

Ruggedised 1mm Polymer Fibre Optic Cable



Technical Datasheet

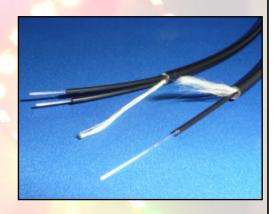
Rugged-jacket polymer fibres designed for harsher environments. Based on the now industry standard 1mm core size with 2.2mm jacket that OMC originally introduced to the marketplace back in the early eighties, these cables are far more resistant to abrasion and include a Keylar® aramid yarn strength member which helps prevent longitudinal stretch, which could otherwise cause damage to terminated ends if cables are pulled or dragged during installation or use. Available in both Simplex and Duplex versions.

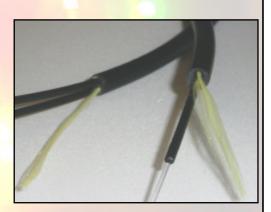
Key Features:

- Low attenuation in the visible light spectrum
- More resistant to crush & abrasion damage
- Aramid yarn strength member
- Large core makes for easy alignment
- Can be used with low cost Tx and Rx devices
- Simple to cut and terminate
- More durable than glass fibre
- Pull/tow installation methods possible
- RoHS Compliant

Typical Applications:

- Short distance datacomms Industrial/Office/Networking
- Medical Illumination/Sensors
- Optical isolation
- Signs & signalling Promotional/Point of sale/Traffic
- Sensors Speed/Position/Liquid
- Automotive Sensors/Illumination/Data bus
- **Lighting Spot Lighting, Light Curtains**







The Optoelectronic Manufacturing Corporation

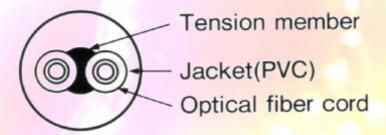
Simplex Type

Simplex type consists of a 1mm core fibre with 2.2mm PE jacket fitted inside a larger 5mm diameter black PVC outer jacket with Kevlar® strength members.



Duplex Type

Duplex type consists of a 1mm core 'figure of eight' duplex fibre inside a 6mm diameter black PVC outer jacket with Kevlar® strength members.



As the construction of both simplex and duplex types uses the standard 2.2mm PE jacket on the internal fibre, the simplex and duplex ruggedised fibre can be used with the standard range of polymer fibre connectors.



Technical Specifications:

Material Core: Polymethyl Methacrylate Material Cladding: Fluorinated Polymer

Type: Step Index

Numerical Aperture: 0.50 Acceptance Angle: 60°

Attenuation: 0.18 dB/m @ 650nm Operating Temperature: -40 to 85°C

Internal Jacket Material: Black PE Outer Jacket Material: Black PVC Internal Strength Member: Kevlar®

Outside Diameter: Simplex 5mm, Duplex 6mm

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