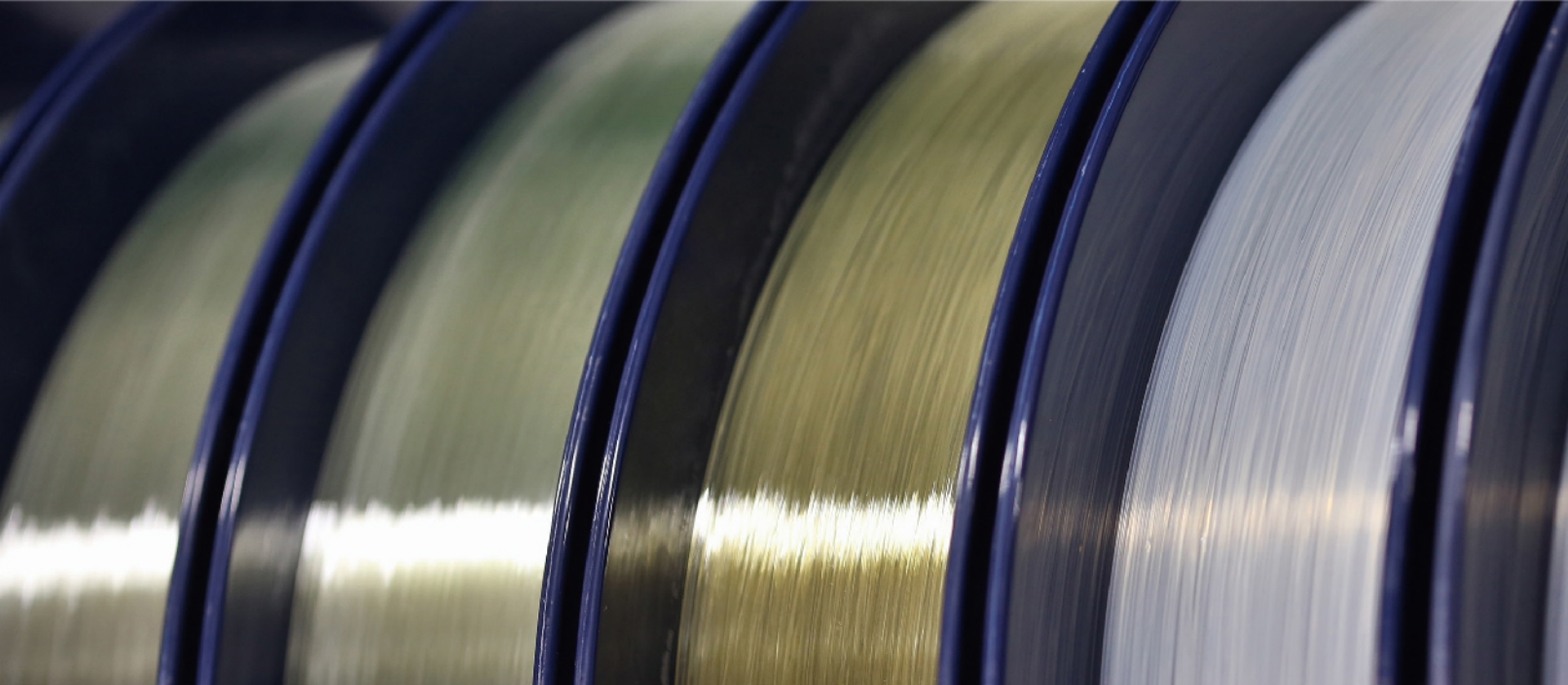




Graded Index Multi-mode Fibre

The YOFC glass-cladding graded index multi-mode fibre (GIMM) features graded index distribution, optimized optical characteristics at the 850nm and 1300nm operating wavelengths, very low attenuation, and extremely high bandwidth. This series of GIMM features different core diameters, cladding diameters, and NAs, and can be customized to suit various applications to the greatest extent according to customer requirements.

YOFC optical fibres are manufactured using the advanced PCVD process. The PCVD process features precise deposition control, enabling perfect implementation of the preset waveguide refractive index profile. The optical fibres manufactured using the PCVD process exhibit excellent geometrical, optical, environmental, and mechanical characteristics.

