Spiral-4 full-duplex commercial diver communication cable

FM088095

1,000 V Spiral-4 Commercial Diver Communication Cable

ASTM B3 / D1248 · 0.6/1 kV · Spiral-4 full-duplex commercial diver communication cable



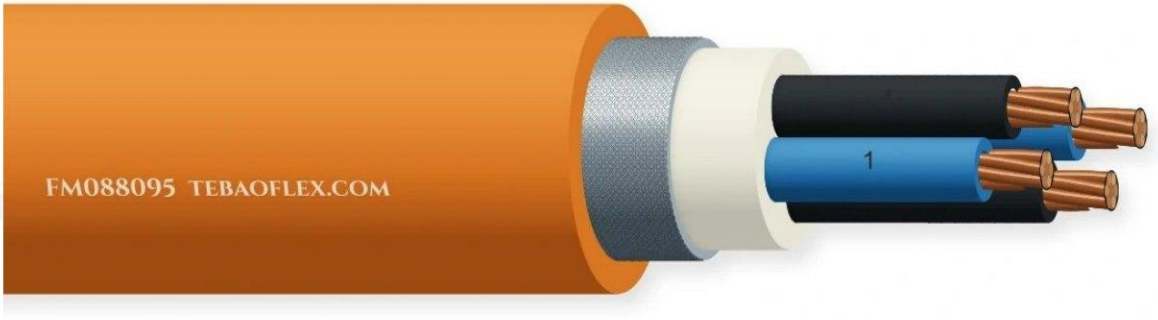
ASTM B3 / IMCA D 014 | **1,000 V Spiral-4 Quad** | **SS or Aramid Braided**

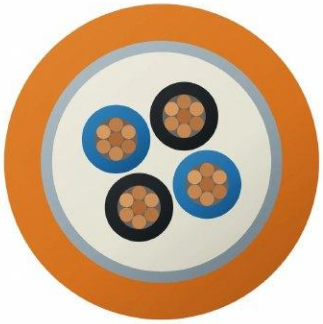
Application

FM088095 Series 1000 V Stainless-Steel or Aramid-Braided Water-Blocked Commercial Diver Communication Cable (ASTM B3 / D1248, 0.6/1 kV, -30 to +80 °C, min. bend radius 8 × 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. Spiral-4 Conductors (4×20 AWG 7/28)
2. ASTM D1248 PE Insulation (Blue & Black)
3. Solid Extruded PE Inner Bedding
4. Braided Stainless Steel / Aramid Armor
5. Marine PVC / Polyurethane Outer Jacket

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (ASTM B3 / ASTM D1248 / IMCA D 014 Diver Comms Standard)	**Core / conductor construction**	Spiral-4 Conductors (4×20 AWG 7/28) — ASTM B3 stranded annealed bare copper in star-quad (Spiral-4) geometry
Primary dielectric / buffering	ASTM D1248 PE Insulation (Blue & Black) — 1,000 V polyethylene insulation color-coded Blue & Black with numbered markers	**Continuous operating temperature**	−30…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per ASTM B3 / ASTM D1248 / IMCA D 014 Diver Comms Standard	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Marine PVC / Polyurethane Outer Jacket — Tear- and abrasion-resistant subsea outer jacket (Ø 9.1–10.9 mm)	**Minimum bending radius**	8 × OD
Hydrostatic, tensile & crush duty	Braided Stainless Steel / Aramid Armor — Braided stainless-steel armor (250 lbs on FM088095) or Aramid braid (up to 750 lbs)	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per ASTM B3 / ASTM D1248 / IMCA D 014 Diver Comms Standard
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per ASTM B3 / ASTM D1248 / IMCA D 014 Diver Comms Standard	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	ASTM B3 / ASTM D1248 / IMCA D 014 Diver Comms 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	Tensile rating kN ≈	Min. bend R mm
FM088095 Construction Schedule (−30…+80 °C) 3 sizes						
☐ **FM088095 Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ **FM088095 Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ **FM088095 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 ASTM B3 / ASTM D1248 / IMCA D 014 Diver Comms Standard.

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	0.6/1 kV (45–100 Ω data)	−30…+80 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	0.6/1 kV (45–100 Ω data)	−30…+80 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	0.6/1 kV (High-Power Hybrid)	−30…+80 °C

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

Standards and approvals

- ASTM B3 / D1248 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/fm088095

Typical values for this cable type, based on ASTM B3 / ASTM D1248 / IMCA D 014 Diver Comms Standard. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.