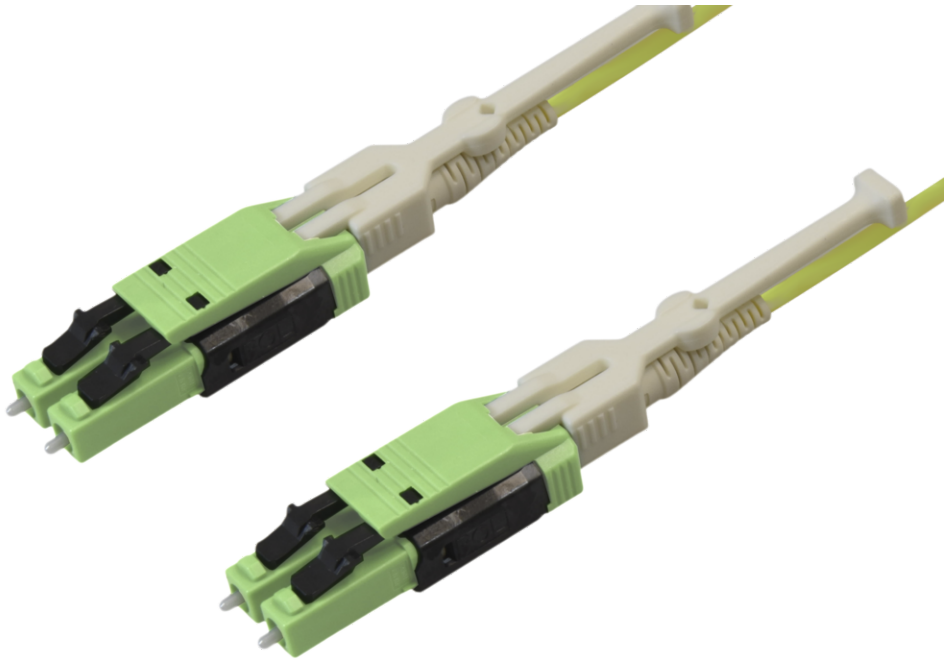
HD - FO Patch cord switchable LC HD/ LC HD Duplex Mini 50/125µ, FRNC, OM5, Crossover, Length: xxxxx in cm



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.

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 | www.tde.de

 © tde GmbH, all rights reserved, errors excepted.

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
Polarity change	tool-less
Housing	Plastic, integrated locking of unlocking aid
Ferrule	Zirkonia Staight 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/Cuplex 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	< 0.10 dB	0.30 dB	35 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

© tde GmbH, all rights reserved, errors excepted.

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

© tde GmbH, all rights reserved, errors excepted.

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

© tde GmbH, all rights reserved, errors excepted.