



PN-G-90100 Polish Mining Rubber Cables

OnGcekzi-G

Cable

PN-G-90103 · 0.6/1 kV · +90 °C EPR · Individually screened cores ('ekzi') · Mining PCP



PN-G-90103

0.6/1 kV

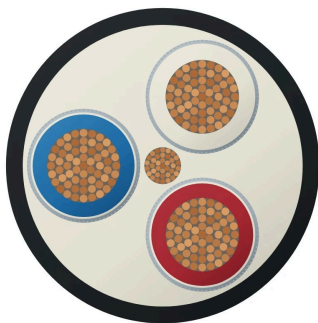
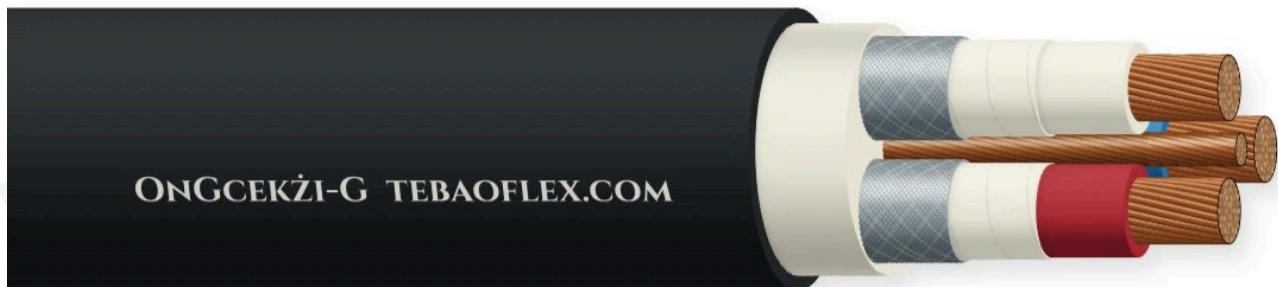
Individually Screened 'ekzi'

Application

OnGcekzi-G is a 0.6/1 kV underground mining rubber cable with individually screened ('i') power and control cores to PN-G-90103 / ZN-TF-208. Enclosing every individual core in its own semi-conductive elastomeric screen prevents core-to-core short-circuits

Typical uses: Longwall Roof Support Automation, Underground Coal & Copper Mines, Flameproof Control & Interlock Gear, Roadway Conveyor Trip Systems, Methane-Hazard Gassy Workings

Construction



Cross-section, not to scale

1	Flexible copper conductor	IEC 60228 Class 5
2	+90 °C EPR core insulation ('c')	PN-G-90103
3	Individual core elastomeric screen ('i')	ZN-TF-208
4	Uninsulated protective earth conductor	PN-G-90103
5	Underground mining outer sheath ('-G')	PN-G-90100 / PN-G-90103

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV AC (Um 1.2 kV)
Individual screen resistivity	≤ 500 Ω·m per PN-G-90103
Nominal frequency	50 / 60 Hz & DC telemetry
Max. conductor operating temp.	+90 °C continuous ('c' EPR)
Mobile ambient range	-25 °C to +60 °C
Min. installation temperature	-15 °C
Min. bend radius (fixed)	6 × overall diameter (D)
Max. tensile pull on copper	15 N/mm ² total conductor area
Abrasion resistance	High-tear PCP outer compound
Flame retardance	IEC 60332-1-2 / PN-G-90100 'G'
Mine water & humidity	Acidic/alkaline mine water resistant
EMC & cross-talk isolation	Per-core semi-conductive screening
Standards	PN-G-90103 / ZN-TF-208

Routine AC test voltage	3.0 kV rms / 5 min
Inter-core fault prevention	100 % core-to-screen earth path
Conductor resistance class	IEC 60228 Class 5
Max. short-circuit temperature	+250 °C (max. 5 s)
Fixed ambient range	-40 °C to +60 °C
Thermal overload margin	+105 °C short-term peak
Min. bend radius (flexing)	10 × overall diameter (D)
Crush & pinch resistance	Heavy-duty 'L-G' mining jacket
Flexing endurance	Bretby & roof-support loop duty
Mineral oil & emulsion	EN 60811-404 resistant PCP
Ozone & corona stability	Ozone-resistant EPR & semicon
Halogen status	Polychloroprene elastomer

Sizes

12 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Individually Screened Cores + PE	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard OnGcekzi-G configurations 12 sizes						
☐ OnGcekzi-G 4×2.5 + 1×2.5	4×2.5 + 1×2.5	2.5	20.5	120	560	123
☐ OnGcekzi-G 7×1.5 + 1×2.5	7×1.5 + 1×2.5	1.5	21.8	125	620	131
☐ OnGcekzi-G 10×1.5 + 1×2.5	10×1.5 + 1×2.5	1.5	25.4	168	830	152
☐ OnGcekzi-G 12×1.5 + 1×2.5	12×1.5 + 1×2.5	1.5	26.6	197	920	160
☐ OnGcekzi-G 14×1.5 + 1×2.5	14×1.5 + 1×2.5	1.5	28.0	226	1,030	168
☐ OnGcekzi-G 19×1.5 + 1×4	19×1.5 + 1×4	1.5	31.5	312	1,310	189
☐ OnGcekzi-G 7×2.5 + 1×4	7×2.5 + 1×4	2.5	24.0	206	780	144
☐ OnGcekzi-G 10×2.5 + 1×4	10×2.5 + 1×4	2.5	28.2	278	1,060	169
☐ OnGcekzi-G 12×2.5 + 1×4	12×2.5 + 1×4	2.5	29.5	326	1,180	177
☐ OnGcekzi-G 19×2.5 + 1×6	19×2.5 + 1×6	2.5	35.0	514	1,680	210
☐ OnGcekzi-G 3×4 + 1×4 + 3×1.5	3×4 + 1×4 + 3×1.5	4	24.8	197	810	149
☐ OnGcekzi-G 3×6 + 1×6 + 3×1.5	3×6 + 1×6 + 3×1.5	6	26.8	274	960	161

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per PN-G-90103 / ZN-TF-208.

Electrical & ampacity data

12 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V rms
4×2.5 + 1×2.5	7.980	30	26	82	3,000
7×1.5 + 1×2.5	13.300	22	19	80	3,000
10×1.5 + 1×2.5	13.300	22	19	80	3,000

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V _{rms}
12×1.5 + 1×2.5	13.300	22	19	80	3,000
14×1.5 + 1×2.5	13.300	22	19	80	3,000
19×1.5 + 1×4	13.300	22	19	80	3,000
7×2.5 + 1×4	7.980	30	26	82	3,000
10×2.5 + 1×4	7.980	30	26	82	3,000
12×2.5 + 1×4	7.980	30	26	82	3,000
19×2.5 + 1×6	7.980	30	26	82	3,000
3×4 + 1×4 + 3×1.5	4.950	40	34	84	3,000
3×6 + 1×6 + 3×1.5	3.300	51	43	87	3,000

– Current ratings apply at +25/+30 °C ambient in free air; apply standard derating factors for elevated ambient or drum coiling.

Standards and approvals

✓ PN-G-90103 / ZN-TF-208

✓ IEC 60332-1-2

✓ CE / RoHS

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

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Email

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Web

tebaoflex.com/cables/ongcekzi-g-cable



Typical values for this cable type, based on PN-G-90103 / ZN-TF-208. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.