subsea umbilical, ROV tether & oceanographic tow cable

Sentinel RD 55mm Streamer

Sentinel RD Ø 55 mm Reduced-Diameter Dual-Aramid All-Solid Digital Mar

Sentinel RD Ø 55 mm Solid Streamer · 500 V DC · Subsea umbilical, rov tether &



Sentinel RD Ø 55 mm Solid Streamer | **500 V DC (-20 to +70 °C)** | **3.5mm Thick Polyurethane (PUR) Jacke**

Application

Sentinel RD Ø 55 mm Reduced-Diameter Dual-Aramid All-Solid Digital Marine Seismic Streamer Cable (Sentinel RD Ø 55 mm Solid Streamer) engineered for 500 V DC service across -20 to +70 °C (min. bend radius 10 × OD).

Typical uses: Oceanographic CTD, ADCP & Deep-Tow Surveys, Work-Class & Observation ROV / AUV Systems, Side-Scan Sonar, SAS & Towed Hydrophone Arrays, Marine 2D/3D/UHR Seismic Streamers & OBC

Construction





Cross-section, not to scale

1. High-Speed Digital Telemetry Pairs
2. 50 VDC Power Supply Conductors
3. Aramid / LCP Synthetic Strength Ropes
4. 3.5mm Thick Polyurethane (PUR) Jacket (Ø

Technical data

Typical values

Rated voltage / transmission duty	500 V DC (Sentinel RD (Ø 55 mm, 12/24 Groups per 150 m) Reduced-Diameter Solid Streamer Specification)	**Core / conductor construction**	High-Speed Digital Telemetry Pairs — Screened twisted pairs for 12 or 24 hydrophone groups per 150 m section
Primary dielectric / buffering	50 VDC Power Supply Conductors — Stranded tinned copper power bus conductors	**Continuous operating temperature**	−20…+70 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per Sentinel RD (Ø 55 mm, 12/24 Groups per 150 m) Reduced-Diameter Solid Streamer Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	3.5mm Thick Polyurethane (PUR) Jacket (Ø 55 mm) — Reduced-diameter all-solid streamer jacket for high-count 3D winches	**Minimum bending radius**	10 × OD
Armour, strength member & mechanical duty	Aramid / LCP Synthetic Strength Ropes — Dual axial high-modulus synthetic strength members	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per Sentinel RD (Ø 55 mm, 12/24 Groups per 150 m) Reduced-Diameter Solid Streamer Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per Sentinel RD (Ø 55 mm, 12/24 Groups per 150 m) Reduced-Diameter Solid Streamer Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	Sentinel RD (Ø 55 mm, 12/24 Groups per 150 m) Reduced-Diameter Solid Streamer Specification		

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	Breaking / tensile kN ≈	Min. bend R mm
Sentinel RD 55mm Streamer Construction Schedule (−20…+70 °C) 3 sizes						
☐ **Sentinel RD 55mm Streamer Coax / Cat5e**	Coax (39/40/50/75 Ω) or 4Pr Cat5e + Power	Stranded SnCu + Foam PE/FEP + Armour/Aramid	8.2	245	42.7	120
☐ **Sentinel RD 55mm Streamer Composite B**	Heavy Coax / 64-Ch Digital Bus + Power	Stranded SnCu + Low-Loss Dielectric + Strength	11.5	485	71.2	170
☐ **Sentinel RD 55mm Streamer Array / Trunk C**	Multi-Ch Digital Streamer / 255-Ch Bus	Redundant Telemetry + Aramid + PUR Jacket	44.5	1,620	95.0	445

– Custom core cross-sections, pair/fibre counts, armour breaking loads and continuous winch/seabed lengths available per Sentinel RD (Ø 55 mm, 12/24 Groups per 150 m) Reduced-Diameter Solid Streamer Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
Coax (39/40/50/75 Ω) or 4Pr Cat5e + Power	18.50	500 V DC (High-Speed)	−20…+70 °C
Heavy Coax / 64-Ch Digital Bus + Power	11.20	500 V DC (Deep-Tow/Array)	−20…+70 °C
Multi-Ch Digital Streamer / 255-Ch Bus	6.80	500 V DC (Full Array)	−20…+70 °C

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

Standards and approvals

- Sentinel RD Ø 55 mm Solid Streamer 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/sentinel-rd-55mm-solid-seismic-streamer

Typical values for this cable type, based on Sentinel RD (Ø 55 mm, 12/24 Groups per 150 m) Reduced-Diameter Solid Streamer Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.