



PN-G-90100 Polish Mining Rubber Cables

OnGcekz-GW Cable

PN-G-90101 · 0.6/1 kV · +90 °C EPR · Screened ('ek') · Pilot cores ('ż') · Water-blocked



PN-G-90101

0.6/1 kV

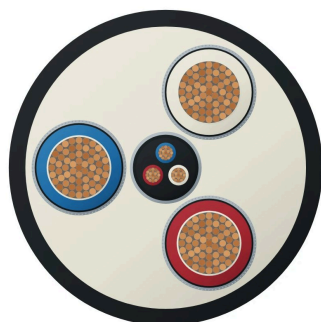
Water-Blocked Mining

Application

OnGcekz-GW is a sealed, water-blocked 0.6/1 kV screened underground mining trailing cable to PN-G-90101 for wet longwall faces and water-sprayed roadheader headings. The '-GW' suffix signifies hydro-swelling water-blocking tapes and sealed elastomeric

Typical uses: Wet Longwall Coal Mining, Water-Cooled Roadheaders, Flooded Mine Headings & Sumps, Potash, Salt & Copper Mines, Underground Tunnelling Faces

Construction



Cross-section, not to scale

1	Flexible copper conductors	IEC 60228 Class 5
2	+90 °C EPR insulation ('c')	PN-G-90101
3	Semi-conductive elastomeric screens	PN-G-90101
4	Pilot bundle ('ż') & earth core	PN-G-90101
5	Hydro-swelling water-blocking barrier	ZN-TF-205
6	Water-sealed mining PCP sheath ('-GW')	PN-G-90101

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
Wet insulation stability	No dielectric drop in flooded troughs
Max. conductor operating temp.	+90 °C continuous ('c' EPR)
Mobile ambient range	-25 °C to +60 °C
Max. mine water temperature	+40 °C continuous immersion
Min. bend radius (fixed)	6 × overall diameter (D)
Max. tensile load on copper	15 N/mm ²
Crush & impact resistance	Heavy-duty '-GW' outer jacket
Water & moisture ingress	Sealed '-GW' longitudinal water-blocked
Oil & hydraulic emulsion	EN 60811-404 resistant
Ozone & corona stability	Ozone-resistant EPR & semicon
Standards	PN-G-90101 / ZN-TF-205

Rated voltage (pilot cores 'ž')	250 V AC
Semi-conductive screen resistivity	≤ 500 Ω·m per PN-G-90101
Nominal frequency	50 Hz
Max. short-circuit temperature	+250 °C (max. 5 s)
Fixed ambient range	-40 °C to +60 °C
Min. laying temperature	-15 °C
Min. bend radius (flexing)	10 × overall diameter (D)
Longitudinal water tightness	Passes head pressure penetration test
Tear strength	≥ 15 N/mm per PN-G-90100
Flame retardance	IEC 60332-1-2 / PN-G-90100
Acidic/saline mine water	Chemically resistant PCP jacket
Halogen content	Chloroprene elastomer sheath

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	Power + PE + Control	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard OnGcekž-GW configurations 12 sizes						
☐ OnGcekž-GW 3×16 + 1×16 + 4×2.5	3×16 + 1×16 + 4×2.5	16	33.8	710	1,710	203
☐ OnGcekž-GW 3×25 + 1×16 + 4×2.5	3×25 + 1×16 + 4×2.5	25	37.4	970	2,150	224
☐ OnGcekž-GW 3×35 + 1×16 + 4×2.5	3×35 + 1×16 + 4×2.5	35	40.2	1,258	2,590	241
☐ OnGcekž-GW 3×50 + 1×25 + 4×2.5	3×50 + 1×25 + 4×2.5	50	44.8	1,776	3,360	269
☐ OnGcekž-GW 3×70 + 1×25 + 4×2.5	3×70 + 1×25 + 4×2.5	70	49.6	2,352	4,240	298
☐ OnGcekž-GW 3×95 + 1×35 + 4×2.5	3×95 + 1×35 + 4×2.5	95	55.2	3,168	5,390	331
☐ OnGcekž-GW 3×120 + 1×50 + 4×2.5	3×120 + 1×50 + 4×2.5	120	60.0	4,032	6,560	360
☐ OnGcekž-GW 3×50 + 1×25 + 7×2.5	3×50 + 1×25 + 7×2.5	50	46.5	1,848	3,550	279
☐ OnGcekž-GW 3×70 + 1×35 + 7×2.5	3×70 + 1×35 + 7×2.5	70	51.2	2,520	4,490	307
☐ OnGcekž-GW 3×95 + 1×50 + 7×2.5	3×95 + 1×50 + 7×2.5	95	56.8	3,384	5,680	341
☐ OnGcekž-GW 3×120 + 1×50 + 7×2.5	3×120 + 1×50 + 7×2.5	120	61.2	4,104	6,740	367
☐ OnGcekž-GW 3×95 + 1×50 + 9×2.5	3×95 + 1×50 + 9×2.5	95	57.5	3,432	5,810	345

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per PN-G-90101 / ZN-TF-205.

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}
3×16 + 1×16 + 4×2.5	1.210	93	79	101	3,000
3×25 + 1×16 + 4×2.5	0.780	123	105	114	3,000
3×35 + 1×16 + 4×2.5	0.554	152	129	129	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}
3×50 + 1×25 + 4×2.5	0.386	189	161	150	3,000
3×70 + 1×25 + 4×2.5	0.272	233	198	180	3,000
3×95 + 1×35 + 4×2.5	0.206	282	240	216	3,000
3×120 + 1×50 + 4×2.5	0.161	326	277	252	3,000
3×50 + 1×25 + 7×2.5	0.386	189	161	150	3,000
3×70 + 1×35 + 7×2.5	0.272	233	198	180	3,000
3×95 + 1×50 + 7×2.5	0.206	282	240	216	3,000
3×120 + 1×50 + 7×2.5	0.161	326	277	252	3,000
3×95 + 1×50 + 9×2.5	0.206	282	240	216	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-205

✓ 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/ongcekgw-cable



Typical values for this cable type, based on PN-G-90101 / ZN-TF-205. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.