subsea ROV umbilical, AUV tether & sonar tow cable

24SSA28 Double-Armoured Umbilical

24SSA28 Double Steel Armoured Umbilical

DNV-ST-E402 / IEC 60794 · 1.8/3 kV · Subsea rov umbilical, auv tether & sonar tow cable



DNV-ST-E402 / IEC 60794 | **1.8/3 kV (-40 to +80 °C)** | **Double Torque-Balanced Steel Wire Ar**

Application

24SSA28 Double Steel Armoured Umbilical featuring single-mode / multi-mode optical unit and double torque-balanced steel wire armour (DNV-ST-E402 / IEC 60794, 1.8/3 kV, -40 to +80 °C, min. bend radius 12 × OD).

Typical uses: Work-Class & Observation ROV Umbilicals and TMS Tethers, Offshore Aquaculture Net Cleaners & Subsea Cage Inspection, AUV, Ocean Glider & Expendable Spool-Payoff Micro-Tethers, USV Towed Sonar Arrays, Seabed Crawlers & Subsea Trenchers

Construction



TEBAOFLEX 24SSA28 DOUBLE STEEL ARMOURED UMBILICAL



Cross-section, not to scale

1. Single-Mode / Multi-Mode Optical Unit
2. Power & Control Copper Conductors
3. Double Torque-Balanced Steel Wire Armour

Technical data

Typical values

Rated voltage / operating system	1.8/3 kV (DNV-ST-E402 24SSA28 Double Steel Armoured Subsea ROV Umbilical Standard)	**Core / conductor construction**	Single-Mode / Multi-Mode Optical Unit — Hermetic stainless-steel tube / tight-buffered optical unit
Primary dielectric / optical buffer	Power & Control Copper Conductors — Stranded copper conductors with Cross-linked polyethylene (XLPE) insulation	**Continuous operating temperature**	−40…+80 °C (submerged seawater & topside deck service)
Hydrostatic & thermal cycling endurance	Verified cold-bend and wet dielectric stability across −40…+80 °C per DNV-ST-E402 24SSA28 Double Steel Armoured Subsea ROV Umbilical Standard	**Storage & transport temperature**	−40…+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	Double Torque-Balanced Steel Wire Armour — Contra-helical high-tensile galvanized steel wire armour	**Minimum bending radius**	12 × OD
Reinforcement / screen / bedding layer	Power & Control Copper Conductors — Stranded copper conductors with Cross-linked polyethylene (XLPE) insulation	**Seawater, hydrolysis & oil resistance**	Resistant to permanent seawater immersion, hydrolysis, hydraulic oil and bio-fouling per DNV-ST-E402 24SSA28 Double Steel Armoured Subsea ROV Umbilical Standard
Hydrostatic pressure & water blocking	Radial and longitudinal water-blocking integrity verified per DNV-ST-E402 24SSA28 Double Steel Armoured Subsea ROV Umbilical Standard	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	DNV-ST-E402 24SSA28 Double Steel Armoured Subsea ROV Umbilical Standard		

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	Max. pulling kN ≈	Min. bend R mm
24SSA28 Double-Armoured Umbilical Construction Schedule (−40…+80 °C) 3 sizes						
☐ 24SSA28 Double-Armoured Umbilical 3×6 + 4×SM + 2	3×6 mm² Power + 4×SM Fiber + 2×2×0.75	SnCu + Gel Tube + Contra-Helical GSWA	20.8	1,280	115.0	250
☐ 24SSA28 Double-Armoured Umbilical 3×10 + 6×SM +	3×10 mm² Power + 6×SM Fiber + 4×2×0.75	SnCu + SS Tube + Double Steel Armour	25.4	1,890	185.0	305
☐ 24SSA28 Double-Armoured Umbilical 3×16 + 8×SM/MM	3×16 mm² Power + 8×SM/MM + 3×2×1.0	SnCu + SS Tube + Heavy GSWA Pack	30.2	2,680	260.0	365

– Custom core counts, optical fiber channels, wet-mate terminations and continuous winch lengths available per DNV-ST-E402 24SSA28 Double Steel Armoured Subsea ROV Umbilical Standard.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance / Load	Operating temp.
3×6 mm² Power + 4×SM Fiber + 2×2×0.75	3.30	1.8/3 kV · 115 kN MBS	−40…+80 °C
3×10 mm² Power + 6×SM Fiber + 4×2×0.75	1.91	1.8/3 kV · 185 kN MBS	−40…+80 °C
3×16 mm² Power + 8×SM/MM + 3×2×1.0	1.21	1.8/3 kV · 260 kN MBS	−40…+80 °C

– Every production length undergoes routine conductor DC resistance / OTDR optical attenuation, AC dielectric and dimensional verification.

Standards and approvals

- DNV-ST-E402 / IEC 60794 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/24ssa28-double-steel-armoured-umbilical

Typical values for this cable type, based on DNV-ST-E402 24SSA28 Double Steel Armoured Subsea ROV Umbilical Standard. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.