Customization Information

- NA: 0.14~0.3
- Core-cladding diameter ratio (CCDR): 1.05 ~ 2.0
- Fibre core diameter: 50 μm ~ 1,000 μm

Features

- High efficiency of coupling with LED and laser sources
- High-power optical energy transmission
- Excellent strip force stability
- Low attenuation and high bandwidth

Applications

- Fibre sensors and laser energy transmission
- Data communication, local area network (LAN), and CATV
- Medical equipment
- Optical equipment and connectors

Specifications–1

Fibre type		GI 50/125-20/250	GI 80/125-30/250	GI 100/125-29/250	GI 100/140-29/250	GI 105/125-30/250	GI 100/125-14/250
Part No.		GI2012-E	GI2017-C	GI2016-F	GI2016-H	GI2017-A	GI2011-A
Optical properties							
NA		0.20±0.015	0.30±0.02	0.29±0.02	0.29±0.02	0.30±0.02	0.14±0.02
Attenuation	@850nm (dB/km)	≤2.45	≤3.5	≤3.5	≤3.2	≤4.0	≤6.0
	@1300nm (dB/km)	≤0.6	≤0.7	≤0.7	≤0.8	≤1.2	-
Bandwidth	@850nm (MHz·km)	≥100	≥100	≥100	≥100	≥100	-
	@1300nm (MHz·km)	≥200	≥200	≥200	≥200	≥200	-
Geometrical properties							
Core diameter of optical fibre (μm)		50.0±2.0	80.0±3.0	100.0±3.0	100.0±3.0	105.0±3.0	100.0±3.0
Cladding diameter (μm)		125.0±2.0	125.0±2.0	125.0±2.0	140.0±2.0	125.0±2.0	125.0±2.0
Outer diameter of optical fibre (μm)		250.0±10.0	250.0±10.0	250.0±10.0	250.0±10.0	250.0±10.0	250.0±10.0
Core/cladding concentricity error (μm)		≤3.0	≤3.0	≤3.0	≤3.0	≤3.0	≤3.0
Core non-circularity (%)		≤2.0	≤5.0	≤2.0	≤3.0	≤2.0	≤3.0
Cladding non-circularity (%)		≤1.0	≤1.0	≤1.0	≤1.0	≤1.0	≤1.0
Material							
Material of fibre core		Ge, F-doped silica glass					
Cladding material		Pure silica glass					
Coating material		Dual-layer, UV-cured acrylate					
Mechanical performance							
Proof test level (kpsi)		100	100	100	100	100	100

Specifications–2

Fibre type		GI 105/125-24/250	GI 50/80-29/165	GI 300/330-25/500	GI 200/220-22/500	GI 230/250-22/500
Part No.		GI2014-J	GI2016-C	GI2014-B	GI2013-N	GI2013-P
Optical properties						
NA		0.24±0.02	0.29±0.02	0.25±0.02	0.22±0.02	0.22±0.02
Attenuation	@850nm (dB/km)	≤3.5	≤4.0	≤7.0	≤6.0	≤5.0
	@1300nm (dB/km)	≤1.5	≤2.0	-	-	-
Bandwidth	@850nm (MHz·km)	≥100	≥100	-	-	-
	@1300nm (MHz·km)	≥200	≥200	-	-	-
Geometrical properties						
Core diameter of optical fibre (μm)		105.0±3.0	50.0±3.0	300.0±10.0	200.0±4.0	230.0±5.0
Cladding diameter (μm)		125.0±2.0	80.0±2.0	330.0±5.0	220.0±3.0	250.0±5.0
Outer diameter of optical fibre (μm)		250.0±10.0	165.0±8.0	500.0±20.0	500.0±20.0	500.0±20.0
Core/cladding concentricity error (μm)		≤3.0	≤3.0	≤3.0	≤3.0	≤3.0
Core non-circularity (%)		≤2.0	≤2.0	-	-	-
Cladding non-circularity (%)		≤1.0	≤1.0	-	-	-
Material						
Material of fibre core		Ge, F-doped silica glass				
Cladding material		Pure silica glass				
Coating material		Dual-layer, UV-cured acrylate				
Mechanical performance						
Proof test level (kpsi)		100	100	100	100	100

• 010027 Version No. 202506