



Heavy-duty rubber cables (NSSHÖU)

OnG Cable

Polish PN-E-90103 450/750 V & 0.6/1 kV flame-retardant oil-resistant mining rubber cable



PN-91/E-90103 · Mining

450/750 V & 0.6/1 kV

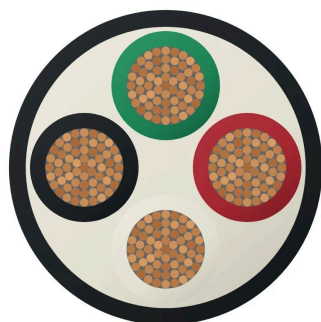
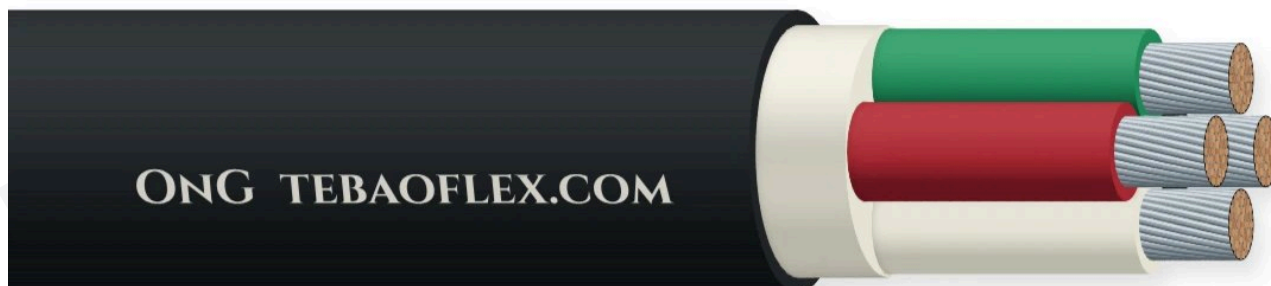
EPR · ON-3 / EM2 PCP

Application

Heavy-duty Polish mining and industrial rubber cable ('O' = oponowy rubber tire cable, 'n' = flame/oil-resistant, 'G' = górnicy mining) to PN-91/E-90103 / PN-89/E-90143 in 450/750 V and 0.6/1 kV with Class 5 copper, +90 °C EPR cores and PCP sheath.

Typical uses: Underground & open-pit coal/copper mines, Mineral processing & coal wash plants, Quarries, cement & aggregate works, Heavy construction & tunnelling gear, Steelworks, coking plants & foundries

Construction



Cross-section, not to scale

1	Flexible copper conductor	PN-EN 60228 Class 5
2	Separator foil	PN-91/E-90103
3	EPR core insulation (GIE1)	PN-91/E-90103
4	Inner elastomeric filling	PN-91/E-90103
5	Mining PCP outer sheath (ON-3)	PN-91/E-90103 · IEC 60332-1-2 · EN 60811-404

Technical data

Typical values

Rated voltage U0/U	450/750 V or 0.6/1 kV (600/1000 V AC)	AC test voltage	2500 V AC (450/750 V) · 3000 V AC (0.6/1 kV), 50 Hz
Conductor stranding	PN-EN 60228 / IEC 60228 Class 5 flexible copper	Insulation resistance	≥ 20 MΩ·km at +20 °C
Current rating basis	90 °C EPR thermoset conductor rating	Max. conductor temperature	+90 °C continuous operation
Short-circuit temperature	+250 °C max. (up to 5 s)	Temperature, flexing	–25 °C to +70 °C
Temperature, fixed	–40 °C to +70 °C	Min. bending radius, fixed	4 × overall diameter
Min. bending radius, moving	6 × overall diameter	Max. tensile load	15 N/mm ² of total copper cross-section
Mechanical impact class	Heavy mining & industrial trailing duty ('Oponowy Górniczy')	Flame retardance ('n')	PN-EN 60332-1-2 / IEC 60332-1-2 self-extinguishing mining sheath
Oil & grease resistance ('n')	PN-EN 60811-404 mineral oil, diesel & hydraulic emulsion resistant	Mine water & humidity	Resistant to underground dampness, mud and coal dust
Weather & ozone	Ozone-resistant GIE1 EPR and ON-3 polychloroprene sheath	Standards	PN-91/E-90103 & PN-89/E-90143
Standard packing	Heat-treated ISPM-15 timber drums with sealed cable ends		

