

Medium-voltage reeling & shore power cables

(N)TSCGEW11Y 6/10 kV Shore Power Cable with FO

(N)TSCGEW11Y 6/10 kV HVSC Shore Power Cable with FO

IEC/ISO/IEEE 80005-1 & DIN VDE 0250-813 · 8×2.5C Pilots + 12 OM1 Fibres + 11Y TPU



IEC/ISO/IEEE 80005-1 · VDE 0250-813

6/10 kV (12 kV max) · 70-185 mm²

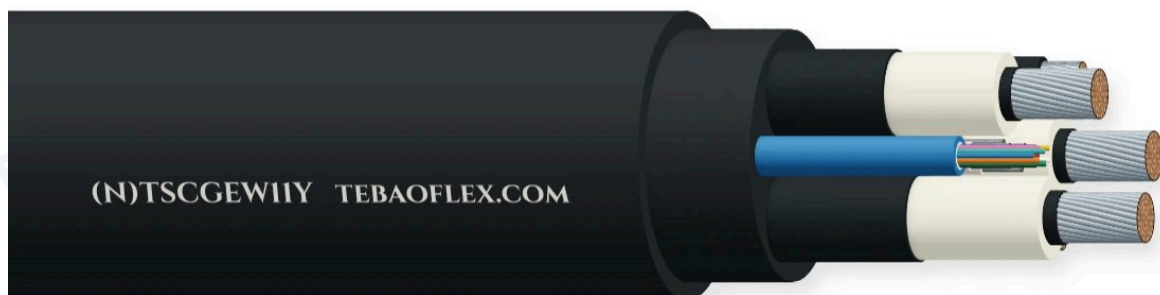
8×2.5C Pilots + 12 OM1 Fibres

Application

IEC/ISO/IEEE 80005-1 and DIN VDE 0250-813 (N)TSCGEW11Y 6/10 kV (21 kV test) shore power reeling cable with 3 phase cores (70-185 mm²), 2 split earths, 8×2.5C pilots, 12 OM1 fibres and dual 11Y TPU sheaths.

Typical uses: Container ship & cruise terminal HVSC berths, Shipboard cold-ironing cable management reels, Quayside mobile shore-power dispenser towers, Ro-Ro, ferry & naval dockyard shore feeds, Port crane & marine offshore MV hybrid reels

Construction



Cross-section, not to scale

1	Main phase conductors	IEC 60228 · DIN VDE 0295
2	Inner semiconductive layer	DIN VDE 0250-813
3	Core insulation	DIN VDE 0207-20
4	Outer semiconductive layer	DIN VDE 0250-813
5	Split ground conductors	IEC/ISO/IEEE 80005-1
6	Screened pilot bundle 1×(8×2.5)C	IEC/ISO/IEEE 80005-1
7	Optical fibre unit (12 × OM1)	IEC 60793-2-10
8	Inner sheath (11Y)	DIN VDE 0250-813
9	Anti-torsion reinforcing braid	
10	Outer sheath (11Y)	DIN VDE 0250-813 · AD8

Technical data

Typical values

Rated & max voltage	U0/U 6/10 kV · Max. operating voltage U _{max} 6.9/12 kV AC (suitable for 6.6 kV and 11 kV HVSC systems)	Routine AC test voltage	21 kV AC routine dielectric test (elevated above standard 17 kV VDE test for marine HVSC service)
Screened pilot bundle	1 × (8 × 2.5 mm ²)C — eight Class 5 tinned copper EPR-insulated cores (white with black numbers) under overall tinned Cu screen	Conductor temperature	+90 °C max continuous operation · +200 °C max short-circuit temperature
Ambient temperature range	Fixed -40 °C to +90 °C · Mobile and reeling operation -30 °C to +90 °C	Min. bending radius	6 × D fixed installation · 10 × D free movement · 12 × D motorized reeling
Max. permissible tensile load	25 N/mm ² of main phase copper cross-section (5,250 N on 3×70 mm ² up to 13,875 N on 3×185 mm ²)	Fibre count & specification	12 × G62.5/125 µm (OM1) graded-index multimode fibres to IEC 60793-2-10 (core 62.5 ± 3 µm, cladding 125 ± 2 µm, coating 245 ± 10 µm)
Attenuation & bandwidth	850 nm: ≤ 3.2 dB/km & ≥ 200 MHz·km · 1300 nm: ≤ 0.9 dB/km & ≥ 500 MHz·km	Submersion & halogen-free TPU	Permanent water immersion up to 10 bar (AD8) · Halogen-free dual TPU (11Y) inner and outer sheaths
Marine & dockside durability	Resistant to seawater, marine oils, UV radiation, ozone and concrete quayside abrasion	Standards	IEC/ISO/IEEE 80005-1 (HVSC) · DIN VDE 0250-813 · DIN VDE 0298-3 · DIN VDE 0298-4

Sizes

4 standard constructions

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

Designation (N)TSC GEW 11Y + FO	Phase mm ²	Split earth mm ²	Screened pilots mm ²	Fibre unit IEC 60793-2-10	Min. OD mm	Max. OD mm	Tensile 25N/mm ² N	Mass ≈ kg/km
☐ 3×70 + 2×35/2 + 1×(8×2.5)C + FO	70	2×35/2	8×2.5C	12×OM1	66.0	69.0	5,250	6,505
☐ 3×95 + 2×50/2 + 1×(8×2.5)C + FO	95	2×50/2	8×2.5C	12×OM1	68.0	71.0	7,125	7,440
☐ 3×120 + 2×70/2 + 1×(8×2.5)C + FO	120	2×70/2	8×2.5C	12×OM1	71.0	74.0	9,000	8,465
☐ 3×185 + 2×95/2 + 1×(8×2.5)C + FO	185	2×95/2	8×2.5C	12×OM1	74.0	77.0	13,875	10,000

- Max. tensile load is calculated at 25 N/mm² of the three main copper phase conductors (3 × phase mm² × 25 N/mm²).
- Minimum bending radius: 6 × D fixed installation, 10 × D free movement, 12 × D reeling operation.

Standards and approvals

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.

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Typical values for this cable type, based on IEC/ISO/IEEE 80005-1 · 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.