Helically cabled surface-demand commercial diving umbilical

UDA0103 / UDA0104

3- & 4-Part Surface-Demand Diving Umbilical

IMCA D 014 / D 078 · 600 V · Helically cabled surface-demand commercial diving umbilical

IMCA D 014 / D 078 | **500 psi Gas + Comms** | **3-Part & 4-Part Lay**



Application

UDA0103 / UDA0204 / UDA0104 3-Part & 4-Part Helically Cabled Surface-Demand Commercial Diving Umbilical (IMCA D 014 / D 078, 600 V, -30 to +70 °C, min. bend radius 8 × OD).

Typical uses: Work-Class & Observation ROV Systems, Offshore Wind & Subsea Power Grids, Oceanographic, Sonar & Seismic Survey, Commercial Diving & Subsea Intervention

Construction



UDA0103 / UDA0104 TEBAOFLEX.COM



Cross-section, not to scale

1. Breathing Gas Hose (HDA0106, 3/8" ID)
2. Pneumofathometer Hose (HDA0104, 1/4" ID)
3. Hot Water Supply Hose (HDA1108, 1/2" ID)
4. Diver Comms / Video Cable Unit
5. Tapeless Helical Rope-Like Lay-Up

Technical data

Typical values

Rated voltage / transmission duty	600 V (IMCA D 014 / IMCA D 078 / EN 12021 Diving Standard)	**Core / conductor construction**	Breathing Gas Hose (HDA0106, 3/8" ID) — Clean low-VOC core tube + high-strength yarn braid + blue cover (500 psi WP / 2,000 psi burst)
Primary dielectric / buffering	Pneumofathometer Hose (HDA0104, 1/4" ID) — Low-VOC core tube + yarn braid + yellow cover (300 psi WP / 1,200 psi burst)	**Continuous operating temperature**	−30…+70 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per IMCA D 014 / IMCA D 078 / EN 12021 Diving Standard	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Tapeless Helical Rope-Like Lay-Up — Planetary contra-helical cabled assembly with controlled buoyancy (-20 to -56 g/m)	**Minimum bending radius**	8 × OD
Hydrostatic, tensile & crush duty	Diver Comms / Video Cable Unit — 4-core shielded diver communication (or 75 Ω coax video/light hybrid in UDA0204)	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per IMCA D 014 / IMCA D 078 / EN 12021 Diving Standard
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per IMCA D 014 / IMCA D 078 / EN 12021 Diving Standard	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IMCA D 014 / IMCA D 078 / EN 12021 Diving 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	Tensile rating kN ≈	Min. bend R mm
UDA0103 / UDA0104 Construction Schedule (−30…+70 °C) 3 sizes						
☐ UDA0103 3-Part / Compact Assembly	Gas/Hydraulic Hose + Power + Comms/Coax	Helical cabled composite umbilical	28.5	920	25.0	285
☐ UDA0103 4-Part / Standard Assembly	Dual Hose + 75 Ω Video Coax + Comms Pairs	Helical cabled composite umbilical	36.0	1,540	48.0	360
☐ UDA0103 Heavy Bell / Intervention	Multi-Hose + 3×Coax + Power/Signal Quads	Aramid-reinforced subsea umbilical	54.0	3,420	90.0	540

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per IMCA D 014 / IMCA D 078 / EN 12021 Diving Standard.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
Gas/Hydraulic Hose + Power + Comms/Coax	4.95	600 V + 35–240 bar Fluid	−30…+70 °C
Dual Hose + 75 Ω Video Coax + Comms Pairs	3.30	600 V + 35–240 bar Fluid	−30…+70 °C
Multi-Hose + 3×Coax + Power/Signal Quads	1.91	600 V + 100–240 bar Fluid	−30…+70 °C

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

Standards and approvals

- IMCA D 014 / D 078 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/uda0103-uda0104

Typical values for this cable type, based on IMCA D 014 / IMCA D 078 / EN 12021 Diving Standard. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.