FIBRE

X **25 Year System Warranty**

X **Internal External Grade**

X **Sequentially Metre Marked**
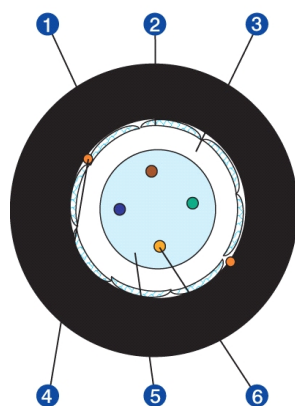
X **Standard Rodent Protection**

Features

- 25 Year System Warranty
- Sequentially Metre Marked
- 50/125 Multimode Fibre
- 1500/500MHz.km Bandwidth
- Cut to length service

- Internal External Grade
- Standard Rodent Protection
- LSOH Black Sheath
- Duct Grade

Product Overview

Excel loose tube optical fibre cables have been designed specifically for internal and external applications. These compact, lightweight cables are extremely flexible and are quick and easy to install. The cables are constructed around a gel filled (non-dripping and silicon free) tube containing up to 24 colour coded 250µm primary coated 50/125µm fibres. This tube is covered with swellable (for the longitudinal watertightness) yarns as strength members and for the standard rodent protection. The outer jacket is Flame Retardant, Low Smoke Zero Halogen.

Fibre Construction

1 LSOH Outer Sheath
2 Yarn Strength Member
3 Loose Tube
4 Ripcord
5 Gel (non-dripping and silicone free)
6 Optical Fibres

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 10 Gigabit Ethernet over maximum distances – 300 metres is assured, due to improved bandwidth available as standard from Excel fibre cables.

Optical Performance

Modal-Field Diameter	50 ± 2.5 µm	
	125 ± 1 µm	
	Numerical Aperture	0.20 ± 0.015 µm

	850 nm	1300 nm
Average Attenuation	2.3 dB/km	0.5 dB/km
Maximum Attenuation	3.0 dB/km	1.0 dB/km
Dispersion	≤1500 ps.nm-1.km-1	≤500 ps.nm-1.km-1
Ethernet Performance		
Gigabit	900m	550 m
10 Gigabit	300m	n/a
Refractive Index (n)	1.481	1.477

Loose Tube Cable			
Nominal and Maximum Outside Diameter		5.8/6.1 mm	
Loose Tube Diameter		3.2 mm	
Energy of flame		550 kJ/m	
Weight		37 kg/km	
Reel Size		Ø800 x 475 mm / Ø1000 x 530 mm	
Standard delivery length		2100 ± 100 m / 4100 ± 100 m	
Temperature range		IEC 60794-1-2-F1	-30 to +70°C
Transport / Storage			-5 to +50°C
Installation			-30 to +70°C
Operation			
Pulling tension		IEC 60794-1-2-E1	≤ 700 N
Long term			≤ 1500 N
Short term			
Bending radii for fibres and tubes Installation/operation			>25 mm
Watertightness		IEC 60794-1-2-F5	Yes
Crush resistance		IEC 60794-1-2-E3	≤ 10000 N/m
Cable			
Bending radii cable		IEC 60794-1-2-E11	10 x Ø
Static according		IEC 60794-1-2-E6	15 x Ø
Dynamic			
Flame retardancy		IEC 60332-3C (EN 50266-2-4)	Pass
Halogen-free Corrosivity		IEC 60754-2 (EN 50267-2-2)	pH ≥ 3.5 - µS/cm ≤ 100
Construction		IEC 60794	
Rodent Protection		Standard	

Typical Applications

- 100BASE-FX
- 1000BASE-SX
- 1000BASE-LX
- 10GBASE-SR/SW
- 10GBASE-LX4
- 155 Mbps ATM
- 622 Mbps ATM
- FDDI
- 531 Mbps Fibre Channel
- 1062 Mbps Fibre Channel

Cores 1-12 plain colours

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

Cores 13-24 with rings

13. Blue	14. Orange	15. Green	16. Brown
17. Natural	18. White	19. Red	20. Black
21. Yellow	22. Violet	23. Pink	24. Turquoise

Part Number Information

Part No.	Description
200-150	Internal/External Grade Loose Tube Fibre Cable 4 Core 50/125 OM3
200-149	Internal/External Grade Loose Tube Fibre Cable 6 Core 50/125 OM3
200-151	Internal/External Grade Loose Tube Fibre Cable 8 Core 50/125 OM3
200-152	Internal/External Grade Loose Tube Fibre Cable 12 Core 50/125 OM3
200-153	Internal/External Grade Loose Tube Fibre Cable 16 Core 50/125 OM3
200-154	Internal/External Grade Loose Tube Fibre Cable 24 Core 50/125 OM3

System Warranty

The Excel System Warranty provides a 25-year product and applications assurance of compliance with the industry performance standard appropriate to the class of cabling installed. The warranty may be applied for by an accredited Excel Partner who has designed, supplied and installed the said system.

25 YEAR WARRANTY excel