10,000 psi pressure-stabilized Gigabit Ethernet ROV cable

FM022208

10,000 PSI Deepwater Gigabit Ethernet & Power ROV Cable

TIA-568-B @ 10,000 PSI · 0.6/1 kV · 10,000 psi pressure-stabilized gigabit ethernet



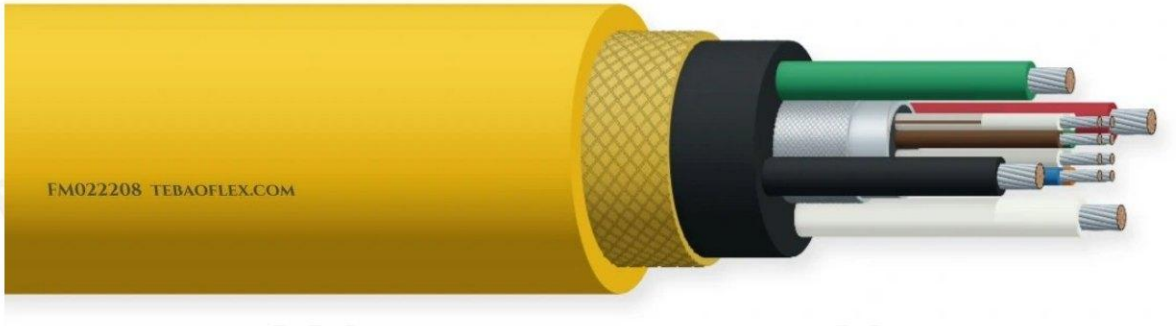
TIA-568 Cat.5e/6 @ 10kPSI | **600–1,000 V + Gigabit** | **2,400 lbs Aramid Braid**

Application

Subsea Ethernet (FM022208-01 to -14) & Subsea Cat 5e (FMXCAT51205K24 to FMXCAT52824K8) 10,000 PSI Deepwater Gigabit Ethernet & Power Hybrid ROV Umbilical Cable (TIA-568-B @ 10,000 PSI, 0.6/1 kV, -40 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. 10,000 PSI Gigabit Ethernet Core
2. Dual Alum/Braid EMC Shield
3. Power & Control Cores (4×18 AWG / 5×12 AWG)
4. Water-Block & Aramid Braid (K8–K24)
5. High-Temp Subsea PUR Jacket

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (ANSI/TIA-568-B Cat.5e/Cat.6 @ 10,000 PSI Deepwater)	**Core / conductor construction**	10,000 PSI Gigabit Ethernet Core — 4 pairs × 23/24 AWG pressure-stabilized data pairs (<2% deviation at 10,000 psi)
Primary dielectric / buffering	Dual Alum/Braid EMC Shield — 100% Aluminum/Polyester foil tape + high-coverage tinned copper braid shield	**Continuous operating temperature**	−40…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per ANSI/TIA-568-B Cat.5e/Cat.6 @ 10,000 PSI Deepwater	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	High-Temp Subsea PUR Jacket — Low-friction polyurethane jacket compatible with 120 °C hot-rubber molding	**Minimum bending radius**	10 × OD
Hydrostatic, tensile & crush duty	Water-Block & Aramid Braid (K8–K24) — Elastomeric void water-blocking + Aramid strength braid (up to 2,400 lbs)	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per ANSI/TIA-568-B Cat.5e/Cat.6 @ 10,000 PSI Deepwater
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per ANSI/TIA-568-B Cat.5e/Cat.6 @ 10,000 PSI Deepwater	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	ANSI/TIA-568-B Cat.5e/Cat.6 @ 10,000 PSI Deepwater		

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
FM022208 Construction Schedule (−40…+80 °C) 3 sizes						
☐ **FM022208 Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐ **FM022208 Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐ **FM022208 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 ANSI/TIA-568-B Cat.5e/Cat.6 @ 10,000 PSI Deepwater.

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)	−40…+80 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	0.6/1 kV (45–100 Ω data)	−40…+80 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	0.6/1 kV (High-Power Hybrid)	−40…+80 °C

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

Standards and approvals

- TIA-568-B @ 10,000 PSI 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/fm022208

Typical values for this cable type, based on ANSI/TIA-568-B Cat.5e/Cat.6 @ 10,000 PSI Deepwater. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.