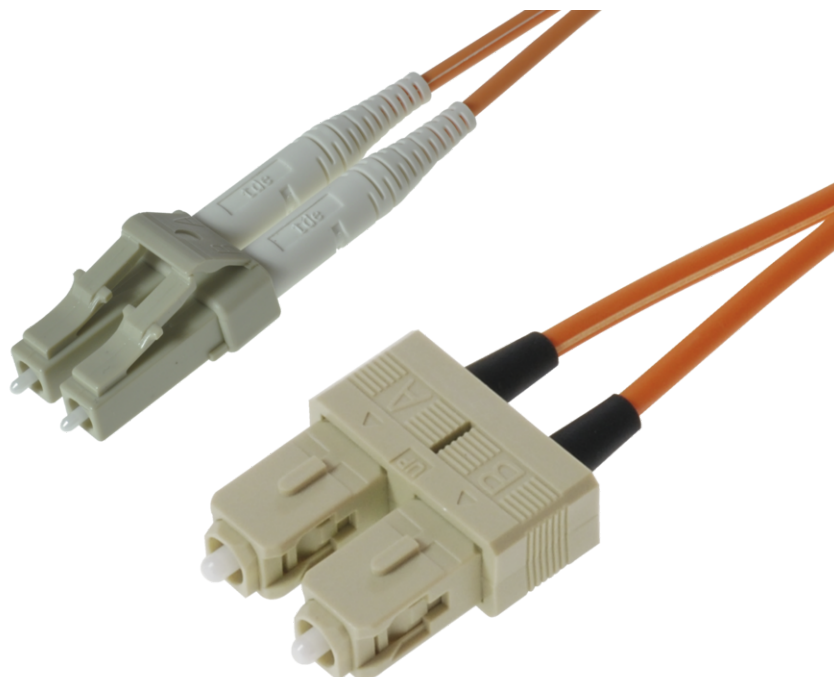


FO-Patch cord LC/SC tde 62,5/125µ OM1 Duplex FlatTwin LSOH Length: xxxxx



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-Patch cord LC/SC tde 62,5/125μ OM1 Duplex FlatTwin LSOH Length: xxxxx

Technical Data

FO Connectors

Connector Type	LC Unibody Duplex
Housing	Plastic, Beige
Ferrule	Zirkonia Straight 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
Simplex / Duplex Clip	with Duplex Clip

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	

FO Connectors

Connector Type	SC Duplex
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
Simplex / Duplex Clip	with Duplex Clip

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

Mechanical characteristics

Temperature range	Operation: -20 to +60°C IEC 60794-2-10
	-10 to +60°C for assembled patch cords
Tensile performance	IEC 60794-1-21 E1 A

FO-Patch cord LC/SC tde 62,5/125µ OM1 Duplex FlatTwin LSOH Length: xxxxx

Crush resistance	IEC 60794-1-21 E3
Impact	IEC 60794-1-21 E4
Repeated bending	IEC 60794-1-21 E6
Torsion	IEC 60794-1-21 E7
Bend	IEC 60794-1-21 E11 A

General characteristics

Sheath colour	G62.5/125 OM1 grau
Zero halogen, no corrosive gases	IEC 60754-1/-2, EN 60754-1/-2, VDE 0482-754-1/-2
Flame propagation	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2, SEV TP 20B/3C 3.4.1.1
Minimum smoke emission	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2
Reaction to fire (Euroclasses)	EN 13501-6: D _{ca} -s2,d1,a1

Optical Characteristics

Fibertype	MM-OM1, 62.5/125µ	
Numerical aperture	0.275 ± 0.015	
Core Ø	62.5 ± 2.5 µm	
Max. Core non-circularity	5 %	
Cladding Ø	125 ± 2 µm	
Max. Cladding non-circularity	1.0 %	
Max. Cladding/Core concentricity error	1.5 µm	
Max. Coating concentricity error	12 µm	
Coating Ø	245 ± 5 µm	
Proof test	100 kpsi	
Wavelength	850 nm	1300 nm
Attenuation typ. (cabled)	2.8 dB/km	0.6 dB/km
Attenuation max. (cabled)	3.0 dB/km	0.7 dB/km
OFL-Bandwidth per TIA/EIA 455-204 and IEC 60793-1-41	200 MHz x km	600 MHz x km
RML-Bandwidth per TIA/EIA 455-204 and IEC 60793-1-41	220 MHz x km	
Refractive index	1.496	1.491

Description	Duplex I-K(ZN)HH
CableØ	4.8 x 3.2 mm
Weight	21 kg/km
Bending radius	50 mm
Tensile load	200 N
Crush resistance short term	3000 N/cm
Fire load	100 kWh/km
Fire load	360 MJ/km

FO-Patch cord LC/SC tde 62,5/125µ OM1 Duplex FlatTwin LSOH Length: xxxxx

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 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

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 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)
Chromatic Dispersion	Zero Dispersion Wavelength (λ ₀): 1332 nm ≤ λ ₀ ≤ 1354 nm Zero Dispersion Slope (S ₀): ≤ 0.097 ps/(nm²*km)

FO-Patch cord LC/SC tde 62,5/125μ OM1 Duplex FlatTwin LSOH Length: xxxxx

Product variants & accessories

Art.-No.	Description
L-LC/SC09TMxxxxx	FO-Patch cord LC/SC tde 9/125μ OS2 Duplex FlatTwin LSOH Length: xxxxx
L-LC/SC50TM3-xxxxx	FO-Patch cord LC/SC tde 50/125μ OM3 Duplex FlatTwin LSOH Length: xxxxx
L-LC/SC50TM4-xxxxx	FO-Patch cord LC/SC tde 50/125μ OM4 Duplex FlatTwin LSOH Length: xxxxx
L-LC/SC50TMxxxxx	FO-Patch cord LC/SC tde 50/125μ OM2 Duplex FlatTwin LSOH Length: xxxxx
L-LC/SC62TMxxxxx	FO-Patch cord LC/SC tde 62,5/125μ OM1 Duplex FlatTwin LSOH Length: xxxxx