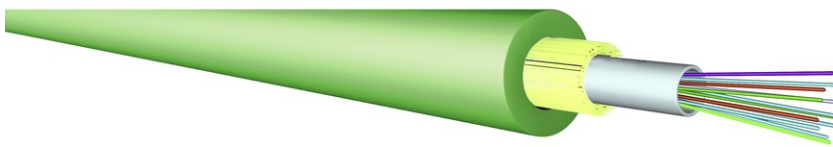


FO indoor cable 12G50/125 μ OM5, LSOH



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 FTTH 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



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Technical Data

Loose tube

Loose tube	unfilled (FRNC)
Wall thickness PVC-tube	0.20 mm – 0.25 mm
Outer diameter	1.8 mm with 12 optical fibres
Tube colour	green
Colour code fibres (1-12)	red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink

Strain relief elements

Strain relief elements	Aramid
Strength members	Fiberglass-reinforced plastic (FRP)

Outer jacket

Outer jacket	Halogen-free and flame-retardant material (FRNC)
Wall thickness	approx. 0.4 mm
Outer diameter	approx. 3.0 mm
Colour	lime green
Inkjet - marking (black)	t d e – IVH12G50–MPO-OM5 LSZH (F.RoHS)

Mechanical characteristics

Min. bending radius fixed (static) acc. IEC 60794-1-2 E11A	10 x outside diameter
Min. bending radius during assembly (dynamic), with additional tensile strain acc. IEC 60794-1-2 E6	15 x outside diameter
Max. tensile force acc. IEC 60794-1-2 E1, short term	300 N
Max. crush resistance acc. IEC 60794-1-2 E3, long term	150 N/dm
Max. crush resistance acc. IEC 60794-1-2 E3, short term	1500 N/dm
Cable weight	15.0 kg/km

Thermal characteristics

Transport and storage	-40°C to +80°C
Verlegung	-20°C to +50°C
In use acc. IEC 60794-1-2 F1	-40°C to +80°C

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Fire performance

Cable is flame-retardant	acc. to IEC 60332-1-2
Smoke density	acc. to IEC 61034
Halogen-free	acc. to IEC 60754-1
Acidity of the combustion gases	acc. to IEC 60754-2
Fire load	0.17 MJ/m

Chemical characteristics	No resistance to oil, petrol, acid and leach
Standardisation	IEC 60794-2

FO Fiber

Type	Corning ClearCurve [®] 50/125 μ OM5 multimode fiber
Design	Optical fibre G50/125 μ m (conform to IEC 60793-2-10 type A1a.4b) with optical core 50 μ m +/- 2.5 μ m diameter and optical cladding 125 μ m +/- 1 μ m diameter

Geometrical properties

Core concentricity error	< 5 %
Coating concentricity error	< 1 %
Core coating eccentricity	< 1.5 μ m
Eccentricity of coating	< 12 μ m
Screen test	\geq 0.7 GPa (100 kpsi)

Transmission characteristics

Attenuation, maximum values 850 nm (cabled fibre)	2.5 dB/km
Attenuation, maximum values 953 nm (cabled fibre)	1.8 dB/km
Attenuation, maximum values 1300 nm (cabled fibre)	0.7 dB/km
Attenuation, maximum values 850 nm (uncabled fibre)	2.34 dB/km
Attenuation, maximum values 953 nm (uncabled fibre)	1.7 dB/km
Attenuation, maximum values 1300 nm (uncabled fibre)	0.64 dB/km
Macrobending, induced attenuation 100 turns, 37.5 mm	\leq 0.5 dB (at 850 nm)
Macrobending, induced attenuation 100 turns, 37.5 mm	\leq 0.5 dB (at 1300 nm)
Macrobending, induced attenuation 2 turns, 15 mm	\leq 0.1 dB (at 850 nm)
Macrobending, induced attenuation 2 turns, 15 mm	\leq 0.3 dB (at 1300 nm)

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Macrobending, induced attenuation 2 turns, 7.5 mm	≤ 0.3 dB (at 850 nm)
Macrobending, induced attenuation 2 turns, 7.5 mm	≤ 0.5 dB (at 1300 nm)
Bandwidth (OFL), minimum values 850 nm	3500 MHz x km
Bandwidth (OFL), minimum values 953 nm	1850 MHz x km
Bandwidth (OFL), minimum values 1300 nm	500 MHz x km
Effective modal Bandwidth-length product min. 850 nm	4700 MHz x km
Effective modal Bandwidth-length product min. 953 nm	2470 MHz x km
Numerical aperture	0.200 +/- 0.015
Effective group of refraction 850 nm	1.482
Effective group of refraction 1300 nm	1.477

Product variants & accessories

Art.-No.	Description
L-IBH12G50-MPO-5-LG	FO indoor cable 12G50/125 μ OM5, LSOH