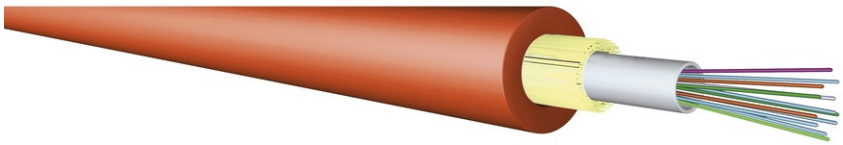
FO Indoor cable 12G50/125µ OM2, LSOH



tde - Standard FO Cables

The standard fiber optic cable types of tde specifically for the assembling of patch and adapter cables, pigtails and trunk cables has been developed. Also the use in FTTD applications inside buildings is possible. The breakout cables have up to 24 individual elements with a 2mm diameter. The overall cable diameter is very slim.

These cables are characterized by very good termination properties. The cable jacket and the secondary coating are easy removable.

Application

- The intended application for this cable is as patch cords for data centres
- Suited for 12 fiber MPO/MTP® connectors
- Suited for single fiber connectors as tMD - tde Micro Distribution cable

tde® trans data elektronik GmbH

Headquarter address:
Lingener Str. 2
D-49626 Bippen/Ohrte
Tel.: +49 5435 9511 0
Fax.: +49 5435 9511 32

Sales office address:
Prinz-Friedrich-Karl-Str. 46
D-44135 Dortmund
Tel.: +49 231 8805 61 13
Fax.: +49 231 8805 61 15

info@tde.de | www.tde.de

 © tde GmbH, all rights reserved, errors excepted.

FO Indoor cable 12G50/125µ OM2, LSOH

Technical Data

Standards	EN 50173-5
	IEC 60794-2-20
	ISO/IEC 24764
Flame resistance	IEC 60332-1-2
	IEC 60332-2-2
	IEC 60754-1
	IEC 60754-2
	IEC 61034

Cable construction

Type	IVH12G50-OM2
Loose tube	12 coated fibers within PVC-core tube
Wall thickness PVC-tube	0.20 mm – 0.25 mm
Fiber type	MM-OM2, 50/125µ, Corning
Strength members	Aramid yarn
Outer jacket	LSZH (Halogen free, low smoke, flame retardant thermoplastic compound)
Jacket color	Orange, RAL 2003
Identification	"t d e – IVH12G50-MPO-OM2 LSZH" and sequential meter marking + Lot number

Physical properties

Outer diameter cable	3.0 ± 0.1 mm
Diameter PVC-core tube	1.8 ± 0.1 mm
Max. tensile load	300 N
Min. bending radius	30 mm
Temperature range (storage, installation, operation)	-20°C to +70°C

FO Fiber

Type	Corning 50/125µ OM2 multimode fiber
Manufacturer	Corning

Optical Specifications

Bandwidth	500 at 850 nm / 500 at 1300 nm
Attenuation	At 850 nm max. ≤ 2.5 dB/km At 1300 nm max. ≤ 0.8 dB/km
Numerical Aperture	0.200 ± 0.015

© tde GmbH, all rights reserved, errors excepted.

FO Indoor cable 12G50/125µ OM2, LSOH

Dimensional Specifications

Core Diameter	50.0 ± 3.0 µm
Cladding Diameter	125.0 ± 2.0 µm
Core-Clad Concentricity	≤ 3.0 µm
Cladding Non-Circularity	< 2.0%
Core Non-Circularity	≤ 5.0%
Coating Diameter	245 ± 5 µm
Coating-Cladding Concentricity	< 12 µm

Environmental Specifications

Enviromental Test	Test Condition	Induced Attenuation 850 nm and 1300 nm (dB/km)
Temperature Dependence	-60°C to +85°C	≤ 0.20
Temperature Humidity Cycling	-10°C to +85°C and 4% to 98% RH	≤ 0.20
Operating Temperature Range	-60°C to +85°C	

Mechanical Specifications

Proof Test	The entire fiber length is subjected to a tensile stress ≥ 100 kpsi (0.7 GN/m²).
Length	Fiber lengths available up to 8.8 km/spool.

Performance Characterizations

Refractive Index Difference	2%
Effective Group Index of Refraction	850 nm: 1.490 1300 nm: 1.486
Fatigue Resistance Parameter (nd)	20
Coating Strip Force	Dry: 0.6 lbs (2.7N) Wet: 14 days in 23°C water soak: 0.6 lbs (2.7N)
Cromatic Dispersion	Zero Dispersion Wavelength (λ0): 1300 nm ≤λ0 ≤ 1320 nm Zero Dispersion Slope (S0): ≤ 0.101 ps/(nm²*km)

Product variants & accessories

Art.-No.	Description
L-IVH12E09-MPO	FO Indoor cable 12E9/125µ OS2, LSOH
L-IVH12G50-MPO-OM2	FO Indoor cable 12G50/125µ OM2, LSOH
L-IVH12G50-MPO-OM3	FO Indoor cable 12G50/125µ OM3, LSOH
L-IVH12G50-MPO-OM4	FO indoor cable 12G50/125µ OM4, LSOH
L-IVH12G62-MPO	FO Indoor cable 12G62,5/125µ OM1, LSOH

© tde GmbH, all rights reserved, errors excepted.