



PN-G-90100 Polish Mining Rubber Cables

OnGcekż/w-GW / O2nGcekż/w-GW

Double-Screened MV Mining Rubber

PN-G-90105 · 1.9/3.3 & 3.6/6 kV · Double-screened ('ekż/w') · Water-blocked ('-GW') · On



PN-G-90105

1.9/3.3–3.6/6 kV

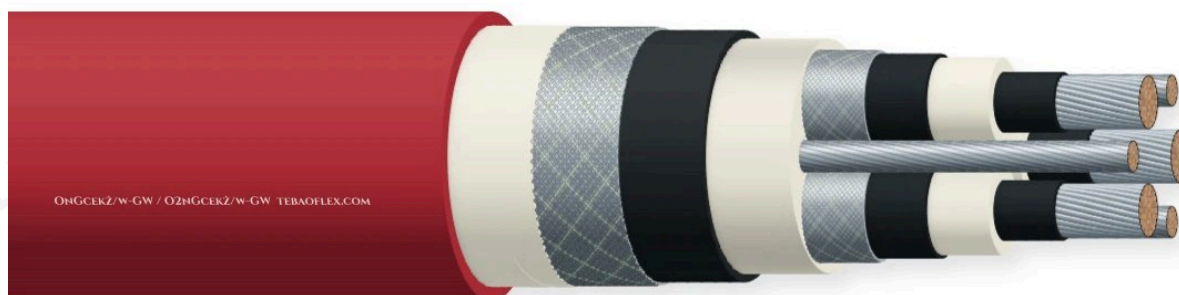
Double-Screened '/w-GW'

Application

OnGcekż/w-GW and O2nGcekż/w-GW are double-screened ('/w'), water-blocked ('-GW') medium-voltage mining trailing cables (1.9/3.3 kV and 3.6/6 kV) for high-output longwall shearers and roadheaders. They combine individual phase screens with an overall

Typical uses: 3.3 kV & 6 kV Longwall Shearers, Wet Methane-Hazard Coal Mines, Heavy Roadheaders & Continuous Miners, Armoured Face Conveyor (AFC) Drives, Underground Potash & Copper Faces

Construction



Cross-section, not to scale

1	Flexible copper phase & pilot conductors	IEC 60228 Class 5
2	+90 °C MV EPR dielectric ('c')	PN-G-90105
3	Individual core elastomeric/Cu screens	PN-G-90105
4	Hydro-swelling water barrier ('W')	ZN-TF-213
5	Collective overall second screen ('/w')	ZN-TF-213
6	Single ('On') or double ('O2n') '-GW'	PN-G-90105

Technical data

Typical values

Rated voltage U0/U	1.9/3.3 kV or 3.6/6 kV AC	Maximum system voltage Um	3.6 kV or 7.2 kV AC
Routine AC test voltage	6.5 kV (3.3 kV) / 11 kV (6 kV)	Double screening architecture	Per-core 'ek' + overall 'w' screen
Pilot core rated voltage	250 V AC	Partial discharge level	≤ 20 pC at 1.5 × U0
Max. conductor operating temp.	+90 °C continuous ('c' MV 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
Max. water immersion temp.	+40 °C continuous	Min. laying temperature	-15 °C
Min. bend radius (fixed)	6 × overall diameter (D)	Min. bend radius (flexing)	10 × overall diameter (D)
Max. tensile pull (On / O2n)	15 N/mm ² (On) / 25 N/mm ² (O2n)	Penetration & crush safety	Dual concentric earth screens
Longitudinal water tightness	Sealed 'GW' swelling barriers	Tear resistance	≥ 20 N/mm on O2n sheath
Water & moisture ingress	Sealed 'GW' water-blocked	Flame retardance	IEC 60332-1-2 / PN-G-90100
Mineral oil & hydraulic fluid	EN 60811-404 resistant PCP	Ozone & corona stability	PD-free MV EPR dielectric
Methane-atmosphere protection	Redundant 'w' earth-leakage screen	Halogen status	Polychloroprene elastomer
Standards	PN-G-90105 / ZN-TF-213		

