

NLgNek-K inf.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. Cables for powering frequency converters.			
Standard:	ZN-FKR-018:2007/A5:2019		
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	Crosslinked compound		
Color of insulation	I layer - grey II layer - grey		
Screen	Double screen made of tin plated copper braid and ALU-PET tape		
Sheath	Halogen free, flame retardant, low smoke compound		
Color of sheath	Grey		
CHARACTERISTIC			
Rated voltage	1,8/3 kV		
Test voltage	6,5 kV		
Working temperature range	from - 40 °C to + 90 °C		
Minimalna temperatura układania	- 5 °C		
Minimum installation temperature	for fixed installation – 3D for sporadic moves – 4D		
Example of cable marking	ROGUM KABLE sp. z o.o. NLgNek-K inf. 1,8/3 kV 1x10 mm ² 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	30	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	68
1	0,21	0,4	0,4	0,6	5,4	71
1,5	0,26	0,5	0,5	0,8	6,4	85
2,5	0,26	0,5	0,5	0,8	6,8	98
4	0,31	0,6	0,5	0,9	7,9	123
6	0,31	0,6	0,5	0,9	8,4	153
10	0,41	0,7	0,5	0,9	10,5	203
16	0,41	0,7	0,5	1,0	11,7	264
25	0,41	0,7	0,6	1,0	13,7	359
35	0,41	0,7	0,6	1,0	14,8	465
50	0,41	0,7	0,6	1,0	16,8	620
70	0,51	0,8	0,6	1,1	19,1	816
95	0,51	0,8	0,6	1,1	20,9	1046
120	0,51	0,8	0,7	1,1	23,0	1269
150	0,51	0,8	0,7	1,2	24,6	1566
185	0,51	0,8	0,7	1,2	27,5	1901
240	0,51	0,8	0,7	1,2	29,4	2331

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