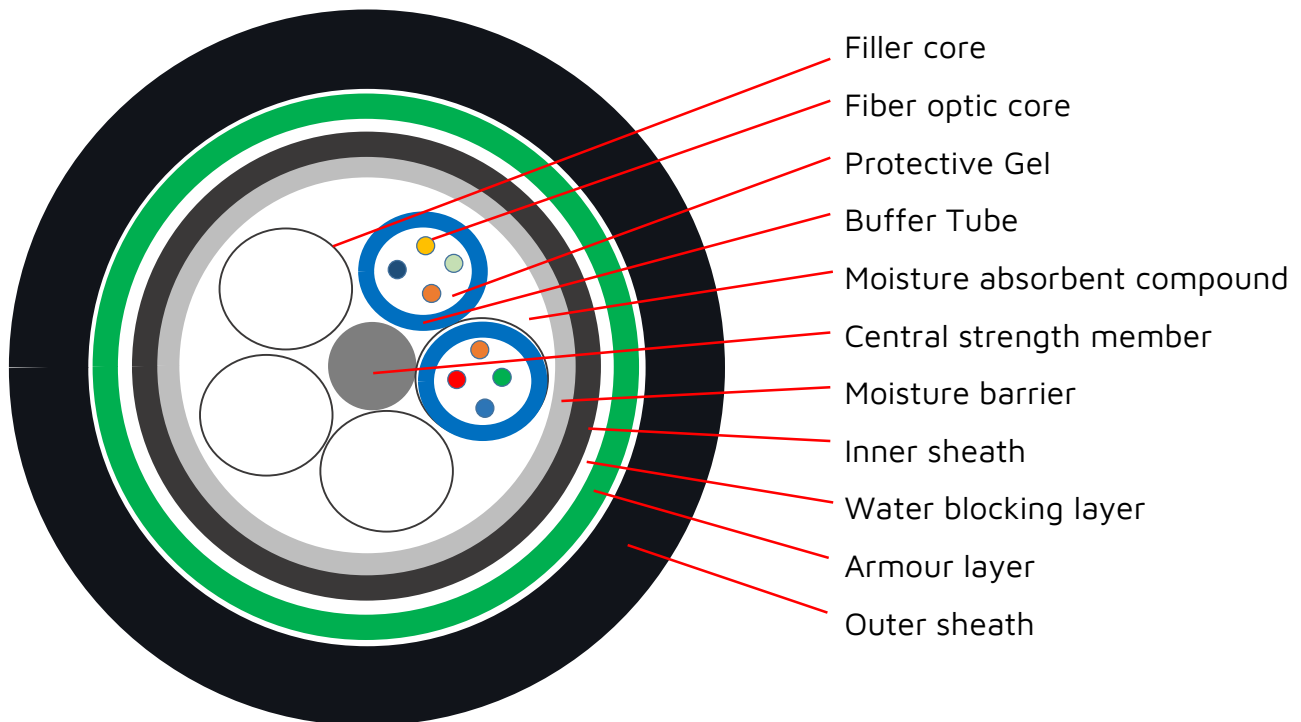


DAS Cable

CovertLine Buried Cable

The CovertLine™ sensing cable is optimised to work with Bandweaver's Horizon Distributed Acoustic Sensing (DAS) systems. Optimised for direct burial applications such as pipeline, perimeter and border monitoring where a buried approach is optimal. It has been designed to achieve the balance to provide sufficient robustness to work in a harsh field environment but to provide the sensitivity to detect intrusion events.



At standard the CovertLine™ sensing cable contains standard single mode fiber based on the G.652D standard which is the sensing fiber utilised by Bandweaver's DAS systems. On request additional multi-mode fiber optic cores can be included which are also suitable for use with Bandweaver's Distributed Temperature Sensing System (DTS). Typical sensing applications include:

- Pipeline protection – both intrusion detection and leak detection
- Buried power cable monitoring – fault detection and protection from construction damage
- Covert buried perimeter intrusion detection
- Border security
- Smart city and transport solutions

Technical specifications

PHYSICAL	
Number of fibers	8 as standard
Outer Diameter	12.3 (±0.2) mm
Colour	Black
Standard reel length	2000m Contact Bandweaver representative for other reel lengths
MATERIAL	
Fiber	250 micron acrylate
Central strength member	Steel wire Diameter 1.4mm (±0.05)
Loose tube	PBT Diameter 1.7mm (±0.06) 0.3 mm thickness (max 4 fibers/ core)
Filler core	3 LDPE members 1.7 mm diameter (±0.06)
Moisture barrier	Polymer coated aluminium tape 0.2mm thickness (±0.03)
Inner sheath	MDPE 0.9mm thickness (±0.1)
Armour	Polymer coated steel tape 2mm thickness
Water blocking layer	Filling compound
Outer sheath	MDPE 1.8mm thickness (±0.2)
FIBER OPTIC	
Fiber Type	9/125 (G.652D or similar)
Attenuation	0.21 dB/km (@ 1550 nm)
MECHANICAL PROPERTIES	
Minimum Bend Radius	
Static	12.5 x Diameter
Dynamic	25 x Diameter
Tensile Strength	Short Term 3000N Long Term 1000N
Crush Resistance	Short Term 3000 N/100m Long Term 1000 N/100m
Temperature operating range	Installation -20 to 60 °C Transportation & storage -40 to 70 °C Operation -40 to 70 °C
Weight	152 kg/km (±10)
Packing Material	Wood shaft
STANDARDS & APPROVALS	
	IEC 794-1-2-E1 - Tensile Strength IEC 60794-1-2-E3 Crush Test IEC 60794-1-2-E4 – Impact Test YD/T901-2001-4.4.4.1 – Temperature Cycling
Part Number	4 fiber: CAB-SM9-BUR-04 (internal ref: GYTA 53) 8 fiber: CAB-SM9-BUR-08 (internal ref: GYXTW) 12 fiber: CAB-SM9-BUR-12 (internal ref: GYXTW)