

## NLgN-K 1,8 /3 kV



**Halogen-free power cables for rolling stock. Single-core cables with halogen free, cross-linked insulation and halogen free, flame retardant sheath, for rated voltage 1,8/3 kV**

<b>Standard:</b>	ZN-FKR-018:2007/A5:2019
<b>Related standard:</b>	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

<b>Conductor</b>	Stranded tin plated copper wires, class 5
<b>Insulation</b>	Crosslinked compound (1,5 mm <sup>2</sup> - 16 mm <sup>2</sup> ) Crosslinked compound with increase elasticity ( 25 mm <sup>2</sup> -240mm <sup>2</sup> )
<b>Color of insulation</b>	Natural
<b>Sheath</b>	Halogen free, flame retardand, low smoke compound
<b>Color of sheath</b>	Grey

### CHARACTERISTIC

<b>Rated voltage</b>	1,8/3 kV
<b>Test voltage</b>	6,5 kV
<b>Working temperature range</b>	from - 40 °C to + 90 °C
<b>Minimum installation temperature</b>	- 5 °C
<b>The minimum bending radius</b>	for fixed installation – 3D for sporadic moving – 4D
<b>Example of cable marking</b>	<b>ROGUM KABLE sp. z o.o. NLgN-K 1,8/3 kV 1x10 mm<sup>2</sup> ID: 2081725</b> Power cable with tin-plated copper conductors, class 5 (Lg), with halogen-free insulation (N) 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

<b>CARD NUMBER</b>	26	<b>RELEASE DATE</b>	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
mm <sup>2</sup>	mm	mm	mm	mm	kg/km
0,75	0,21	0,6	0,5	3,5	16
1	0,21	0,8	0,6	4,3	21
1,5	0,26	0,8	0,6	4,5	24
2,5	0,26	0,9	0,7	5,3	37
4	0,31	1,0	0,8	6,3	57
6	0,31	1,1	0,9	7,4	87
10	0,41	1,2	0,9	9,1	133
16	0,41	1,2	1,0	10,2	190
25	0,41	1,3	1,0	12,1	277
35	0,41	1,3	1,0	13,5	381
50	0,41	1,3	1,0	15,2	535
70	0,51	1,4	1,1	17,6	718
95	0,51	1,4	1,1	19,4	948
120	0,51	1,5	1,1	21,4	1162
150	0,51	1,5	1,1	23,2	1447
185	0,51	1,5	1,1	25,4	1791
240	0,51	1,5	1,1	28,0	2213
300*	0,51	1,8	1,3	32,0	2850

\* outside the scope of the certificate

PARAMETERS	
Cross-section of core	The highest conductor resistance at 20oC
mm <sup>2</sup>	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
300	0,0654