



ПвЭБВ-10 3x50 **ТУ У 31.3-00214534-017-2003**

Three-core power cables with copper conductors, with XLPE, steel-tape armoured, with PVC compound outer sheath

For the cable of this mark correspond the foreign-made analogues:
2XSEYBY (DE) • Cu/SC/XLPE/SC/CuT/STA/PVC (GB) • ПвБВ (RU)
Technical cable requirements correspond to IEC 60502-2

Cables are used for laying:

- *in places, where mechanical impacts on cable are possible, except tensile forces*
- *in premises, tunnels, ducts, mines, dry soil and outdoor under shelter*
- *single laying*

It is possible to manufacture cables with an integrated fiber-optic module.

Order entry example:

ПвЭБВ-10 3x50/16 (OM) ТУ У 31.3-00214534-017-2003

In conjunction with the DTS system, the integrated fiber-optic module can act as a distributed cable line temperature sensor.

It is possible to manufacture cable with sealed conductors.

Order entry example:

ПвЭБВ-10 3x50/16 (r) ТУ У 31.3-00214534-017-2003

Fire safety code in accordance with ДСТУ 4809:2007: ПБ100000000

Products of this mark meet the requirements:

- *single wire cable flame retardance*



ПВЭБВ-10 3x50 TY Y 31.3-00214534-017-2003

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TECHNICAL SPECIFICATIONS

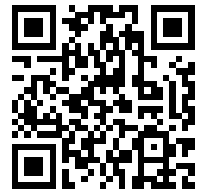
Rated voltage	kV	10
Maximum voltage	kV	12
Number and rated area of conductors	mm ²	3 x 50
Insulation thickness	mm	3.4
Minimum screen cross-section	mm ²	16
Permissible short circuit current across the screen of minimum cross-section	kA	3.3
Maximum permissible short-circuit current in core	kA	7.2
Permissible continuous current rating *		
• by aerial laying	A	205
• by burial	A	181
Partial discharge factor for rated voltage, not more than	pC	6
Maximum permissible conductor temperature		
• Continuous	°C	+90
• in emergency operation	°C	+130
• at short circuit	°C	+250
Operating temperature range (in climate version NF)	°C	-50 ... +50
Operating temperature range (in climate version T)	°C	-25 ... +65
Minimum bending radius by laying	mm	848
Rated outer diameter of the cable (for reference) **	mm	53
Cable weight (approximate)	kg/km	4210
Rated factory cable length and gross weight of the delivery on the drums	m, t	# 18аУД-40: 534 • 2.8 # 20аУД-60: 648 • 3.4 # 25УД-90: 1068 • 6.1

Notes:

When ordering it is necessary to agree the factory length of the product with the manufacturer

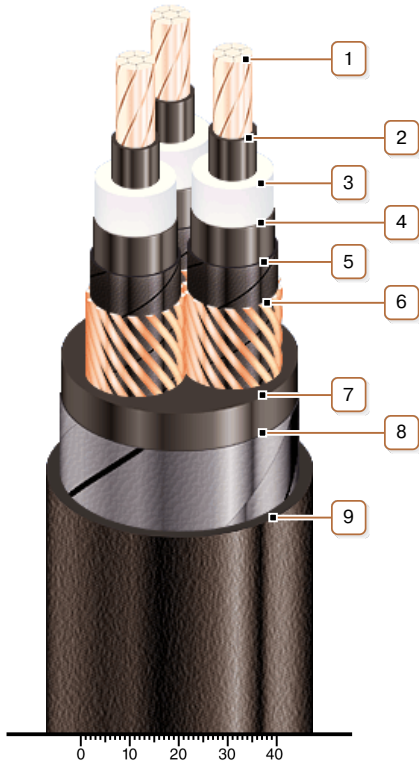
* Long permissible current loads are calculated for the following conditions: conductor temperature 90 °C, air temperature 30 °C, soil temperature 20 °C, load factor 1.0, thermal resistivity of soil 1.5 °K·m/W, laying depth in the ground 0.8 m, shields are grounded at both ends of the line

** The external diameter may differ from the rated up to ± 10 %



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CONSTRUCTION

1. **Copper multiwire compact conductor**
Note: It is possible to manufacture cable with sealed conductors.
2. **Inner extruded semiconducting layer**
3. **XLPE insulation**
4. **Outer extruded semiconducting layer**
5. **Lapping layer of semiconductive swellable tape**
6. **Copper screen**
7. **Extruded filling of PVC compound**
8. **Double galvanized steel-tape armour**
9. **PVC compound outer sheath**

Note: Conductor twisting is not illustrated