



PN-G-90100 Polish Mining Rubber Cables

OnG-Szn Cable

PN-G-90104 · 300/500 V (250 V mining) · Twin-core (2×) · Extra-flexible Cu · EPR · PCP



PN-G-90104

300/500 V

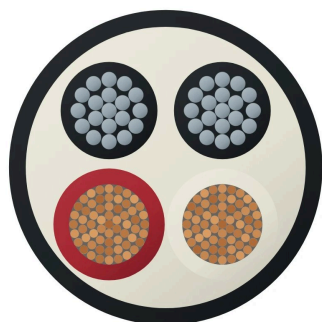
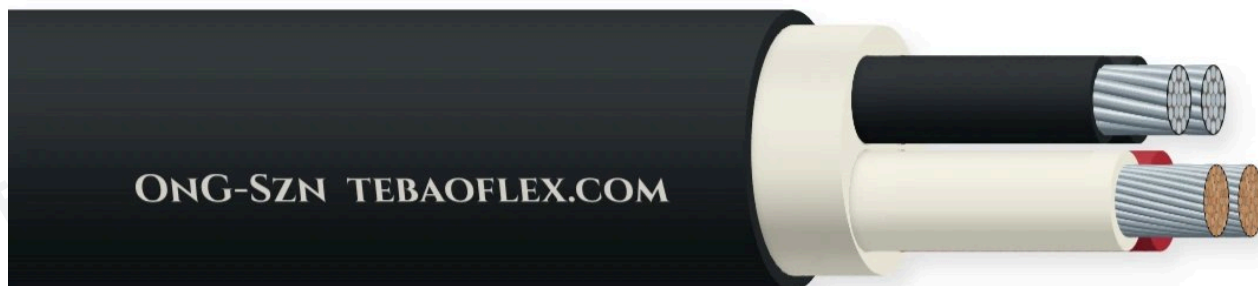
Twin-Core Mining Cord

Application

OnG-Szn ('sznur górniczy') is a compact, extra-flexible twin-core mining rubber cord manufactured to PN-G-90104 for underground miner cap-lamps, portable low-voltage hand tools, gas detectors, and local signalling appliances. Built with high-strand-count

Typical uses: Underground Miner Cap-Lamps, Portable Mine Hand Tools, Intrinsically Safe Gas Instrumentation, Roadway Acoustic Signalling, Tunnelling & Shaft Inspection Gear

Construction



Cross-section, not to scale

1	Extra-flexible copper conductor	IEC 60228 Class 5/6
2	EPR elastomer insulation	PN-G-90104
3	Short-lay core twist & cotton/synthetic	PN-G-90104
4	Flexible polychloroprene cord sheath	PN-G-90104

Technical data

Typical values

Rated voltage U0/U	300/500 V (250 V mining)	Routine AC test voltage	2.0 kV rms / 5 min
Insulation resistance at 20 °C	≥ 20 MΩ·km	Operating current type	AC 50/60 Hz & DC battery
Conductor stranding	IEC 60228 Class 5 / Class 6	Intrinsic safety compatibility	Low-inductance twisted pair layout
Max. conductor operating temp.	+70 °C continuous	Max. short-circuit temperature	+200 °C (max. 5 s)
Mobile ambient range	-25 °C to +60 °C	Fixed ambient range	-40 °C to +60 °C
Min. flexing temperature	-25 °C	Thermal ageing stability	PN-G-90100 air-oven verified
Min. bend radius (fixed)	4 × overall diameter (D)	Min. bend radius (flexing)	6 × overall diameter (D)
Flexing endurance	≥ 30,000 reverse bend cycles	Axial pull reinforcement	Central textile strain-relief yarns
Kink & twist resistance	Short-pitch core lay-up	Abrasion resistance	Smooth low-friction PCP jacket
Flame retardance	IEC 60332-1-2 / PN-G-90100	Oil, grease & battery acid	Polychloroprene resistant to electrolytes
Mine water & perspiration	Resistant to moisture & body sweat	Ozone & ageing	Ozone-resistant EPR & PCP
Chemical exposure	Resistant to weak acids & alkalis	Halogen status	Polychloroprene elastomer
Standards	PN-G-90104 / ZN-TF-209		

Sizes

10 standard constructions

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

Order designation	Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard OnG-Szn configurations 10 sizes						
☐ OnG-Szn 2×1.0	2×1.0	1.0	8.2	19	88	33
☐ OnG-Szn 2×1.5	2×1.5	1.5	9.2	29	112	37
☐ OnG-Szn 2×2.5	2×2.5	2.5	10.8	48	158	43
☐ OnG-Szn 2×4.0	2×4.0	4.0	12.6	77	225	50
☐ OnG-Szn 2×6.0	2×6.0	6.0	14.2	115	305	57
☐ OnG-Szn 3×1.0	3×1.0	1.0	8.8	29	105	35
☐ OnG-Szn 3×1.5	3×1.5	1.5	9.8	43	135	39
☐ OnG-Szn 3×2.5	3×2.5	2.5	11.6	72	195	46
☐ OnG-Szn 3×4.0	3×4.0	4.0	13.5	115	280	54
☐ OnG-Szn 3×6.0	3×6.0	6.0	15.4	173	385	62

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per PN-G-90104 / ZN-TF-209.

Electrical & ampacity data

10 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
2×1.0	19.500	15	13	79	2,000
2×1.5	13.300	19	16	80	2,000
2×2.5	7.980	26	22	82	2,000
2×4.0	4.950	35	30	84	2,000
2×6.0	3.300	45	38	87	2,000
3×1.0	19.500	15	13	79	2,000
3×1.5	13.300	19	16	80	2,000

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}
3×2.5	7.980	26	22	82	2,000
3×4.0	4.950	35	30	84	2,000
3×6.0	3.300	45	38	87	2,000

– 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-90104 / PN-G-90100

✓ 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

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/ong-szn-cable



Typical values for this cable type, based on PN-G-90104 / ZN-TF-209. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.