

X 25 Year System Warranty

X Internal External Grade

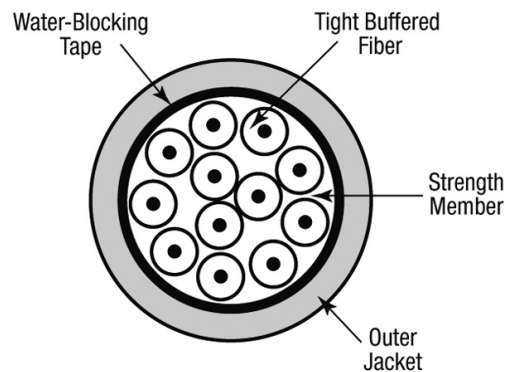
X Sequentially Metre Marked

### Features

- 25 Year System Warranty
- Sequentially Metre Marked
- LSOH Black Sheath
- Duct Grade
- Internal External Grade
- 50/125 Multimode Fibre
- 6000/500 MHz.km Bandwidth
- Cut to length service

### Product Overview

Excel OM4 multimode tight buffered optical fibre cables have been designed specifically for internal and external applications. The OM4 multimode optical fibre cable will support 10 Gigabit Ethernet up to channels of 550m in length. These compact, lightweight cables are extremely flexible and are quick and easy to install. The cables are constructed with a swellable reinforced yarn strength member containing up to 24 colour coded 900µm tight buffered 50/125µm fibres, covered with a flame retardant, low smoke zero halogen, outer sheath.



### 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

| Number of fibres        | 4                | 6              | 8        | 12              | 16       | 24        |
|-------------------------|------------------|----------------|----------|-----------------|----------|-----------|
| Nominal Diameter        | 5.4mm            | 5.9mm          | 5.9mm    | 7.6mm           | 8.6mm    | 9.6mm     |
| Maximum pulling tension |                  |                |          |                 |          |           |
| Long term               | 400N             | 450N           | 450N     | 500N            | 500N     | 600N      |
| Short term              | 800N             | 900N           | 900N     | 1000N           | 1000N    | 1200N     |
| Energy of flame         | 296 kJ/m         | 347 kJ/m       | 371 kJ/m | 622 kJ/m        | 845 kJ/m | 1082 kJ/m |
| Weight                  | 26 kg/km         | 30 kg/km       | 32 kg/km | 45 kg/km        | 53 kg/km | 65 kg/km  |
| Reel size               | Ø 560 x 336 mm   | Ø 800 x 475 mm |          | Ø 1000 x 530 mm |          |           |
| Standard reel length    | 2100 ± 100 m     |                |          |                 |          |           |
| Temperature range       | IEC 60794-1-2-F1 |                |          |                 |          |           |
| Transport / Storage     |                  |                |          | -30 to +70°C    |          |           |
| Installation            |                  |                |          | -5 to +50°C     |          |           |
| Operation               |                  |                |          | -30 to +70°C    |          |           |

|                                    |                             |  |  |            |  |  |
|------------------------------------|-----------------------------|--|--|------------|--|--|
| Bending radii for fibres and tubes |                             |  |  |            |  |  |
| Installation/operation             | >25 mm                      |  |  |            |  |  |
| Strippability                      |                             |  |  |            |  |  |
| Secondary coating only             | = 100 mm                    |  |  |            |  |  |
| Secondary + primary coating        | = 10 mm                     |  |  |            |  |  |
| Watertightness                     | IEC 60794-1-2-F5            |  |  | Yes        |  |  |
| Crush resistance                   | IEC 60794-1-2-E3            |  |  |            |  |  |
| Tight buffer                       |                             |  |  | = 4000 N/m |  |  |
| Cable                              |                             |  |  | = 4000 N/m |  |  |
| Bending radii cable                |                             |  |  |            |  |  |
| Static according                   | IEC 60794-1-2-E11           |  |  | 15 x Ø     |  |  |
| Dynamic                            | IEC 60794-1-2-E6            |  |  | 12 x Ø     |  |  |
| Flame retardancy                   | IEC 60332-3C (EN 50266-2-4) |  |  | Pass       |  |  |
| Halogen-free                       | IEC 60754-2 (EN 50267-2-2)  |  |  |            |  |  |
| Corrosivity                        | pH = 3.5 - µS/cm = 100      |  |  |            |  |  |
| Construction                       | IEC 60794                   |  |  |            |  |  |

|                        |  |  |  |                 |  |  |
|------------------------|--|--|--|-----------------|--|--|
| Optical Performance    |  |  |  |                 |  |  |
| Core/Cladding Diameter |  |  |  | 50 ± 2.5 µm     |  |  |
|                        |  |  |  | 125 ± 1 µm      |  |  |
| Numerical Aperture     |  |  |  | 0.20 ± 0.015 µm |  |  |

|                      | 850 nm        | 1300 nm      |
|----------------------|---------------|--------------|
| Average Attenuation  | 2.5 dB/km     | 0.5 dB/km    |
| Maximum Attenuation  | 3.0 dB/km     | 1.0 dB/km    |
| Bandwidth            | ≥ 6000 MHz.km | ≥ 500 MHz.km |
| Ethernet Performance |               |              |
| Gigabit              | 900 m         | 550 m        |
| 10 Gigabit           | 550 m         | n/a          |
| Refractive Index (n) | 1.482         | 1.477        |

|                          |               |          |           |
|--------------------------|---------------|----------|-----------|
| Cores 1-12 plain colours |               |          |           |
| 1. White                 | 2. Red        | 3. Blue  | 4. Yellow |
| 5. Green                 | 6. Violet     | 7. Brown | 8. Black  |
| 9. Orange                | 10. Turquoise | 11. Pink | 12. Grey  |

|                        |               |           |            |
|------------------------|---------------|-----------|------------|
| Cores 13-24 with rings |               |           |            |
| 13. White              | 14. Red       | 15. Blue  | 16. Yellow |
| 17. Green              | 18. Violet    | 19. Brown | 20. Black  |
| 21. Orange             | 22. Turquoise | 23. Pink  | 24. Grey   |

## Part Numbers

| Part No. | Description   |
|----------|---|
| 204-102  | Internal/External Grade Tight Buffered Fibre Cable 2 Core 50/125 OM4  |
| 204-106  | Internal/External Grade Tight Buffered Fibre Cable 6 Core 50/125 OM4  |
| 204-108  | Internal/External Grade Tight Buffered Fibre Cable 8 Core 50/125 OM4  |
| 204-112  | Internal/External Grade Tight Buffered Fibre Cable 12 Core 50/125 OM4 |
| 204-116  | Internal/External Grade Tight Buffered Fibre Cable 16 Core 50/125 OM4 |
| 204-124  | Internal/External Grade Tight Buffered Fibre Cable 24 Core 50/125 OM4 |

## 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.



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### S-Cabling Sp. z o.o.

ul. Kakolewska 21, , Leszno, , 64-100, Poland

Tel: + 48 65 528 71 99 Fax:

Email: [s-cabling@s-cabling.pl](mailto:s-cabling@s-cabling.pl) Web: [www.s-cabling.pl](http://www.s-cabling.pl)

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