross section (earth core or neutral core).
- 3 The inner sheath is made of polyvinyl chloride compound of reduced fire hazard, is applied with filling the gaps between the insulated cores.
- 4 Armor cover made of two galvanized steel bands.
- 5 Protective hose made of low fire hazard PVC.

POWER CABLES FOR FIXED INSTALLATION



ВВГнг(A)-LS for voltage 0.66 and 1 kV

Power cables with plastic insulation, flame retardant, with low smoke and gas emission for a voltage of 0.66 and 1 $\rm kV$

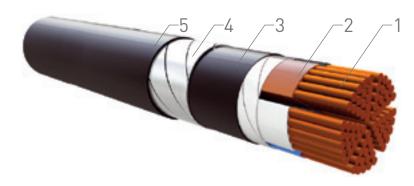


DESIGN:

- 1 Conductor copper single or multi-wire, round or sector shape, class 1 or 2 according to GOST 22483.
- 2 Insulation made of polyvinyl chloride compound of reduced fire hazard. The core is insulated strands twisted together. The inner gap of the core made of insulated cores is filled with a bundle pressed out of polyvinyl chloride plastic compound of reduced fire hazard. Multi-core cables have all cores of equal cross section. Four-core cables with a cross section of 25 mm² or more can have one core of a smaller cross section (earth core or neutral core).
- 3 The inner sheath is made of polyvinyl chloride compound of reduced fire hazard, is applied with filling the gaps between the insulated cores.
- 4 The outer shell is made of low fire hazard PVC.

ВБШвнг(A)-LS for voltage 0.66 and 1 kV

Power cables with plastic insulation, flame retardant, with low smoke and gas emission for a voltage of 0.66 and $1\,\mathrm{kV}$

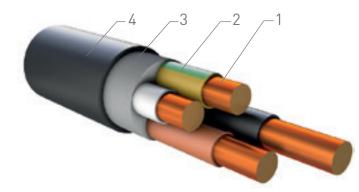


- 1 Conductor copper single-wire or multi-wire, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation made of polyvinyl chloride compound of reduced fire hazard. The core is insulated strands twisted together. The inner gap of the core made of insulated cores is filled with a bundle pressed out of polyvinyl chloride plastic compound of reduced fire hazard. Multi-core cables have all cores of equal cross section. Four-core cables with a cross section of 25 mm² or more can have one core of a smaller cross section (earth core or neutral core).
- 3 The inner sheath is made of polyvinyl chloride compound of reduced fire hazard, is applied with filling the gaps between the insulated cores.
- 4 Armor cover made of two galvanized steel bands.
- 5 Protective hose made of low fire hazard PVC.



ВВГнг(A)-LS-XЛм(УФ), ВВГнг(A)-LS-XЛ, ВВГнг(A)-LSм(УФ) for voltage 0.66 and 1 kV

Power cables with plastic insulation, flame retardant, with low smoke and gas emission for a voltage of 0.66 and 1 kV

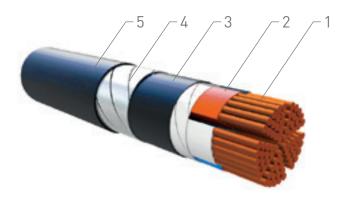


DESIGN:

- 1 Conductor copper single-wire or multi-wire, round or sector-shaped, class 1 or 2 according to GOST 22483.
- Insulation from polyvinyl chloride compound of low fire hazard, for cables made of PVC compound of reduced fire hazard with a low glass transition temperature for cables in the "HL" version.
- 3 The inner sheath is made of PVC-compound of low fire hazard, for cables in the "HL" version it is made of PVC-compound of reduced fire hazard with a low glass transition temperature. The inner sheath is applied to fill the gaps between the insulated cores.
- 4 The outer sheath is made of PVC compound of low fire hazard, for cables in the version "XΠ" it is made of PVC compound of reduced fire hazard with a low glass transition temperature, for cables with the index "m" the outer sheath is resistant to lubricating oils and diesel fuel, for cables with the "UV" index an outer sheath resistant to ultraviolet radiation.

ВБШвнг(A)-LS-XЛ, ВБШвнг(A)-LS-XЛм(УФ), ВБШвнг(A)-LSм(УФ) for voltage 0.66 and 1 kV

Power cables with plastic insulation, flame retardant, with low smoke and gas emission for a voltage of 0.66 and 1 kV



- 1 Conductor copper single-wire or multi-wire, round or sector-shaped, class 1 or 2 according to GOST 22483.
- 2 Insulation from polyvinyl chloride compound of low fire hazard, for cables made of PVC compound of reduced fire hazard with a low glass transition temperature for cables in the "HL" version.
- 3 The inner sheath is made of PVC-compound of low fire hazard, for cables in the "HL" version it is made of PVC-compound of reduced fire hazard with a low glass transition temperature. The inner sheath is applied to fill the gaps between the insulated cores.
- 4 Armor cover made of two galvanized steel bands.
- 5 Protective hose made of PVC compound of low fire hazard, for cables in the version "ΧЛ" made of PVC compound of reduced fire hazard with a low glass transition temperature, for cables with the index "m" a protective hose resistant to grease oils and diesel fuel, for cables with the "UV" index a protective hose resistant to ultraviolet radiation.

POWER CABLES FOR FIXED INSTALLATION

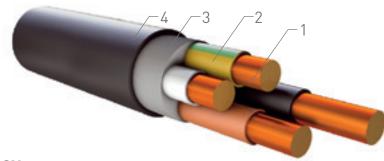


ВВГ-XЛ for voltage 0.66 and 1 kV

Power cables with plastic insulation in cold-resistant design or voltage 0.66 and 1 \mbox{kV}

ВВГнг(A)-XЛ for voltage 0.66 and 1 kV

Power cables with plastic insulation, flame retardant, cold-resistant version for voltage 0.66 and 1 \mbox{kV}



DESIGN:

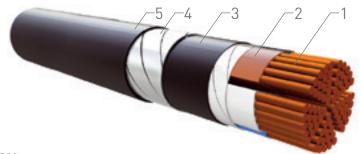
- 1 Conductor copper single or multi-wire, round or sector-shaped, corresponds to class 1 or 2 according to GOST 22483.
- Insulation PVC compound with low glass transition temperature. Core insulated conductors twisted together and fastened by a polypropylene thread (for sector cores). Insulated conductors of multi-core cables have a distinctive color. Insulation of the neutral core is blue. The ground conductor insulation has a two-color (green-yellow) color. The inner gap of the core made of insulated conductors is filled with a bundle pressed out of polyvinyl chloride plastic compound.
- **3** The inner sheath is made of polyvinyl chloride compound with a low glass transition temperature.
- **4** The outer shell is made of polyvinyl chloride compound with a low glass transition temperature.

ВБШв-ХЛ for voltage 0.66 and 1 kV

Power cables with plastic insulation in cold-resistant design or voltage 0.66 and 1 \mbox{kV}

ВБШвнг(A)-XЛ for voltage 0.66 and 1 kV

Power cables with plastic insulation, flame retardant, cold-resistant version for voltage 0.66 and 1 kV

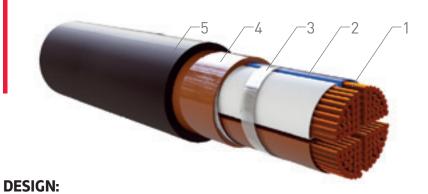


- 1 Conductor copper single or multi-wire, round or sector-shaped, corresponds to class 1 or 2 according to GOST 22483.
- Insulation PVC compound with low glass transition temperature. Core insulated conductors twisted together and fastened by a polypropylene thread (for sector cores). Insulated conductors of multi-core cables have a distinctive color. Insulation of the neutral core is blue. The ground conductor insulation has a two-color (green-yellow) color. The inner gap of the core made of insulated cores is filled with a bundle pressed out of polyvinyl chloride plastic compound.
- 3 The inner sheath is made of polyvinyl chloride compound with a low glass transition temperature.
- 4 Armor cover made of two galvanized steel bands.
- **5** Protective hose made of PVC compound with low glass transition temperature.



ППГнг(A)-HF, ППГЭнг(A)-HF, ПБПнг(A)-HF for voltage 0.66 and 1 kV

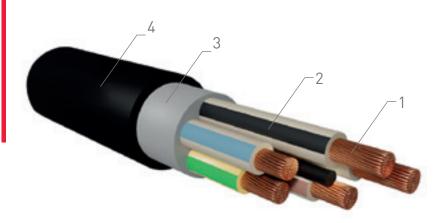
Flame-retardant power cables with insulation and sheath made of halogen-free polymer compositions for voltages of 0.66 and 1 kV



- 1 Conductor copper single or multi-wire, round or sector-shaped, corresponds to class 1 or 2 according to GOST 22483.
- 2 Insulation from a polymer composition that does not contain halogens.
- 3 Core insulated cores twisted together and fastened with a polypropylene thread (for sector cores). Insulated cores of multi-core cables have a distinctive color scheme. Blue core insulation. The ground conductor insulation has a two-color (green-yellow) color. The inner gap of the core made of insulated conductors is filled with a bundle pressed out of the polymer composition. Multi-core cables must have all cores of equal cross section. Four-core cables with conductors with a nominal cross section of 25 mm² or more may have one conductor of a smaller cross section (zero or ground).
- 4 Inner sheath from a polymer composition that does not contain halogens, is superimposed with filling the gaps between the insulated cores.
- 5 The outer shell is made of a polymer composition that does not contain halogens.

КГВВ, КГВВнг(A), КГВВнг(A)-LS for voltage 0.66 and 1 kV

Flexible cables with plastic insulation for voltage 0.66 and 1 kV

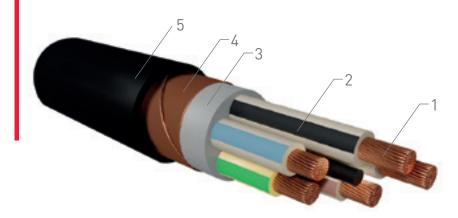


- 1 Conductor stranded copper, round shape, 5th class of flexibility according to GOST 22483.
- 2 Insulation made of PVC compound. The core is insulated strands twisted together. The inner gap of the core made of insulated conductors is filled with a bundle pressed out of polyvinyl chloride plastic compound. Multi-core cables have all cores of equal cross section. Four-core cables with a cross section of 25 mm² or more can have one core of a smaller cross section (earth core or neutral core).
- 3 The inner sheath is made of polyvinyl chloride plastic compound, superimposed with filling the gaps between the insulated cores.
- 4 The outer shell is made of PVC compound.



