Production Company AKVATON "AKVATON", Ltd

Round and rectangular copper and aluminum wire with combined insulation

Class 155, 200

Product copper wires name:

- PETVSD-155
- PLSD-155
- PETVSDT-155
- PETVSLD-155
- PETSD-200
- PPTSD-200
- PNTSD-200
- PETSLD-200
- PPTSDT-200
- PNTSDT-200

Product aluminum wires name:

- PETVSD-155A
- PLSD-155A
- PETVSDT-155A
- PETVSLD-155A
- PETSD-200A
- PPTSD-200A
- PNTSD-200A
- PETSLD-200A
- PPTSDT-200A
- PNTSDT-200A

Size series:

Round: 1,7 - 2,5 mm

Rectangular: 5 - 80 mm²

$1,4 \leq (b/a) < 8$

Class: 155, 200

Temperature index: 155°C, 200°C
Thermal shock: 220°C
Thermoplasticity of insulation:
Class 155: 240°C
Class 200: 320°C

Breakdown voltage:

Round, rectangular: 900 - 1400 V

Electrical resistance:

Cooper: 0,01724 Ом*мм²/м

Aluminium: 0,0277 Ом*мм²/м

Relative elongation:

Cooper: from 24 - 32% and more

Aluminium: from 20 - 25% and more

Chemical resistance:

Excellent

Properties:

- Excellent dielectric strength
- High mechanical strength, elasticity
- Resistance to thermal shock, thermoplasticity
- Resistance to organic solvents

Sphere application:

- Transformers
- Traction engines
- Electric machines, devices and appliances

Conductor material:

DSTU EN 1977 - Cu - ETP CW004A
DSTU EN 1977 - Cu - ETP1 CW003A
DSTU EN 1977 - Cu - OF CW008A
EN1715 - (Al ≥ 99.7)

Isolation:

- Enamel coating
- Polyamide fluoroplastic film
- Fluoroplastic film
- Aramid paper "Nomex"
- Fiberglass thread

Packaging:

- Coils
- Drums

Specification:

TU U 27.3-13970259-011:2017

Production is certified:

DSTU ISO 9001:20015 (ISO 9001:2015, IDT);
DSTU EN ISO 9001:2018 (EN ISO 9001:2015, IDT);
ISO 9001:2015

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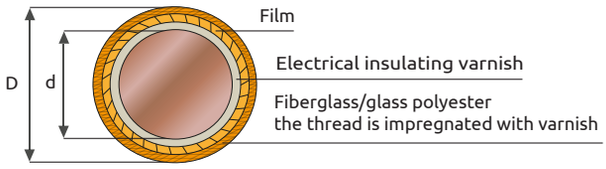
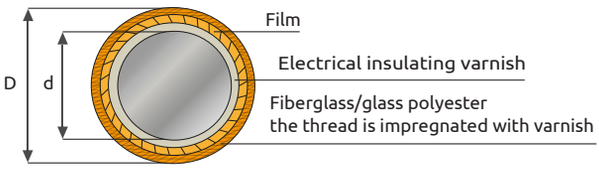
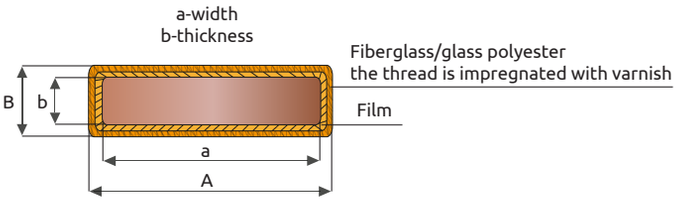
Wire cross section



D-d=insulation



*the insulation layers can be of any combination



A-a=insulation
B-b=insulation

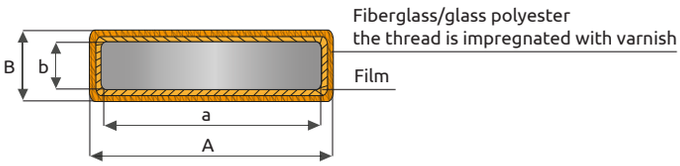


Table of dimensional characteristics

Temperature index 155, 200
Round and rectangular copper and aluminum wires with combined insulation

Brands wires	Temperature class	Type of insulation	Size range	
			Round, mm	Rectangular, mm^2
PETVSD-155 PETVSD-155A	155°C	Heat-resistant high-strength enamel and two layers of windings with glass threads, impregnated with heat-resistant varnish, with normal insulation	1,7-2,5	5,0-80,0
PETVSLD-155 PETVSLD-155A		Heat-resistant high-strength enamel and two layers of windings with fiberglass threads, impregnated with heat-resistant varnish, with normal insulation		
PETVSDT-155 PETVSDT-155A		Heat-resistant high-strength enamel and two layers of windings with glass threads, impregnated with heat-resistant varnish, with thinner insulation		
PLSD-155 PLSD-155A		One layer of polyethylene terephthalate film and two layers glass threads, impregnated with heat-resistant varnish, with normal insulation		
PETSD-200 PETSD-200A	200°C	Heat-resistant enamel of increased heat resistance and two layers of windings made of glass threads, with impregnation heat-resistant varnish, with normal insulation		
PETSLD-200 PETSLD-200A		Heat-resistant enamel of increased heat resistance and two layers of windings made of fiberglass threads, with impregnation heat-resistant varnish, with normal insulation		
PPTSDT-200 PPTSDT-200A		One layer of polyimide-fluoroplastic film and two layers glass threads, impregnated with heat-resistant varnish, with thinner insulation		
PPTSD-200 PPTSD-200A		One layer of polyimide-fluoroplastic film and two layers glass threads, impregnated with heat-resistant varnish, with normal insulation		
PNTSDT-200 PNTSDT-200A		One layer of NOMEX synthetic aramid paper and two layers of glass threads, impregnated with heat-resistant varnish, with thinner insulation		
PNTSD-200 PNTSD-200A		One layer of NOMEX synthetic aramid paper and two layers of glass threads, impregnated with heat-resistant varnish, with normal insulation		