



Technical specification of Ukraine  
TY Y 27.3-00217099-045:2014

### Application

The cables are designed for the transmission of low-level electrical signals in the data gathering systems, communication and thermal control systems of nuclear power plants ( NPP ), including in NPP's containment area.

### Design

#### Current-carrying conductors

- copper single-wire conductors,
- single-wire conductors of chromel-copel alloy, of nominal diameter 0,7 mm
- copper, stranded conductors (4th class).

#### Insulation

Cross-linked polymer composition

#### Inner sheath

Halogen free polymer composition .

#### Screen of pair

As lapping with synthetic aluminum foiled film.

#### Outer sheath

Halogen free polymer composition.

### Design data of the samples

Number of pairs and nominal cross-section of single-wire conductors, mm <sup>2</sup>	Number of pairs and nominal cross-section of stranded conductors, mm <sup>2</sup>	Types of cables			
		KPETIng-HF		KPETIng-FRHF	
		Maximal outer diameter mm <sup>2</sup>	Estimated weight per 1 km of cable , kg	Maximal outer diameter, mm	Estimated weight per1 km of cable , kg
1x2x0,5	-	7,7	82	-	-
2x2x0,5	-	11,6	160	-	-
7x2x0,5	-	14,8	280	-	-
12x2x0,5	-	18,5	414	-	-
14x2x0,5	-	19,5	454	-	-
1x2x0,7	-	8,8	97	9,1	100
2x2x0,7	-	12,4	183	13,0	193
7x2x0,7	-	16,2	347	17,5	390
12x2x0,7	-	20,0	517	22,6	614
14x2x0,7	-	21,0	571	23,9	685
-	1x2x0,35	9,0	96	9,3	102
-	2x2x0,35	12,8	191	13,6	198
-	7x2x0,35	16,7	359	18,2	404
-	12x2x0,35	21,0	544	23,2	632
-	14x2x0,35	21,8	598	25,0	706
-	12x2x0,5	-	-	23,7	662
-	14x2x0,5	-	-	25,5	741

By agreement between the customer and the manufacturer it is possible to manufacture cables with different number of pairs , as well as with a combination in one cable of solid and stranded conductors with different diameters and cross sections which are indicated in the tables

Cables stand the exposure to the outside factors :

- temperature change from -50 to +70°C;
- relative air humidity under the temperature of +35 °C is 98%;

Service life of cables is 40 years.

Shipping length is specified in the order.