КГВЭВ, КГВЭВнг(A), КГВЭВнг(A)-LS for voltage 0.66 and 1 kV

Flexible cables with plastic insulation for voltage 0.66 and 1 kV



DESIGN:

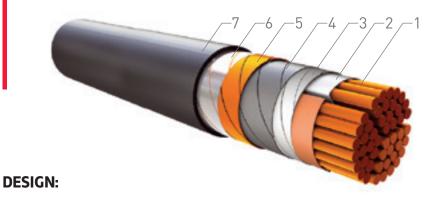
- 1 Conductor stranded copper, round shape, 5th class of flexibility according to GOST 22483.
- 2 Insulation made of PVC compound. Core insulated cores of two-, three-, four- and five-core cables twisted together. The inner gap of the core made of insulated cores is filled with a bundle pressed out of polyvinyl chloride plastic compound. Multi-core cables have all cores of equal cross section. Four-core cables with a cross section of 25 mm² or more can have one core of a smaller cross section (earth core or neutral core).
- 3 The inner sheath is made of PVC compound.
- 4 Screen a copper tape superimposed over the inner shell.
- 5 The outer shell is made of PVC compound.

BBF for voltage 6kV

Power cables with plastic insulation for voltage 6 kV

ВВГнг(A) for voltage 6 kV

Power cables with plastic insulation, flame retardant for a voltage of 6 \mbox{kV}



- 1 Conductor copper stranded, round or sector-shaped, class 2 according to GOST 22483.
- 2 Insulation made of PVC compound.

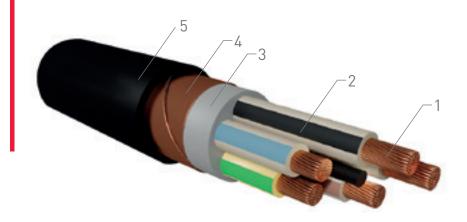
 Core three insulated conductors of equal cross section, twisted together.

 The inner gap of the core of insulated conductors is filled with a bundle pressed out of polyvinyl chloride plastic compound.
- 3 Inner sheath (for cables with round conductors) from polyvinylchloride plastic compound is superimposed with filling the gaps between the insulated cores.
- 4 An electrically conductive screen in the form of a winding of an electrically conductive non-woven fabric.
- 5 Metal shield made of two copper tapes. Nominal cross section of the metal screen: 16 mm² for cables with a core cross section of (16–120) mm²; 25 mm² for cables with core cross section (150–240) mm².
- 6 Separating layer in the form of a winding with polyethylene terephthalate film.
- 7 The outer sheath is made of PVC compound.



КГВЭВ, КГВЭВнг(A), КГВЭВнг(A)-LS for voltage 0.66 and 1 kV

Flexible cables with plastic insulation for voltage 0.66 and 1 kV



DESIGN:

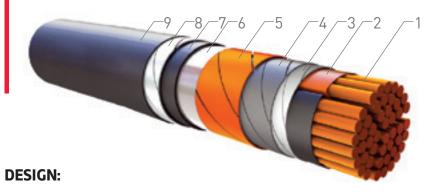
- 1 Conductor stranded copper, round shape, 5th class of flexibility according to GOST 22483.
- 2 Insulation made of PVC compound. Core insulated cores of two-, three-, four-and five-core cables twisted together. The inner gap of the core made of insulated cores is filled with a bundle pressed out of polyvinyl chloride plastic compound. Multi-core cables have all cores of equal cross section. Four-core cables with a cross section of 25 mm² or more can have one core of a smaller cross section (earth core or neutral core).
- 3 The inner sheath is made of PVC compound.
- 4 Screen a copper tape superimposed over the inner shell.
- 5 The outer shell is made of PVC compound.

ВБВ for voltage 6 kV

Power cables with plastic insulation for voltage 6 kV

ВБВнг(A) for voltage 6 kV

Power cables with plastic insulation, flame retardant for a voltage of $6\,\mathrm{kV}$



- 1 Conductor copper stranded, round or sector-shaped, class 2 according to GOST 22483.
- 2 Insulation made of PVC compound. Core three insulated conductors of equal cross section, twisted together. The inner gap of the core made of insulated conductors is filled with a bundle pressed from polyvinyl chloride plastic compound.
- Inner sheath (for cables with round conductors) made of polyvinylchloride compound is applied to fill the gaps between the insulated conductors.
- **4** An electrically conductive screen in the form of a winding of an electrically conductive non-woven fabric.
- 5 Metal shield made of two copper tapes. Nominal cross section of the metal screen: 16 mm² for cables with a core cross section of (16–120) mm²; 25 mm² for cables with core cross section (150–240) mm².
- 6 Separating layer in the form of a winding with polyethylene terephthalate film.
- 7 Pillow under the armor made of PVC plastic compound.
- 8 Armor cover made of two galvanized steel bands.
- 9 Outer sheath made of PVC compound.

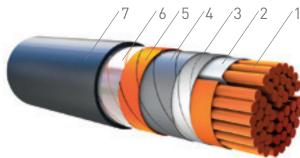


ВВГ-ХЛ for voltage 6 kV

Power cables with plastic insulation, cold-resistant version for voltage 6 kV

ВВГнг(A)-XЛ for voltage 6 kV

Power cables with plastic insulation, flame retardant, cold-resistant design for a voltage of 6 \mbox{kV}



DESIGN:

- 1 Conductor copper stranded, round or sector-shaped, class 2 according to GOST 22483.
- 2 Insulation PVC compound with low glass transition temperature. Core three insulated conductors of equal cross section, twisted together. The inner gap of the core made of insulated cores is filled with a bundle pressed from polyvinyl chloride plastic compound.
- **3** Inner sheath (for cables with round conductors) made of polyvinylchloride compound with a low glass transition temperature, is applied to fill the gaps between the insulated conductors.
- **4** An electrically conductive screen in the form of a winding of an electrically conductive non-woven fabric.
- **5** Metal shield made of two copper tapes. Nominal cross section of the metal screen: 16 mm² for cables with a core cross section of (16–120) mm²; 25 mm² for cables with core cross section (150–240) mm².
- **6** Separating layer in the form of a winding with polyethylene terephthalate film.
- **7** The outer sheath is made of polyvinyl chloride compound with a low glass transition temperature.

ВБВ-ХЛ for voltage 6 kV

Power cables with plastic insulation, flame retardant, cold-resistant design

ВБВнг(A)-XЛ for voltage 6 kV

Power cables with plastic insulation, flame retardant, cold-resistant design for voltage 6 kV

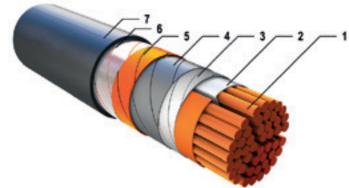


- 1 Conductor copper stranded, round or sector-shaped, class 2 according to GOST 22483.
- **2** Insulation PVC compound with low glass transition temperature. Core three insulated conductors of equal cross section, twisted together. The inner gap of the core made of insulated cores is filled with a bundle pressed out of polyvinyl chloride plastic compound.
- **3** Inner sheath (for cables with round conductors) made of polyvinyl chloride plastic compound with a low glass transition temperature, applied to fill the gaps between the insulated conductors.
- **4** An electrically conductive screen in the form of a winding of an electrically conductive non-woven fabric.
- 5 Metal shield made of two copper tapes. Nominal cross section of the metal screen: 16 mm² for cables with a core cross section of (16–120) mm²; 25 mm² for cables with core cross section (150–240) mm².
- **6** Separating layer in the form of a winding with polyethylene terephthalate film.
- 7 Pillow for armor made of PVC compound with low glass transition temperature.
- 8 Armor cover made of two galvanized steel bands.
- **9** The outer sheath is made of PVC compound with a low glass transition temperature.



ВВГнг(A)-LS for voltage 6 kV

Power cables with plastic insulation, flame retardant, with low smoke and gas emission for a voltage of 6 kV

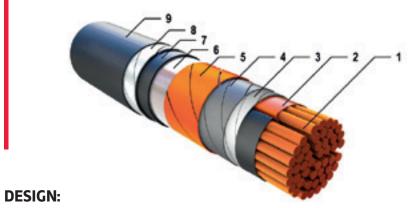


DESIGN:

- 1 Conductor stranded copper, round or sector shape, class 2 according to GOST 22483.
- 2 Insulation from polyvinylchloride compound of reduced fire hazard. Core three insulated conductors of equal cross section, twisted together. Internal spacing of the core from insulated cores, it is filled with a bundle, pressed out of polyvinyl chloride plastic compound of reduced fire hazard.
- 3 Inner sheath (for cables with round conductors) from polyvinylchloride compound of reduced fire hazard, superimposed with filling the gaps between the insulated cores.
- **4** Electrically conductive screen in the form of a winding of electrically conductive non-woven fabric.
- **5** Metal shield made of two copper tapes. Nominal cross section of the metal screen: -16 mm² for cables with a core cross section of (16–120) mm²; -25 mm² for cables with core cross section (150-240) mm².
- **6** Separating layer in the form of winding with glass tape.
- 7 The outer sheath is made of low fire hazard PVC.

ВБВнг(A)-LS for voltage 6 kV

Power cables with plastic insulation, flame retardant, with low smoke and gas emission for a voltage of 6 $\,\mathrm{kV}$



- 1 Conductor stranded copper, round or sector shape, class 2 according to GOST 22483.
- 2 Insulation from polyvinylchloride compound of reduced fire hazard. Core three insulated conductors of equal cross section, twisted together. Internal spacing of the core from insulated cores, it is filled with a bundle, pressed out of polyvinyl chloride plastic compound of reduced fire hazard.
- 3 Inner sheath (for cables with round conductors) from polyvinylchloride compound of reduced fire hazard, superimposed with filling the gaps between the insulated cores.
- **4** Electrically conductive screen in the form of a winding of electrically conductive non-woven fabric.
- 5 Metal shield made of two copper tapes. Nominal metal shield cross section: 16 mm2 for cables with core cross section (16–120) mm2; 25 mm² for cables with core cross section (150–240) mm².
- **6** Separating layer in the form of winding with glass tape.
- 7 Pillow under the armor made of PVC compound of reduced fire hazard.
- 8 Armor cover of two galvanized steel tapes.
- 9 The outer sheath is made of polyvinyl chloride compound of reduced fire hazard.

