



PN-G-90100 Polish Mining Rubber Cables

OnGc-G Cable

PN-G-90102 · 0.6/1 kV · Class 5 Cu · +90 °C heat-resistant EPR · Unscreened · Mining PCP



PN-G-90102

0.6/1 kV

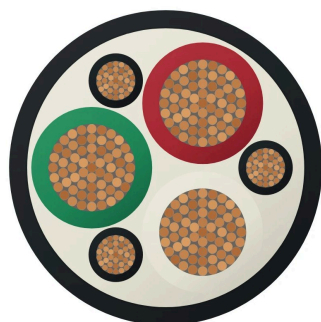
+90 °C Mining Rubber

Application

OnGc-G is a Polish-standard 0.6/1 kV heat-resistant unscreened flexible mining rubber power cable manufactured to PN-G-90102. The 'c' designation denotes +90 °C heat-resistant EPR insulation for higher current-carrying capacity, while '-G' certifies

Typical uses: Underground Coal & Salt Mining, Mine Dewatering & Ventilation, Tunnel Boring Auxiliary Feeders, Quarry & Aggregate Processing, Heavy Industrial Power Distribution

Construction



Cross-section, not to scale

1	Flexible copper conductor	IEC 60228 Class 5
2	Heat-resistant EPR insulation ('c')	PN-G-90102
3	Core lay-up & inner rubber filler	PN-G-90102
4	Underground mining outer sheath ('-G')	PN-G-90100 / PN-G-90102

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV AC	Maximum system voltage Um	1.2 kV AC
Routine AC test voltage	3.0 kV rms / 5 min	Max. short-circuit current density	143 A/mm ² (1 s, +90 to +250 °C)
Nominal frequency	50 / 60 Hz	Conductor stranding class	IEC 60228 Class 5
Max. conductor operating temp.	+90 °C continuous ('c' EPR)	Max. short-circuit temperature	+250 °C (max. 5 s)
Mobile ambient range	-25 °C to +60 °C	Fixed ambient range	-40 °C to +60 °C
Current rating advantage	+15 % to +18 % vs +70 °C OnG	Min. laying temperature	-15 °C
Min. bend radius (fixed)	6 × overall diameter (D)	Min. bend radius (mobile)	10 × overall diameter (D)
Max. static tensile pull	15 N/mm ² of copper cross-section	Crush & impact resistance	Heavy underground 'G' sheath grade
Tear resistance	≥ 15 N/mm per PN-G-90100	Sheath tensile strength	≥ 12.5 MPa unaged
Flame retardance	IEC 60332-1-2 / PN-G-90100 'G'	Mineral oil & grease	EN 60811-404 oil-resistant PCP
Mine water & dampness	Acidic & alkaline mine water resistant	Ozone resistance	Ozone-inert EPR core insulation
Weather & UV stability	Suitable for surface & underground	Halogen status	Chloroprene rubber (halogenated)
Standards	PN-G-90102 / ZN-TF-203		

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	Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard OnGc-G configurations 12 sizes						
☐ OnGc-G 4×4	4×4	4	17.2	154	440	103
☐ OnGc-G 4×6	4×6	6	19.0	230	565	114
☐ OnGc-G 4×10	4×10	10	23.2	384	890	139
☐ OnGc-G 4×16	4×16	16	26.8	614	1,270	161
☐ OnGc-G 4×25	4×25	25	31.8	960	1,860	191
☐ OnGc-G 4×35	4×35	35	35.4	1,344	2,410	212
☐ OnGc-G 4×50	4×50	50	40.8	1,920	3,290	245
☐ OnGc-G 4×70	4×70	70	46.2	2,688	4,380	277
☐ OnGc-G 4×95	4×95	95	52.0	3,648	5,690	312
☐ OnGc-G 5×6	5×6	6	20.8	288	690	125
☐ OnGc-G 5×10	5×10	10	25.4	480	1,070	152
☐ OnGc-G 5×16	5×16	16	29.5	768	1,540	177

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per PN-G-90102 / ZN-TF-203.

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
4×4	4.950	40	34	84	3,000
4×6	3.300	51	43	87	3,000
4×10	1.910	70	60	92	3,000
4×16	1.210	93	79	101	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}
4×25	0.780	123	105	114	3,000
4×35	0.554	152	129	129	3,000
4×50	0.386	189	161	150	3,000
4×70	0.272	233	198	180	3,000
4×95	0.206	282	240	216	3,000
5×6	3.300	51	43	87	3,000
5×10	1.910	70	60	92	3,000
5×16	1.210	93	79	101	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-90102 / 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/ongc-g-cable



Typical values for this cable type, based on PN-G-90102 / ZN-TF-203. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.