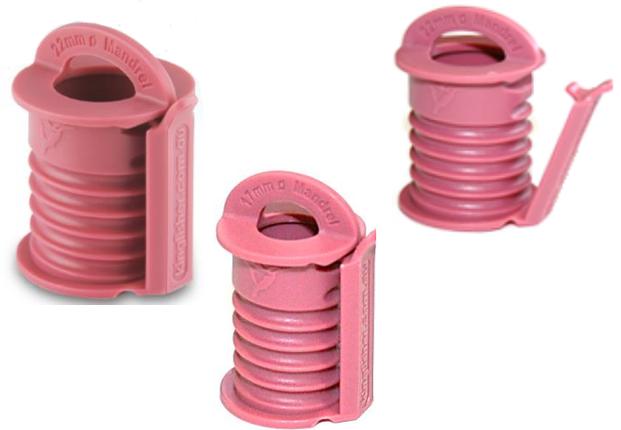


# OPT701 Series

## Multimode Mandrel Wraps

### Optical Communications Test Applications

- Multimode loss testing
- Multimode power testing



Revision 3

The Kingfisher International OPT701 mandrel wrap mode filters are used to improve loss testing accuracy on multimode optical fiber.

They comply with standard TIA/EIA-568-C, when used with 2 - 3 mm test cords and 50 or 62.5  $\mu\text{m}$  core fiber.

### Features

- Simply improve multimode power and loss testing
- Comply with TIA/EIA-568-C standards
- Unique hinged clip eases attachment and removal of test cord
- Includes mandrels for both 50 and 62.5  $\mu\text{m}$  core fiber
- Grooved body to ensure correct number of fiber loops are made on the mandrel

# OPT701 – Multimode Mandrel Wrap

Featuring a unique hinged clip to facilitate easy secure attachment and removal of the test launch cord, the Kingfisher International OPT701 mandrel wrap mode filters are designed for use with the industry standard 2 – 3 mm diameter test cords providing TIA/EIA-568-C.0. standard compliance at 50 & 62.5 μm.

To ensure consistency and repeatability of multimode test results, both international test standards and good practice require:

1. A mandrel to strip off light from unstable “edge modes, thus improving measurement stability.
2. A LED light source with defined modal launch condition, which is achieved with Kingfisher’s unique LED sources.

### MULTIMODE ATTENUATION STANDARDS DESCRIBING USE OF MANDRELS FOR LED SOURCES AND LTS INCLUDE:

- IEC 61280-4-1: Fiber-optic communication subsystem test procedures – Part 4-1: Cable plant and links - Multimode fiber-optic cable plant attenuation measurement.
- IEC 61300-1: Fiber Optic interconnecting devices and passive components –Basic test and measurement procedures. Part 1: General and Guidance.

### SPECIFICATIONS

Standard:	TIA-568-C.0			
Fiber core size	Mandrel diameter based on cable type			
	900 μm buffered	2.0 mm Jacketed	2.4 mm Jacketed	3.0 mm Jacketed
50 μm	25 mm	23 mm	23 mm	22 mm
62.5 μm	20 mm	18 mm	18 mm	17 mm

- IEC 61300-3-4: Fiber Optic interconnecting devices and passive components – Basic test and measurement procedures. Part 3-4: Examination & measurements - Attenuation.
- NECA/BICSI 568: Installing Commercial Building Telecommunications Cabling.
- TIA/EIA 455-50-B: Light Launch Conditions of Long-Length Graded-Index Optical Fiber Spectral Attenuation Measurements.
- TIA/EIA-568-C.0: Generic Telecommunications Cabling for Customer Premises.

### DEFAULT REQUIREMENTS ARE:

- LED sources with specific Coupled Power Ratio (CPR), Centre Wavelength and possibly Spectral Width characteristics.
- A mandrel wrap mode filter of correct diameter
- Tests may require one or both 850 / 1300 nm wavelengths.
- A two-way or bi-directional measurement procedure.

### KINGFISHER MULTIMODE INSTRUMENTS COMPLY WITH THE REQUIREMENTS AS FOLLOWS:

All Kingfisher 850/1300 nm LED sources and two way LTS are CPR Cat = 1 and Encircle Flux compliant at 50μm (OM2 & OM3).

### ORDERING INFORMATION

Description	Part number
Option, Mandrel Wrap Filters, TIA, 50 & 62.5 μm	OPT701

### STANDARD COMPONENTS

Description	Quantity
22 mm Mandrel Wrap	1
17 mm Mandrel Wrap	1

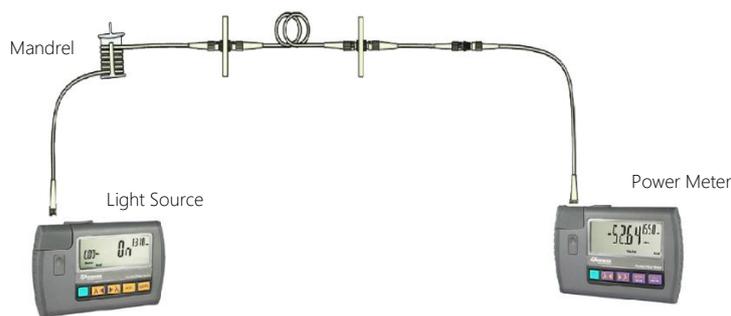


Figure: Test the multimode fiber link accurately using Kingfisher’s Multimode Mandrel

### AUTHORIZED DEALER