FLEXIBLE POWER CABLES WITH RUBBER INSULATION AND RUBBER SHEATH



BBF3 for voltage 0.66 and 1 kV

Power cables with plastic insulation, voltage 0.66 and 1 kV

ВВГЭнг(A) for voltage 0.66 and 1 kV

Power cables with plastic insulation, flame retardant, voltage 0.66 and 1 kV

DESIGN:

- 1 Conductor copper single or stranded, round or sector shape corresponds to class 1 or 2 according to GOST 22483.
- 2 Insulation PVC.
- 3 Core insulated cores, twisted together and fastened with a polypropylene thread (for sector cores). The insulated cores of multi-core cables have a distinctive color scheme. Insulation of zero conductors is blue. Ground wire insulation has a two-color (green-yellow) color. Inner gap core of insulated wires is filled with a bundle, pressed out of polyvinyl chloride plastic compound.
- 4 The inner shell is made of polyvinylchloride compound.
- 5 Screen copper tape superimposed over the inner shell.

ΚΓ for 380 and 660 V

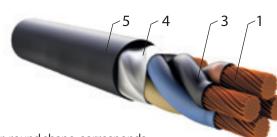
Power flexible cables for voltage 380 and 660 V

КГ-XЛ for 380 and 660 V

Flexible power cables, cold-resistant version for voltage up to 660 V

KFH for 380 and 660 V

Flexible power cables, flame retardant for voltage 380 and 660 V



DESIGN:

- 1 Conductor stranded copper, round shape, corresponds to class 5 according to GOST 22483.
- 2 Insulation from insulating rubber. The isolated veins have a distinctive coloring solid or in the form of a longitudinal strip. The insulation of the zero core is blue; if there is no neutral conductor, the blue color is used for the color of any conductor, except for the grounding one. The ground conductor has a green-yellow color or is indicated by the number 0. The color of single-core and two-core cables is not standardized. The colors brown, black, white and, if not combined, green and yellow are not used for core colors in multicore cables. Core insulated cores twisted together with a twist pitch of no more than 16 twist diameters.
- 3 Separation layer synthetic film or talc or other similar material applied to the core. It is allowed to manufacture without a film, provided that the insulated cores are separated from the sheath.
- 4 Outer sheath made of rubber hose, for cable brand KGN, oil-resistant, flame retardant. In single-core cables of the brand KG, KG-KhL, it is allowed to replace the insulation and sheath with an insulating-protective sheath. The nominal thickness of the insulating-protective sheath is equal to the sum of the nominal thicknesses of the insulation and sheath or twice the thickness of the insulation.



WIRES AND CABLES FOR ELECTRICAL INSTALLATIONS

ПуВ, ПуГВ

Wires with PVC insulation for electrical installations for voltage up to 450/750 V inclusive

GOST 31947-2012 SPECIFICATIONS 16-705.501-2010



1 Conductor:

- copper single- or multi-wire class 1 or 2 according to GOST 22483 for PuV brand wire;
- copper stranded class 5 according to GOST 22483 for wires of PuGV grades.
- 2 Insulation PVC.

Π уВнг(A)-LS, Π уГВнг(A)-LS, Π уВВнг(A)-LS, Π уГВВнг(A)-LS

Low fire hazard wires for electrical installations up to 450/750 V inclusive

GOST 31947-2012

SPECIFICATIONS 27.32.13-085-46233005-2021

DESIGN:

- **1** Conductor:
- copper single- or multi-wire class 1 or 2 according to GOST 22483 for wires of the $\Pi yBhr(A)-LS$, $\Pi yBBhr(A)-LS$;
- copper stranded 5th class according to GOST 22483 for wires of $\mbox{ ПуГВнг(A)-LS}$, $\mbox{ ПуГВВнг(A)-LS}$.
- 2 Insulation from polyvinylchloride compound of reduced fire hazard.
- **3** The outer sheath is made of low fire hazard PVC (for cables grades ΠyΒΒμr(A)-LS, ΠyΓΒΒμr(A)-LS).

Π у Π н Γ (A)-HF, Π у Γ Π н Γ (A)-HF, Π у Γ Π Пн Γ (A)-HF

Low fire hazard wires for electrical installations up to 450/750 V inclusive

GOST 31947-2012

SPECIFICATIONS 27.32.13-085-46233005-2021

DESIGN:

- **1** Conductor:
 - copper single- or multi-wire class 1 or 2 according to GOST 22483 for wires of $\Pi \gamma \Gamma \Pi \mu \Gamma(A) HF$, $\Pi \gamma \Gamma \Pi \Pi \mu \Gamma(A) HF$;
- copper stranded class 5 according to GOST 22483 for wires of the Π у $\Gamma\Pi$ H Γ (A)-HF, Π V $\Gamma\Pi\Pi$ H Γ (A)-HF brands.
- 2 Insulation from a polymer composition that does not contain halogens.
- **3** The outer sheath is made of a halogen-free polymer composition (for wires of grades ΠγΓΠΠης(A) HF, ΠγΠΠης(A)–HF).

WIRES AND CABLES FOR ELECTRICAL INSTALLATIONS



КуГВВнг(A)-LS, КуВВнг(A)-LS

Low fire hazard cables for electrical installations up to 300/500 V

GOST 31947-2012 SPECIFICATIONS 27.32.13-085-46233005-2021

КуППнг(А)-НF, КуГППнг(А)-НF

Low fire hazard cables for electrical installations up to 300/500 V

GOST 31947-2012 SPECIFICATIONS 27.32.13-085-46233005-2021

DESIGN:

- **1** Conductor:
 - copper single- or multi-wire class 1 or 2 according to GOST 22483 for cable of the KuVVng (A) -LS brand;
 - copper stranded class 5 according to GOST 22483 for cable brand KuGVVng (A) –I S.
- 2 Insulation from polyvinylchloride compound of reduced fire hazard. The core is insulated strands twisted together. The insulated cores of multi-core cables have a distinctive color scheme. Blue core insulation. The ground conductor insulation has a two-color (green-yellow) color. The inner gap of the core of insulated cores is filled with a bundle, pressed out of polyvinyl chloride plastic compound of reduced fire hazard.
- **3** The outer sheath is made of polyvinyl chloride compound of reduced fire hazard.

DESIGN:

- 1 Conductor:
- copper single– or multi–wire class 1 or 2 according to GOST 22483 for KuPPng(A)-HF brand cable / $Ky\Pi\Pi hr(A)-HF$;
- copper stranded class 5 according to GOST 22483 for cable brand KuGPPng (A) -HF / KyГППнг(A)-HF.
- 2 Insulation from a polymer composition that does not contain halogens. The core is insulated strands twisted together. The insulated cores of multi-core cables have a distinctive color scheme. Blue core insulation. The ground conductor insulation has a two-color (green-yellow) color. The inner gap of the core made of insulated cores is filled with a bundle pressed out of the polymer composition.
- **3** The outer sheath is made of a halogen-free polymer composition (for cables of the KuGPPng(A)-HF, KuPPng(A)-HF brands / КуГППнг(A)-HF, КуППнг(A)-HF.







"BALTKABEL" plant

The BALTKABEL plant is one of the leading manufacturers of cable and wire products in the North-West region of Russia, is part of the AKRON HOLDING Group of Companies, the largest independent industrial and metallurgical Holding in Russia.

The BALTKABEL plant was founded in 1999. and over many years of work has established itself as a manufacturer of high quality products, sensitively captures the changing needs of the country in cable and wire products. A modern organization of production and management, a professional team, investment projects allow the company to quickly develop promising niches and new markets.

The applied production quality management system, as well as constant control at all stages of production, from the purchase of materials to strict criteria for testing the final product, allows the end user to obtain a high quality product in full compliance with GOST.

Today, the enterprise produces self-supporting insulated wires of the SIP-2, SIP-3, SIP-4 grades, as well as uninsulated aluminum and copper wires of the grades A, AS, M.







Wire A



Brand	A
Specification	Wire uninsulated for overhead power lines. Conductor twisted from aluminum wires.
Nominal section, mm²	16
Operating temperature, C	Up to +90
Application area	For the transmission of electrical energy in overhead power networks (TL) in areas with a temperate and cold climate, in an atmosphere with a sulfur dioxide content of not more than 150 mg / m3 x day and chlorides of less than 0.3 mg / m3 x day. Service life: 45 years. Installation – aerial placement on the supports of power lines, in accordance with the rules for the operation of electrical equipment and the rules for the use of power plants and networks.



Wire AC



Brand	AC
Specification	Wire uninsulated for overhead power lines. A conductive conductor consisting of a steel core made of galvanized steel wires of normal strength, and a conductive part of aluminum wires.
Nominal section, mm ²	Al/Ct - Al/Ct 16/2,7 - 300/67
Operating temperature, C	Up to +90
Application area	For the transmission of electrical energy in overhead power networks (TL) in areas with a temperate and cold climate, in an atmosphere with a sulfur dioxide content of not more than 150 mg / m3 x day and chlorides of less than 0.3 mg / m3 x day. Service life: 45 years. Installation - aerial placement on the supports of power lines, in accordance with the rules for the operation of electrical equipment and the rules for the use of power plants and networks.







Wire M



Brand	М
Specification	Wire uninsulated for overhead power lines. Conductor, consisting of twisted copper wires, multi-wire, round shape, class 2 according to GOST 22483-2012.
Номинальное сечение, мм²	16-400
Operating temperature, C	Up to +90
Application area	For operation on land and at sea in areas with a temperate and cold climate, in an atmosphere with a sulfur dioxide content of not more than 250 mg/m3 x day and chlorides of less than 300 mg/m3 x day



Self-supporting insulated wire (CИП -2)



Brand CИП-2 specification 27.32.13-001-48751885-2022,

GOST 31946-2012

Description Self-supporting insulated wire for overhead transmission

lines, with aluminum main conductors, with light-stabilized cross-linked polyethylene insulation, with an insulated zero conductor made of aluminum alloy, with or without auxiliary conductors for outdoor lighting circuits, for rated alternating

voltage 0.6/1 kV

Number of current- carrying 2-6

cores

Conductor cross section, mm² 16 - 240

Operating temperature, C from -60 to +90

Application area For overhead power lines and branches to inputs

to residential buildings, outbuildings in areas with a temperate and cold climate, in an air atmosphere of types I and II

according to GOST 15150

Self-supporting insulated wire (CИΠ-3)



Brand CИП-3 brand specification 27.32.14-002-48751885-2022,

GOST 31946-2012

Description Protected wire for overhead power lines, with protective

insulation made of light-stabilized cross-linked

polyethylene, with an aluminum alloy conductor, for a rated voltage of 20 and 35 kV, a rated frequency of 50 Hz

voltage of 20 and 55 kV, a rated frequenc

Number of conductors 1

Conductor cross section, mm² 25 - 240

Operating temperature, C from -60 to +50

Application area For overhead power transmission lines for a rated voltage

of 10–35 kV in an air atmosphere of types II and III according to GOST 15150–69, including on the coasts of the seas, salt lakes, in industrial areas and areas of saline sands.





