



25 Year System Warranty

G.652.D Compliant

Internal External Grade

Corrugated Steel Tape Armour

Performs to OS1 & OS2

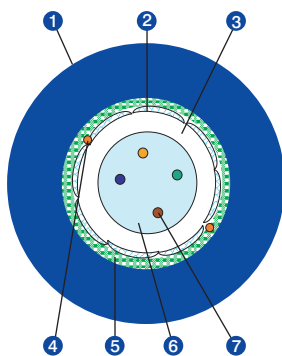
Features

- 9/125 Singlemode Fibre
- LSOH Blue Sheath
- Duct Grade
- Cut to length service
- Sequentially Metre Marked
- Rodent Resistant
- Corrugated Steel Tape Armour
- 25 Year System Warranty
- G.652.D Low water peak grade

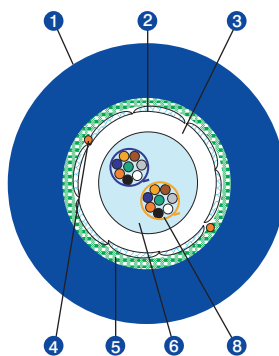
Product Overview

Excel corrugated steel tape (CST) armoured loose tube optical fibre cables have been designed specifically for applications requiring a high degree of mechanical protection. The singlemode fibre is G.652.D compliant low water peak grade offering both OS1 & OS2 performance. These compact, lightweight cables are extremely rugged, provide rodent resistance and are quick and easy to install. The cables are constructed around a silica gel filled tube(s) containing up to 12 colour coded 250µm primary coated 9/125 fibres. This tube is covered with E-glass strength members and a flame retardant, low smoke zero halogen, outer sheath. In 16 and 24 core cables, the twin bundle design provides both extra protection for the fibres but also enables faster and easier installation, whilst retaining a compact outside diameter.

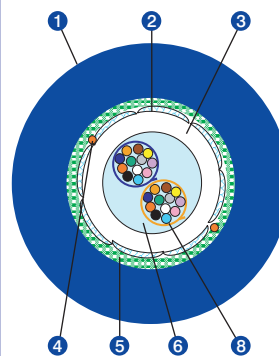
4,8 & 12 Fibre Construction



16 Fibre Construction



24 Fibre Construction



- 1 LSOH Outer Sheath
- 2 E-glass
- 3 Gel-filled Loose Tube
- 4 Ripcord
- 5 Corrugated Steel Armour
- 6 Filling Compound
- 7 Optical Fibres
- 8 Optical Fibres (in blue and orange bundles)

Performance Overview

Excel loose tube fibre optic cables are designed and manufactured to ensure that optimum performance is possible from installed fibre links. Support of protocols such as Gigabit Ethernet over 10 km distances are assured, due to improved bandwidth available as standard from Excel fibre cables.

Performance / Specification Table

Physical Characteristics

Loose Tube CST Cable		
Outside Diameter	4-12 Cores 8.3 ± 0.2 mm	16 & 24 Core 8.5 ± 0.2 mm
Outer Sheath	LSOH 1.8 mm thick	
Loose Tube Diameter	2.8 ± 0.1 mm	
Loose Tube	Polybutylene Teraphthalate (PBT)	
Loose Tube Colour	Natural	
Loose Tube Fill	Thixotropic Jelly	
Peripheral Strength Members	E-Glass	
Weight	4-12 Cores 90 kg / km (nominal)	16 & 24 Core 95 kg / km (nominal)
Standard maximum length	2000 m \pm 10%	
Temperature range Transport / Storage Operation	IEC 60794-1-2-F1	-40 to +60°C -20 to +70°C
Pulling tension Long term Short term	IEC 60794-1-2-E1	\leq 1000 N \leq 2000 N
Bending radii for fibres and tubes Installation/operation	>25 mm	
Watertightness	IEC 60794-1-2-F5	Yes
Crush load	IEC 60794-1-2-E3	\leq 3000 N/m
Bending radii cable Long term Short term	IEC 60794-1-2-E11 IEC 60794-1-2-E6	$10 \times \emptyset$ $20 \times \emptyset$
Flame retardancy	IEC 60332-1 (EN 50265-2-1)	Pass
Halogen-free Corrosivity	IEC 60754-2 (EN 50267-2-2)	pH \geq 3.5 - μ S/cm \leq 100
Construction	ITU G.652D	
Armour	Corrugated Steel Tape (CST)	

Optical Performance

Modal-Field Diameter	$9.2 \pm 0.4 \mu\text{m}$ $125 \pm 1 \mu\text{m}$
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	1350 nm	1550 nm
Maximum Attenuation	0.4 dB/km	0.25 dB/km
Dispersion	$\leq 3.5 \text{ ps.nm}^{-1}.\text{km}^{-1}$	$\leq 18 \text{ ps.nm}^{-1}.\text{km}^{-1}$
PMD	$\leq 0.2 \text{ ps} / \text{km}$	
Cable Cut-off Wavelength	$\leq 1260 \text{ nm}$	

Fibre Colours

Cores 1-12 plain colours

1. Blue	2. Orange	3. Green	4. Brown
5. Natural	6. White	7. Red	8. Black
9. Yellow	10. Purple	11. Pink	12. Aqua

N.B. In 16 core cables, colours 1-8 are repeated in each loose tube. In 24 core cables, colours 1-12 are repeated in each loose tube.

System Warranty

When installed together with Excel connectivity by an accredited Excel Cabling Partner, this product is supported by a comprehensive 25 year product and applications warranty.

Typical Applications

- 1000BASE-LX
- 10GBASE-LX4
- 10GBASE-LR/LW
- 10GBASE-ER/EW
- 155 Mbps ATM
- 622 Mbps ATM
- FDDI
- 531 Mbps Fibre Channel
- 1062 Mbps Fibre Channel

Part Number Information

Part No.	Description
205-305	Excel 4 Core 9/125 OS1 OS2 Loose Tube CST Blue Fibre
205-306	Excel 8 Core 9/125 OS1 OS2 Loose Tube CST Blue Fibre
205-307	Excel 12 Core 9/125 OS1 OS2 Loose Tube CST Blue Fibre
205-308	Excel 16 Core 9/125 OS1 OS2 Loose Tube CST Blue Fibre
205-309	Excel 24 Core 9/125 OS1 OS2 Loose Tube CST Blue Fibre



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