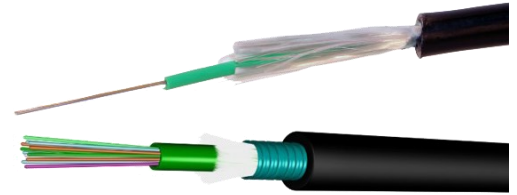


## Multimode Fiber Optic Cables 50/125 OM3 - Loose Tube - indoor/outdoor - Glass strands

### Applicable Standards

- IEC / EN 60793-2-10: type A1-OM3
- TIA/EIA-492 AAAF (formerly AAAC)
- ITU-T G.651.1
- ISO/IEC 11801: Category OM3
- ANSI/TIA/EIA-568.3-D



### General informations

- Core tube, with 2 – 24 fibers, glass yarn, corrugated steel tape armor and PE sheath, rodent proof
- Supports high data transmission speeds
- The sheath is made of PE, for outdoor use and direct burial, armoured and anti rodent
- Fiber optic cable exceeds requirements of EN50173-1, ISO/IEC11801 and EN/IEC60794-3 for 10 Gbit/s installations

Cabled Fibre Attenuation			
Attribute	Measurement method	Units	Limits
Attenuation at 850 nm	IEC 60793-1-40	dB/km	≤ 3.0
Attenuation at 1300 nm	IEC 60793-1-40	dB/km	≤ 1.0
Optical Specifications (Bare Fibre)			
Attribute	Measurement method	Units	Limits
Attenuation at 850 nm	IEC 60793-1-40	dB/km	≤ 2.5
Attenuation at 1300 nm	IEC 60793-1-40	dB/km	≤ 0.7
Attenuation Difference btw 1380 nm and 1300 nm	IEC 60793-1-40	dB/km	≤ 3.0
Point Discontinuity at 850 nm and 1300 nm	IEC 60793-1-40	dB	≤ 0.1
Numerical Aperture	IEC 60793-1-43	-	0.200 ± 0.015
Bending Loss			
Attribute	Measurement method	Units	Limits
Mandrel Radius = 7.5 mm, 2 turns at 850 / 1300 nm	IEC 60793-1-40	dB	≤ 0.2 / ≤ 0.5
Mandrel Radius = 15 mm, 2 turns at 850 / 1300 nm	IEC 60793-1-40	dB	≤ 0.1 / ≤ 0.3
Bandwidth			
Attribute	Measurement method	Units	Limits
Overfilled Launch Modal Bandwidth (OFL) at 850 nm	IEC 60793-1-41	MHz • km	≥ 1500
Overfilled Launch Modal Bandwidth (OFL) at 1300 nm	IEC 60793-1-41	MHz • km	≥ 500
Effective Modal Bandwidth (EMB) at 850 nm	IEC 60793-1-49	MHz • km	≥ 2000

## Multimode Fibre Optic Cables 50/125 OM3 - Loose Tube - indoor/outdoor - Glass strands

Multimode System Reach		
IEEE Standard	Units	Transmission Distance
10GBASE-SR	m	300
40GBASE-SR4	m	140*
100GBASE-SR10	m	140*
100GBASE-SR4	m	70

\*Indicated link distances require total connector loss  $\leq 1.0$  dB, and VCSEL spectral bandwidth of  $\leq 0.45$  nm

Geometrical Specifications			
Attribute	Measurement method	Units	Limits
Core diameter	IEC 60793-1-20	$\mu\text{m}$	$50 \pm 2.5$
Core non-Circularity	IEC 60793-1-20	%	$\leq 5$
Core-Cladding Concentricity error	IEC 60793-1-20	$\mu\text{m}$	$\leq 1$
Cladding diameter	IEC 60793-1-20	$\mu\text{m}$	$125.0 \pm 1.0$
Cladding non-Circularity	IEC 60793-1-20	%	$\leq 0.7$
Cladding diameter – uncoloured	IEC 60793-1-21	$\mu\text{m}$	$242 \pm 7$
Cladding diameter – coloured	IEC 60793-1-21	$\mu\text{m}$	$250 \pm 15$
Coating non-Circularity	IEC 60793-1-21	%	$\leq 5$
Coating-Cladding Concentricity error	IEC 60793-1-21	$\mu\text{m}$	$\leq 10$

Mechanical Specifications			
Attribute	Measurement method	Units	Limits
Proof stress level	IEC 60793-1-30	GPa	$\geq 0.7$ (1 %)
Average strip force	IEC 60793-1-32	N	$1.0 \leq F_{\text{avg.strip}} \leq 3.0$
Peak strip force	IEC 60793-1-32	N	$1.3 \leq F_{\text{peak.strip}} \leq 8.9$
Dynamic fatigue, unaged and aged	IEC/EN 60793-1-33	-	$\text{nd} \geq 20$

Group index of refraction			
Attribute	Measurement method	Units	Values
Typical Group index of refraction at 850 nm	IEC 60793-1-22	-	1.482
Typical Group index of refraction at 1300 nm	IEC 60793-1-22	-	1.477

Reference	Description
AD-FO-MM50-6-OM3	6 Fibers OM3 50/125
AD-FO-MM50-12-OM3	12 Fibers OM3 50/125
AD-FO-MM50-24-OM3	24 Fibers OM3 50/125
AD-FO-MM50-48-OM3	48 Fibers OM3 50/125