Self-supporting insulated wire (CИП-4)



Brand CMΠ-4 specification 27.32.13-001-48751885-2022,

GOST 31946-2012

Description Self-supporting insulated wire for overhead transmission

lines, with aluminum main conductors, with light-stabilized cross-linked polyethylene insulation, with or without auxiliary conductors for outdoor lighting circuits, for a rated

alternating voltage of 0.6/1 kV

Number of conductors 1-6

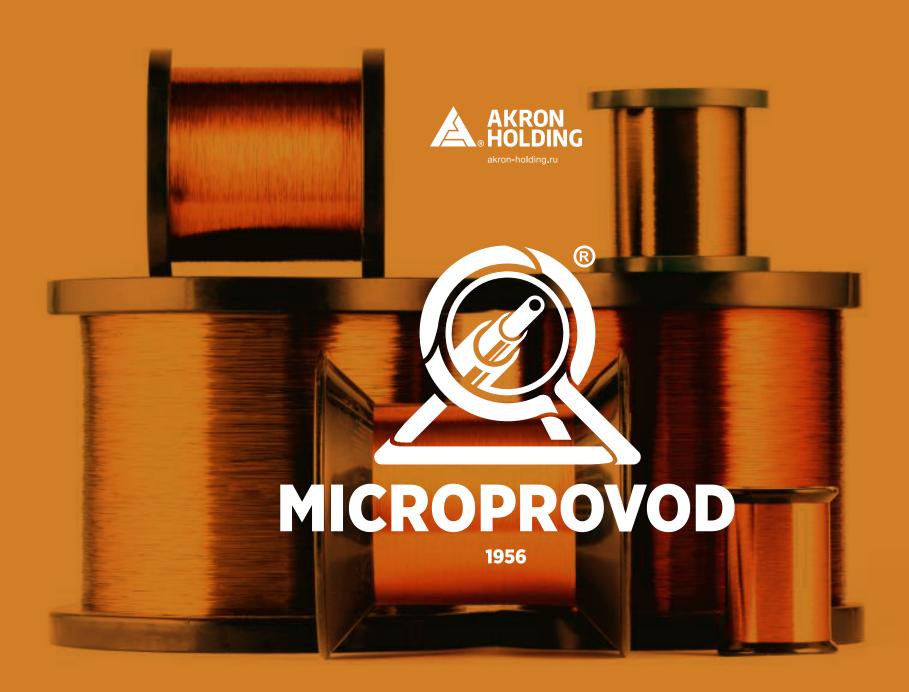
Conductor cross section, mm² 16 - 185

Operating temperature, C from -60 to +50

Application area

The wires are designed for overhead power lines for a rated voltage up to 0.6/1 kV inclusive, for mains of overhead power lines (OHL) and linear branches from OHTL in an air atmosphere of types II and III according to GOST 15150-69, including on the coasts seas, salt lakes, industrial areas and areas of saline sands.







Since 2021, Mikroprovod LLC has been part of Akron Holding

Microprovod LLC

is one of the leading enterprises in Russia and the CIS countries, specializing in the production of thin and thin enameled wires with a diameter of 0.02 to 4.55 mm, made from copper, nickel-plated copper, resistance alloys and precious metals.

MAIN GOALS:

- · Achieving a leading position in the market;
- Ensuring compliance with product characteristics the best world samples;
- Further technical re-equipment of production;
- Improvement of technology and organization of production in order to improve product quality;
- Improvement and development of the quality management system;

BASIC PRINCIPLES:

- · The quality of the manufactured products, its competitiveness is the basis of the well-being of the enterprise and each of its employees;
- Fulfillment of requirements and wishes of the consumer;
- Professionalism and responsibility of each employee for the final result of their work.







Туре	Temperature index	Insulation type	Norms and standards	Manufacturing range, mm
	105°C (A)	polyvinyl formal	SPECIFICATIONS 16-505.583-77	0.200 – 1.250
ПЭТВ-1,2		polyether	SPECIFICATIONS 16-705.110-79 MЭK 317-34	0.060 - 2.500
ПЭТВМ	- - - 130°C (B)	polyether	SPECIFICATIONS 16-505.370-78	0.250 - 1.400
ПЭТВКТ		polyether	SPECIFICATIONS 16-505.582-78	0.050 - 0.800
ПЭТВКМ; ПЭТКД		polyetherimide + polyamide	SPECIFICATIONS 16-705.354-84	0.200 - 0.450
ПЭВТЛД; ПЭВТЛД ТИ 180		polyurethane + polyvinyl butyral	SPECIFICATIONS 16-705.160-80 MЭK 317-2	0.014 - 0.400
ПЭВТЛК		polyurethane + polyamide	SPECIFICATIONS 16-505.480-73 MЭK 317-19	0.040 - 0.355
ПЭТ-155		polyetherimide	SPECIFICATIONS 16.K71-160-92 M9K 317-3	0.060 - 2.500
ПЭТНХ-155 ПЭТММ-155 ПЭТМТ-155		polyetherimide	SPECIFICATIONS 16-505.810-75	0.020 - 0.800
ПЭВТЛ-1,2; ПЭВТЛ-2 high voltage	155°C (F)	polyurethane	SPECIFICATIONS 16-505.446-77 MЭK 317-20	0.020 - 1.600
ПЭФ-155		polyester cyanurathimide	SPECIFICATIONS 16-505.673-77	0.063 – 1.800
ПЭТР-155		polyetherimide	SPECIFICATIONS 16-705.048-78	0.020 - 0.200
ПЭТМ-155		polyester cyanurathimide	SPECIFICATIONS 16-705.173-80	0.050 - 2.000
ПЭЦ-2		polyetherimide + polyamide	SPECIFICATIONS 16-502.029-84	2 × 0.050
ПЭТД-180		polyetherimide + polyamidimide	SPECIFICATIONS 16-705.264-82 MЭK 317-13	0.200 – 2.000
ПЭФД-180		polyether cyanurathimide + polyamidimide	SPECIFICATIONS KI 16-011-96	0.200 – 2.500
ПЭТ-180	180°C (H)	modified	SPECIFICATIONS KIT 16-012-96 M9K 317-8	0.060 - 2.500
ПЭУ-Д-180		polyester	SPECIFICATIONS 16.K14-20-99	0.05 - 0.500
ПЭФ-155Ф		polyether cyanurathimide	SPECIFICATIONS KIT 16-009-95	0.200 - 0.750
ПЭТ-200		polyamideimide	SPECIFICATIONS 16-505.937-76 MЭK 317-26	0.020 - 2.500
ПЭЭТДЗ	200°C (C)	fine-conducting core as part of oil submersible cables	SPECIFICATIONS KIT 16-034-2019	2.650 - 5.000
ПЭТД-200		polyetherimide+polyamideimide	SPECIFICATIONS KIT 16-019-07 M3K 317-7	0.020 - 2.500
ПЭТ- imide		polyimide	SPECIFICATIONS 16-505.489-78 MЭK 317-7	0.030 - 1.600
ΠΗЭΤ- imide	220°C (C)	polyimide	SPECIFICATIONS 16-505.489-78 MЭK 317-7	0.030 – 1.600
ΠΗЭΤ- imide		polyimide	SPECIFICATIONS 16-502.001-81	0.355 – 1.250
ПЭКПИ-250	250 °C (C)	polyimide	SPECIFICATIONS 3591-001-11783531	1,000 -3,000



In 2022, Microprovod LLC opened a new direction for the implementation of power cable for fixed laying from 0.66kV to 6Kv

TYPES OF POWER CABLE:

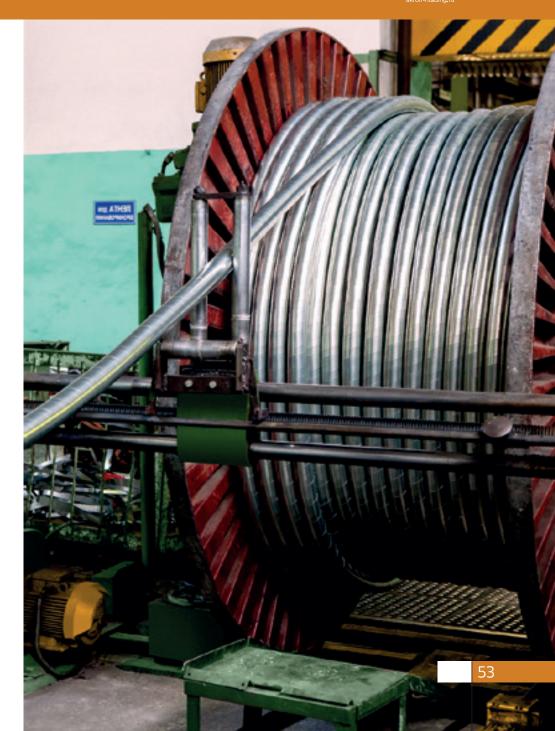
- ВВГнг (A)-LS SPECIFICATION 310
- ВБШвнг (A)-LS
- BBГнг (A)-FRLS
- ВБШвнг (A)-FRLS
- BBГЭнг (A)-FRLS
- ВВГнг (A)-LSLTx
- ВБШвнг (A)-LSLTx
- ВВГЭнг (A)-LSLTx
- ВВГнг (A) HL
- ВБШвнг (A) HL
- ППГнг (A)-HF
- ППГнг (A)-FRHF
- BBГ-Пнг (A)-LS (flat)
- ППГ-Пнг (A)-HF (flat)
- NYM (flat)



A new direction of the Mikroprovod plant was the implementation of a control cable designed to monitor the state of objects, control equipment and relay protection and automation devices, alarm devices.

