Subsea impressed current cathodic protection feeder cable

ICCP ANODE & FEEDER CABLE

ICCP Anode Sled & Buoyant Anode Double-Armored Subsea Feeder Cable

IEEE 1580 / DNV-RP-B401 · 0.6/1 kV · Subsea impressed current cathodic protection



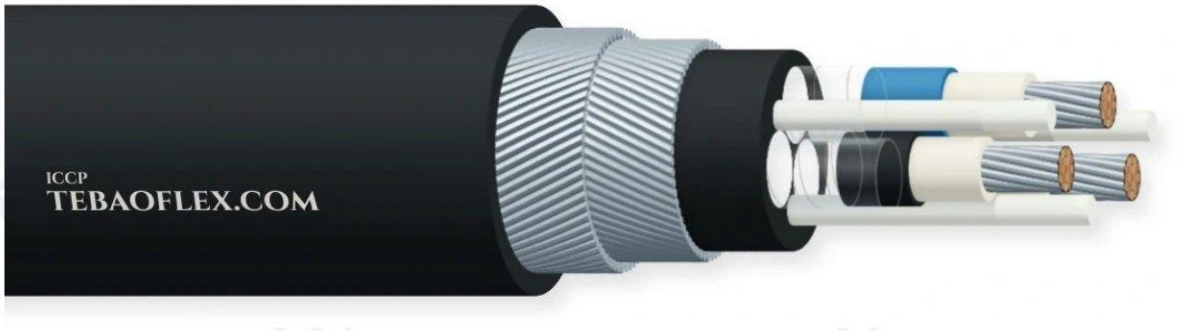
IEEE 1580 / DNV-RP-B401 | 0.6/1 kV (150–950 A DC) | 148 kN Double SWA

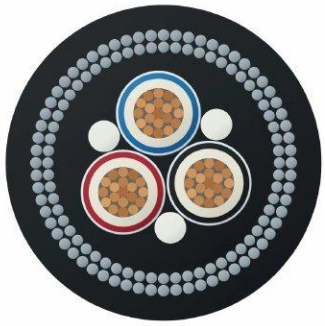
Application

Subsea Anode Sled & Buoyant Anode / Anode Mat Impressed Current Cathodic Protection (ICCP) Contra-Helical Double-Armored Subsea Feeder Cable & Type P XLPO MMO Anode Lead Cable (IEEE 1580 / DNV-RP-B401, 0.6/1 kV, -30 to +90 °C).

Typical uses: Naval Shipboard & Submarine Outboard, Offshore Cathodic Protection (ICCP), Underwater Welding & Nuclear Pools, Deep-Well & Seabed Pump Feeders

Construction





Cross-section, not to scale

1. Stranded Tinned Copper (3×2 AWG / 3×4/0 AWG)
2. Dual-Pass TPU/XLPE & 100% Polyester Wrap
3. HDPE Fillers & Water-Blocking Yarns
4. HDPE Bedding & Contra-Helical Double GSWA
5. Black HDPE Subsea Outer Jacket

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (IEEE 1580 Type P / ASTM B33 / DNV-RP-B401 ICCP Standard)	**Core / conductor construction**	Stranded Tinned Copper (3×2 AWG / 3×4/0 AWG) — ASTM B33 soft annealed stranded tinned copper conductors (150–950 A DC ICCP)
Primary dielectric / buffering	Dual-Pass TPU/XLPE & 100% Polyester Wrap — 2-pass extruded TPU/XLPE insulation + 100% Polyester tape (Type P XLPO on MMO leads)	**Continuous operating temperature**	−30…+90 °C (subsea, marine & submersible duty)
Short-circuit / peak thermal rating	Verified thermal stability per IEEE 1580 Type P / ASTM B33 / DNV-RP-B401 ICCP Standard	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Black HDPE Subsea Outer Jacket — Abrasion- and seawater-resistant high-density polyethylene outer sheath	**Minimum bending radius**	12 × OD
Hydrostatic, tensile & crush duty	HDPE Bedding & Contra-Helical Double GSWA — Extruded HDPE bedding + 2-layer contra-helical galvanized steel wire armor (148 kN MBL)	**Hydrostatic pressure & water blocking**	Engineered for continuous submersion and hydrostatic integrity per IEEE 1580 Type P / ASTM B33 / DNV-RP-B401 ICCP Standard
Seawater, oil & chemical resistance	Resistant to seawater hydrolysis, hydraulic oils and abrasion per IEEE 1580 Type P / ASTM B33 / DNV-RP-B401 ICCP Standard	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEEE 1580 Type P / ASTM B33 / DNV-RP-B401 ICCP 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
ICCP ANODE & FEEDER CABLE Construction Schedule (−30…+90 °C) 3 sizes							
☐	**ICCP ANODE Config A (Compact)**	4×2×24 AWG + 2×18 AWG (or 4C)	Stranded tinned Cu (IEC 60228 / ASTM)	10.4	155	4.5	85
☐	**ICCP ANODE Config B (Standard)**	4×2×20 AWG + 4×16 AWG (or 8C)	Stranded tinned Cu (IEC 60228 / ASTM)	13.3	265	9.6	110
☐	**ICCP ANODE Config C (Heavy Hybrid)**	8×2×20 AWG + 4×12 AWG (or 12C)	Stranded tinned Cu (IEC 60228 / ASTM)	16.6	420	18.5	140

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per IEEE 1580 Type P / ASTM B33 / DNV-RP-B401 ICCP Standard.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4×2×24 AWG + 2×18 AWG (or 4C)	28.40	0.6/1 kV (45–100 Ω data)	−30…+90 °C
4×2×20 AWG + 4×16 AWG (or 8C)	10.70	0.6/1 kV (45–100 Ω data)	−30…+90 °C
8×2×20 AWG + 4×12 AWG (or 12C)	5.40	0.6/1 kV (High-Power Hybrid)	−30…+90 °C

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

Standards and approvals

- IEEE 1580 / DNV-RP-B401 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/iccp-anode-feeder-cable

Typical values for this cable type, based on IEEE 1580 Type P / ASTM B33 / DNV-RP-B401 ICCP Standard. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.