

25 Year System Warranty

G.652.D Compliant

Internal External Grade

Standard Rodent Protection

Performs to OS1 & OS2

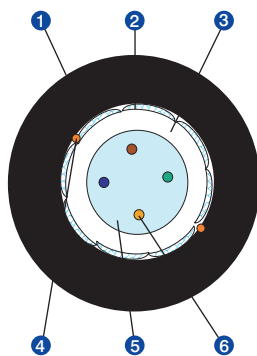
### Features

- 9/125 Singlemode Fibre
- LSOH Black Sheath
- Duct Grade
- Cut to length service
- Sequentially Metre Marked
- Suitable for Internal & External Use
- 25 Year System Warranty
- G.652.D Low water peak grade

### Product Overview

Excel loose tube optical fibre cables have been designed specifically for internal and external applications. The singlemode fibre is G.652.D compliant low water peak grade offering both OS1 & OS2 performance. 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 9/125µm 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 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 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 Transport / Storage Installation Operation	IEC 60794-1-2-F1	-30 to +70°C -5 to +50°C -30 to +70°C
Pulling tension Long term Short term	IEC 60794-1-2-E1	≤ 700 N ≤ 1500 N
Bending radii for fibres and tubes Installation/operation	>25 mm	
Watertightness	IEC 60794-1-2-F5	Yes
Crush resistance Cable	IEC 60794-1-2-E3	≤ 10000 N/m
Bending radii cable Static according Dynamic	IEC 60794-1-2-E11 IEC 60794-1-2-E6	10 x Ø 15 x Ø
Flame retardancy	IEC 60332-1 (EN 50265-2-1)	Pass
Halogen-free Corrosivity	IEC 60754-2 (EN 50267-2-2)	pH ≥ 3.5 - μS/cm ≤ 100
Rodent Protection	Standard	

### Optical Performance

Modal-Field Diameter	9 ± 0.4 μm 125 ± 0.7 μm
Numerical Aperture	0.20 ± 0.015 μm

	1310 nm	1550 nm
Average Attenuation	0.32 dB/km	0.21 dB/km
Maximum Attenuation	0.40 dB/km	0.30 dB/km
Dispersion	≤3.5 ps.nm <sup>-1</sup> .km <sup>-1</sup>	≤18 ps.nm <sup>-1</sup> .km <sup>-1</sup>
PMD	≤ 0.2 ps/km	
Cable Cut-off Wave-length	≤ 1260 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. Violet	11. Pink	12. Turquoise

## Fibre Colours

### 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

## 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
205-300	Excel 4 Core 9/125 OS1 OS2 Loose Tube Black Fibre
205-301	Excel 8 Core 9/125 OS1 OS2 Loose Tube Black Fibre
205-302	Excel 12 Core 9/125 OS1 OS2 Loose Tube Black Fibre
205-303	Excel 16 Core 9/125 OS1 OS2 Loose Tube Black Fibre
205-304	Excel 24 Core 9/125 OS1 OS2 Loose Tube Black Fibre



Virtware - Sol. Int. Telecomunicações, Lda  
Rua dos Canastreiros, 394  
4400-404 Canidelo VNG, Portugal

Tel: +351 918205881  
Email: [info@virtware.pt](mailto:info@virtware.pt) Web: [www.virtware.pt](http://www.virtware.pt)