

**PN-G-90100 Polish Mining Rubber Cables**

OGc

Cable

PN-G-90105 / PN-89/E-90143 · 0.6/1 kV to 3.6/6 kV · +90 °C EPR ('c') · Open-cast &

PN-G-90105

1.8/3–3.6/6 kV

Open-Cast Mining Rubber



Application

OGc is a heavy-duty flexible rubber power feeder cable manufactured to PN-G-90105 / PN-89/E-90143 for open-cast lignite mines, quarry excavators, mobile crushing plants, and field transformer links. Built with Class 5 copper conductors, +90 °C

Typical uses: Open-Cast Lignite & Coal Mines, Quarry Shovels & Mobile Crushers, Overland Belt Conveyor Stations, Dredging & Dewatering Pontoons, Outdoor Mobile Substations

Construction



Cross-section, not to scale

1	Flexible copper conductor	IEC 60228 Class 5
2	+90 °C EPR dielectric ('c')	PN-G-90105
3	Elastomeric inner filler & bedding	PN-89/E-90143
4	Heavy-duty open-cast outer rubber	PN-G-90105

Technical data

Typical values

Rated voltage U0/U 0.6/1 kV, 1.8/3 kV, or 3.6/6 kV

Routine AC test voltage 3.0 kV / 6.5 kV / 11.0 kV rms

Nominal frequency 50 / 60 Hz

Max. conductor operating temp. +90 °C continuous ('c' EPR)

Outdoor mobile ambient range -40 °C to +60 °C

Min. laying temperature -25 °C

Min. bend radius (fixed) 6 × overall diameter (D)

Max. tensile pull on copper 15 N/mm²

Cold-impact resilience No cracking down to -40 °C

UV & sunlight resistance Carbon-stabilised black elastomer

Oil & diesel resistance EN 60811-404 resistant

Water & mud exposure Suitable for flooded quarry benches

Standards PN-G-90105 / PN-89/E-90143

Maximum system voltage Um 1.2 kV, 3.6 kV, or 7.2 kV

Specific insulation resistance ≥ 500 MΩ·km at +20 °C

Conductor stranding class IEC 60228 Class 5

Max. short-circuit temperature +250 °C (max. 5 s)

Fixed ambient range -50 °C to +60 °C

Emergency overload temp. +105 °C

Min. bend radius (flexing) 10 × overall diameter (D)

Bench dragging abrasion Heavy-wall elastomer outer jacket

Tear strength ≥ 15 N/mm

Ozone resistance Ozone-inert EPR insulation & sheath

Flame retardance IEC 60332-1-2 self-extinguishing

Halogen status Chloroprene 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	Voltage & Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
0.6/1 kV & 1.8/3 kV OGc heavy open-cast & quarry feeders 6 sizes						
☐ OGc 1.8/3 kV 3×16+1×10	1.8/3 kV 3×16+1×10	16	29.2	557	1,340	175
☐ OGc 1.8/3 kV 3×25+1×16	1.8/3 kV 3×25+1×16	25	33.5	874	1,840	201
☐ OGc 1.8/3 kV 3×35+1×16	1.8/3 kV 3×35+1×16	35	36.8	1,162	2,290	221
☐ OGc 1.8/3 kV 3×50+1×25	1.8/3 kV 3×50+1×25	50	41.6	1,680	3,080	250
☐ OGc 1.8/3 kV 3×70+1×35	1.8/3 kV 3×70+1×35	70	46.8	2,352	4,020	281
☐ OGc 1.8/3 kV 3×95+1×50	1.8/3 kV 3×95+1×50	95	52.4	3,216	5,190	314
3.6/6 kV OGc medium-voltage open-cast excavator feeders 6 sizes						
☐ OGc 3.6/6 kV 1×50	3.6/6 kV 1×50	50	21.5	480	820	129
☐ OGc 3.6/6 kV 1×95	3.6/6 kV 1×95	95	26.2	912	1,390	157
☐ OGc 3.6/6 kV 1×150	3.6/6 kV 1×150	150	30.8	1,440	2,040	185
☐ OGc 3.6/6 kV 3×25+1×16	3.6/6 kV 3×25+1×16	25	38.4	874	2,210	230
☐ OGc 3.6/6 kV 3×50+1×25	3.6/6 kV 3×50+1×25	50	46.2	1,680	3,510	277
☐ OGc 3.6/6 kV 3×95+1×50	3.6/6 kV 3×95+1×50	95	57.0	3,216	5,740	342

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per PN-G-90105 / PN-89/E-90143.

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}
1.8/3 kV 3×16+1×10	1.210	93	79	101	6,500
1.8/3 kV 3×25+1×16	0.780	123	105	114	6,500
1.8/3 kV 3×35+1×16	0.554	152	129	129	6,500
1.8/3 kV 3×50+1×25	0.386	189	161	150	6,500
1.8/3 kV 3×70+1×35	0.272	233	198	180	6,500
1.8/3 kV 3×95+1×50	0.206	282	240	216	6,500
3.6/6 kV 1×50	0.386	189	161	150	11,000
3.6/6 kV 1×95	0.206	282	240	216	11,000
3.6/6 kV 1×150	0.129	374	318	268	11,000
3.6/6 kV 3×25+1×16	0.780	123	105	114	11,000
3.6/6 kV 3×50+1×25	0.386	189	161	150	11,000
3.6/6 kV 3×95+1×50	0.206	282	240	216	11,000

– 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-90105 / PN-89/E-90143

✓ 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/ogc-cable



Typical values for this cable type, based on PN-G-90105 / PN-89/E-90143. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.