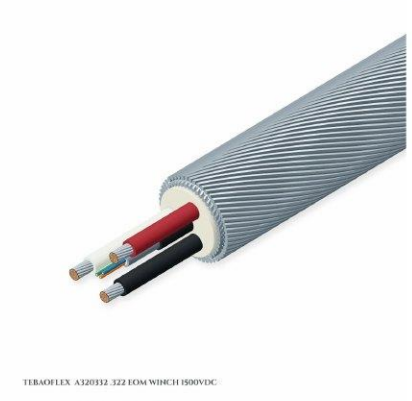
subsea umbilical, ROV tether & oceanographic tow cable

A320332 .322 EOM

A320332 .322-Inch (8.18 mm) 1,500 V DC CTD & Plankton Imaging Electro-

UNOLS .322 EOM / ITU-T G.652D · 1,500 V DC · Subsea umbilical, rov tether &

UNOLS .322 EOM / ITU-T G.652D | **1,500 V DC (-40 to +85 °C)** | **Double Galvanized Steel Wire Armour**



Application

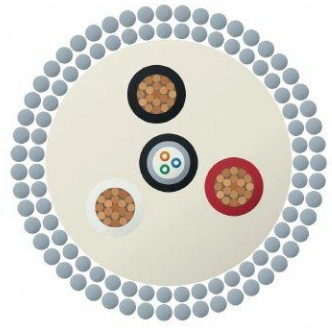
A320332 .322-Inch (8.18 mm) 1,500 V DC CTD & Plankton Imaging Electro-Optical Winch Cable (UNOLS .322 EOM / ITU-T G.652D) engineered for 1,500 V DC service across -40 to +85 °C (min. bend radius 15 × OD).

Typical uses: Oceanographic CTD, ADCP & Deep-Tow Surveys, Work-Class & Observation ROV / AUV Systems, Side-Scan Sonar, SAS & Towed Hydrophone Arrays, Marine 2D/3D/UHR Seismic Streamers & OBC

Construction



TEBAOFLEX A320332 .322 EOM WINCH 1500VDC



Cross-section, not to scale

1. Laser-Welded Steel Optical Tube (3×SMF)
2. 1500 V DC Tinned Copper Cores (3×20 AWG)
3. HDPE Inner Belt & Void Filler
4. Double Galvanized Steel Wire Armour (.32

Technical data

Typical values

Rated voltage / transmission duty	1,500 V DC (UNOLS .322-Inch (8.18 mm) 1,500 V DC Electro-Optical-Mechanical Winch Specification)	**Core / conductor construction**	Laser-Welded Steel Optical Tube (3×SMF) — Hermetic stainless-steel tube housing 3 single-mode optical fibers
Primary dielectric / buffering	1500 V DC Tinned Copper Cores (3×20 AWG) — Three stranded tinned copper conductors with HDPE insulation	**Continuous operating temperature**	−40…+85 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per UNOLS .322-Inch (8.18 mm) 1,500 V DC Electro-Optical-Mechanical Winch Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	Double Galvanized Steel Wire Armour (.322") — Contra-helical high-tensile galvanized steel wire armour (Ø 8.18 mm)	**Minimum bending radius**	15 × OD
Armour, strength member & mechanical duty	HDPE Inner Belt & Void Filler — Extruded high-density polyethylene bedding stabilizing core geometry	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per UNOLS .322-Inch (8.18 mm) 1,500 V DC Electro-Optical-Mechanical Winch Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per UNOLS .322-Inch (8.18 mm) 1,500 V DC Electro-Optical-Mechanical Winch Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	UNOLS .322-Inch (8.18 mm) 1,500 V DC Electro-Optical-Mechanical Winch Specification		

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	Breaking / tensile kN ≈	Min. bend R mm
A320332 .322 EOM Construction Schedule (−40…+85 °C) 3 sizes						
☐ **A320332 .322 EOM 4–12F EOM/Sub**	**4–12 × ITU-T G.652D / G.654E SM (+ Power)**	**Laser-welded SS FIMT + Steel/Aramid Armour**	**8.2**	**260**	**48.0**	**125**
☐ **A320332 .322 EOM 24–48F EOM/Sub**	**24–48 × ITU-T G.652D / G.654E SM (+ Power)**	**Laser-welded SS FIMT + Contra-Helical Steel**	**17.5**	**680**	**120.0**	**260**
☐ **A320332 .322 EOM 96–192F Trunk**	**96–192 × ITU-T G.654E / G.652D Submarine**	**SS Tube + Steel Vault + Cu Tube + DA Armour**	**28.0**	**1,650**	**300.0**	**420**

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per UNOLS .322-Inch (8.18 mm) 1,500 V DC Electro-Optical-Mechanical Winch Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4–12 × ITU-T G.652D / G.654E SM (+ Power)	**0.35**	**≤0.35 dB/km @ 1310 nm**	**−40…+85 °C**
24–48 × ITU-T G.652D / G.654E SM (+ Power)	**0.21**	**≤0.21 dB/km @ 1550 nm**	**−40…+85 °C**
96–192 × ITU-T G.654E / G.652D Submarine	**0.18**	**≤0.18 dB/km @ 1550 nm**	**−40…+85 °C**

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

Standards and approvals

- UNOLS .322 EOM / ITU-T G.652D 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/a320332-322-eom-winch-1500vdc

Typical values for this cable type, based on UNOLS .322-Inch (8.18 mm) 1,500 V DC Electro-Optical-Mechanical Winch Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.