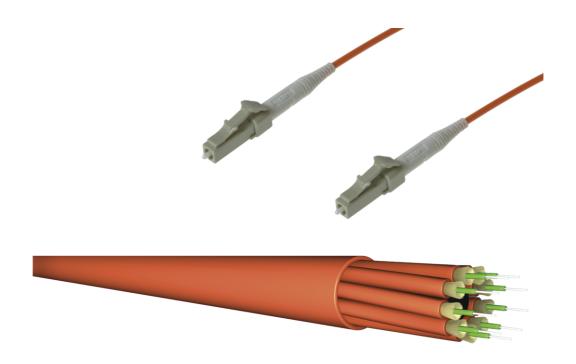


FO Breakoutl cable 24x LC/24x LC 24G62,5/125µ OM1 LSHF, Length: xxxx



# tde - Fiber Optic Assemblies

The tde patch and trunk cables are manufactured completely at the German facility in Ohrte. Production processes at tde meet the latest standards, and the company has one of the most up-to-date fiber optic assembly houses in Europe. Fiber optic patch cables and trunk cables are manufactured in many different configurations using highly automated processes on two independent mass production lines. The range of products on offer encompasses the entire spectrum of connector types available on the market. Production capacity is around 100,000 fiber optic connectors per month, and this can be ramped up easily whenever required. To guarantee consistently top quality, only the best components from renowned vendors are used. All tde production staff have the necessary qualifications and education, and have been well trained in using specialist technical equipment such as laser cleavers and glue-dispensing robots.

Each cable application is subjected to a full test procedure comprising interferometer measurements, insertion loss and return loss measurements and a final visual inspection to ensure that only 100% error-free products are shipped to the customer.

Products made by tde perform at least internationally accepted quality standards and norms. The quality management system is ISO 9001, ISO 14001 and TL9000 certified.



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## **Technical Data**

## **FO Connectors**

Connector Type	LC Unibody Simplex
Housing	Plastic, Beige
Ferrule	Zirkonia Staight Split, Spring-loaded Axially
Ferrule Hole	126 μ
Mating Cycles	1.000
Operating Temperature	-40°C up to +75°C
Strain Relief to	100 N
Manufacturer	tde

### **Optical performance**

Fiber	Туре	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
50/125μ OM2	LC	850 nm	$\leq 0.25 \; dB$	0.45 dB	30 dB
62.5/125μ OM1	LC	850 nm	$\leq 0.25 \text{ dB}$	0.45 dB	

## FO Fan-Out

Fan-out length	50 mm
Ø Fan-out	16 mm
Ø Single unit	1.7 - 2 mm
Single unit length	78 ± 5 cm (not stepped)

## **FO** Cables

### Cable Data

Fiber Amount	24
Construction	4 x 6
Outer Diameter	17.4 mm
Tolerance	± 0.5 mm

Subcable Diameter	2.0 (± 0.1 mm)
Strength Members	Aramid yarns
Outer Jacket	LSOH (Halogen free, low smoke, flame retardant thermoplastic compound)
Jacket Colour	Orange
Standard printing	"t d e - IVHH24G62-2.0" and sequential meter marking + Lot number

## **Mechanical/ Thermal Characteristics**

Fiber Amount	24
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## FO Breakoutl cable 24x LC/24x LC 24G62,5/125µ OM1 LSHF, Length: xxxx

Weight	235 kg/km
Tensile load	3200 N
Bending radius	20 x outer diamter
Operating temperature	-5°C to +60°C
Fire resistance	Pass (EN 50266, IEC 60332-3)
Halogen content	Free (EN 50267, IEC 60754)
Smoke density	Low (EN 50268, IEC 61034-1/2)

### **Special features**

Characteristics	Fiber and aramid yarn free movable in the compound
Identification	Numbers, min. every 25cm on subcables

### FO Fiber

Туре	Corning 62.5/125µ OM1 multimode fiber
Manufacturer	Corning

## **Optical Specifications**

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

### **Dimensional Specifications**

Core Diameter	62.5 ± 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	$245 \pm 5 \mu\text{m}$
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	



FO Breakoutl cable 24x LC/24x LC 24G62,5/125µ OM1 LSHF, Length: xxxx

### **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.

#### **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)
Cromatic 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**

ArtNo.	Description
L-LC/LC62V04Gxxxx	FO Breakoutl cable 4x LC/4x LC 4G62,5/125μ OM1 LSHF, Length: xxxx
L-LC/LC62V08Gxxxx	FO Breakoutl cable 8x LC/8x LC 8G62,5/125μ OM1 LSHF, Length: xxxx
L-LC/LC62V12Gxxxx	FO Breakoutl cable 12x LC/12x LC 12G62,5/125μ OM1 LSHF, Length: xxxx
L-LC/LC62V24Gxxxx	FO Breakoutl cable 24x LC/24x LC 24G62,5/125μ OM1 LSHF, Length: xxxx