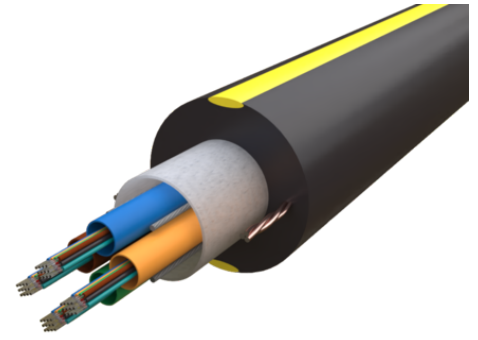


| | |
|---------------------|---|
| Product name | 48F G657A1 ULW overhead OFC micromodule Black/Yellow OD 7mm 4km/dr |
| Product code | MU1548003 |
| GTIN | 7332811364433 |
| ETIM-Class | EC000034 |



PRODUCT SPECIFICATIONS

48F G657A1 Ultra-Lightweight (ULW) aerial cables are designed for overhead pole installation. But can also be installed underground in ducts by pulling. Cable parameters such as cable diameter, stiffness and tensile strength are optimized for best installation performance. Openreach PIA approved, suitable for use alongside 11kV power cables and with tensile breaking force for maximum security, less than 2000N.

Measurements

| | |
|---------------|----------|
| Length | 1,000 mm |
| Height | 7 mm |
| Width | 7 mm |
| Weight | 35 g |

Technical Specifications - Cable Construction

| | |
|----------------------------------|--|
| Fibre Count | 48 |
| Cable Construction | Micro Module |
| Fibres per Tube | 12 |
| Fibre Colour Sequence | EIA/TIA-598A |
| Tube Colour Sequence | EIA/TIA-598A |
| Embedding Strength Member | 3 x 0.32 mm - brass coated steel wire |
| Moisture Barrier | Water blocking yarn & water swellable tape |
| Outer Sheath Material | HDPE (High Density Polyethylene) |

| | |
|--------------------------|--------------------------|
| Colour of Cable Sheath | Black |
| Strip Marking Width | Yellow 1.25 mm (nominal) |
| Halogen Free | Yes |
| UV Proof | Yes |
| Metal free | No |
| Cable Diameter | 7 mm |
| Cable Diameter Tolerance | +/- 0.3 mm |
| Nominal Cable Weight | 35 kg/km |

Technical Specifications - Cable Characteristics

| | |
|---|---|
| Tensile Break Load | 1,900 N |
| Tensile Strength (N) IEC-60794-1-21-E1 | 1,250 N |
| Crush Resistance - IEC- 60794-1-21-E3 | 2,000 N/10cm |
| Min. Bend Radius (During Installation) IEC-60794-1-21-E11 | 70 mm |
| Water Penetration Test IEC-60794-1-22-F5 | 1 m water head, 3m sample, 24 hours |
| Temperature Performance Installation IEC-60794-1-22-F1 | -10°C to +60°C (max. change in attenuation shall be ≤ 0.15 dB/km) |
| Temperature Performance Operation IEC-60794-1-22-F1 | -30°C to +70°C (max. change in attenuation shall be ≤ 0.15 dB/km) |
| Temperature Performance Storage IEC-60794-1-22-F1 | -40°C to +70°C (Max. change in attenuation shall be ≤ 0.15 dB/km) |
| Voltage Test 11 KV | If installed along power line minimum vertical distance of 1.8 m should be maintained |
| Resistance to wind/ice | Cable shall withstand 97 kph wind, no ice. 80 kph wind + 5mm ice. 0 kph wind, + 10mm ice. without appreciable sag |
| Max Span Length | 68 m |
| Maximum Span (in exceptional circumstances) | 80 m |

Technical Specifications - Fibre Characteristics

| | |
|---|------------------|
| Fibre Type | ITU-T G.657 A1 |
| Attenuation 1310nm | ≤ 0.35 dB/km |
| Attenuation 1550nm | ≤ 0.21 dB/km |
| Attenuation 1625nm | ≤ 0.23 dB/km |
| Chromatic Dispersion 1285-1330nm | ≤ 3.5 ps/(nm·km) |
| Chromatic Dispersion 1550nm | ≤ 18 ps/(nm·km) |
| Chromatic Dispersion 1625nm | ≤ 22 ps/(nm·km) |
| PMD (Max. Individual) | ≤ 0.15 ps/√km |
| PMD (Link design value) | ≤ 0.06 ps/√km |
| Cable cut off wavelength | ≤ 1260 nm |
| MFD 1310nm | 9.1 nm |
| MFD 1550nm | 10.3 nm |
| Bending Inducted Attenuation 1550nm 1 Turn ø 20mm | 0.75 dB |

| | |
|--|---------------------------|
| Bending Inducted Attenuation 1550nm 10 Turn \varnothing 30mm | 0.25 dB |
| Bending Inducted Attenuation 1625nm 1 Turn \varnothing 20mm | 1.5 dB |
| Bending Inducted Attenuation 1625nm 10 Turn \varnothing 30mm | 1.0 dB |
| Core-Cladding Concentricity Error | $\leq 0.5 \mu\text{m}$ |
| Cladding Diameter | 125 +/- 0.7 μm |
| Cladding Non Circularity | $\leq 0.8 \%$ |
| Primary Coating Diameter | 242 +/- 5 μm |