

## OnG1 FLEX 0,6/1 kV 4- i 5- cores



ROGUM KABLE SP. Z O.O.

<b>Mining power cables for mobile and portable power devices with insulation and sheath made of flexible polymer material, unshielded. Rated voltage 0,6/1kV</b>	
<b>According to</b>	ZN-FKR-019:2007/A1:2015; PN-EN 60332-1-2:2010/A1:2016-02
<b>CONSTRUCTION</b>	
<b>Conductor</b>	Tinned, annealed multi-wire cooper class 5 flexible conductor according to PN-EN 60228.
<b>Insulation</b>	Polymer material with properties corresponding to the IZ type material according to PN-89/E-29100
<b>Core filler</b>	Polymer material with properties corresponding to the IZ type material according to PN-89/E-29100
<b>Sheath</b>	Polymer material with flame retarding and oil proof properties corresponding to type ON4 material according to PN-E-90140:1986
<b>Cable core</b>	4 – cores: cable consists of 3 power cores and 1 corrugated protective conductor all stranded around central filler piece. 5 – cores: cable consists of 3 power cores, 1 corrugated protective conductor and 1 auxiliary core all stranded around central filler piece
<b>Sheath colour</b>	Black
<b>Insulation colour</b>	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
<b>CHARACTERISTIC</b>	
<b>Rated voltage Uo/U</b>	0,6/1 kV
<b>Test voltage for power conductors</b>	3,2 kV
<b>Test voltage for auxiliary conductors</b>	2 kV
<b>Maximum core temperature during operation</b>	+90 °C
<b>Maximum core temperature during short circuit</b>	+250 °C
<b>Ambient temperature for permanently installed cables</b>	od -40°C do +90°C
<b>Ambient temperature for mobile connections</b>	-25°C do +80°C
<b>Minimum bending radius</b>	Fixed installation – 6D; Mobile connections – 10D
<b>Cable name explanation</b>	OnG1 FLEX – Sheathed (O) mining (G) power cable with flexible multi-wire tinned copper conductor, insulation made of elastomeric material, shaeth made of flame retardant polymer material (n), cores twisted around the filler (1) and with an increased flexibility (FLEX)
<b>Cable marking</b>	OnG1 FLEX 0,6/1kV 3x2,5+2,5mm <sup>2</sup> ROGUM KABLE Sp. z o.o. + cable ID + length + 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 <sup>2</sup> ) 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 and underground mines in the fields of non-methane and in excavations classified as "a" "b" or "c" methane explosion class and "A" or "B" coal dust explosion.

## CERTIFICATES AND APPROVALS

EMAG certificate (Łukasiewicz Research Network – Institute of Innovative Technologies)

## ADDITIONAL INFORMATION

On request there is a possibility:

- to change the color of the sheath

In all cases concerning detailed technical data please contact our Client Advisor: [doradztwotechniczne@rogum.com.pl](mailto:doradztwotechniczne@rogum.com.pl)

**CARD NUMBER**

8

**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 <sup>2</sup>	mm	kg/km
4	3x2,5+2,5	19,6	310
	3x4+4	21,9	420
	3x6+6	25,8	590
	3x10+10	30,5	860
	3x16+10	37,0	1200
	3x16+16	37,0	1250
	3x25+16	44,5	1750
	3x25+25	44,5	1850
	3x35+16	46,6	2160
	3x35+25	46,6	2250
	3x35+35	46,6	2350
	3x50+25	52,6	3000
	3x50+50	52,6	3250
	3x70+25	58,6	3650
	3x70+70	58,6	4100
	3x95+95	65,0	5300
	3x120+120	68,5	6300
3x150+150	72,0	8600	
3x185+185	80,0	9400	
5	3x2,5+2,5+2,5	19,9	350
	3x4+4+4	22,3	500
	3x6+6+6	26,4	675
	3x10+10+6	31,6	1000
	3x16+10+6	40,2	1350
	3x25+16+10	48,0	2000

<b>PARAMETERS</b>		
<b>Nominal cross-section of the power conductor</b>	<b>Highest core resistance at 20 °C</b>	<b>Current carrying capacity at ambient temperature at 25 °C</b>
<b>mm<sup>2</sup></b>	<b>Ω/km</b>	<b>A</b>
1,5	13,7	28
2,5	8,21	31
4	5,09	42
6	3,39	54