



DIN VDE 0250-812 / 813 mining trailing cables

NTSKCGECWÖU

Coal-Cutter and Underground Festoon Cable

DIN VDE 0250-813 3.6/6 kV & 6/10 kV wave-screened (CW) coal-cutter & underground festoon



DIN VDE 0250-813

3.6/6 kV · 6/10 kV

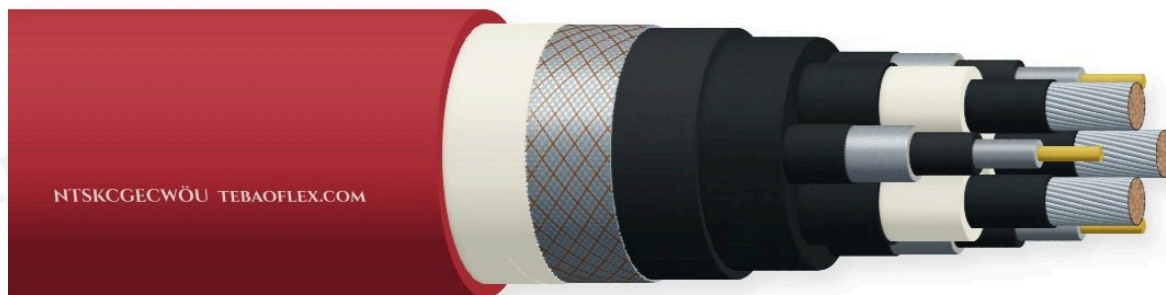
Wave-Screen CW · 5GM5

Application

NTSKCGECWÖU is a medium-voltage (3.6/6 kV and 6/10 kV) underground coal-cutter and monorail festoon trailing cable per DIN VDE 0250-813, combining pilot/control cores (K), semi-conductive EPR screening (CGE), and a wave-laid concentric copper/steel screen

Typical uses: Underground longwall coal mining, Monorail gallery festoon systems, Potash & trona cutter-loaders, Subsurface mobile substations

Construction



Cross-section, not to scale

1	Phase & K pilot conductors	DIN EN 60228 Class 5
2	Inner & outer semicon (GE)	DIN VDE 0250-813
3	MV core insulation (3GI3)	DIN VDE 0207-20
4	Core & K-bundle lay-up	DIN VDE 0250-813
5	Wave-laid concentric screen (CW)	DIN VDE 0250-813
6	Outer sheath (5GM5)	DIN VDE 0207-21

Technical data

Typical values

Rated voltage U ₀ /U	3.6/6 kV (U _{max} 7.2 kV) · 6/10 kV (U _{max} 12 kV)	AC routine test voltage	11 kV rms (3.6/6 kV) · 17 kV rms (6/10 kV)
Partial discharge level	≤ 20 pC at 2 U ₀	Control/pilot core rating	0.6/1 kV (AC test 2.5 kV)
Max. conductor operating temp.	+90 °C	Max. short-circuit temperature	+250 °C (max. 5 s)
Ambient temp. (flexing / festoon)	-25 °C to +60 °C	Ambient temp. (fixed)	-40 °C to +80 °C
Max. tensile load on copper	15 N/mm ² (up to 20 N/mm ² with CW screen)	Min. bending radius (fixed)	6 × cable outer diameter
Min. bending radius (Bretby/festoon)	10 × cable outer diameter	CW screen elongational compliance	Wave-laid geometry absorbs bending strain
Oil & emulsion resistance	DIN EN 60811-404 hydraulic emulsion & resistance	Flame retardancy	DIN EN 60332-1-2 self-extinguishing
Sheath tear & cut resistance	DIN VDE 0207-21 compound 5GM5	Standards	DIN VDE 0250-813

Sizes

10 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 NTSKCGECWÖU configurations 10 sizes						
☐ NTSKCGECWÖU 3×25+4×2.5K+25CW 3.6/6 kV	3×25 + 4×2.5K + 25CW (3.6/6 kV)	25	44.5	1,150	2,680	267
☐ NTSKCGECWÖU 3×35+4×2.5K+25CW 3.6/6 kV	3×35 + 4×2.5K + 25CW (3.6/6 kV)	35	47.8	1,440	3,150	287
☐ NTSKCGECWÖU 3×50+4×2.5K+25CW 3.6/6 kV	3×50 + 4×2.5K + 25CW (3.6/6 kV)	50	52.0	1,880	3,890	312
☐ NTSKCGECWÖU 3×70+4×2.5K+35CW 3.6/6 kV	3×70 + 4×2.5K + 35CW (3.6/6 kV)	70	56.5	2,560	4,820	339
☐ NTSKCGECWÖU 3×95+4×2.5K+50CW 3.6/6 kV	3×95 + 4×2.5K + 50CW (3.6/6 kV)	95	61.8	3,480	6,050	371
☐ NTSKCGECWÖU 3×120+4×2.5K+70CW 3.6/6 kV	3×120 + 4×2.5K + 70CW (3.6/6 kV)	120	66.5	4,420	7,320	399
☐ NTSKCGECWÖU 3×35+4×2.5K+25CW 6/10 kV	3×35 + 4×2.5K + 25CW (6/10 kV)	35	51.0	1,470	3,520	306
☐ NTSKCGECWÖU 3×50+4×2.5K+25CW 6/10 kV	3×50 + 4×2.5K + 25CW (6/10 kV)	50	55.2	1,910	4,280	331
☐ NTSKCGECWÖU 3×70+4×2.5K+35CW 6/10 kV	3×70 + 4×2.5K + 35CW (6/10 kV)	70	59.8	2,595	5,260	359
☐ NTSKCGECWÖU 3×95+4×2.5K+50CW 6/10 kV	3×95 + 4×2.5K + 50CW (6/10 kV)	95	65.0	3,520	6,540	390

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per DIN VDE 0250-813.

Electrical & ampacity data

10 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}
3×25 + 4×2.5K + 25CW (3.6/6 kV)	0.799	122	104	151	11,000
3×35 + 4×2.5K + 25CW (3.6/6 kV)	0.568	150	128	168	11,000
3×50 + 4×2.5K + 25CW (3.6/6 kV)	0.396	187	159	192	11,000
3×70 + 4×2.5K + 35CW (3.6/6 kV)	0.279	229	195	226	11,000
3×95 + 4×2.5K + 50CW (3.6/6 kV)	0.211	276	235	267	11,000
3×120 + 4×2.5K + 70CW (3.6/6 kV)	0.165	319	271	308	11,000
3×35 + 4×2.5K + 25CW (6/10 kV)	0.568	150	128	168	17,000
3×50 + 4×2.5K + 25CW (6/10 kV)	0.396	187	159	192	17,000
3×70 + 4×2.5K + 35CW (6/10 kV)	0.279	229	195	226	17,000
3×95 + 4×2.5K + 50CW (6/10 kV)	0.211	276	235	267	17,000

– Current ratings apply at +30 °C ambient in free air; apply standard derating factors for elevated ambient or drum layers.

Standards and approvals

- ✓ DIN VDE 0250-813
- ✓ DIN EN 60332-1-2
- ✓ LOBA / Underground Mining

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/ntskgcewou-coal-cutter-and-underground-festoon-cable



Typical values for this cable type, based on DIN VDE 0250-813. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.