



PN-G-90100 Polish Mining Rubber Cables

OnGcekż-G2 / O2nGcekż-G2

Screened Mining Rubber Cable with

PN-G-90101 · 0.6/1 kV · Twin-strand phase ('-G2', 2×3×S) · +90 °C EPR · Screened · Pilot



PN-G-90101

0.6/1 kV

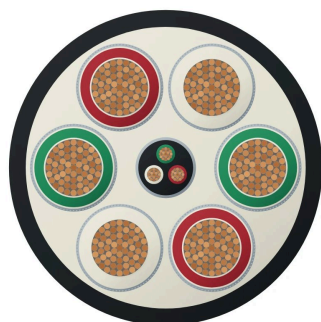
Twin-Strand 2×3×S Mining

Application

OnGcekż-G2 and O2nGcekż-G2 are high-ampacity 0.6/1 kV screened mining trailing cables engineered with a twin-strand ('-G2', 2×3×S) split-phase conductor architecture. Splitting each phase into two parallel screened cores reduces bending stiffness and outer

Typical uses: High-Output Longwall Coal Faces, Heavy Roadheader & Bolter-Miners, Compact Bretby Handler Chains, Underground Potash & Copper Mines, High-Current 1000 V Face Drives

Construction



Cross-section, not to scale

1	Twin-strand phase conductors ('-G2')	IEC 60228 Class 5
2	+90 °C EPR core insulation ('c')	PN-G-90101
3	Elastomeric phase & pilot screens ('ek')	PN-G-90101
4	Central pilot unit ('ż') & earth	PN-G-90101
5	Single ('On') or double ('O2n') mining	PN-G-90101 / ZN-TF-206

Technical data

Typical values

Rated voltage (power cores)	0.6/1 kV AC (Um 1.2 kV)
Routine AC test (power / pilot)	3.0 kV / 1.5 kV rms for 5 min
Semi-conductive screen resistivity	≤ 500 Ω·m per PN-G-90101
Max. conductor operating temp.	+90 °C continuous ('c' EPR)
Mobile ambient range	-25 °C to +60 °C
Heat dissipation advantage	Higher surface area of 6 phase cores
Min. bend radius (fixed)	5 × overall diameter (D)
Bending force vs 3-core	20–30 % lower bending moment
Max. tensile pull on copper	15 N/mm ² total phase area
Flame retardance	IEC 60332-1-2 / PN-G-90100
Mine water & humidity	Resistant to acidic/alkaline mine water
Mechanical abrasion	Double-layer O2n PCP sheath option
Standards	PN-G-90101 / ZN-TF-206

Rated voltage (pilot cores 'z')	250 V AC
Inductive reactance reduction	≈ 30 % lower than 3-core equivalent
Nominal frequency	50 / 60 Hz
Max. short-circuit temperature	+250 °C (max. 5 s)
Fixed ambient range	-40 °C to +60 °C
Min. flexing temperature	-25 °C
Min. bend radius (flexing)	8 × overall diameter (D)
Outer sheath tear resistance	Enhanced on O2n double-sheath
Crush & impact resistance	Heavy underground longwall grade
Oil & hydraulic emulsion	EN 60811-404 resistant PCP
Ozone & corona stability	Ozone-resistant EPR & semicon
Halogen status	Polychloroprene elastomer

Sizes

9 standard constructions

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

Order designation	Twin-Phase (2×3×5) + PE + Pilots	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
OnGcekž-G2 (single-layer heavy PCP mining sheath) 5 sizes						
☐ OnGcekž-G2 2×3×16+1×16+4×2.5	2×3×16 + 1×16 + 4×2.5	16	40.5	1,171	2,480	202
☐ OnGcekž-G2 2×3×25+1×25+4×2.5	2×3×25 + 1×25 + 4×2.5	25	45.8	1,776	3,420	229
☐ OnGcekž-G2 2×3×35+1×25+4×2.5	2×3×35 + 1×25 + 4×2.5	35	50.4	2,352	4,290	252
☐ OnGcekž-G2 2×3×50+1×35+4×2.5	2×3×50 + 1×35 + 4×2.5	50	56.8	3,312	5,680	284
☐ OnGcekž-G2 2×3×70+1×50+4×2.5	2×3×70 + 1×50 + 4×2.5	70	63.5	4,608	7,450	318
O2nGcekž-G2 (double-layer reinforced PCP mining sheath) 4 sizes						
☐ O2nGcekž-G2 2×3×25+1×25+4×2.5	2×3×25 + 1×25 + 4×2.5	25	47.2	1,776	3,610	236
☐ O2nGcekž-G2 2×3×35+1×25+4×2.5	2×3×35 + 1×25 + 4×2.5	35	51.8	2,352	4,510	259
☐ O2nGcekž-G2 2×3×50+1×35+7×2.5	2×3×50 + 1×35 + 7×2.5	50	58.4	3,384	5,960	292
☐ O2nGcekž-G2 2×3×70+1×50+7×2.5	2×3×70 + 1×50 + 7×2.5	70	65.0	4,680	7,780	325

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per PN-G-90101 / ZN-TF-206.

Electrical & ampacity data

9 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
2×3×16 + 1×16 + 4×2.5	1.210	163	139	101	3,000
2×3×25 + 1×25 + 4×2.5	0.780	216	184	114	3,000
2×3×35 + 1×25 + 4×2.5	0.554	266	226	129	3,000
2×3×50 + 1×35 + 4×2.5	0.386	331	281	150	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}
2×3×70 + 1×50 + 4×2.5	0.272	408	347	180	3,000
2×3×25 + 1×25 + 4×2.5	0.780	216	184	114	3,000
2×3×35 + 1×25 + 4×2.5	0.554	266	226	129	3,000
2×3×50 + 1×35 + 7×2.5	0.386	331	281	150	3,000
2×3×70 + 1×50 + 7×2.5	0.272	408	347	180	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-90101 / ZN-TF-206

✓ 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

info@tebaoflex.com

Web

tebaoflex.com/cables/ongcekz-g2-o2ngcekz-g2-screened-mining-rubber-cable-with-twin-strand-conductor-construction



Typical values for this cable type, based on PN-G-90101 / ZN-TF-206. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.