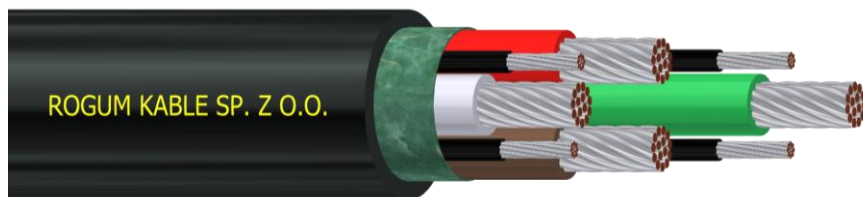


OnGc-G FLEX 0,6/1 kV



Mining power cables for mobile and portable power devices, Unshielded. Rated voltage 0,6/1 kV

According to ZN-FKR-019:2007/A1:2015; PN-EN 60332-1-2:2010/A1:2016-02

CONSTRUCTION

Conductor	Annealed multi-stranded tinned copper class 5 flexible conductor according to PN-EN 60228
Insulation	Polymer material with properties corresponding to the heat resistant IEP type material according to PN-89/E-29100
Sheath	Polymer material with flame retardant and oil-proof properties corresponding to material type ON4 according to PN-E-90140:1986
Protective conductor divided into 3 or 4 separate cores	Each part of the protective core is covered with conductive polymer material with properties corresponding to material type GP according to PN-89/E-29100
Cable core	4-cores: 3 insulated power cores with protective conductor divided into 3 parts placed between power cores and fillers between cores, all cores stranded around central filler piece. 5-cores: 3 insulated power cores with protective conductor divided into 4 parts placed between power cores and fillers between cores, all cores stranded around central filler piece. 7-cores: 3 insulated power cores with 3 auxiliary cores and protective conductor divided into 4 parts placed between power cores, all cores stranded around central filler piece. Every type of cable core wrapped with a layer of conductive tape
Sheath colour	Black
Insulation colour	4-cores: power cores: green, red, natural (white); protective conductor: black corrugated; 5-cores: power cores: green, red, natural (white); protective conductor: black corrugated; auxiliary core: brown; 7-cores: power cores: green, red, natural (white); protective conductor: black corrugated; auxiliary cores: green, red, natural (white);

CHARACTERISTIC

Rated voltage U₀/U	0,6/1 kV
Test voltage for power cores	3,2 kV
Test voltage for auxiliary cores	2 kV
Maximum core temperature during operation	+90 °C
Maximum core temperature during short circuit	+250 °C
Ambient temperature range for permanently installed cables	-40°C to +90°C
Ambient temperature range for mobile connections	-25°C to +80°C
Minimum bending radius	Fixed installation – 6D; Mobile connections – 10D

Cable name explanation	OnGc-G FLEX – Sheathed power cable (O) with flexible multi-wire tinned copper conductor, insulation made of elastomeric heat-resistant material (Gc), sheath made of flame retardant material (n). Cable designed for mining application (G) with increased flexibility (FLEX)
Cable marking	OnGc-G 0,6/1kV 3x70+3x25/3 mm ² ROGUM KABLE Sp. z o.o. + cable ID + meter mark + year of production Each cable has a legible and permanent marking repeated cyclically, printed or embossed (for cables with power conductors size equal or greater than 25 mm ²) longitudinally on outer sheath including in particular: manufacturer's name, cable / wire type, cross-section, number of wires, rated voltage, identifier, year of production and the length of the delivered section
APPLICATION	
Cables designed for powering fixed and portable power devices operating in open pit, borehole and underground mines outside of the explosion hazard zones	
CERTIFICATES AND APPROVALS	
EMAG certificate (Łukasiewicz Research Network – Institute of Innovative Technologies)	
ADDITIONAL INFORMATION	
On request there is a possibility: <ul style="list-style-type: none"> to change the color of the sheath In all cases concerning detailed technical data please contact our Client Advisor: doradztwotechniczne@rogum.com.pl	
CARD NUMBER	9
EDITION	21.03.2023

CABLE CONSTRUCTION			
Total number of cores	Number of cores and cross-sectional area	Maximum cable diameter	Approximated cable weight
	Power cores + Protective conductor + Auxiliary cores		
n	n x mm ²	mm	kg/km
4	3x16+3x10/3	27,5	1000
	3x25+3x16/3	32,0	1400
	3x25+3x25/3	32,0	1400
	3x35+3x16/3	36,2	1800
	3x50+3x16/3	41,5	2400
	3x50+3x25/3	41,5	2400
	3x70+3x25/3	45,5	3050
	3x95+3x35/3	51,8	4150
5	3x120+3x35/3	58,8	4900
	3x6+4x6/4+6	24,5	650
	3x10+4x10/4+10	28,5	950
	3x16+4x10/4+16	29,5	1100
	3x16+4x16/4+16	29,5	1250
	3x25+4x16/4+25	34,5	1610
	3x35+4x16/4+35	39,3	2200
7	3x50+4x25/4+50	45,2	3100
	3x16+4x10/4+3x2,5	29,5	1010
	3x25+4x16/4+3x2,5	34,8	1500
	3x35+4x16/4+3x2,5	39,3	2000
	3x50+4x25/4+3x4	45,2	2800
	3x70+4x25/4+3x4	49,6	3500
	3x95+4x35/4+3x4	56,6	4600
3x120+4x35/4+3x4	64,4	5500	

PARAMETERS					
Nominal cross-section of the power conductor	Highest core resistance at 20 °C	Current carrying capacity at ambient temperature at 25 °C	Unit inductance	Unit inductive reactance	Unit capacity to ground
mm²	Ω/km	A	mH/km	Ω/km	μF/km
16	1,24	118	0,28138	0,08835	0,29776
25	0,795	152	0,26273	0,08250	0,34561
35	0,565	187	0,25458	0,07994	0,36863
50	0,393	233	0,23659	0,07429	0,41712
70	0,277	288	0,24011	0,07540	0,46348
95	0,210	345	0,25111	0,07885	0,47345
120	0,164	400	0,24211	0,07602	0,48432