TYPES OF CONTROL CABLE:

- KBBГнг(A)-LS
- КВБбШвнг(A)-LS
- KBBГЭнг(A)-LS SPECIFICATION 310
- КВВГнг(А)-ХЛ
- КВВГЭнг(А)-ХЛ









ELECTROSHIELD SAMARA

ABOUT THE COMPANY

Since November 2022, Electroshield Samara became part of Akron Holding

ELECTROSHIELD SAMARA

is a high-tech manufacturing company with an 80-year history, the largest Russian manufacturer of electrical equipment in the 0.4–220 kV segment

Backbone enterprise of the Russian Federation.

Fields of application of equipment



Oil and gas production and processing



Generation



Industrial enterprises



Network companies, city networks



Russian Railways



Renewable Energy



COMPLETE DISTRIBUTION DEVICES





КСО-СЭЩ-298M 6, 10 kV



- Indoor chamber with vacuum circuit breakers and load break switches.
- One-way service.
- Main circuit current up to 1600 A.
- Tripping current of circuit breakers 20 kA.

КРУ-СЭЩ-59 6, 10 kV



- A cell in an electrotechnical block-box of a high degree
- of factory readiness.
- Floor mounted circuit breaker at the bottom of the cabinet.
- Degree of protection of a cover of IP54.
- Main circuit current up to 2500 A.
- Circuit breaker opening current up to 31.5 kA.

КРУ-СЭЩ- 61M/63 6, 10 kV



- · Cell of internal installation.
- Floor mounted circuit breaker at the bottom of the cabinet.
- Bilateral service.
- Main circuit current up to 4000 A.
- Circuit breaker opening current up to 40 kA

COMPLETE DISTRIBUTION DEVICES

КРУ-СЭЩ-65 35 kV



- Execution external in a block box of high factory readiness.
- One-way service.
- Main circuit current up to 1600 A.
- Circuit breaker opening current up to 25 kA.

КРУ-СЭЩ-70 6, 10, 15, 20 KV



- · Cell of internal installation.
- Switch in the middle of the cabinet on the inventory trolley.
- One- and two-way service.
- Main circuit current up to 4000 A.
- Circuit breaker opening current up to 40 kA.

КРУ-СЭЩ-70 35 kV



- · Cell of internal installation.
- Floor mounted circuit breaker at the bottom of the cabinet.
- Bilateral service.
- Main circuit current up to 2500 A.
- Circuit breaker opening current up to 31.5 kA.

COMPLETE DISTRIBUTION DEVICES



КРУ-СЭЩ-80-10H with a floor switch



- · Cell of internal installation.
- Floor-mounted switch in the middle part of the cabinet.
- · Cell width 600 mm.
- Bilateral service.
- Main circuit current up to 4000 A.
- Tripping current of circuit breakers up to 40 kA.

КРУ-СЭЩ-80 with the middle location of the switch



- · Cell of internal installation.
- Middle location of the switch.
- · Cell width 600 mm.
- One-way / two-way service.
- Main circuit current up to 2000 A.
- Tripping current of circuit breakers up to 31.5 kA.

КРУ-СЭЩ-85 with middle switch position



- · Cell of internal installation.
- Middle location of the switch.
- · Cell width 750 mm.
- One-way service.
- Main circuit current up to 1600 A.
- Tripping current of circuit breakers up to 31.5 kA.



НКУ-СЭЩ

- Certified equipment of a full production cycle and tested in the factory for maximum factory readiness.
- Designed for primary and secondary distribution of electricity, provide high reliability of power supply.
- Maximum safety and protection of personnel, ease of use and maintenance, guaranteed reliability.
- Ability to implement projects: complex, according to individual requirements, international.

НКУ-СЭЩ-М



- Current up to 5000 A.
- Blocks of stationary execution.
- Degree of protection up to IP54.
- · Sectioning degree up to 4b.
- Earthquake-resistant design up to 9 points on the MSK scale.
- Construction on the hardware base of any manufacturer - according to the requirements of the customer or project.
- Guaranteed safety of personnel and equipment in the event of a malfunction.
- Insulated busbars prevent electrical discharge and arc propagation.
- Solutions with VFD, soft starter of full factory readiness.
- Solutions based on automatic switches and ballasts ELECTROSHIELD SAMARA.

НКУ-СЭЩ-МВ



- · Current up to 6300 A.
- · Retractable units.
- · Degree of protection up to IP54.
- · Sectioning degree up to 4b.
- Earthquake-resistant design up to 9 points on the MSK scale.
- Ability to quickly repair and "hot-swap blocks" in the area of the accident.
- Guaranteed safety of personnel and equipment in the event of a malfunction.
- Insulated busbars prevent electrical discharge and arc propagation.
- Solutions with VFD, soft starter of full factory readiness.
- Complex and individual design solutions.
- Integration of power and auxiliary equipment of a wide range of vendors.
- Solutions based on automatic switches and ballasts ELECTROSHIELD SAMARA.
- Integration of power and auxiliary equipment according to the requirements of projects and customers.



КТП-СЭЩ-П indoor installation

- On the basis of PYHH KTПП, HKY with stationary or retractable units with power equipment SESH, or according to the requirements of the project or the customer.
- Rated busbar current up to 6300 A.
- Full production cycle at the factory.
- Control at all stages of manufacturing, testing, high quality and guaranteed
- the reliability of the equipment is confirmed by appropriate tests.
- · Full factory readiness.
- Complex supply, installation supervision and commissioning by certified factory specialists.
- Service, warranty and post-warranty service.

КТП-СЭЩ-П block-modular version (in insulated shell)



- Full production cycle at the factory.
- Dimensions according to
- with project requirements.
- Full factory readiness.
- Earthquake resistant design.
- Proven technical and strength characteristics, high quality.

Complete transformer substation Pilot OUTDOOR INSTALLATION IN METAL SHELL



- The design is designed without the use of welding operations - the absence of corrosion centers.
- The case is made of galvanized metal with the subsequent painting by powder enamels -
- extended service life, preservation of a presentable appearance, no need for work to remove corrosion and restore paintwork.
- Safety of operation and maintenance the presence of mechanical interlocks on the HV and LV sides.
- Demonstrated safety of service personnel and availability of a localization test report.
- · Solutions based on automatic switches SESH.
- Ability to integrate power and secondary equipment of any manufacturer at the request of the customer or the project.
- Construction of a "smart PTS" with integrated security and fire alarms with the ability to output and send signals and parameters from the automated control system.
- · Protection against unauthorized access.



ВА-СЭЩ-В АСВ



Complete range of high quality air circuit breakers with high breaking capacity.

Circuit breakers have a complete set of necessary functions: overcurrent protection, coordination with other protection devices, monitoring of the supply network, measurement, diagnostics, analysis and data transmission.

- Russian production.
- Range of rated currents up to 6300 A.
- · Several types of microprocessor releases.
- · Lots of built-in features.
- · Large selection of accessories.
- The highest breaking capacity up to 120 kA.
- · Minimum overall dimensions.
- Operating temperature up to -40°C.
- Possibility of implementation as a part of ELECTROSHIELD SAMARA products and as an independent product.
- Warehouse for finished products at the ELECTROSHIELD SAMARA plant in Samara.

ВА-СЭЩ МССВ



Circuit breakers in a molded case with a maximum breaking capacity - up to 150 kA. The line of switches is characterized by excellent performance, rich functionality and high breaking capacity. VA-SESH fully comply with market development trends and needs, have a full set of necessary functions that allow not only to protect power supply networks, but also to diagnose, monitor and analyze the network.

- · Russian production.
- Several sizes for rated currents up to 1600 A.
- Wide choice of releases.
- · Large selection of accessories.
- Fixed / plug-in / draw-out design.
- The highest breaking capacity up to 150 kA.
- · Minimum overall dimensions.
- Operating temperature up to -40°C.
- Possibility of implementation as a part of ELECTROSHIELD SAMARA products and as an independent product.
- Warehouse for finished products at the ELECTROSHIELD plant in Samara

VACUUM BREAKERS AND ELECTRIC DEVICES



ВВУ-СЭЩ 10 kV



ВВУ-СЭЩ 35 (27,5) kV

ВВН-СЭЩ 35 (27,5) kV



ВВМ-СЭЩ 10 kV







- Large selection of additional options: auxiliary power supply, interlocks, current releases and trip coils from an independent power source.
- · High switching resource.
- Stationary and withdrawable design as part of complete switchgears and chambers prefabricated unilateral service optical communication cable.
- Terminal strip and secondary switching bundles with various types of plug connectors.
- · Longitudinal and transverse arrangement of poles. Flat and round busbars with detachable connection.
- Versions with various standard pole spacings.
- The whole range of drives (spring-motor, electromagnetic, magnetic latch).

ELECTRIC APPLIANCES



- · Leading global suppliers of components, 100% quality control at all stages of production.
- Reliable anti-corrosion coating, high switching life.
- Large selection of options and layout solutions.
- · Manual and motor drives, remote control.
- · Maintenance-free contacts of the main blades and grounding blades increase reliability and reduce machine maintenance costs.



КВЭ-СЭЩ with switch ВВМ-СЭЩ



Universal cassette withdrawable element designed for use in modern complete switchgear.

MAIN **TECHNICAL PARAMETERS**

PARAMETER	IMPOI	IMPORTANCE		
Type of circuit breaker used	ВВМ-СЭЩ-3-10- 20/1000	ВВМ-СЭЩ-3-10- 31,5/1600		
Rated voltage, kV		10		
Rated current, A	1000	1600		
Rated breaking current, kA	20	31,5		
Electrodynamic resistance current, kA	51	80		
Resource for switching resistance: - at rated current, "VO" cycles - at rated breaking current, cycles "VO"	50 000 100	30 000 50		
Cassette base stroke, mm	2	200		
Interpole distance, mm	20	200, 210		
Weight, kg	87	95		



Outdoor disconnectors 35 kV



Disconnectors for outdoor installation 220 kV, 110 kV



Load break switches 10 kV



Outdoor disconnectors 10 kV



- Rated voltage 10 220 kV.
- Rated current 630 3150 A.
- · Mechanical life:
 - 10 kV disconnectors 2000 10,000 VO cycles;
 - disconnectors 35, 110, 220 kV 10,000 VO cycles;
 - VNA-SESH 2000 VO cycles.

POWER TRANSFORMERS

TRANSFORMERS WITH OIL INSULATION

ТМПНГ-СЭЩ 63-1200 kVA



For powering submersible electric pumps for oil production.

