ISO 13628-5 super-duplex stainless steel tube umbilical (STU)

SURF SUPER-DUPLEX STU

SURF ISO 13628-5 / API 17E Super-Duplex Steel Tube Umbilical (STU)

ISO 13628-5 / API 17E · 6/10 kV · Iso 13628-5 super-duplex stainless steel tube



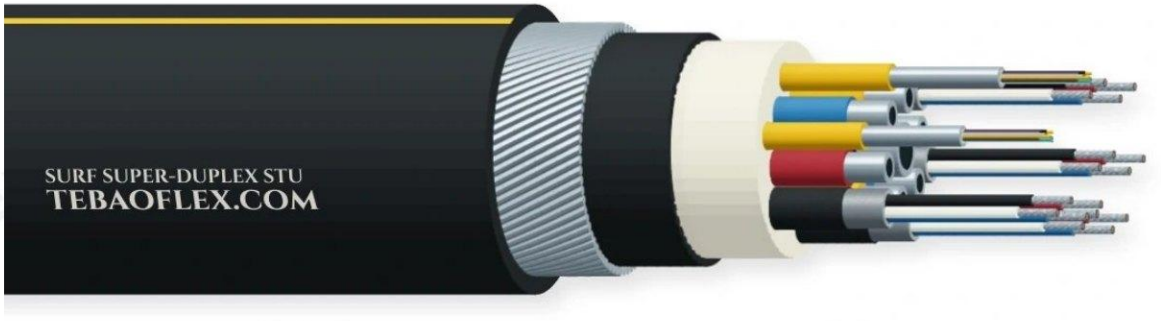
ISO 13628-5 / API Spec 17E | **10,000–15,000 PSI SDSS** | **0.6/1 kV & 6/10–18/30 kV**

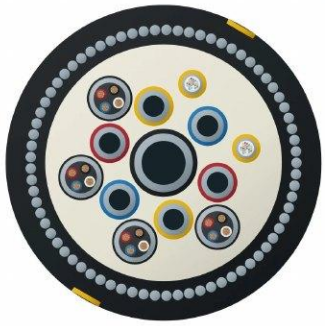
Application

SURF ISO 13628-5 / API Spec 17E Super-Duplex Stainless Steel Tube Umbilical (STU) for Subsea Chemical Injection, Hydraulic Control, Gas Lift & Electro-Optical Transmission (ISO 13628-5 / API 17E, 6/10 kV, -20 to +90 °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. Center MEG / Chemical Injection Tube
2. 15,000 PSI SDSS Hydraulic Tubes (6×)
3. Control Quads & Armoured FO Cables
4. Pre-Shaped Polymeric Profile Fillers
5. Galvanized Steel Armour & HDPE Sheath

Technical data

Typical values

Rated voltage / transmission duty	6/10 kV (ISO 13628-5 / API Spec 17E Super-Duplex STU Standard)	**Core / conductor construction**	Center MEG / Chemical Injection Tube — Large-bore Super-Duplex Stainless Steel (UNS S32750) tube with PE/PA11 oversheath
Primary dielectric / buffering	15,000 PSI SDSS Hydraulic Tubes (6×) — Cold-drawn UNS S32750 tubes (Rp0.2 ≥ 550 MPa) with individual polymeric oversheaths	**Continuous operating temperature**	−20…+90 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per ISO 13628-5 / API Spec 17E Super-Duplex STU Standard	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Galvanized Steel Armour & HDPE Sheath — Helically wound galvanized steel armour + black/yellow HDPE outer jacket	**Minimum bending radius**	15 × OD
Hydrostatic, tensile & crush duty	Pre-Shaped Polymeric Profile Fillers — Extruded grooved PVC/PE profile fillers locking tubes and cables in exact geometry	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per ISO 13628-5 / API Spec 17E Super-Duplex STU Standard
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per ISO 13628-5 / API Spec 17E Super-Duplex STU Standard	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	ISO 13628-5 / API Spec 17E Super-Duplex STU 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
SURF SUPER-DUPLEX STU Construction Schedule (−20…+90 °C) 3 sizes						
☐ **SURF SUPER-DUPLEX STU 3×240 mm² + FO**	3 × 240 mm² + 48F FIMT	IEC 60228 Class 2 water-blocked Cu	118.0	26,400	320.0	1,770
☐ **SURF SUPER-DUPLEX STU 3×400 mm² + FO**	3 × 400 mm² + 48F FIMT	IEC 60228 Class 2 water-blocked Cu	134.0	34,800	420.0	2,010
☐ **SURF SUPER-DUPLEX STU 3×630 mm² + FO**	3 × 630 mm² + 96F FIMT	IEC 60228 Class 2 water-blocked Cu	152.0	46,200	560.0	2,280

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per ISO 13628-5 / API Spec 17E Super-Duplex STU Standard.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 240 mm² + 48F FIMT	0.08	6/10 kV (560 A)	−20…+90 °C
3 × 400 mm² + 48F FIMT	0.05	6/10 kV (710 A)	−20…+90 °C
3 × 630 mm² + 96F FIMT	0.03	6/10 kV (890 A)	−20…+90 °C

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

Standards and approvals

- ISO 13628-5 / API 17E 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/surf-super-duplex-stu

Typical values for this cable type, based on ISO 13628-5 / API Spec 17E Super-Duplex STU Standard. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.