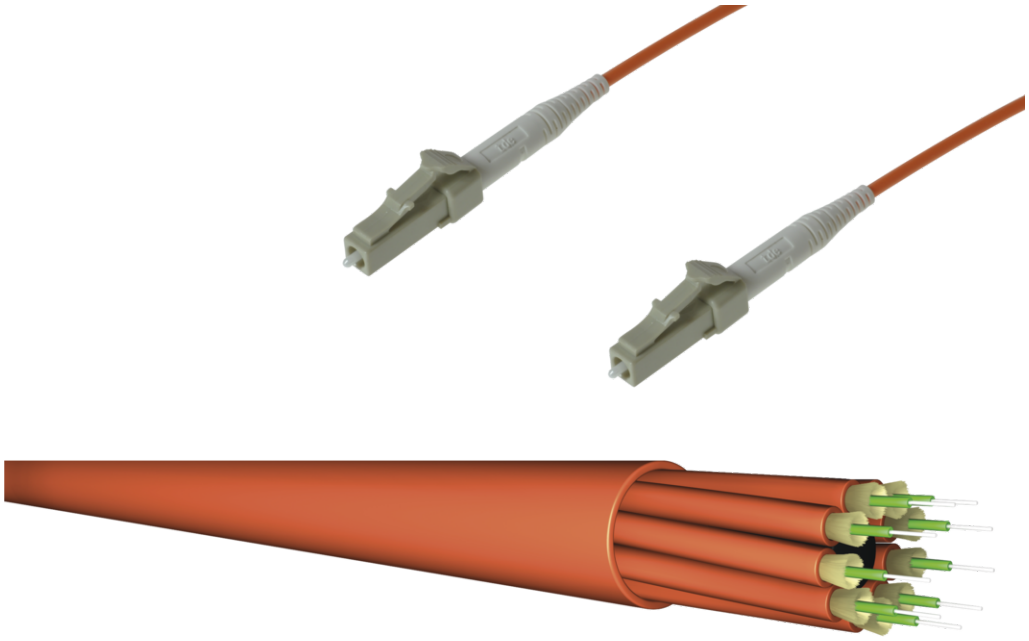
FO Breakoutl cable 24x LC/24x LC 24G62,5/125µ OM1 LSHF, Length: xxxx



## 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.

**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 I www.tde.de

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

# 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 | Type | Wavelength | Insertion loss typ. | Insertion loss max. | Return loss min. |
|---|---|---|---|---|---|
| 50/125µ OM2 | LC | 850 nm | ≤ 0.25 dB | 0.45 dB | 30 dB |
| 62.5/125µ OM1 | LC | 850 nm | ≤ 0.25 dB | 0.45 dB | |

IL at 97% measured according to IEC 61300-3-4 under laboratory conditions.

## 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 |

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

### Mechanical/ Thermal Characteristics

| | |
|---|---|
| Fiber Amount | 24 |
| 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

| | |
|---|---|
| Type | Corning 62.5/125µ OM1 multimode fiber |
| Manufacturer | Corning |

### Optical Specifications

| | |
|---|---|
| Bandwidth | 160/200 at 850 nm / 500 at 1300 nm |
| Attenuation | At 850 nm max. ≤ 3.0 dB/km<br>At 1300 nm max. ≤ 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 ± 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 | |

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 ≥ 100 kpsi (0.7 GN/m²). |
| 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<br>1300 nm: 1.491 |
| Fatigue Resistance Parameter (nd) | 20 |
| Coating Strip Force | Dry: 0.6 lbs (2.7N)<br>Wet: 14 days in 23°C water soak: 0.6 lbs (2.7N) |
| Cromatic Dispersion | Zero Dispersion Wavelength (λ0): 1332 nm ≤λ0 ≤ 1354 nm<br>Zero Dispersion Slope (S0): ≤ 0.097 ps/(nm²*km) |

## Product variants & accessories

| Art.-No. | 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 |