

NLgNek-K 1,8 /3 kV

ROGUM KABLE SP. Z O.O.



Halogen-free power cables for rolling stock.

Screened single-core cables with halogen free, cross-linked insulation and halogen free, flame retardant sheath, for rated voltage 1,8/3 kV

Standard: ZN-FKR-50264-027:2019

Related standards: PN-EN 45545-2+A1:2015-12; PN-EN 60228:2007; PN-EN 50264-3-1:2008.

CONSTRUCTION

Conductor	Stranded tin plated copper wires, class 5
First layer of insulation	Crosslinked compound.
Second layer of insulation	Crosslinked compound.
Color of insulation	I layer - white II layer - white
Screen	Tin plated copper braid with ALU-PET tape under screen.
Sheath	Halogen free, flame retardant, low smoke compound
Color of sheath	Grey

CHARAKTERYSTYKA

Rated voltage	1,8/3 kV
Test voltage	6,5 kV
Working temperature range	from - 40 °C to + 90 °C
Minimum installation temperature	- 5 °C
The minimum bending radius	for fixed installation – 3D for sporadic moves – 4D
Example of cable marking	ROGUM KABLE sp. z o.o. NLgNek-K 1,8/3 kV 1x10 mm² ID: 2081725 Power cable with tin-plated copper conductors, class 5 (Lg), with halogen-free insulation (N) screened (ek) and halogen-free sheath (N), for rolling stock (K).

APPLICATION

Typical applications for power supply to various systems inside and outside railway rolling stock at fixed and sporadic moving installations.

CERTIFICATE AND APPROVALS

Railway Institute Certificate

ADDITIONAL INFORMATION

At the client's request, it is possible to:

- change the color of the insulation/sheath

In matters relating to detailed technical data, please contact our Technical Advisor: doradztwotechniczne@rogum.com.pl

CARD NUMBER

102

RELEASE DATE

26-06-2023



CONSTRUCTION						
Cross-section of core	Max diameter of the wires in the core	Nominal thickness of the insulation		Nominal thickness of the sheath	Max cable diameter	Approximate weight of the cable
		I layer	II layer			
mm ²	mm	mm	mm	mm	mm	kg/km
0,75	0,21	0,4	0,4	0,6	5,2	69
1	0,21	0,4	0,4	0,6	5,4	70
1,5	0,26	0,5	0,5	0,8	6,4	84
2,5	0,26	0,5	0,5	0,8	6,8	97
4	0,31	0,6	0,5	0,9	7,9	121
6	0,31	0,6	0,5	0,9	8,4	151
10	0,41	0,7	0,5	0,9	10,5	201
16	0,41	0,7	0,5	1,0	11,7	263
25	0,41	0,7	0,6	1,0	13,7	358
35	0,41	0,7	0,6	1,0	14,8	464
50	0,41	0,7	0,6	1,0	16,8	619
70	0,51	0,8	0,6	1,1	19,1	815
95	0,51	0,8	0,6	1,1	20,9	1045
120	0,51	0,8	0,7	1,1	23,0	1268
150	0,51	0,8	0,7	1,2	24,6	1564
185	0,51	0,8	0,7	1,2	27,5	1899
240	0,51	0,8	0,7	1,2	28,7	2329

PARAMETERS	
Cross-section of core	The highest conductor resistance at 20 °C
mm ²	Ω/km
0,75	26,7
1,0	20,0
1,5	13,7
2,5	8,21
4	5,09
6	3,39
10	1,95
16	1,24
25	0,795
35	0,565
50	0,393
70	0,277
95	0,210
120	0,164
150	0,132
185	0,108
240	0,0817