submersible water-quality, CTD & ocean sensor cable

SC-6122400 Digital Water Sensor

SC-6122400 Digital Water Quality Sensor Cable

EN 50288 / ISO 15839 · 300 V · Submersible water-quality, ctd & ocean sensor cable



EN 50288 / ISO 15839 | 300 V (-40 to +80 °C) | Subsea / Marine Outer Protective She

Application

SC-6122400 Digital Water Quality Sensor Cable featuring stranded copper twisted pairs (2×2) and subsea / marine outer protective sheath (EN 50288 / ISO 15839, 300 V, -40 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. Stranded Copper Twisted Pairs (2×2)
2. Copper Wire Braid EMC Screen
3. Subsea / Marine Outer Protective Sheath

Technical data

Typical values

Rated voltage / operating system	300 V (EN 50288 & ISO 15839 SC-6122400 Digital Water Quality Sensor Cable Standard)	**Core / conductor construction**	Stranded Copper Twisted Pairs (2×2) — Twisted pairs with High-stifiness polypropylene (PP) core insulation
Primary dielectric / optical buffer	Copper Wire Braid EMC Screen — High-coverage braided copper shield for EMI/VFD protection	**Continuous operating temperature**	−40…+80 °C (submerged seawater & topside deck service)
Hydrostatic & thermal cycling endurance	Verified cold-bend and wet dielectric stability across −40…+80 °C per EN 50288 & ISO 15839 SC-6122400 Digital Water Quality Sensor Cable Standard	**Storage & transport temperature**	−40…+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	Subsea / Marine Outer Protective Sheath — Black hydrolysis- & abrasion-resistant marine Polyurethane (PUR) outer sheath	**Minimum bending radius**	6 × OD
Reinforcement / screen / bedding layer	Copper Wire Braid EMC Screen — High-coverage braided copper shield for EMI/VFD protection	**Seawater, hydrolysis & oil resistance**	Resistant to permanent seawater immersion, hydrolysis, hydraulic oil and bio-fouling per EN 50288 & ISO 15839 SC-6122400 Digital Water Quality Sensor Cable Standard
Hydrostatic pressure & water blocking	Radial and longitudinal water-blocking integrity verified per EN 50288 & ISO 15839 SC-6122400 Digital Water Quality Sensor Cable Standard	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	EN 50288 & ISO 15839 SC-6122400 Digital Water Quality Sensor Cable Standard		

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
SC-6122400 Digital Water Sensor Construction Schedule (−40…+80 °C) 3 sizes						
☐ SC-6122400 Digital Water Sensor 1×2×22AWG RS-485	1 × 2 × 0.34 mm² (22 AWG) + Power Pair	Stranded SnCu + Foam PE + Foil/Braid	8.2	92	2.0	50
☐ SC-6122400 Digital Water Sensor 4×2×24AWG Cat5e	4 × 2 × 24 AWG Subsea Gigabit Ethernet	Stranded SnCu + High-Pressure PE + SF/UTP	9.6	125	3.5	60
☐ SC-6122400 Digital Water Sensor 4×2×23AWG Cat6+2	4 × 2 × 23 AWG Cat6 + 2 × 1.5 mm² Power	Stranded SnCu + 600-Bar Matrix + PUR	12.8	215	6.8	78

– Custom core counts, optical fiber channels, wet-mate terminations and continuous winch lengths available per EN 50288 & ISO 15839 SC-6122400 Digital Water Quality Sensor Cable Standard.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance / Load	Operating temp.
1 × 2 × 0.34 mm² (22 AWG) + Power Pair	55.00	300 V (120 Ω RS-485)	−40…+80 °C
4 × 2 × 24 AWG Subsea Gigabit Ethernet	84.00	300 V (100 Ω 1000BASE-T)	−40…+80 °C
4 × 2 × 23 AWG Cat6 + 2 × 1.5 mm² Power	72.00	300 V (100 Ω Cat6 6000m)	−40…+80 °C

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

Standards and approvals

- EN 50288 / ISO 15839 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/sc-6122400-sc-digital-water-quality-sensor-cable

Typical values for this cable type, based on EN 50288 & ISO 15839 SC-6122400 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.