Sizes

24 standard constructions

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

Order designation	Cores × mm ²	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
OnG Single-Core 0.6/1 kV Mining & Industrial Power Leads (25–240 mm²) 5 sizes							
☐ OnG 1×25 (0.6/1 kV)	1×25	4	11.6	12.6	240	335	50
☐ OnG 1×50 (0.6/1 kV)	1×50	1	14.9	16.2	480	610	65
☐ OnG 1×95 (0.6/1 kV)	1×95	3/0	19.3	21.0	912	1,110	84
☐ OnG 1×150 (0.6/1 kV)	1×150	300 kcmil	23.6	25.6	1,440	1,710	102
☐ OnG 1×240 (0.6/1 kV)	1×240	500 kcmil	29.0	31.5	2,304	2,660	126
OnG Multicore Power Cables (3G1.5–4G95) 15 sizes							
☐ OnG 3×1.5	3G1.5	16	9.8	10.6	43	155	42
☐ OnG 4×1.5	4G1.5	16	10.7	11.6	58	190	46
☐ OnG 5×1.5	5G1.5	16	11.8	12.8	72	235	51
☐ OnG 3×2.5	3G2.5	14	11.2	12.2	72	220	49
☐ OnG 4×2.5	4G2.5	14	12.3	13.4	96	270	54
☐ OnG 5×2.5	5G2.5	14	13.6	14.8	120	330	59
☐ OnG 4×4	4G4	12	14.4	15.6	154	390	62
☐ OnG 4×6	4G6	10	16.1	17.5	230	520	70
☐ OnG 4×10	4G10	8	20.1	21.8	384	860	87
☐ OnG 4×16	4G16	6	23.2	25.2	614	1,210	101
☐ OnG 4×25	4G25	4	27.8	30.2	960	1,780	121
☐ OnG 4×35	4G35	2	31.3	34.0	1,344	2,350	136
☐ OnG 4×50	4G50	1	36.3	39.5	1,920	3,220	158
☐ OnG 4×70	4G70	2/0	41.0	44.6	2,688	4,310	178
☐ OnG 4×95	4G95	3/0	46.2	50.2	3,648	5,650	201

Order designation	Cores × mm ²	AWG ≈	Outer Ø min mm	Outer Ø max mm	Copper kg/km	Weight ≈ kg/km	Min. bend R mm
OnG Multicore Mining Control & Signalling Cables (7G1.5–12G2.5) 4 sizes							
☐ OnG 7×1.5	7G1.5	16	14.0	15.2	101	330	61
☐ OnG 12×1.5	12G1.5	16	17.8	19.4	173	520	78
☐ OnG 7×2.5	7G2.5	14	16.4	17.8	168	470	71
☐ OnG 12×2.5	12G2.5	14	20.8	22.6	288	760	90

– Dimensions and weights are typical values per PN-91/E-90103 / PN-89/E-90143. Minimum fixed bending radius shown is 4 × OD.

Electrical & current ratings

13 sizes

Cross-section mm ²	AWG ≈	Max. DC resistance 20 °C, Ω/km	1-core in air 30 °C, A	3–4 core in air 30 °C, A
1.5	16	13.3	23	18
2.5	14	7.98	30	25
4	12	4.95	41	34
6	10	3.3	53	44
10	8	1.91	74	61
16	6	1.21	99	82
25	4	0.78	131	108
35	2	0.554	162	135
50	1	0.386	202	168
70	2/0	0.272	250	207
95	3/0	0.206	301	250
150	300 kcmil	0.129	404	335
240	500 kcmil	0.08	540	453

– Current ratings at 30 °C ambient in free air per DIN VDE 0298-4 / EN 50565-1. Apply derating factors for elevated ambient temperature or reeling layer grouping.

Standards and approvals

✓ PN-91/E-90103 / PN-89/E-90143

✓ CE · RoHS 2 (2011/65/EU) · REACH

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

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Typical values for this cable type, based on PN-91/E-90103 / 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.