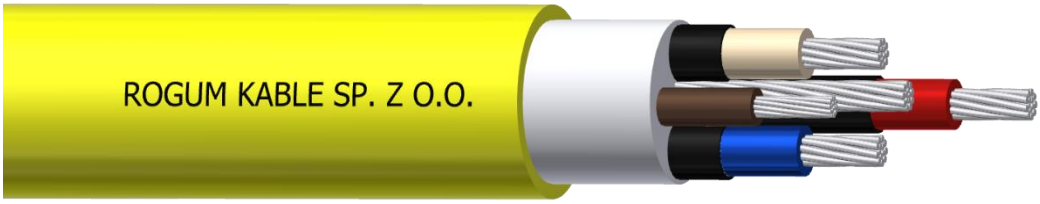
YnOGYek 0,6/1 kV



Mining power cables with individually shielded power cores, PVC insulation and fire retardant PVC sheath. Rated voltage 0,6/1kV	
According to	ZN-FKR-022:2009/A3:2022; PN-EN 60332-1-2:2010/A1:2016-02
CONSTRUCTION	
Conductor	Tinned, annealed multi-wire cooper class 5 flexible conductor according to PN-EN 60228.
Insulation	PVC type TI 1 according to PN-EN 50363-3:2010/A1:2011
Power cores shield	Layer of conductive, non-metallic, polymer material with properties corresponding to GP type material acc. to PN-E-29100:1989
Inner sheath	PVC type TM 2 according to PN-EN 50363-4-1:2010
Outer sheath	PVC type TM 1 with self-extinguishing and flame retardant properties according to PN-EN 50363-4-1:2010; PN-EN 60332-1-2:2010
Cable core	Cable core consists of 3 shielded power cores and 1 insulated auxiliary core all twisted over non-insulated protective core made of annealed, tinned copper wire.
Sheath colour	I layer – white; II layer - yellow
Insulation colour	Power conductors: natural (white), red, blue Protective conductor: non-insulated 1 auxiliary conductor: brown 3 auxiliary conductors: brown, red, blue
CHARACTERISTIC	
Rated voltage Uo/U	0,6/1 kV
Test voltage for power cores	3,2 kV
Test voltage for auxiliary cores	2 kV
Minimum ambient temperature for installation	-5°C
Maximum core temperature during operation	+70°C
Maximum core temperature during short circuit	+160 °C
Minimum ambient temperature for permanently installed cables	-30 °C
Minimum bending radius	Fixed installation – 6D
Cable name explanation	YnOGYek **–** Sheated power cable (O) for mining application (G), with flexible multi-wire copper conductor, insulation made of PVC (Y), individual shielding made of non-metalic conductive material (ek) and sheath made of flame retardant PVC (Yn)

MINING CABLES - PVC

Cable marking	YnOGYek 0,6/1kV 3x35+16 mm^2 ROGUM KABLE sp. z o.o. + cable ID + length + year of production Each cable has a legible and permanent marking repeated cyclically, printed 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 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

CARD NUMBER	2	EDITION	21.03.2023

NUMBER AND TYPE OF CORES

Total number of cores in cable	Type of core		
	Power cores	Protective conductor	Auxiliary cores
n	n	n	n
5	3	1	1

CABLE CONSTRUCTION

Total number of cores	Number of cores and cross-sectional area Power cores + Protective conductor + Auxiliary cores	Cable maximum diameter	Approximated cable weight
n	n x mm^2	mm	kg/km
5	3x2,5+2,5+2,5	20,7	490
	3x4+4+4	22,8	610
	3x6+6+4	26,4	790
	3x10+10+6	30,4	1210

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
2,5	8,21	27	0,32866	0,10320	0,40107
4	5,09	37	0,31198	0,09796	0,47296
6	3,39	47	0,30624	0,09616	0,50865
10	1,95	66	0,28615	0,08985	0,59486

CORRECTION FACTORS (KT) FOR AMBIENT TEMPERATURE GREATER THAN 25 °C	
Ambient temperature	Correction factors (Kt) for cables rated for permissible long-term operation at limit temperature of 70 °C
°C	A
30	0,94
35	0,88
40	0,82
45	0,75
50	0,67
55	0,58