subsea umbilical, ROV tether & oceanographic tow cable

12-Strand UHMWPE Tow Line

Ø 56 mm / 80 mm (204 t / 407 t MBL) 12-Strand Torque-Free UHMWPE Heavy

ISO 10325 / OCIMF UHMWPE 12-Strand · Non-Metallic (204–407 t) · Subsea umbilical, rov



ISO 10325 / OCIMF UHMWPE 12-Strand | **Non-Metallic (204–407 t) (-40 to +70** | **High-Visibility Urethane Outer Coati**

Application

Ø 56 mm / 80 mm (204 t / 407 t MBL) 12-Strand Torque-Free UHMWPE Heavy Marine Tow & Deep-Sea Mooring Line (ISO 10325 / OCIMF UHMWPE 12-Strand) for Non-Metallic (204–407 t) service across -40 to +70 °C.

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





Cross-section, not to scale

1. 12-Strand Torque-Free UHMWPE Braided Cor
2. Buoyant Center Core (SG < 1.0)
3. High-Visibility Urethane Outer Coating

Technical data

Typical values

Rated voltage / transmission duty	Non-Metallic (204–407 t) (ISO 10325 12-Strand Torque-Free UHMWPE (Ø 56/80 mm, 204–407 t MBL) Subsea Tow & Mooring Specification)	**Core / conductor construction**	12-Strand Torque-Free UHMWPE Braided Core — Twelve high-modulus polyethylene strands (204 t / 407 t MBL)
Primary dielectric / buffering	Buoyant Center Core (SG < 1.0) — Floating synthetic core keeping tow & mooring line positively buoyant	**Continuous operating temperature**	−40…+70 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per ISO 10325 12-Strand Torque-Free UHMWPE (Ø 56/80 mm, 204–407 t MBL) Subsea Tow & Mooring Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	High-Visibility Urethane Outer Coating — Abrasion- and UV-resistant yellow polyurethane protective jacket	**Minimum bending radius**	8 × OD
Armour, strength member & mechanical duty	Buoyant Center Core (SG < 1.0) — Floating synthetic core keeping tow & mooring line positively buoyant	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per ISO 10325 12-Strand Torque-Free UHMWPE (Ø 56/80 mm, 204–407 t MBL) Subsea Tow & Mooring Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per ISO 10325 12-Strand Torque-Free UHMWPE (Ø 56/80 mm, 204–407 t MBL) Subsea Tow & Mooring Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	ISO 10325 12-Strand Torque-Free UHMWPE (Ø 56/80 mm, 204–407 t MBL) Subsea Tow & Mooring 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
12-Strand UHMWPE Tow Line Construction Schedule (−40…+70 °C) 3 sizes						
☐ 12-Strand UHMWPE Tow Line Type I	Standard oceanographic / offshore build	Stranded SnCu / Double Steel or UHMWPE	8.2	265	54.3	125
☐ 12-Strand UHMWPE Tow Line Type II	Medium-duty deepwater / offshore build	Stranded SnCu / Double Steel or UHMWPE	9.5	355	64.9	145
☐ 12-Strand UHMWPE Tow Line Type III	Heavy-duty deep-tow / offshore build	Stranded SnCu / Double Steel or UHMWPE	10.5	440	79.2	160

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per ISO 10325 12-Strand Torque-Free UHMWPE (Ø 56/80 mm, 204–407 t MBL) Subsea Tow & Mooring Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
Standard oceanographic / offshore build	11.50	Non-Metallic (204–407 t) (Std Duty)	−40…+70 °C
Medium-duty deepwater / offshore build	8.20	Non-Metallic (204–407 t) (Med Duty)	−40…+70 °C
Heavy-duty deep-tow / offshore build	6.50	Non-Metallic (204–407 t) (Heavy Duty)	−40…+70 °C

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

Standards and approvals

- ISO 10325 / OCIMF UHMWPE 12-Strand 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/12-strand-uhmwpe-heavy-marine-tow-mooring-line

Typical values for this cable type, based on ISO 10325 12-Strand Torque-Free UHMWPE (Ø 56/80 mm, 204–407 t MBL) Subsea Tow & Mooring Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.