submersible water-quality, CTD & ocean sensor cable

SACIQ-SW Seawater Sensor

SACIQ-SW Seawater Digital Water Quality Cable

EN 50288 / IEC 60529 IP68 · 300 V · Submersible water-quality, ctd & ocean sensor cable



EN 50288 / IEC 60529 IP68 | 300 V (-30 to +80 °C) | Subsea / Marine Outer Protective She

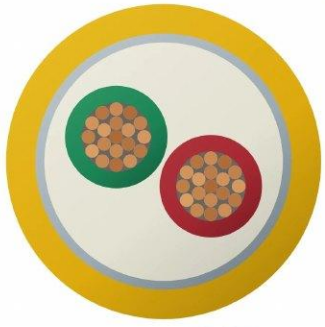
Application

SACIQ-SW Seawater Digital Water Quality Cable featuring flexible stranded copper conductors (4 cores) and subsea / marine outer protective sheath (EN 50288 / IEC 60529 IP68, 300 V, -30 to +80 °C, min. bend radius 6 × OD).

Typical uses: Aquaculture Dissolved Oxygen (DO), pH & Salinity Monitoring, Vented Hydrostatic Water-Level & Borehole Pressure Probes, Oceanographic CTD Rosettes, Current Meters & Mooring Buoys, Recirculating Aquaculture (RAS) & Wastewater Sensor Networks

Construction





Cross-section, not to scale

1. Flexible Stranded Copper Conductors (4 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 V (EN 50288 SACIQ-SW Seawater Digital Water Quality Sensor Cable Standard)
Primary dielectric / optical buffer	Cross-Linked Elastomeric / Polymer Core Insulation — High-density polyethylene (hdpe / pe) core insulation
Hydrostatic & thermal cycling endurance	Verified cold-bend and wet dielectric stability across −30…+80 °C per EN 50288 SACIQ-SW Seawater Digital Water Quality Sensor Cable Standard
Outer jacket / sheath protection	Subsea / Marine Outer Protective Sheath — Black hydrolysis- & abrasion-resistant marine Polyurethane (PUR) outer sheath
Reinforcement / screen / bedding layer	Water-Blocking Tape & Inner Bedding — Hydrostatic water-blocking filler and low-friction separator wrap
Hydrostatic pressure & water blocking	Radial and longitudinal water-blocking integrity verified per EN 50288 SACIQ-SW Seawater Digital Water Quality Sensor Cable Standard
Standards	EN 50288 SACIQ-SW Seawater Digital Water Quality Sensor Cable Standard
Core / conductor construction	Flexible Stranded Copper Conductors (4 Cores) — Class 5 / class 6 copper conductors
Continuous operating temperature	−30…+80 °C (submerged seawater & topside deck service)
Storage & transport temperature	−40…+80 °C on export wooden/steel cable drum
Minimum bending radius	6 × OD
Seawater, hydrolysis & oil resistance	Resistant to permanent seawater immersion, hydrolysis, hydraulic oil and bio-fouling per EN 50288 SACIQ-SW Seawater Digital Water Quality Sensor Cable Standard
RoHS & REACH compliance	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant

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
SACIQ-SW Seawater Sensor Construction Schedule (−30…+80 °C) 3 sizes						
☐ SACIQ-SW Seawater Sensor 2×2×0.50 mm²	2 × 2 × 0.50 mm² (20 AWG) + Vent/Drain	Stranded SnCu + Foil/TCWB + Subsea PUR	8.4	98	2.5	50
☐ SACIQ-SW Seawater Sensor 4×2×0.50 + 2×1.5	4 × 2 × 0.50 + 2 × 1.5 mm² Hybrid	Stranded SnCu + Individual/Overall Shield	11.8	195	5.2	70
☐ SACIQ-SW Seawater Sensor 4×2×0.75 + 4×2.5	4 × 2 × 0.75 + 4 × 2.5 mm² Subsea	Stranded SnCu + Aramid/Armour + PUR	15.2	360	12.0	95

– Custom core counts, optical fiber channels, wet-mate terminations and continuous winch lengths available per EN 50288 SACIQ-SW Seawater Digital Water Quality Sensor Cable Standard.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance / Load	Operating temp.
2 × 2 × 0.50 mm² (20 AWG) + Vent/Drain	39.00	300 V (4–20 mA / DO)	−30…+80 °C
4 × 2 × 0.50 + 2 × 1.5 mm² Hybrid	39.00	300 V (CTD / Multi-Sensor)	−30…+80 °C
4 × 2 × 0.75 + 4 × 2.5 mm² Subsea	26.00	300 V (ROV / Camera / LED)	−30…+80 °C

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

Standards and approvals

- EN 50288 / IEC 60529 IP68 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/saciq-sw-seawater-digital-water-quality-cable

Typical values for this cable type, based on EN 50288 SACIQ-SW Seawater Digital Water Quality Sensor Cable Standard. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.