subsea umbilical, ROV tether & oceanographic tow cable

FM020914S 7km Video

FM020914S 300/600 V 7,000 m Full-Ocean-Depth RG-6F 75-Ohm Coax & Power

FM020914S / 7,000 m Video · 300 V / 600 V · Subsea umbilical, rov tether &



FM020914S / 7,000 m Video | **300 V / 600 V (-30 to +80 °C)** | **7,000 m Polyurethane (PUR) Outer Jac**

Application

FM020914S 300/600 V 7,000 m Full-Ocean-Depth RG-6F 75-Ohm Coax & Power Deep-Sea Video Cable (FM020914S / 7,000 m Video) engineered for 300 V / 600 V service across -30 to +80 °C (min. bend radius 8 × 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. RG-6F 75-Ohm Deep-Sea Coaxial Core
2. 300V/600V Power & Shielded Twisted Pairs
3. Water-Blocked Core & 4,200 lbs Aramid Br
4. 7,000 m Polyurethane (PUR) Outer Jacket

Technical data

Typical values

Rated voltage / transmission duty	300 V / 600 V (FM020914S 7,000 m Deep-Sea RG-6F 75-Ohm Coaxial + Power Composite Video Specification)	**Core / conductor construction**	RG-6F 75-Ohm Deep-Sea Coaxial Core — Solid PE dielectric coaxial unit rated for 7,000 m hydrostatic pressure
Primary dielectric / buffering	300V/600V Power & Shielded Twisted Pairs — 16-22 AWG tinned copper conductors with high-pressure copolymer insulation	**Continuous operating temperature**	−30…+80 °C (subsea & offshore duty)
Hydrostatic & thermal stability	Verified thermal and hydrostatic stability per FM020914S 7,000 m Deep-Sea RG-6F 75-Ohm Coaxial + Power Composite Video Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel winch reel
Outer protection / armouring	7,000 m Polyurethane (PUR) Outer Jacket — Deep-ocean abrasion- and hydrolysis-resistant PUR sheath	**Minimum bending radius**	8 × OD
Armour, strength member & mechanical duty	Water-Blocked Core & 4,200 lbs Aramid Braid — Void-free water-blocking compound + braided aramid strength member	**Seawater, hydrostatic & hydrolysis resistance**	Engineered for continuous seawater immersion, pressure cycling and hydrolysis resistance per FM020914S 7,000 m Deep-Sea RG-6F 75-Ohm Coaxial + Power Composite Video Specification
Oil, drilling mud & abrasion resistance	Resistant to marine hydraulic oils, salt mist, winch sheave wear and seabed abrasion per FM020914S 7,000 m Deep-Sea RG-6F 75-Ohm Coaxial + Power Composite Video Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	FM020914S 7,000 m Deep-Sea RG-6F 75-Ohm Coaxial + Power Composite Video 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
FM020914S 7km Video Construction Schedule (−30…+80 °C) 3 sizes						
☐ FM020914S 7km Video 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
☐ FM020914S 7km Video Composite B	Heavy Coax / 64-Ch Digital Bus + Power	Stranded SnCu + Low-Loss Dielectric + Strength	11.5	485	71.2	170
☐ FM020914S 7km Video 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 FM020914S 7,000 m Deep-Sea RG-6F 75-Ohm Coaxial + Power Composite Video 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	300 V / 600 V (High-Speed)	−30…+80 °C
Heavy Coax / 64-Ch Digital Bus + Power	11.20	300 V / 600 V (Deep-Tow/Array)	−30…+80 °C
Multi-Ch Digital Streamer / 255-Ch Bus	6.80	300 V / 600 V (Full Array)	−30…+80 °C

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

Standards and approvals

- FM020914S / 7,000 m Video 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/fm020914s-7km-deep-sea-video-cable-600v

Typical values for this cable type, based on FM020914S 7,000 m Deep-Sea RG-6F 75-Ohm Coaxial + Power Composite Video Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.