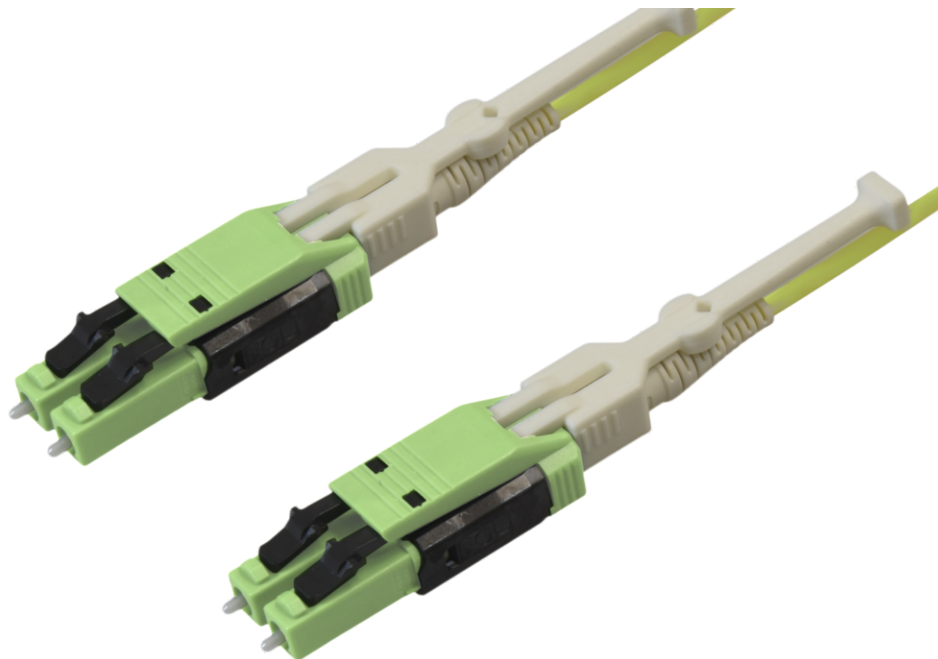


HD - FO Patch cord switchable LC HD/ LC HD Duplex Mini 50/125µ, FRNC, OM5, Crossover, Length:
xxxxx in cm



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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HD - FO Patch cord switchable LC HD/ LC HD Duplex Mini 50/125μ, FRNC, OM5, Crossover, Length:
xxxxx in cm

Technical Data

FO Connectors

| | |
|-----------------------|--|
| Connector type | LC HD duplex Uniboot |
| Housing | Plastic, integrated locking of unlocking aid |
| Polarity | tool-less |
| Ferrule | Zirkonia Straight Split, Spring-loaded Axially |
| Ferrule hole | 126 μm |
| Mating cycles | 1000 |
| Operating temperature | -40°C to 75°C |
| Strain relief to | 100 N |
| Manufacturer | tde |
| Simplex/Duplex clip | Uniboot Duplex Housing |

Optical performance

| Fiber | Type | Wavelength | Insertion loss typ. | Insertion loss max. | Return loss min. |
|-------------|---------------|------------|---------------------|---------------------|------------------|
| 50/125μ OM5 | LC Uniboot HD | 850 nm | < 0.25 dB | 0.45 dB | 30 dB |

FO Cables

| | |
|------------------|-------------|
| Flame resistance | IEC 60332-3 |
| | IEC 60754 |
| | IEC 61034-1 |
| | IEC 61034-2 |

Cable construction

| | |
|------------------|---|
| Type | DVH02G50-OM5-2.0 |
| Tight buffer | 2x 600μ coated fibers (free movable in the compound) |
| Fiber type | MM-OM4, 50/125μ, Corning ClearCurve OM5 |
| Strength members | Aramid yarn (free movable in the compound) |
| Outer jacket | LSZH (Halogen free, low smoke, flame retardant thermoplastic compound) |
| Jacket color | Magenta, RAL 4003 |
| Identification | "t d e – DVH02G50-OM5-2.0mm LSZH" and sequential meter marking + Lot number |

Physical properties

| | |
|----------------------------------|--------------|
| Outer diameter cable | 2.0 ± 0.1 mm |
| Maximum tensile load, short term | 500 N |
| Maximum tensile load, long term | 300 N |
| Min. Bending radius, unloaded | 20 mm |

HD - FO Patch cord switchable LC HD/ LC HD Duplex Mini 50/125µ, FRNC, OM5, Crossover, Length:
xxxxx in cm

| | |
|-------------------------------|---------------|
| Min. Bending radius, loaded | 40 mm |
| Temperature range (operation) | -5°C to +60°C |

FO Fiber

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

Geometrical properties

| | |
|-----------------------------|----------------------|
| Core concentricity error | < 5 % |
| Coating concentricity error | < 1 % |
| Core coating eccentricity | < 1.5 µm |
| Eccentricity of coating | < 12 µm |
| Screen test | ≥ 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 | ≤ 0.5 dB (at 850 nm) |
| Macrobending, induced attenuation 100 turns, 37.5 mm | ≤ 0.5 dB (at 1300 nm) |
| Macrobending, induced attenuation 2 turns, 15 mm | ≤ 0.1 dB (at 850 nm) |
| Macrobending, induced attenuation 2 turns, 15 mm | ≤ 0.3 dB (at 1300 nm) |
| 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 |

HD - FO Patch cord switchable LC HD/ LC HD Duplex Mini 50/125μ, FRNC, OM5, Crossover, Length: xxxxx in cm

| | |
|--|-----------------|
| 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-HLCA/HLCA9DRMxxxxx | HD - FO Patch cord switchable LC APC HD / LC APC HD Duplex Mini 9/125μ, FRNC, OS2, Crossover, Length: xxxxx in cm |
| L-HLC/HLC09DRMxxxxx | HD - FO Patch cord switchable LC HD / LC HD Duplex Mini 9/125μ, FRNC, OS2, Crossover, Length: xxxxx in cm |
| L-HLC/HLC50D4RMxxxxx | HD - FO Patch cord switchable LC HD / LC HD Duplex Mini 50/125μ, FRNC, OM4, Crossover, Length: xxxxx in cm |
| L-HLC/HLC50D5RMxxxxx | HD - FO Patch cord switchable LC HD/ LC HD Duplex Mini 50/125μ, FRNC, OM5, Crossover, Length: xxxxx in cm |