

Fiber OM1 62,5/125

Multimode Optical Fiber

V-Protect offers YOFC OM1(62.5/125μm) Multimode Fibre complies with or exceeds ISO/IEC 11801-1 OM1 specification, IEC 60793-2-10 A1-OM1 specification, and TIA-492AAAF A1-OM1 specification.



▣ Features

- Superior geometry uniformity
- Low attenuation
- High bandwidth at wavelengths of 850nm and 1300nm
- Manufactured by PCVD process
- Extremely refined refractive index profile
- Coated with YOFC's proprietary dual layer UV

▣ Application

- Local area networks (LAN)
- Video, voice and data services
- Gigabit Ethernet using laser or LED light sources
- High resistance to micro-bending
- Optimized performance in tight-buffer cable applications
- Stable performance over a wide range of environmental conditions

▣ Fiber characteristics

	Multimode	OM1 62,5/125
■ Fiber type		
■ Composition		
Coating		Dual layers of UV-cured acrylate
■ Geometrical Characteristics		
Core Diameter		$62.5 \pm 2.5 \mu\text{m}$
Core Non-Circularity		$\leq 5.0 \%$
Cladding Diameter		$125.0 \pm 1.0 \mu\text{m}$
Cladding Non-Circularity		$\leq 1.0 \%$
Coating Diameter		$245 \pm 7 \mu\text{m}$
Coating/Cladding Concentricity Error		$\leq 10.0 \mu\text{m}$
Coating Non-Circularity		$\leq 6.0 \%$
Core/Cladding Concentricity Error		$\leq 1.5 \mu\text{m}$
Delivery Length		up to 17.6 [km/reel]
■ Optical Characteristics		
Attenuation	at 850 nm	$\leq 2.7 \text{ dB/km}$
	at 1300 nm	$\leq 0.6 \text{ dB/km}$
Overfilled Modal Bandwidth	at 850 nm	$> 200 \text{ MHz}\cdot\text{km}$
	at 1300 nm	$> 500 \text{ MHz}\cdot\text{km}$
Numerical Aperture		0.275 ± 0.015
Group Refractive Index	at 850 nm	1.496
	at 1300 nm	1.491
Zero Dispersion Wavelength, λ_0	1320~1365 nm	
Zero Dispersion Slope, S_0	$1320 \leq \lambda_0 \leq 1348 \text{ nm}$	≤ 0.11 [ps/(nm ² ·km)]
	$1348 \leq \lambda_0 \leq 1365 \text{ nm}$	$\leq 0.001 (1458 - \lambda_0)$ [ps/(nm ² ·km)]
Macrobending loss		
	for 100 turns at a 37,5 mm mandrel radius	$\leq 0.50 \text{ dB at 850 nm}$
	for 100 turns at a 37,5 mm mandrel radius	$\leq 0.50 \text{ dB at 1300 nm}$

Fiber OM1 62,5/125

Multimode Optical Fiber

Optical fiber

Mechanical Characteristics

Fiber proof test level		$\geq 9 \text{ N}$
		$\geq 1 \%$
		$\geq 100 \text{ kpsi}$
Coating strip force	typical average force	$1.3 \sim 8.9 \text{ N}$
	peak force	$\geq 1.3, \leq 8.9 \text{ N}$
Dynamic Stress Corrosion Susceptibility		
Parameter (n_d , typical)		20

Backscatter Characteristics

Step (Mean of Bidirectional Measurement) 1300nm		$\leq 0.10 \text{ dB}$
Irregularities Over Fibre Length and Point Discontinuity	1300nm	$\leq 0.10 \text{ dB}$
Attenuation Uniformity	1300nm	$\leq 0.10 \text{ dB/km}$

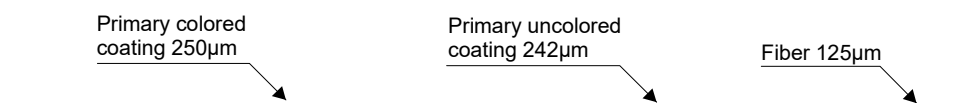
Environmental Characteristics

Induced attenuation at 850 nm and 1300 nm		
from -60°C to +85°C temperature cycling		$\leq 0.10 \text{ dB/km}$
-10~+85°C / 4%~98 % RH temperature humidity cycling		$\leq 0.10 \text{ dB/km}$
+85°C dry heat		$\leq 0.10 \text{ dB/km}$
+85°C, 85% RH damp heat		$\leq 0.10 \text{ dB/km}$
+23°C water immersion		$\leq 0.10 \text{ dB/km}$

Packing

Fiber type	Multimode	OM1 62,5/125
Length on spool [km]		up to 17,6 km
Spool dimension		
	Flange diameter [mm]	234.5
	Barrel diameter [mm]	152.0
	Inner width [mm]	96.0
	Outer width [mm]	116.0
	Bore diameter [mm]	25.4

Fiber construction



Order code

OC-F61-x

Fiber color

00 - neutral, 01 - red, 02 - green, 03 - blue, 04 - yellow, 05 - white, 06 - grey, 07 - brown, 08 - violet, 09 - aqua, 10 - black, 11 - orange, 12 - pink, 13 - neutral/black, 14 - red/black, 15 - green/black, 16 - blue/black, 17 - yellow/black, 18 - white/black, 19 - grey/black, 20 - brown/black, 21 - violet/black, 22 - aqua/black, 23 - black/white, 24 - orange/black, 25 - pink/black

Fiber OM1 62,5/125

Multimode Optical Fiber

Optical fiber

Standard colours:

Fiber type	G.652.D	G.657.A1,A2,B3	OM1 62,5/125	OM2 50/125	OM3 50/125	OM4 50/125	OM5 50/125
Fiber colour	Yellow	White	Blue	Orange	Aqua	Violet	Green
RAL	1021	9010	5015	2003	6027	4005	6001

Label on the spool contain

Tape of fiber
Length

Warranty

V-Protect warrants that the delivered fibers meet this specification. If the fibers fail to meet this specification, V-Protect agrees to replace such failed fibers. V-Protect makes no warranty, however, as to the results to be obtained from the use of these fibers. In no event shall V-Protect be liable for removal or installation costs or other indirect or consequential damages.