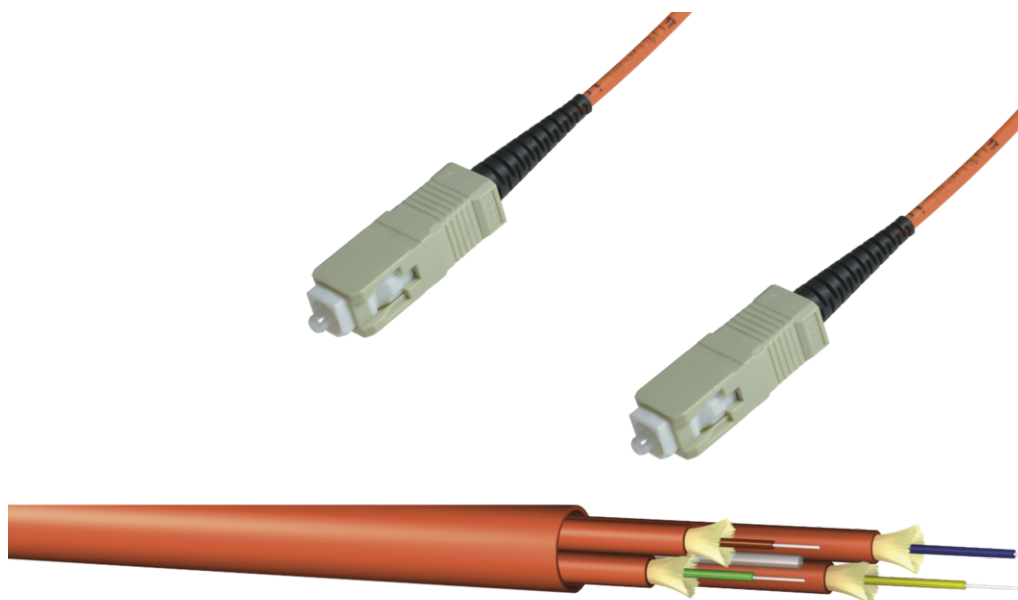


FO BreakoutI cable 4x SC/4x SC 4G50/125 $\mu$  OM2 LSHF, Length: xxxx

## 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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FO BreakoutI cable 4x SC/4x SC 4G50/125μ OM2 LSHF, Length: xxxx

## Technical Data

### FO Connectors

Connector Type	SC Simplex
Housing	Plastic, Beige
Ferrule	Zirconia Straight Split, Spring-loaded Axially
Ferrule Hole	126 μ
Mating Cycles	1.000
Operating Temperature	-40°C up to +75°C
Strain Relief to	150 N
Manufacturer	tde

### Optical performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
50/125μ OM2	SC	850 nm	≤ 0.25 dB	0.45 dB	30 dB
62.5/125μ OM1	SC	850 nm	≤ 0.25 dB	0.45 dB	

## FO Cables

### Cable Data

Type	IVHH04G50/125 OM2
Fiber Amount	4
Construction	4
Outer Diameter	7.0 mm
Tolerance	± 0.3 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 – IVHH04G50-2.0” and sequential meter marking + Lot number

### Mechanical/Thermal Characteristics

Fiber Amount	4
Weight	48 kg/km
Tensile load	1000 N
Bending radius	15 x outer diameter
Operating temperature	-5°C bis +60°C IEC 60794-2-20
Fire resistance	EN 50266, IEC 60332
Halogen content	EN 50267, IEC 60754-1/-2
Smoke density	EN 50268, IEC 61034-1/-2

FO BreakoutI cable 4x SC/4x SC 4G50/125μ OM2 LSHF, Length: xxxx

## Special features

Characteristics	Fiber and aramid yarn free movable in the compound
Identification	Numbers, every 2cm on subcables

## 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

## 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

Environmental 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

FO Breakoutl cable 4x SC/4x SC 4G50/125μ OM2 LSHF, Length: xxxx

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 ( $\lambda_0$ ): 1300 nm $\leq \lambda_0 \leq$ 1320 nm Zero Dispersion Slope (S0): $\leq 0.101$ ps/(nm <sup>2</sup> *km)

## Product variants & accessories

Art.-No.	Description
L-SC/SC50V04Gxxxx	FO Breakoutl cable 4x SC/4x SC 4G50/125μ OM2 LSHF, Length: xxxx
L-SC/SC50V08Gxxxx	FO Breakoutl cable 8x SC/8x SC 8G50/125μ OM2 LSHF, Length: xxxx
L-SC/SC50V12Gxxxx	FO Breakoutl cable 12x SC/12x SC 12G50/125μ OM2 LSHF, Length: xxxx
L-SC/SC50V24Gxxxx	FO Breakoutl cable 24x SC/24x SC 24G50/125μ OM2 LSHF, Length: xxxx