Conductor-and-support cable of KGR-7-1,2M type

Application
Conductor-and-support modified seven-conductor cable in irradiated polyethylene insulation in rubber sheath for nominal breaking load of 12 kN.

The cable is intended for the simultaneous transmission of power supply under the nominal working voltage of 220V of direct voltage, 380V of alternating current of frequency 50Hz and telephonecommunication.

Design
The cable has central carrying rope, seven conductors, five of them are power conductors; two conductors are telephone and two cords.

Nominal cross-section
power conductors — 1,0 mm^2, telephone conductors — 0,35 mm^2.

Carrying rope
Steel galvanized wires in the rubber sheath.

Power current-carrying conductors
Steel-copper.

Telephone current-carrying conductors
Copper.

Insualtion
Power and telephone polyethylene-insulated conductors.

Telephone conductors are twisted in pair. Screen of copper tinned wires.

Cord is of polyethylene изготовлен из полиэтилена (основа стальная про-волока).

Sheath
Rubber.

Performance specification
Electric resistance of conductors' insulation recounted per 1 km of length and temperature of 20°C, is not less than 100 MOhm.

The cable stands the voltage of alternating current of frequency 50 Hz during 2 minutes (with submerging into the water).

For power conductors —2000 V;
For telephone conductors — 500 V.

Breaking strength of the cable is not less than 12 kN.
Minimal bending radius is not more than 100 mm.

- The cable is pressurized in the radial direction under the influence of hydrostatic pressure not more than 6,5 MPa .
- Cable is resistant to the high air air temperature +50°C, sea water — +35°C.
- Cable is resistant to the low air temperature -40°C, sea water –4°C
- Cable is resistant to the high air humidity up to 98 % at the temperature 35 °C.
- The cable is resistant to the exposure of the salt mist.

Factory length of the cable:
- 240+20 m;
- 350+30 m;
- 500+50 m;
- 750+40m.

Service life of the cable is 15 years.

External cable diameter is 18,8+2,0 mm.

Estimated weight of the 1 km of the cable is 483 kg.