Chlorine-resistant floating autonomous pool cleaner cable

REF 50531 & REF 49491 (ROBOT DE PISCINE)

REF 50531 & REF 49491 500 V Floating Swimming Pool Robot Cable



IEC 60335-2-41 · 300/500 V · Chlorine-resistant floating autonomous pool cleaner cable

500 V Pool Cleaner | **-9.2 g/m Floating Buoyancy** | **Chlorine & UV Resistant**

Application

REF 50531 (500 V 4×0.75 mm² Low-Density Polyolefin Floating Pool-Robot Cable, -9.2 g/m) & REF 49491 (2×0.75 + 2×0.34 mm² Extra-Flexible Pool Cleaner Cable) (IEC 60335-2-41, 300/500 V, -10 to +60 °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. Flexible Copper Cores (4×0.75 / 2×0.75+2×0.34)
2. Low-Density Buoyancy Fillers (REF 50531)
3. Overall Assembling Binder Tape
4. Floating Low-Density Polyolefin Jacket

Technical data

Typical values

Rated voltage / transmission duty	300/500 V (IEC 60335-2-41 / Floating Pool-Robot Cable Specification)	**Core / conductor construction**	Flexible Copper Cores (4×0.75 / 2×0.75+2×0.34) — 4×0.75 mm² PE cores (REF 50531, ≤27.3 Ω/km) or 2×0.75 + 2×0.34 mm² PVC (REF 49491)
Primary dielectric / buffering	Low-Density Buoyancy Fillers (REF 50531) — Four large-volume low-density foamed fillers providing –9.2 g/m positive buoyancy	**Continuous operating temperature**	−10…+60 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per IEC 60335-2-41 / Floating Pool-Robot Cable Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Floating Low-Density Polyolefin Jacket — Chlorine-resistant blue low-density polyolefin jacket (Ø 19.0 mm, 274 g/m in air)	**Minimum bending radius**	6 × OD
Hydrostatic, tensile & crush duty	Overall Assembling Binder Tape — Helical binder tape stabilizing the buoyant core bundle during flex & torsion	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per IEC 60335-2-41 / Floating Pool-Robot Cable Specification
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per IEC 60335-2-41 / Floating Pool-Robot Cable Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60335-2-41 / Floating Pool-Robot Cable 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	Tensile rating kN ≈	Min. bend R mm
REF 50531 & REF 49491 (ROBOT DE PISCINE) Construction Schedule (−10…+60 °C) 3 sizes						
☐ **REF 50531 Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ **REF 50531 Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ **REF 50531 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 IEC 60335-2-41 / Floating Pool-Robot Cable Specification.

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	300/500 V (45–100 Ω data)	−10…+60 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	300/500 V (45–100 Ω data)	−10…+60 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	300/500 V (High-Power Hybrid)	−10…+60 °C

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

Standards and approvals

- IEC 60335-2-41 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/ref-50531-ref-49491-robot-de-piscine

Typical values for this cable type, based on IEC 60335-2-41 / Floating Pool-Robot Cable Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.