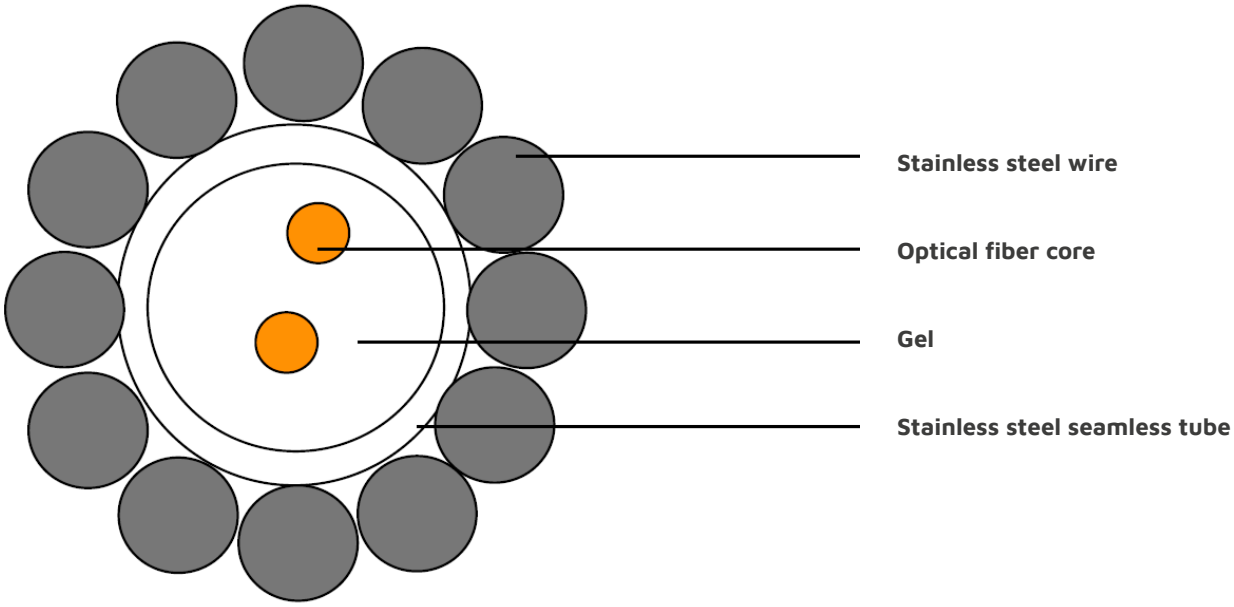
Bandweaver

DATASHEET

DTS Cable
Low Temperature Leak Detection

The Bandweaver Low temperature leakage monitoring cable is based on a metal armour structure. The central stainless steel tube structure is composed of a stainless steel (316) tube protecting the fiber sensing elements with steel stranded reinforcement components.

This cable has the advantages of excellent mechanical properties, high tensile strength, compression resistance, waterproof properties and is suitable for use in a variety of harsh environments.



Features

› Waterproof, rugged, shockproof design

› Small outer diameter, simple structure, rapid thermal response

› Corrosion resistant materials

› Wider operating temperature range. Cryogenic version down to -190°C

› Steel wire stranding providing tensile strength and flexibility.

• Applications include: Pipeline monitoring, LNG/LPG leak detection

• Mixed singlemode & multimode for both DTS and DAS applications

Monitored | Secured | Safe

SPECIFICATIONS

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Outer Diameter	2.9 mm +/- 0.1 mm	
Standard Length	1000m (Other lengths available on request)	
MATERIAL		
Tube Filling	Stainless Steel 316 Thixotropic gel	
Strength Members	12 wires - Stainless Steel 316L	
OPTICAL		
Fiber Type	Multimode G651.a	Single mode G652D
Fiber Colour	1*	1*
Attenuation	< 3.5 dB / km (850 nm) < 1.0 dB / km (1300 nm)	< 0.4 dB / km (850 nm) < 0.3 dB / km (1300 nm)
MECHANICAL & ENVIRONMENTAL PROPERTIES		
Tensile Strength	Long Term: 750 N Short Term 1500 N	
Crush Resistance	Long Term: 4000 N / 10cm Short Term: 2000 N / 10cm	
Bending Radius	Static: 20 x Diameter Dynamic: 40 x Diameter	
Operating Temperature	Standard Version	Long term -60 °C to 85 °C Short Term -80 °C to 120 °C
	Cryogenic Version	Long term -160 °C to 85 °C Short Term -190 °C to 150 °C
Thermal Expansion Coefficient	14.3x10 -6m/m°C (300°C)	
STANDARDS AND CERTIFICATIONS		
Weight	33kg / km	
Standards	IEC 60794-1-2:2003 (GB/T 7424.2-2008) – Optical fiber specifications and test procedures ISO 7240-5, NEQ; UL 521, NEQ (GB16280-2014) Line type fire detection	
Packing Material	Wooden Reel	

*Other fiber optic cores available on request