seawater- & washdown-resistant marine control cable

ROBUST 210 300/500V

ROBUST 210 Chemical & Bio-Oil Control Cable

EN 50525 / ECOLAB · 300/500 V · Seawater- & washdown-resistant marine control cable



EN 50525 / ECOLAB | 300/500 V (-50 to +80 °C)

Subsea / Marine Outer Protective She

Application

ROBUST 210 Chemical & Bio-Oil Control Cable featuring flexible stranded copper conductors (5 cores) and subsea / marine outer protective sheath (EN 50525 / ECOLAB, 300/500 V, -50 to +80 °C, min. bend radius 4 × OD).

Typical uses: Seafood Processing & Packaging IP69K Washdown Lines, Offshore Aquaculture Feed Barges & Sorting Machinery, Recirculating Aquaculture (RAS) Valve & Dosing Control, Coastal Marine Deck Equipment & Workboat Control Panels

Construction





Cross-section, not to scale

1. Flexible Stranded Copper Conductors (5 C
2. Cross-Linked Elastomeric / Polymer Core
3. Water-Blocking Tape & Inner Bedding
4. Subsea / Marine Outer Protective Sheath

Technical data

Typical values

Rated voltage / operating system	300/500 V (EN 50525 & ECOLAB Chemical & Bio-Oil Resistant TPE Control Specification)	**Core / conductor construction**	Flexible Stranded Copper Conductors (5 Cores) — Class 5 / class 6 copper conductors
Primary dielectric / optical buffer	Cross-Linked Elastomeric / Polymer Core Insulation — Thermoplastic elastomer (tpe) core insulation	**Continuous operating temperature**	−50…+80 °C (submerged seawater & topside deck service)
Hydrostatic & thermal cycling endurance	Verified cold-bend and wet dielectric stability across −50…+80 °C per EN 50525 & ECOLAB Chemical & Bio-Oil Resistant TPE Control Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	Subsea / Marine Outer Protective Sheath — Black low-smoke zero-halogen (SHF1 / SHF2 / LSZH) flame-retardant outer sheath	**Minimum bending radius**	4 × OD
Reinforcement / screen / bedding layer	Water-Blocking Tape & Inner Bedding — Hydrostatic water-blocking filler and low-friction separator wrap	**Seawater, hydrolysis & oil resistance**	Resistant to permanent seawater immersion, hydrolysis, hydraulic oil and bio-fouling per EN 50525 & ECOLAB Chemical & Bio-Oil Resistant TPE Control Specification
Hydrostatic pressure & water blocking	Radial and longitudinal water-blocking integrity verified per EN 50525 & ECOLAB Chemical & Bio-Oil Resistant TPE Control Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	EN 50525 & ECOLAB Chemical & Bio-Oil Resistant TPE Control Specification		

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	Max. pulling kN ≈	Min. bend R mm
ROBUST 210 300/500V Construction Schedule (−50…+80 °C) 3 sizes						
☐ **ROBUST 210 300 4G1.5 / 5C18AWG**	**4G1.5 mm² (or 5C × 18 AWG)**	**IEC 60228 Class 5/6 Cu/SnCu**	**9.6**	**145**	**2.2**	**55**
☐ **ROBUST 210 300 7G1.5 / 8C16AWG**	**7G1.5 mm² (or 8C × 16 AWG)**	**IEC 60228 Class 5/6 Cu/SnCu**	**12.2**	**235**	**3.6**	**70**
☐ **ROBUST 210 300 12G2.5 / 16C16AWG**	**12G2.5 mm² (or 16C × 16 AWG)**	**IEC 60228 Class 5/6 Cu/SnCu**	**17.4**	**510**	**7.5**	**105**

– Custom core counts, optical fiber channels, wet-mate terminations and continuous winch lengths available per EN 50525 & ECOLAB Chemical & Bio-Oil Resistant TPE Control Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance / Load	Operating temp.
4G1.5 mm² (or 5C × 18 AWG)	**13.30**	**300/500 V (18 A)**	**−50…+80 °C**
7G1.5 mm² (or 8C × 16 AWG)	**13.30**	**300/500 V (16 A)**	**−50…+80 °C**
12G2.5 mm² (or 16C × 16 AWG)	**7.98**	**300/500 V (22 A)**	**−50…+80 °C**

– Every production length undergoes routine conductor DC resistance / OTDR optical attenuation, AC dielectric and dimensional verification.

Standards and approvals

- EN 50525 / ECOLAB 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/robust-210-chemical-bio-oil-control-cable

Typical values for this cable type, based on EN 50525 & ECOLAB Chemical & Bio-Oil Resistant TPE Control Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.