ТМ(Г)(Ф)-СЭЩ 25-3150 kVA



- Voltage class 6, 10, 15, 20, 35 kV.
- Series 11 is standard.
- Series 12 with reduced losses according to commodity equipment specification 34.01-3.2-011-2021 and Government Decree No. 600.
- Series 14 using flame retardant dielectric.
- · Series 15 is insulating (separating).
- Series (МШ) low noise.

ТМ(H)-СЭЩ 2500-6300 kVA



Voltage class 35 kV. For work in electrical networks using load regulation or switching without excitation.

TRANSFORMERS WITH DRY-CAST INSULATION

ТЛС(3)-СЭЩ with dry-cast insulation



- Power 25-100 kVA.
- Voltage class 6, 10 kV.
- Degree of protection from IP00 to IP21.
- Execution with switching without excitation and without switching without excitation.

Low Power Transformer ОЛ(C)-СЭЩ



- Power 0.63...4 kVA.
- Voltage class 6, 10, 35 kV.



MEASURING TRANSFORMERS



ELECTROSHIELD SAMARA produces a full line of instrument current and voltage transformers for indoor and outdoor installation with voltage up to 35 kV

ADVANTAGES:



- Reliability and accuracy of measurements.
- Production of transformers of any configuration.
- A wide range of current and voltage transformers according to the rated primary voltage and accuracy class.
- Ease of maintenance and ease of installation.

Support cast ТОЛ-СЭЩ 10, 20, 35 kV



Tire cast ТШЛ-СЭЩ 0,66; 10; 20 kV



Zero sequence ТЗЛК(Р)-СЭЩ 0,66 kV



Cast through passages ТПЛ-СЭЩ 10 kV



Support cast НОЛ-СЭЩ 6, 10, 20, 35 kV



Support cast grounded 3НОЛ-СЭЩ 6, 10, 15, 20, 35 kV



Three-phase group 3х3НОЛ-СЭЩ, НАЛИ-СЭЩ 6, 10, 35 kV













CONFIRMED
LEROY MERLIN'S BIGGEST
DIY-NETWORK LEROY MERLIN

MONTHLY STOCK IN STOCK

TM PBK AND TM ANTIFIRE PRODUCT ACCESSORIES POSSIBILITIES - MONOPOSTABOK WARRANTY

DAYS A WEEK WE SUPPLY PRODUCTS
TO OUR PARTNERS

LOGISTICS CENTERS:
IN MOSCOW REGION
AND OPENBURG CITY





OUR PARTNERS

The largest international and Russian DIY chains







Leading construction companies in Russia and CIS countries





Major players in the wholesale and retail market of building materials



УРАЛЬСКАЯ ИНВЕСТИЦИОННАЯ КОМПАНИЯ



Design institutes of Russia



Installation and design organizations











BRASSCO

Integrated metalworking enterprise BRASSCO combines the traditions and technologies of Italy, Japan, Germany and Russia.

We adopted the approaches, traditions and best practices of the world's leading manufacturers, added our own successful management to ensure a complete metal processing cycle.

BRASSCO POSSIBILITIES

Production of serial products - spheres and components according to drawings, samples and terms of reference

Production of complex single products

Application of various galvanic coatings

Development of engineering and design documentation









PRODUCTION OF RODS AND INSERTED PARTS

- high-performance equipment
- · high-precision geometry
- execution advanced Italian, German

PRODUCTION OF COMPLEX SINGLE PRODUCTS

- modern milling, turning, electroerosive, tool-grinding technologies and equipment
- processing of parts of varying degrees of complexity
- technical support of experts: from the creation of design documentation to commissioning

APPLICATION OF GALVANIC COATING

- single and serial coverage
- coating on overall products of various shapes up to 2000*1000*500 mm

PRODUCTION OF BRASS THREADED FITTINGS

are used for pipeline connections of cold, drinking, household and hot water supply, heating, as well as for connecting plumbing fixtures

KEY BENEFITS

- maximum automation and robotization of production processes
- narrow-profile specialists with extensive experience in metal
- manufacturing industry, a well-established supply chain,
- including for export customer-oriented enterprise management system









Polypropylene pipe SDR 6, SDR 11

Used for cold and hot water systems

Coefficient of linear expansion - 0.015 mm/m

Glass fiber reinforced pipe SDR 6, SDR 7.4

Used for systems cold and hot water supply, high-temperature heating

Coefficient of linear expansion - 0.06 mm/m

Pipe reinforced with aluminum SDR 6

Used for systems cold and hot water supply, Closed heating systems

Coefficient of linear expansion - 0.03 mm/m















Metal-plastic pipe PERT+AL+PERT

Used for underfloor heating

Coefficient of linear expansion - 0.03 mm/m

The aluminum layer provides 100% oxygen-tight and low linear expansion

Polyethylene pipe PERT

Used for underfloor heating

Coefficient of linear expansion - 0.013 mm/m

The pipe does not shrink and does not require regular tightening of fittings

Polyethylene pipe HDPE

Used for watering and cold water supply

Coefficient of linear expansion - 0.018 mm/m

Increased resistance to ultraviolet allows you to lay the pipeline in an open way





POLYPROPYLENE AND COMBINED FITTINGS, SHUT-OFF VALVES

















PN25

60°C — operating temperature 80°C — maximum temperature 10 ATM — working pressure







Advantages

- perfectly glossy surface
- patented design of embedded elements
- pipe and socket connection









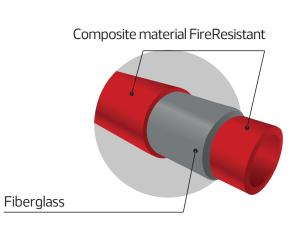


"PLASTIC" COMPANY

In 2013 the company "Plastic" launched the production of polymer systems for automatic fire extinguishing under the brand name AntiFire.

The AntiFire system is an innovative technology in fire fighting. Designed for water and foam sprinkler water-filled fire extinguishing installations.

Pipelines tm AntiFire can be used in offices, shopping centers, shops, museums, residential buildings, hospitals, warehouses, parking lots, hotels, etc.













POLYMER SYSTEMS AntiFire



- · not subject to corrosion do not clog
- no priming and painting required light weight systems
- pipe D40 lm 500 gr. service life more than 50 years
- no additional maintenance costs
- possibility of installation
- on existing facilities ease of assembly
- as fast as possible,
- convenient and safe installation by welding machine
- reduced installation costs seamless pipe welding
- and fittings eliminates leakage aesthetic appearance

METAL PIPES



- corrosion
- · lime deposits
- primer and paint required
- load on the ceiling structures of the pipe D40 lm - 1400 gr.
- service life 10 years
- requires annual maintenance installation only in unused premises high time and financial costs for installation work
- permission required to fiery works





PERMISSION DOCUMENTATION



The management system is certified. Stable product quality is confirmed by the certificate of conformity ISO 9001:2015

TM AntiFire systems passed fire tests and were certified by the "Academy of the State Fire Service of the Ministry of Emergency Situations of Russia".



















IMPLEMENTED OBJECTS

3000+
implemented objects
by the TM AntiFire system

72 regions of Russia and CIS countries



PRODUCTS TM ANTIFIRE













In 2022 Anti Firre systems were installed:

396

industrial, commercial, residential and social facilities in Russia and neighboring countries

with total area

3,8 million m²

these are pipes with a length

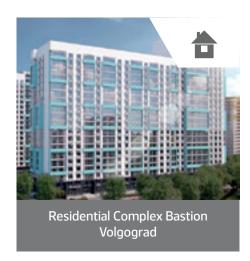
504 000m

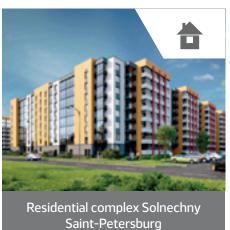
number of fittings used

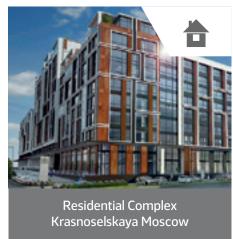
564 000 pcs







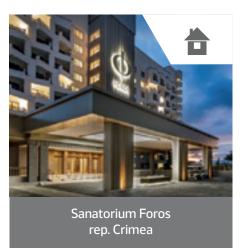


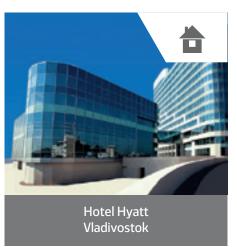






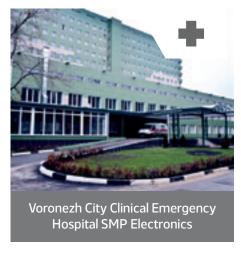






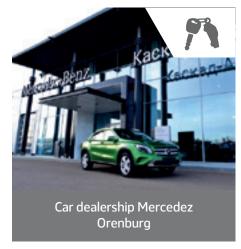






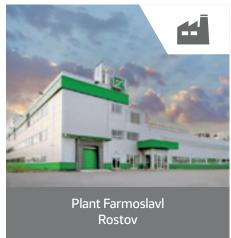


Ufa

















ABOUT THE COMPANY



Since 2019 GZOCM – Gayskaya Cooper is part of Akron Holding

Company in numbers

686 86

Staff

14 miles

Of special equipment

327,8 thusandth

Territory of the enterprise

130 thousand

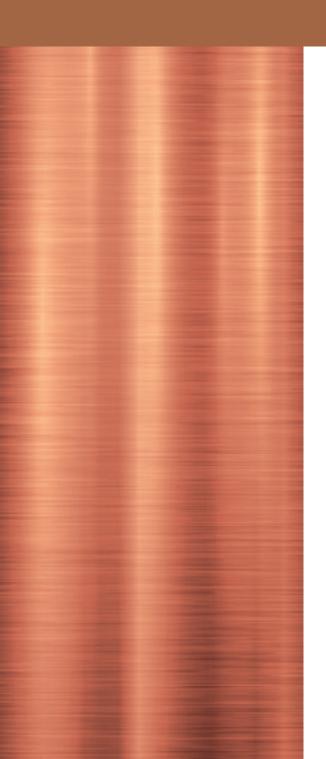
Area of the main buildings



- COPPER
- BRASS
- BRONZE









More than 1000 items of goods according to GOSTs in stock and on order

We manufacture products for the defense industry, mechanical engineering, construction and automotive industries



47 years of production experience

We cooperate with the largest enterprises of the country, providing 30-35% of the Russian industry with flat non-ferrous metal products, casting bronzes of round section



Production capacity of more than 35 thousand tons per year

At the moment, there is a melting, rolling and mechanical repair shop that produces blanks for construction and various industries.



