

FO Breakout cable 62,5/125 $\mu$  OM1 LSOH 2,0mm



## 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.

### Features

- Robust, flexible fiber optic Duplex cable with a combined sheath based on 2 single fiber cables 2.8 mm with semi tight buffer 0.9mm.
- Easy handling and simple to strip off.
- Low Fire load due to the halogen free LSOH sheath.

### Application

- Patch cable between terminal distributors and/or end devices
- Direct connector installation
- Can be spliced in cable terminal distributors.



**tde<sup>®</sup>** 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.: +49 231 914 36 99  
Fax.: +49 231 914 31 29

info@tde.de | www.tde.de

## FO Breakout cable 62,5/125 $\mu$ OM1 LSOH 2,0mm

### Optical characteristics

The cables are available with different types of fiber

## Technical Data

### Mechanical characteristics

Temperature range	Operation: -20 to +60°C IEC 60794-2-10 -10 to +60°C for assembled patch cords
Tensile performance	IEC 60794-1-21 E1 A
Crush resistance	IEC 60794-1-21 E3
Impact	IEC 60794-1-21 E4
Repeated bending	IEC 60794-1-21 E6
Torsion	IEC 60794-1-21 E7
Bend	IEC 60794-1-21 E11 A

### General characteristics

Sheath colour	G62.5/125 OM1 grau
Zero halogen, no corrosive gases	IEC 60754-1/-2, EN 60754-1/-2, VDE 0482-754-1/-2
Flame propagation	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2, SEV TP 20B/3C 3.4.1.1
Minimum smoke emission	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2
Reaction to fire (Euroclasses)	EN 13501-6: D <sub>ca</sub> -s2,d1,a1

### Optical Characteristics

Fibertype	MM-OM1, 62.5/125 $\mu$	
Numerical aperture	0.275 $\pm$ 0.015	
Core $\emptyset$	62.5 $\pm$ 2.5 $\mu$ m	
Max. Core non-circularity	5 %	
Cladding $\emptyset$	125 $\pm$ 2 $\mu$ m	
Max. Cladding non-circularity	1.0 %	
Max. Cladding/Core concentricity error	1.5 $\mu$ m	
Max. Coating concentricity error	12 $\mu$ m	
Coating $\emptyset$	245 $\pm$ 5 $\mu$ m	
Proof test	100 kpsi	
Wavelength	850 nm	1300 nm
Attenuation typ. (cabled)	2.8 dB/km	0.6 dB/km
Attenuation max. (cabled)	3.0 dB/km	0.7 dB/km
OFL-Bandwidth per TIA/EIA 455-204 and IEC 60793-1-41	200 MHz x km	600 MHz x km
RML-Bandwidth per TIA/EIA 455-204 and IEC 60793-1-41	220 MHz x km	
Refractive index	1.496	1.491

Description	Duplex I-K(ZN)HH
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Cable $\varnothing$	4.8 x 3.2 mm
Weight	21 kg/km
Bending radius	50 mm
Tensile load	200 N
Crush resistance short term	3000 N/cm
Fire load	100 kWh/km
Fire load	360 MJ/km

### FO Fiber

Type	Corning 62.5/125 $\mu$ OM1 multimode fiber
Manufacturer	Corning

### Optical Specifications

Bandwidth	160/200 at 850 nm / 500 at 1300 nm
Attenuation	At 850 nm max. $\leq$ 3.0 dB/km At 1300 nm max. $\leq$ 0.7 dB/km
Numerical Aperture	0.275 $\pm$ 0.015

### Dimensional Specifications

Core Diameter	62.5 $\pm$ 3.0 $\mu$ m
Cladding Diameter	125.0 $\pm$ 2.0 $\mu$ m
Core-Clad Concentricity	$\leq$ 3.0 $\mu$ m
Cladding Non-Circularity	$<$ 2.0%
Core Non-Circularity	$\leq$ 5.0%
Coating Diameter	245 $\pm$ 5 $\mu$ m
Coating-Cladding Concentricity	$<$ 12 $\mu$ m

### Environmental Specifications

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

### Mechanical Specifications

Proof Test	The entire fiber length is subjected to a tensile stress $\geq$ 100 kpsi (0.7 GN/m <sup>2</sup> ).
Length	Fiber lengths available up to 17.6 km/spool.

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### Performance Characterizations

Refractive Index Difference	2%
Effective Group Index of Refraction	850 nm: 1.496 1300 nm: 1.491
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)
Chromatic Dispersion	Zero Dispersion Wavelength ( $\lambda_0$ ): 1332 nm $\leq \lambda_0 \leq$ 1354 nm Zero Dispersion Slope (S0): $\leq 0.097$ ps/(nm <sup>2</sup> *km)

### Product variants & accessories

Art.-No.	Description
L-IVHH02E09	FO Breakout cable 9/125 $\mu$ G.652.D LSOH 2,0mm
L-IVHH02G50	FO Breakout cable 50/125 $\mu$ OM2 LSOH 2,0mm
L-IVHH02G50-OM3	FO Breakout cable 50/125 $\mu$ OM3 LSOH 2,0mm
L-IVHH02G50-OM4	FO Breakout cable 50/125 $\mu$ OM4 LSOH 2,0mm
L-IVHH02G62	FO Breakout cable 62,5/125 $\mu$ OM1 LSOH 2,0mm