2,000 m water-blocked foil-shielded instrumentation cable

FM020712

2,000m Water-Blocked Shielded-Pair Acoustic Tow Cable

ASTM B33 / Subsea · 600 V · 2,000 m water-blocked foil-shielded instrumentation cable



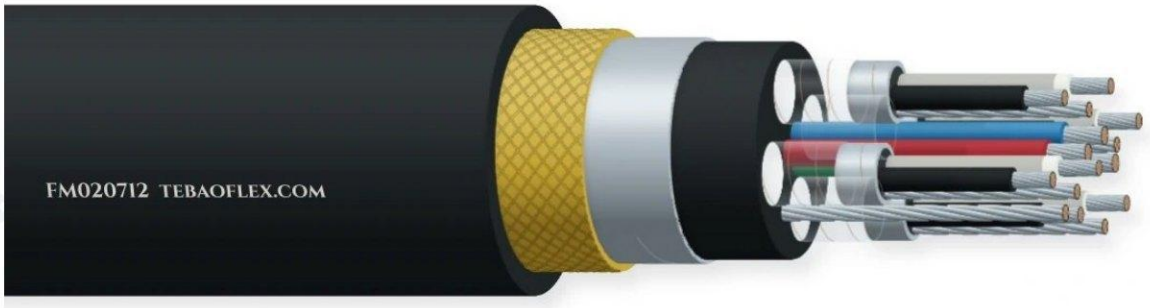
600 V Power / 300 V Data | **41–73 Ω Shielded Pairs** | **2,000 m Water-Blocked**

Application

FM020712 Series (FM020712-1 to FM020712-8) 2,000m Water-Blocked Individually Foil-Shielded Twisted-Pair & Power Composite Oceanographic & Acoustic Towed Instrumentation Cable (ASTM B33 / Subsea, 600 V, -30 to +80 °C).

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. Isolated Foil-Shielded Pairs (4×2×20 AWG)
2. Power Conductors (3×18 AWG, 600 V)
3. Thermoset Water-Block & Overall Foil
4. 800 lb Synthetic Fiber Strength Layer
5. Subsea Black PUR Outer Jacket

Technical data

Typical values

Rated voltage / transmission duty	600 V (ASTM B33 / 2,000 m Undersea Acoustic Instrumentation)	**Core / conductor construction**	Isolated Foil-Shielded Pairs (4×2×20 AWG) — Black/White numbered pairs (46 Ω, 33 pF/ft) with isolated Al/PET foil & drain
Primary dielectric / buffering	Power Conductors (3×18 AWG, 600 V) — Three stranded tinned copper power cores cabled in central core	**Continuous operating temperature**	−30…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per ASTM B33 / 2,000 m Undersea Acoustic Instrumentation	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Subsea Black PUR Outer Jacket — Flexible hydrolysis-resistant black polyurethane jacket (2,000 m depth rated)	**Minimum bending radius**	10 × OD
Hydrostatic, tensile & crush duty	800 lb Synthetic Fiber Strength Layer — Overall braided aramid/synthetic strength member (800 lbs MBL, 160 lbs SWL)	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per ASTM B33 / 2,000 m Undersea Acoustic Instrumentation
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per ASTM B33 / 2,000 m Undersea Acoustic Instrumentation	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	ASTM B33 / 2,000 m Undersea Acoustic Instrumentation		

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
FM020712 Construction Schedule (−30…+80 °C) 3 sizes						
☐ **FM020712 Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ **FM020712 Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ **FM020712 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 B33 / 2,000 m Undersea Acoustic Instrumentation.

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	600 V (45–100 Ω data)	−30…+80 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	600 V (45–100 Ω data)	−30…+80 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	600 V (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 B33 / Subsea 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/fm020712

Typical values for this cable type, based on ASTM B33 / 2,000 m Undersea Acoustic Instrumentation. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.