Delivery in Russia and the CIS from 3 days

We carry out delivery across Russia and neighboring countries by transport companies, railway and water transport. We carry out complex logistics routes.

Delivery methods



Railways





ROOFING COPPER

Copper provides lightness and flexibility to copper roofing

Copper roofing passes all tests for bending and strength, and also complies with all regulatory documents

The most popular for installation is copper roofing supplied in rolls or sheets







ROOFING COPPER. COMPLETED PROJECTS



Copper roofing manufactured by GZOTsM is used for roofing in monasteries, parishes, temples, historical buildings, new architectural projects, as well as for:

External cladding of buildings

Seam roofs for private houses

Gutter systems, snow retention systems

Lanterns, lamps, weather vanes, etc.





















Production

Production of aluminum profiles of various categories of complexity

Painting

Horizontal and vertical painting line:



- · At the request of the customer, the profile can be painted with powder paints in the color according to the RAL table
- High quality coating is confirmed by **QUALICOAT** certificates



Matrix tool

The company uses matrix tools both of its own production and of leading European enterprises

Forming tooling elements are made of high quality tool steel from leading international manufacturers (KIND & Co., EDELSTAHLWERK, **BOHLER UDDEHOLM**)

For the manufacture of matrix tools, modern CHARMILL electro erosive equipment and MICRON metal-cutting equipment are used

In order to increase the wear resistance of matrix sets, increase their service life, the enterprise carries out the process of their primary nitriding on a modern Italian-made COFI furnace.





Construction objects

Our profile has been used on many modern construction sites. From sports (for the Spartakiad in Kazan and Olympic venues in Sochi), residential complexes and shopping and business centers to industrial facilities.

Some objects using our profile:

Stadium "Olympic"

International Business Center Moscow City

Residential Complex "Shuvalovsky"

Residential Complex "Olympic Village Novogorsk"

Shopping mall «Aviapark»

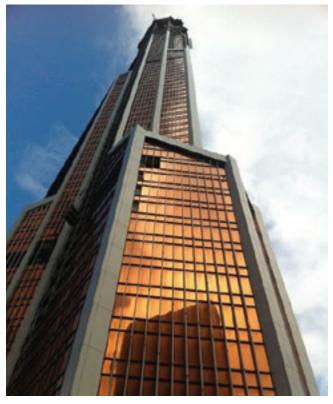
Greenhouses CODEMA SYSTEMS

Business center "Akademik" and many others





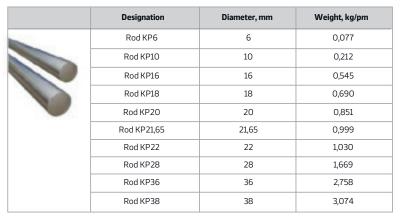






ENERGOTECHMASH

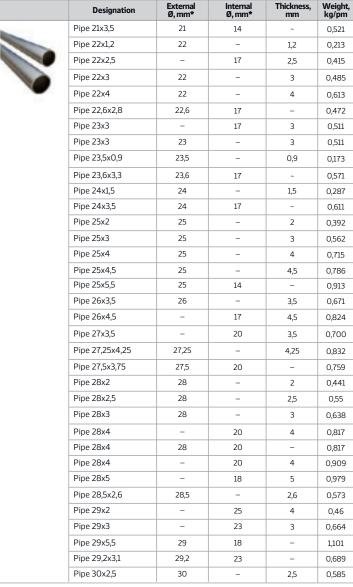




O ROUND PIPE

Designation	External Ø, mm*	Internal Ø, mm*	Thickness, mm	Weight, kg/pm
Pipe 7x1	7	_	1	0,051
Pipe 10x1	10	-	1	0,077
Pipe 10x2,3	10	_	2,3	0,151
Pipe 12x2,5	12	_	2,5	0,202
Pipe 14x3	14	_	3	0,281
Pipe 15,1x1	_	13,1	1	0,120
Pipe 15,5x2,85	15,5	2,85	~	0,307
Pipe 16x3,5	16	~	3,5	0,372
Pipe 17,5x0,9	17,5	~	0,9	0,127
Pipe 18x3	18	~	3	0,383
ПА-14	18	-	1,5	0,211
Pipe 19x1,2	19	-	1,2	0,182
Pipe 19x1,5	19	-	1,5	0,224
Pipe 19x4,5	19	10	~	0,556
Pipe 20x3,5	-	13	3,5	0,492
Pipe 20x4	20	12	~	0,545

^{*}the diameter is indicated, controlled during manufacture



^{*}the diameter is indicated, controlled during manufacture





Designation	External Ø, mm*	Internal Ø, mm*	Thickness, mm	Weight, kg/pm
Pipe 30x3	-	24	3	0,690
Pipe 30x3	30	24	-	0,690
Pipe 30x3	30	-	3	0,690
Pipe 30x4	30	-	4	0,885
Pipe 30x5	-	20	5	1,064
Pipe 31,5x2	31,5	_	2	0,502
Pipe 31,5x3	31,5	-	3	0,728
Pipe 32x1,5	32	-	1,5	0,389
Pipe 33x6,5	33	20	-	1,433
Pipe 34x3,85	34	26,3	-	0,988
Pipe 34x6	-	22	6	1,43
Pipe 35x4	35	-	4	1,056
Pipe 35,4x4,5	-	26,4	4,5	1,184
Pipe 36x4,8	-	26,4	4,8	1,275
Pipe 36x4,85	36	26,3	-	1,286
Pipe 37x5,3	-	26,4	5,3	1,43
Pipe 37,4x5,5	-	26,4	5,5	1,494
Pipe 37,4x5,5	37,4	~	5,5	1,548
Pipe 38x3	38	~	3	0,894
Pipe 38x5,8	~	26,4	5,8	1,59
Pipe 38x5,8	38	26,4	~	1,59
Pipe 38,3x5,95	38,3	26,4	~	1,639
Pipe 39x3,65	39	31,7	~	1,099
Pipe 39x6,3	~	26,4	6,3	1,754
Pipe 39,5x6,55	39,5	26,4	~	1,838
Pipe 40x2	40	~	2	0,647
Pipe 40,4x5,5	-	29,4	5,5	1,634
Pipe 40,6x5,5	-	29,6	5,5	1,644
Pipe 41,6x6	-	29,6	6	1,818
Pipe 41,6x6	41,6	29,6	~	1,818
Pipe 42x7	-	28	7	2,086
Pipe 44,6x5,3	-	34	5,3	1,773
Pipe 45x2	45	~	2	0,732
Pipe 45,4x6	-	33,4	6	2,013

	Designation	External Ø, mm*	Internal Ø, mm*	Thickness, mm	Weight, kg/pm
	Pipe 46x6,3	_	33,4	6,3	2,129
	Pipe 48x3,5	48	~	3,5	1,326
	Pipe 49,6x4,8	_	40	4,8	1,830
S.	Pipe 51,85x12	-	45,85	12	0,481
	Pipe 50x2	50	~	2	0,817
	Pipe 50x3	50	~	3	1,196
	Pipe 50x10	~	30	10	3,405
	Pipe 50,6x5,3	~	40	5,3	2,044
	Pipe 52x1,2	52	-	12	0,519
	Pipe 52x6,3	52	39,4	~	2,451
	Pipe 52,2x6	52	40	~	2,360
	Pipe 54x7	~	40	7	2,801
	Pipe 55x2	55	-	2	0,902
	Pipe 56x7	56	42	-	2,92
	Pipe 58x8	58	~	8	3,405
	Pipe 58x10	~	38	10	4,087
	Pipe 60x1	60	~	1	0,502
	ПБА-33	60	~	2	0,986
	Pipe 60x2	60	-	2	0,988
	Pipe 65x2	65	-	2	1,073
	Pipe 65x10	65	_	10	4,683
	Pipe 70x2	70	-	2	1,158
	Pipe 70x12,5	70	-	12,5	6,119
	Pipe 71x1,5	_	68	15	0,888
	Pipe 75x12,5	75	_	12,5	6,651
	Pipe 80x15	80	_	15	8,301
	Pipe 85x15	85	-	15	1,066
	Pipe 85x15	85	-	15	8,939
	Pipe 90x4	90	-	4	2,929
	Pipe 90x5	90	80	_	3,618
	Pipe 100x15	100	~	15	10,855
	Pipe 120x2	120	~	2	2,009
	Pipe 125x15	125	~	15	14,048
	Pipe 140x10	140	~	10	11,068

^{*}the diameter is indicated, controlled during manufacture

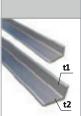
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RECTANGULAR SQUARE TUBE

	Designation	Width,	Height,		ess, mm	Weight,
	Dia - 20::20:45			t1.	t2	
	Pipe 20x20x1,5	20	20	1,5	1,5	0,301
\t2	Pipe 25x16x2,1	25	16	2,1	2,1	0,419
<u>t1</u>	Pipe 25x25x1,5	25	25	1,5	1,5	0,382
Specify the corner	Pipe 35x20x1,5	35	20	1,5	1,5	0,420
radii according to the drawing	Pipe 40x20x2	40	20	2	2	0,607
	Pipe 40x25x2,5	40	25	2,5	2,5	0,813
	Pipe 40x40x2	40	40	2	2	0,824
	Pipe 50x20x1,5	50	20	1,5	1,5	0,545
	Pipe 59,4x39,7x1	59,4	39,7	1	1	0,526
	Pipe 60x25x1,5	60	25	1,5	1,5	0,647
	Pipe 60x30x2	60	30	2	2	0,932
	Pipe 60x40x1,1	60	40	1,1	1,1	0,583
	Pipe 60x40x3	60	40	3	3	1,529
	Pipe 60x60x1,2	60	60	1,2	1,2	0,765
	Pipe 60x60x2	60	60	2	2	1,257
	Pipe 60x60x4	60	60	4	4	2,428
	Pipe 64x64x6,4	64	64	6,4	6,4	3,996
	Pipe 70x50x4	70	50	4	4	2,428
	Pipe 76x76x6,4	76	76	6,4	6,4	4,829
	Pipe 80x30x2(4)	80	30	2	4	1,561
	Pipe 100x200x3	200	100	3	3	4,760
	Pipe 102x102x6,4	102	102	6,4	6,4	6,632
	Pipe 120x50x3	120	50	3	3	2,670

