

FIBRE



About Us

With over 25 years experience of manufacturing optical fibres, Prysmian is able to offer an extensive product portfolio made to achieve the highest levels of quality and performance.

With a deep understanding of present and future market requirements, Prysmian's product range is targeted at the differing needs of the customer.

Prysmian is in the unique position of having access to all three major manufacturing processes; MCVD (Modified Chemical Vapour Deposition), OVD (Outside Vapour Deposition) and VAD (Vapour Axial Deposition).

This enables Prysmian to obtain an optimised range of products for different applications.

Enquiries

The optical characteristics of 50/125 Multimode Optical Fibre can be tailored to meet your precise specifications. Whatever your requirements, if you need more information or would like to place an order, please call Prysmian Telecom Cables and Systems on +39 02 6449 7568.

50/125 Multimode Optical Fibre

- > Lower system cost
- > Easy splicing
- > Compatibility



dega design group

FIBRE

50/125 Multimode Optical Fibre

Prysmian Telecom Cables and Systems is a world leader in optical networking, offering a comprehensive range of vertically integrated products and services.

We create everything from in-house local area networks to international communication links spanning oceans and continents.

Benefits

> Lower system cost

In a local network the cost of the transmitters is a substantial part of the total cost. With 50/125 multimode fibres, it is possible to use low cost transceivers, such as LEDs and VCSELs.

> Easy splicing

Local networks allow many users to connect to the network simultaneously. This implies that a simple and strong connection is required. With 50/125 multimode fibre it is possible to obtain easy, robust and low cost connections.

> Compatibility

50/125 multimode fibres are compatible with industry standards for fibre optics networks protocol like FDDI, Ethernet, Token Ring and ATM.

Application

50/125 multimode fibres are developed for all applications where the distances covered are short, such as Local Area Network (LAN) or all networks with a small extension like campus, buildings or offices. A multimode fibre also enables connections for backbone, riser or horizontal links. All these networks are characterized with many points of access to the fibre and a short distance covered. The index profile of multimode fibres is specifically tuned to provide the optimum solution for these local applications.

Mechanical specifications

Multimode optical fibre is proof tested at an elongation greater than or equal to 1%. This fibre is characterised in terms of Weibull plot and n value (Stress Corrosion Susceptibility Factor), with typical values above 19 (Dynamic Test).



Characteristics

The 50/125 Multimode fibre uses the physics of light and glass in innovative ways to confirm its leadership in local area network communications. Refinements to the index profile and coating geometries of the fibre ensure a high level of performance and a broad and future proof range of uses for this fibre.

The 50/125 Multimode fibre is compliant with ITU-T Recommendation G.651 and IEC 60793-2-10 A1a.

Key Features

- Splicing operation is facilitated by the large core.
- The large core of multimode fibres enables the use of low cost transceivers with a big spot size.
- The core index profile is optimised to boost the total band achievable.

DIMENSIONAL SPECIFICATIONS

Glass geometry

	Unit	
Core diameter	µm	50.0 ± 2.5
Cladding diameter	µm	125.0 ± 1.0
Core/cladding concentricity	µm	≤ 1.5
Cladding non circularity	%	≤ 1.0
Core non circularity	%	≤ 6.0

Coating geometry

	Unit	
External coating diameter	µm	245 ± 10
Coating/cladding concentricity error	µm	≤ 12.0

OPTICAL SPECIFICATIONS

Attenuation coefficients

	Unit	
@ 850 nm	dB/km	≤ 2.4 + 3.0
@ 1300 nm	dB/km	≤ 0.6 + 1.0

Modal Bandwidth

	Unit	
@ 850 nm	Mhz•Km	≥ 500 + 600
@ 1300 nm	Mhz•Km	≥ 500 + 1200

Numerical Aperture

	Unit	
		0.200 ± 0.015

Note: Higher bandwidth fibres, like OM3, are also available from stock.

Any questions? Our team of experienced technical staff is ready to talk to you. See contact details.