Subsea aquaculture LED photoperiod luminaire power cable

SUBLED COMBI PUR CABLE

SUBLED COMBI PUR 450/750 V Subsea Aquaculture Lighting Cable

EN 50525-2-21 · 450/750 V · Subsea aquaculture led photoperiod luminaire power cable



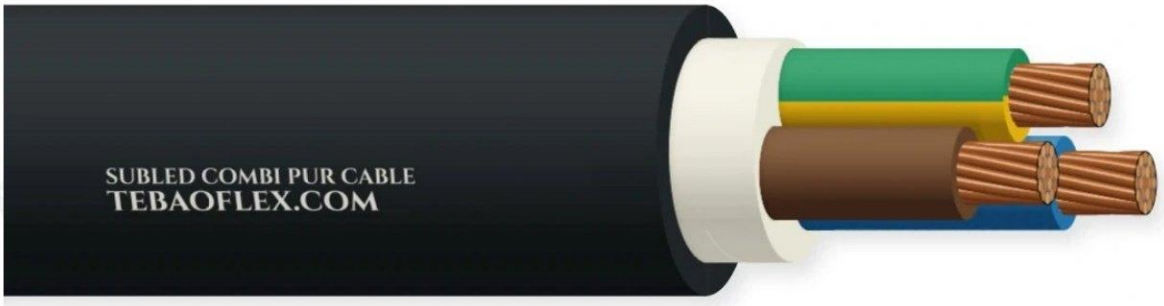
DIN EN 50525-2-21 | 48 V DC / 450/750 V AC | IP68 Aquaculture LED

Application

Subsea LED Combi (0106916 35m / 0107024 55m Vulcanized PUR 3G1.5) & Subsea Lighting (319-194 / 319-208 PUR 3G1.5 / 3G2.5) Subsea Aquaculture Photoperiod Lighting Cable (EN 50525-2-21, 450/750 V, -40 to +80 °C, min. bend radius 6 × OD).

Typical uses: Work-Class & Observation ROV Systems, Offshore Wind & Subsea Power Grids, Oceanographic, Sonar & Seismic Survey, Commercial Diving & Subsea Intervention

Construction





Cross-section, not to scale

1. Class 5 Flexible Conductors (3G1.5 / 3G2.5)
2. Heat-Resistant EPR Core Insulation
3. Aquaculture Cross-Linked PUR Jacket
4. Vulcanized Gland & IP68 Quick-Connect

Technical data

Typical values

Rated voltage / transmission duty	450/750 V (DIN EN 50525-2-21 / IEC 60228 Aquaculture Lighting)	**Core / conductor construction**	Class 5 Flexible Conductors (3G1.5 / 3G2.5) — IEC 60228 Class 5 finely stranded annealed copper (48 V DC 1350 W / 230 V AC)
Primary dielectric / buffering	Heat-Resistant EPR Core Insulation — 450/750 V ethylene propylene rubber insulation (Brown, Blue & Green/Yellow)	**Continuous operating temperature**	−40…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per DIN EN 50525-2-21 / IEC 60228 Aquaculture Lighting	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Vulcanized Gland & IP68 Quick-Connect — Vulcanized seal gland at aluminum-bronze luminaire + IP68 quick-connect plug	**Minimum bending radius**	6 × OD
Hydrostatic, tensile & crush duty	Aquaculture Cross-Linked PUR Jacket — Black tear-, seawater-, biofouling- and disinfectant-resistant PUR sheath (Ø 8–11.5 mm)	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per DIN EN 50525-2-21 / IEC 60228 Aquaculture Lighting
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per DIN EN 50525-2-21 / IEC 60228 Aquaculture Lighting	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	DIN EN 50525-2-21 / IEC 60228 Aquaculture Lighting		

Sizes

3 standard constructions

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

Order designation	Configuration	Core / stranding	Outer Ø ≈ mm	Net weight ≈ kg/km	Tensile rating kN ≈	Min. bend R mm
SUBLED COMBI PUR CABLE Construction Schedule (−40…+80 °C) 3 sizes						
☐ **SUBLED COMBI PUR CABLE Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ **SUBLED COMBI PUR CABLE Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ **SUBLED COMBI PUR CABLE Config C (Heavy Hybrid)**	8×2×20 AWG + 4×12 AWG (or 12C)	Stranded tinned Cu (IEC 60228 / ASTM)	16.6	420	18.5	140

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per DIN EN 50525-2-21 / IEC 60228 Aquaculture Lighting.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4×2×24 AWG + 2×18 AWG (or 4C)	28.40	450/750 V (45–100 Ω data)	−40…+80 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	450/750 V (45–100 Ω data)	−40…+80 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	450/750 V (High-Power Hybrid)	−40…+80 °C

– Every production length undergoes routine conductor DC resistance, high-voltage dielectric or OTDR continuity and dimensional verification.

Standards and approvals

- EN 50525-2-21 Compliant
- EN 10204 3.1 Factory Test Certificate
- 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
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/subled-combi-pur-cable

Typical values for this cable type, based on DIN EN 50525-2-21 / IEC 60228 Aquaculture Lighting. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.