CORNER

	Designation	Width,	Height,	Thickne	ess*, mm	Weight,
	Designation	mm	mm	t1	t2	kg/pm
	Corner 10x20x2	10	20	2	2	0,152
	Corner 10x40x2	10	40	2	2	0,26
<u>t1</u>	Corner 15x25x2	15	25	2	2	0,206
	Corner 20x15x1,2	20	15	1,2	1,2	0,11
t2	Corner 20x20x2	20	20	2	2	0,205



	Designation	Width,	Height,	Thickness*, mm		Weight,
	Designation	mm	mm	t1	t2	kg/pm
	Corner 23x23x2	23	23	2	2	0,238
	Corner 25x20x1,3	25	20	1,3	1,3	0,154
_	Corner 25x25x2	25	25	2	2	0,260
	Corner 25x50x3	25	50	3	3	0,585
	Corner 30x18x1,3	30	18	1,3	1,3	0,164
	Corner 30x20x2	30	20	2	2	0,26
	Corner 30x30x1,3	30	30	1,3	1,3	0,207
	Corner 30x50x5	30	50	5	5	1,015
	Corner 31x19x1	31	19	1	1	0,130
	Corner 35x35x3	35	35	3	3	0,540
	Corner 40x18x1,5	40	18	1,5	1,5	0,226
	Corner 40x40x3	40	40	3	3	1,039
	Corner 40x40x4	40	40	4	4	0,824
	Corner 50x18x1,5	50	18	1,5	1,5	0,270
	Corner 50x30x3	50	30	3	3	0,626
	Comer 50x50x2	50	50	2	2	0,533
	Corner 50x50x3	50	50	3	3	0,787
	Corner 50x50x4	50	50	4	4	1,039
	Corner 50x50x7	50	50	7	7	1,760
	Corner 55x55x4	55	55	4	4	1,153
	Corner 60x18x1,5	60	18	1,5	1,5	0,311
	Corner 60x60x5	60	60	5	5	1,558
	Comer 65x50x6	65	50	6	6	1,772
	Corner 70x18x1,5	70	18	1,5	1,5	0,351
	Corner 80x18x1,5	80	18	1,5	1,5	0,392
	Corner 80x80x5	80	80	5	5	2,099
	Corner 90x18x1,5	90	18	1,5	1,5	0,433
	Corner 100x18x2	100	18	2	2	0,628
	Corner 120x14x2	120	14	2	2	0,715
	Corner 140x40x2,7	140	40	2,7	3	1,328
_						

*Specify the corner radii according to the drawing

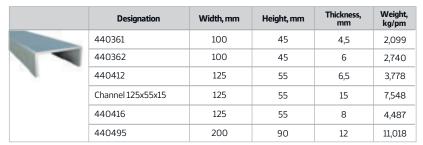




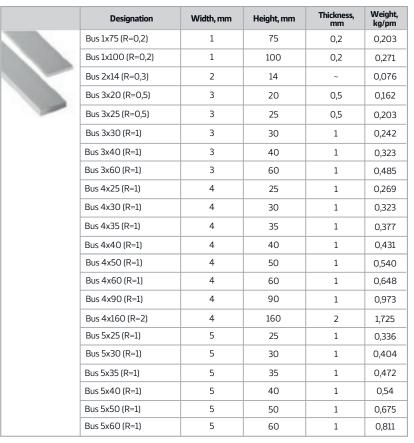




CHANNEL

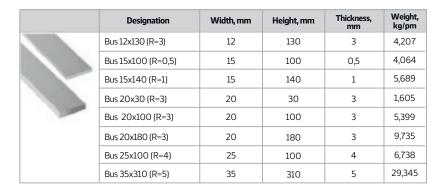






	Designation	Width, mm	Height, mm	Thickness, mm	Weight, kg/pm
	Bus 5x80 (R=1)	5	80	1	1,08
	Bus 5x100 (R=2)	5	100	2	1,345
	Bus 6x35 (R=2)	6	35	2	0,560
	Bus 6x40 (R=2)	6	40	2	0,641
-	Bus 6x50 (R=2)	6	50	2	0,804
	Bus 6x50 (R=3)	6	50	3	0,792
	Bus 6x60 (R=2)	6	60	2	0,966
	Bus 6x80 (R=2)	6	80	2	1,292
	Bus 6x90 (R=2)	6	90	2	1,454
	Bus 6x90 (R=3)	6	90	3	1,443
	Bus 6x100 (R=2)	6	100	2	1,617
	Bus 8x20 (R=0,5)	8	20	0,5	0,433
	Bus 8x20 (R=2)	8	20	2	0,424
	Bus 8x40 (R=1)	8	40	1	0,865
	Bus 8x50 (R=2)	8	50	2	1,075
	Bus 8x60 (R=2)	8	60	2	1,292
	Bus 8x80 (R=2)	8	80	2	1,725
	Bus 8x100 (R=2)	8	100	2	2,159
	Bus 8x140 (R=2)	8	140	2	3,026
	Bus 8x160 (R=2)	8	160	2	3,460
	Bus 10x15 (R=2)	10	15	2	0,397
	Bus 10x50 (R=2)	10	50	2	1,346
	Bus 10x60 (R=2)	10	60	2	1,617
	Bus 10x60 (R=5)	10	60	5	1,568
	Bus 10x70 (R=2)	10	70	2	1,888
	Bus 10x80 (R=2)	10	80	2	2,159
	Bus 10x100 (R=0,5)	10	100	0,5	2,709
	Bus 10x100 (R=2)	10	100	2	2,701
	Bus 10x100 (R=5)	10	100	5	2,65
		10	120	2	<u> </u>
	Bus 10x120 (R=2) Bus 12x50 (R=3)	10	50	3	3,243
					1,605
	Bus 12x60 (R=3)	12	60	3	1,930
	Bus 12x80 (R=3)	12	80	3	2,581
	Bus 12x100 (R=3)	12	100	3	3,231

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U-PROFILE

Designation	Width, mm	Height, mm	Thickness, mm	Weight, kg/pm
ПА-60	50	35	2	0,633
ПА-95	60	40	5	1,762
ПА-97	62	80	2	1,182
ПА-314	125	55	4	2,47
ПА-315	170	55	4	2,958
ПА-324	32	10	1,5	0,199
ПА-470	23,6	15	1,5	0,205
НП-530	37,5	50	_	0,902
ПП-533	12	15	2	0,206

Any profile can be powder coated according to the RAL table.



EXAMPLES OF COMPLEX PROFILES MADE ACCORDING TO CUSTOMER DRAWINGS



Plant "Energotehmash" manufactures aluminum profiles for various industries and areas:

- · mechanical engineering, transport equipment;
- oil industry;
- · construction, window systems;
- · furniture manufacturing;
- profiles for advertising structures, commercial equipment;
- · and many other areas.





























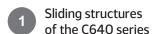
Since 2021, new directions have been developing on the basis of the production capacities of Energotehmash.

Aluminium Profile System

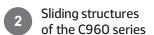
Aluminum profile construction "Provedal" is intended for fencing space of balconies and loggias, which by their functional value are not residential premises, for protection from climatic influences, noise and dust, improvement of thermal insulation conditions of the premises, in addition, a constructive possibility of installing an anti-mosquito net is provided.

Aluminum profile systems "Provedal" include the following subsystems:











Sliding structures of the P400 series



Systems of ventilated hinged facades



Mastering the production of the European aluminum subsystem in Russia

A comprehensive service is provided: from the design and supply of components to installation work

Calculation of estimates for the supply of components for facades to private housing construction objects, individual selection of facing materials

Manufacturing and installation work

REVENTAL-RLS-HIS-V-105

GlassFiberConcrete



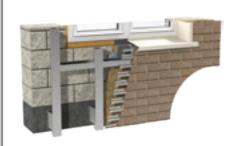
REVENTAL-RLS-HIS-V-121

Fiber cement and chrysotile cement boards HPL panels



REVENTAL-RLS-HIS-V-130

Clinker tiles Porcelain stoneware Stone



REVENTAL-RLS-HIS-V-164

Composite Sheet metal





PRODUCTION OF POLYMER-SAND PRODUCTS USED IN CONSTRUCTION

A fundamentally new method for the production of a polymer-sand composition allows you to create modern, and most importantly competitive products with higher characteristics than analogues made from traditional materials

HIGH PRODUCT QUALITY
DURABILITY
ATTRACTIVE PRICE
UNIQUE
ENVIRONMENTAL
FRIENDLY AESTHETIC



polimer-etm.ru Samara region, Zhigulevsk city, Morkvashinskaya street, 40, "Energotehmash" plant

tel. +7 (84862) 72442 ext. 1843

HATCH TYPE LM



Cover diameter: 576 mm Cover thickness: 25 mm Shell outer diameter: 750 mm

Shell height: 53 mm

HATCH TYPE T (C 150)



Material: Polymer sand

HATCH TYPE C



Cover diameter: 600 mm Cover thickness: 53 mm Shell outer diameter: 750 mm Shell height: 100 mm

HATCH TYPE CM



Cover diameter: 600 mm Cover thickness: 40 mm Shell outer diameter: 750 mm Shell height: 100 mm

HATCH TYPE LMU



Cover diameter: 576 mm Cover thickness: 35 mm Shell outer diameter: 750 mm

Shell height: 55 mm

HATCH TYPE T (C 250)



Cover diameter: 600 mm Cover thickness: 60 mm Shell outer diameter: 750 mm

Shell height: 100 mm



Polymer structures perfectly perform the function of accumulation of wastewater and are the only right solution for installation in areas where there is no access for construction equipment. Sewer structures made of plastic are successfully used to control the state of the underground communications network in various areas: in the arrangement of sewage, storm water, and pipeline drainage systems.

RING FOR WELL 750



Material: Polymer-sand Ring weight: 20 kg External diameter: 750 mm Load: 9 tons

RING FOR WELL



Material: Polymer-sand Ring weight: 33 kg External diameter: 1100 mm Load: 9 tons

CONE ADAPTER



Cone weight: 32 kg External diameter: 1000 mm Cone height: 125 mm Load: 9 tons

BOTTOM FOR WELL



Bottom plate weight: 33 kg External diameter: 1100 mm Height: 40 mm

Height: 40 mm Load: 9 tons

WELL OF RINGS



1000 mm WITH ADAPTER RING 750 mm

CONE HATCH 1000 MM



CONE ADAPTER



for 750





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 Almaznaya street, 3
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- skt-g.ru





- Samara region, Neftegorsky district, Semenovka village (2.5 km northeast of Neftegorsk) tel.: +7 (84670) 2-71-03 Sales department: +7 (800) 555-73-14
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