

NLgNek-K inf. 3,6/6 kV



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 3,6/6 kV. Cables for powering frequency converters.

Standard:	ZN-FKR-023:2009/A4:2019
Related standards:	PN-EN 45545-2+A1:2015-12; PN-EN 60228:2007; PN-EN 50363-5:2010/A1:2010; PN-EN 50363-8:2010/A1:2011.

CONSTRUCTION

Conductor	Stranded tin plated copper wires, class 5
I layer of insulation	Crosslinked compound with increase elasticity
II layer of insulation	Cross-linked halogen-free material
Color of insulation	I layer – red II layer - black
Screen	Double screen made of tin plated copper braid and ALU-PET tape
Sheath	Halogen free, flame retardant, low smoke compound
Color of sheath	Black

CHARACTERISTIC

Rated voltage	3,6/6kV
Test voltage	11 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 inf. 3,6/6 kV 1x10 mm² ID: 2081725 Power cable with tin-plated copper conductors, class 5 (Lg), with halogen-free insulation (N) double screened (ek inf.) and halogen-free sheath (N), for rolling stock (K).

APPLICATION

Cables for fixed and sporadic moving installations in rail vehicles and for powering frequency converters.

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	31	RELEASE DATE	26-06-2023
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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	0,5	0,5	0,7	5,9	75
1	0,21	0,6	0,5	0,7	6,3	81
1,5	0,26	0,7	0,6	0,8	7,1	93
2,5	0,26	0,7	0,6	0,9	7,7	110
4	0,31	0,7	0,7	0,9	8,5	133
6	0,31	0,7	0,7	0,9	9,4	165
10	0,41	0,8	0,7	1,0	11,2	221
16	0,41	0,8	0,7	1,0	12,3	279
25	0,41	0,8	0,7	1,1	14,2	376
35	0,41	0,8	0,8	1,1	15,5	491
50	0,41	0,9	0,8	1,1	17,6	654
70	0,51	0,9	0,8	1,2	19,9	848
95	0,51	0,9	0,8	1,2	21,6	1081
120	0,51	0,9	0,9	1,3	23,9	1317
150	0,51	1,0	0,9	1,3	25,6	1615
185	0,51	1,0	1,0	1,3	28,6	1966
240	0,51	1,0	1,0	1,4	30,3	2415

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