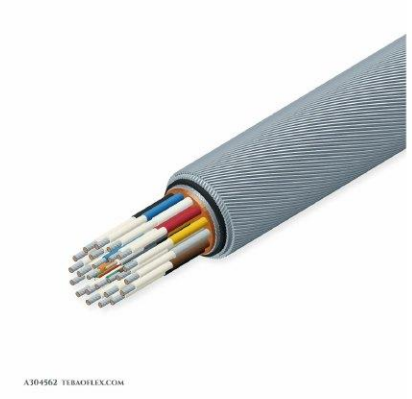
845 kN steel-armoured work-class ROV & subsea plow umbilical

A304562

Series 3.0–7.0 kV (845 kN) Steel-Armoured ROV & Plow Umbilical

SAE AS81044 / ISO 13628-5 · 3.6/6 kV · 845 kn steel-armoured work-class rov & subsea

SAE AS81044 / ISO 13628-5 | **3,000–7,000 V AC + 2.4 kV** | **845 kN Heavy-Lift SWA**



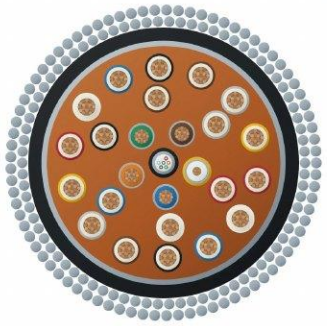
Application

A304562, A304613, A304493, A304267, A304822, A304835, A304982 & A304472 Heavy-Lift Steel-Armoured Work-Class ROV & Subsea Plow Electro-Optical Umbilical Series (SAE AS81044 / ISO 13628-5, 3.6/6 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. Optical Package (7×SMF)
2. Coaxial & Signal Cores (1 Coax + 4 Sig)
3. HV Power Conductors (20 Cores)
4. Ground Tape, Overall Braid & Elastomer Belt
5. Torque-Balanced Steel Armour (845 kN)

Technical data

Typical values

Rated voltage / transmission duty	3.6/6 kV (SAE AS81044 (SPEC 44) / ISO 13628-5 Heavy-Lift ROV & Plow)	**Core / conductor construction**	Optical Package (7×SMF) — Laser-welded stainless-steel tube / Stainless-Steel-Tube package for 6,000 m depth
Primary dielectric / buffering	Coaxial & Signal Cores (1 Coax + 4 Sig) — 19-strand tinned copper + SAE AS81044 (SPEC 44) dual-wall irradiated insulation	**Continuous operating temperature**	−40…+80 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per SAE AS81044 (SPEC 44) / ISO 13628-5 Heavy-Lift ROV & Plow	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Torque-Balanced Steel Armour (845 kN) — Preformed contra-helical high-carbon galvanized steel wire armour	**Minimum bending radius**	15 × OD
Hydrostatic, tensile & crush duty	Ground Tape, Overall Braid & Elastomer Belt — Water-blocked core + Cu/PET tape + tinned Cu braid + Elastomer inner sheath	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per SAE AS81044 (SPEC 44) / ISO 13628-5 Heavy-Lift ROV & Plow
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per SAE AS81044 (SPEC 44) / ISO 13628-5 Heavy-Lift ROV & Plow	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	SAE AS81044 (SPEC 44) / ISO 13628-5 Heavy-Lift ROV & Plow		

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
A304562 Construction Schedule (−40…+80 °C) 3 sizes						
☐ **A304562 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**
☐ **A304562 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**
☐ **A304562 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 SAE AS81044 (SPEC 44) / ISO 13628-5 Heavy-Lift ROV & Plow.

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**	**3.6/6 kV (≤0.35 dB/km SM)**	**−40…+80 °C**
3 × 16 mm² HV + 8×2×1.0 + 12F FIMT	**1.21**	**3.6/6 kV (≤0.35 dB/km SM)**	**−40…+80 °C**
3 × 25 mm² HV + 12×2×1.0 + 24F FIMT	**0.78**	**3.6/6 kV (≤0.35 dB/km SM)**	**−40…+80 °C**

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

Standards and approvals

- SAE AS81044 / ISO 13628-5 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/a304562

Typical values for this cable type, based on SAE AS81044 (SPEC 44) / ISO 13628-5 Heavy-Lift ROV & Plow. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.