API Spec 16D double-armoured subsea BOP MUX control umbilical

A304739 BOP MUX

A304739 API 16D Double-Armoured Subsea BOP MUX Control Umbilical

API Spec 16D / Std 53 · 1.8/3 kV · Api spec 16d double-armoured subsea bop mux control



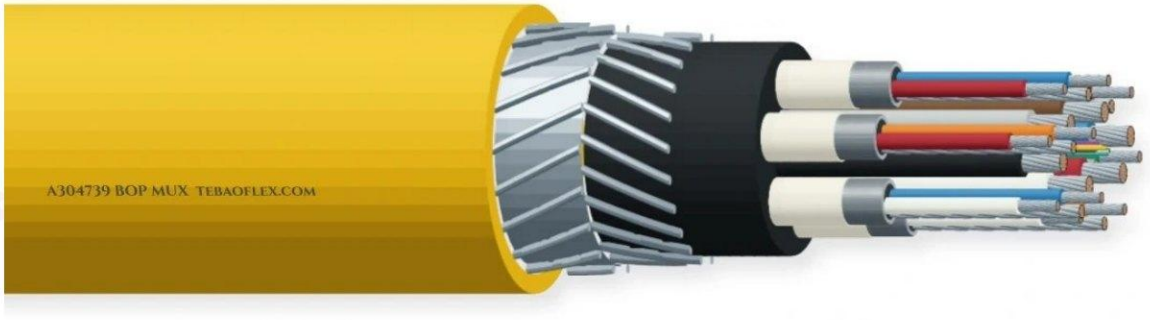
API Spec 16D / API Std 53 | 600–3,000 V + 6,000m FIMT | Yellow/Blue Pod Coded

Application

Cable Subsea Blowout Preventer (BOP) Multiplexed (MUX) Caged & Spaced Contra-Helical Double-Armoured Electro-Optical Control Umbilical Cable (A304739 Series) (API Spec 16D / Std 53, 1.8/3 kV, -30 to +80 °C, min. bend radius 12 × 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. Laser-Welded Stainless-Steel Optical Core
2. Redundant SEM Power Cores (600–3,000 V)
3. EMC-Screened MUX Telemetry Pairs/Quads
4. Caged & Spaced Contra-Helical Steel Armor
5. Greaseless Pod-Coded Outer Jacket (Ø38.1 mm)

Technical data

Typical values

Rated voltage / transmission duty	1.8/3 kV (API Spec 16D / API Std 53 / ISO 13628-5 Subsea BOP MUX)	**Core / conductor construction**	Laser-Welded Stainless-Steel Optical Core — Laser-welded stainless-steel tube housing SM/MM fibers for 6,000 m BOP MUX telemetry
Primary dielectric / buffering	Redundant SEM Power Cores (600–3,000 V) — Stranded tinned copper with SAE AS81044 (SPEC 44) dual-wall / XLPE insulation	**Continuous operating temperature**	−30…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per API Spec 16D / API Std 53 / ISO 13628-5 Subsea BOP MUX	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Greaseless Pod-Coded Outer Jacket (Ø38.1 mm) — High-visibility Yellow (or Blue Pod) mud- and abrasion-resistant HDPE/PUR jacket	**Minimum bending radius**	12 × OD
Hydrostatic, tensile & crush duty	Caged & Spaced Contra-Helical Steel Armor — Weight-saving torque-balanced double galvanized steel wires in polymer matrix	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per API Spec 16D / API Std 53 / ISO 13628-5 Subsea BOP MUX
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per API Spec 16D / API Std 53 / ISO 13628-5 Subsea BOP MUX	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	API Spec 16D / API Std 53 / ISO 13628-5 Subsea BOP MUX		

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
A304739 BOP MUX Construction Schedule (−30…+80 °C) 3 sizes						
☐ **A304739 BOP MUX Type A (Standard Lift)**	**3 × 10 mm² HV + 6×2×1.0 + 12F FIMT**	**Class 5 tinned Cu + 316L FIMT**	**25.4**	**1,680**	**320.0**	**380**
☐ **A304739 BOP MUX Type B (Heavy Work-Class)**	**3 × 16 mm² HV + 8×2×1.0 + 12F FIMT**	**Class 5 tinned Cu + 316L FIMT**	**32.2**	**2,650**	**480.0**	**485**
☐ **A304739 BOP MUX Type C (Ultra-Deep Trencher)**	**3 × 25 mm² HV + 12×2×1.0 + 24F FIMT**	**Class 5 tinned Cu + 316L FIMT**	**38.1**	**3,890**	**680.0**	**570**

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per API Spec 16D / API Std 53 / ISO 13628-5 Subsea BOP MUX.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 10 mm² HV + 6×2×1.0 + 12F FIMT	**1.91**	**1.8/3 kV (≤0.35 dB/km SM)**	**−30…+80 °C**
3 × 16 mm² HV + 8×2×1.0 + 12F FIMT	**1.21**	**1.8/3 kV (≤0.35 dB/km SM)**	**−30…+80 °C**
3 × 25 mm² HV + 12×2×1.0 + 24F FIMT	**0.78**	**1.8/3 kV (≤0.35 dB/km SM)**	**−30…+80 °C**

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

Standards and approvals

- API Spec 16D / Std 53 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/a304739-bop-mux

Typical values for this cable type, based on API Spec 16D / API Std 53 / ISO 13628-5 Subsea BOP MUX. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.