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	Type, Voltage & Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
OnGcekž/w-GW — Single heavy sheath double-screened water-blocked MV 6 sizes						
☐ OnGcekž/w-GW 1.9/3.3 kV 3×35+1×16+4×2.5	1.9/3.3 kV 3×35+1×16+4×2.5	35	45.2	1,340	3,090	271
☐ OnGcekž/w-GW 1.9/3.3 kV 3×50+1×25+4×2.5	1.9/3.3 kV 3×50+1×25+4×2.5	50	49.8	1,870	3,890	299
☐ OnGcekž/w-GW 1.9/3.3 kV 3×70+1×25+4×2.5	1.9/3.3 kV 3×70+1×25+4×2.5	70	54.6	2,460	4,820	328
☐ OnGcekž/w-GW 1.9/3.3 kV 3×95+1×35+4×2.5	1.9/3.3 kV 3×95+1×35+4×2.5	95	60.2	3,290	6,010	361
☐ OnGcekž/w-GW 3.6/6 kV 3×50+1×25+4×2.5	3.6/6 kV 3×50+1×25+4×2.5	50	53.5	1,890	4,280	321
☐ OnGcekž/w-GW 3.6/6 kV 3×70+1×35+4×2.5	3.6/6 kV 3×70+1×35+4×2.5	70	58.4	2,580	5,290	350
O2nGcekž/w-GW — Double reinforced sheath double-screened water-blocked MV 6 sizes						
☐ O2nGcekž/w-GW 1.9/3.3 kV 3×50+1×25+7×2.5	1.9/3.3 kV 3×50+1×25+7×2.5	50	51.6	1,945	4,180	310
☐ O2nGcekž/w-GW 1.9/3.3 kV 3×70+1×35+7×2.5	1.9/3.3 kV 3×70+1×35+7×2.5	70	56.5	2,630	5,160	339
☐ O2nGcekž/w-GW 1.9/3.3 kV 3×95+1×50+7×2.5	1.9/3.3 kV 3×95+1×50+7×2.5	95	62.0	3,510	6,420	372
☐ O2nGcekž/w-GW 3.6/6 kV 3×50+1×25+7×2.5	3.6/6 kV 3×50+1×25+7×2.5	50	55.2	1,960	4,560	331
☐ O2nGcekž/w-GW 3.6/6 kV 3×70+1×35+7×2.5	3.6/6 kV 3×70+1×35+7×2.5	70	60.2	2,650	5,610	361
☐ O2nGcekž/w-GW 3.6/6 kV 3×95+1×50+7×2.5	3.6/6 kV 3×95+1×50+7×2.5	95	65.8	3,530	6,920	395

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per PN-G-90105 / ZN-TF-213.

Electrical & ampacity data

12 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C $\mu\text{F}/\text{m} \approx$	AC test V_{rms}
1.9/3.3 kV 3×35+1×16+4×2.5	0.554	152	129	129	6,500
1.9/3.3 kV 3×50+1×25+4×2.5	0.386	189	161	150	6,500
1.9/3.3 kV 3×70+1×25+4×2.5	0.272	233	198	180	6,500
1.9/3.3 kV 3×95+1×35+4×2.5	0.206	282	240	216	6,500
3.6/6 kV 3×50+1×25+4×2.5	0.386	189	161	150	11,000
3.6/6 kV 3×70+1×35+4×2.5	0.272	233	198	180	11,000
1.9/3.3 kV 3×50+1×25+7×2.5	0.386	189	161	150	6,500
1.9/3.3 kV 3×70+1×35+7×2.5	0.272	233	198	180	6,500
1.9/3.3 kV 3×95+1×50+7×2.5	0.206	282	240	216	6,500
3.6/6 kV 3×50+1×25+7×2.5	0.386	189	161	150	11,000
3.6/6 kV 3×70+1×35+7×2.5	0.272	233	198	180	11,000
3.6/6 kV 3×95+1×50+7×2.5	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 / ZN-TF-213

✓ IEC 60332-1-2

✓ WUG / CE

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/ongcekz-w-gw-o2ngcekz-w-gw-double-screened-mv-mining-rubber-cable



Typical values for this cable type, based on PN-G-90105 / ZN-TF-213. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.