

# Large Core Multi-mode Optical Fibre (200/230 $\mu\text{m}$ )

## Description

The large core multi-mode fibre has high NA and a large core. With high NA and large core, the fibre has higher coupling efficiency and can collect higher powers from sources than standard single-mode or graded-index fibres. With the accurate control of index profile by PCVD process, the bandwidth is better than fibres manufactured with other processes.

## Application

- Local-area network
- Sensors
- Laser Power delivery
- Medical systems
- Optical device and connectors
- Data communication in consumer electronics

## Process

YOFC fibres are manufactured using the advanced Plasma activated Chemical Vapor Deposition (PCVD) process. Because of the inherent advantages of the process, YOFC fibres show extremely refined refractive index (RI) profile control, excellent geometrical performance, low attenuation, etc.

## Characteristics

- Efficient coupling to LED and laser sources
- High bandwidth and low attenuation at 850 nm and 1300 nm
- Capable of handling high powers
- Dual UV-Cured Acrylate Coating offering good protection
- Excellent strippability

## Customer variations

- Available in a range of NA, core size and index profile to meet customer requirement

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Characteristics	Conditions	Specified Values		Units
<b>Optical characteristics</b>		<b>200/230-37</b>	<b>200/230-40</b>	
Numerical Aperture (calculated)		0.36–0.40	0.40–0.45	
Attenuation	850 nm	<7.0	<6.0	[dB/km]
Bandwidth	850 nm	>20	>100	[MHz · km]
Index profile		Step Index	Graded Index	
<b>Geometrical characteristics</b>				
Core diameter		200 ± 4	200 ± 4	[ $\mu\text{m}$ ]
Cladding diameter		230+0/–10	230+0/–10	[ $\mu\text{m}$ ]
Coating diameter		500 ± 30	500 ± 30	[ $\mu\text{m}$ ]
Coating/cladding concentricity error		≤5.0	≤5.0	[ $\mu\text{m}$ ]
<b>Mechanical characteristics</b>				
Proof test	off line	>75	>75	[KPSI]
		>16.3	>16.3	[N]
Delivery length (km/reel)		≥0.8 ≤4.4	≥0.8 ≤4.4	[km]
<b>Material</b>				
Core		Pure silica glass	Pure doped silica glass	
Cladding		Fluoroacrylate		

**Remarks:**

1. Specification for attenuation and bandwidth varies with measurement conditions.
2. Other fibre lengths are available on request.
3. Other proof test levels are available.