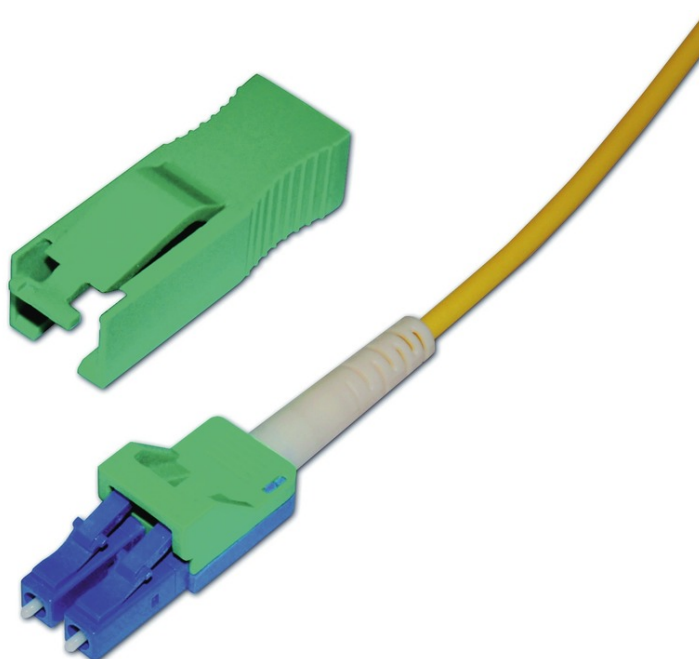


tde - Secure Patch cord LC/LC 50/125 $\mu$  Duplex Round Cable LSOH OM3, length xxx in m



## tde - Secure Patchcords with locking feature

The feature of the SLC plug is simple: If one puts the plug into a standard LC adapter, this engages there firmly and is surely locked. The disconnecting is only possible with the use of a special extraction tool. Then no danger exists that unauthorized plugs are unlocked. Eight different key configurations are available as standard options.



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## Technical Data

Cable	Round cord 3.2mm diameter, distribution cable construction, LSOH
Connector	Secure LC Duplex
Tests	Insertion Loss, Interferometer Test and Visual Inspection
Cable Colour	Aqua
Connector Colour	yy = WS (white), GR (grey), GN (green), BL (blue), GE (yellow), RT (red), OR (orange), SW (black)
Length	xxx in meters

## FO Connectors

Connector Type	Secure LC Duplex
Housing	Plastic
Ferrule	Zirkonia Staight Split
Manufacturer	tde

## Optical performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
50/125 $\mu$ OM3	LC	850 nm	$\leq 0.25$ 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-OM3
Tight buffer	2x 900 $\mu$ coated fibers (free movable in the compound)
Fiber type	MM-OM3, 50/125 $\mu$ , Corning ClearCurve OM3
Strength members	Aramid yarn (free movable in the compound)
Outer jacket	LSZH (Halogen free, low smoke, flame retardant thermoplastic compound)
Jacket color	Aqua, RAL 6027
Identification	"t d e – DVH02G50-OM3 LSZH" and sequential meter marking + Lot number

## Physical properties

Outer diameter cable	2.9 $\pm$ 0.1 mm
Weight	15 kg/km
Maximum tensile load, short term	500 N
Maximum tensile load, long term	300 N

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Bending radius	30 mm (10D)
Temperature range (operation)	-5°C to +60°C

### FO Fiber

Type	Corning ClearCurve <sup>®</sup> 50/125 $\mu$ OM3 multimode fiber
Optimized Data Rate over Distance	40/100 Gb/s über 140 m* 10 Gb/s over 300 m 1 Gb/s over 1000 m
Standard Compliance	ISO/IEC 11801: type OM3 fiber IEC 60793-2-10: type A1a.2 fiber TIA/EIA: 492AAAC-B ITU: ITU G651.1
*	Distances specified in the 40G/100G per IEEE 802.3ba standard are 150m on OM4 and 100m on OM3; Corning fibers are manufactured to tighter dispersion specifications and thereby support the extended distances shown in the table (assuming cable attenuation $\leq$ 3.0 dB/km and same 1.0 dB of connector loss for OM3 that the standard requires for OM4).

### Optical Specifications

Bandwidth	High Performance EMB* (MHz.km): 2000 at 850 nm only Legacy Performance EMB* (MHz.km): 1500 at 850 nm / 500 at 1300 nm
Attenuation	At 850 nm max. $\leq$ 2.3 dB/km At 1300 nm max. $\leq$ 0.6 dB/km
Macrobend Loss	Mandrel Radius (mm): 37.5 / 15 / 7.5 Number of Turns: 100 / 2 / 2 Induced Attenuation (dB) at 850 nm: $\leq$ 0.05 / $\leq$ 0.1 / $\leq$ 0.2 Induced Attenuation (dB) at 1300 nm: $\leq$ 0.15 / $\leq$ 0.3 / $\leq$ 0.5
Numerical Aperture	0.200 $\pm$ 0.015
*	Ensured via miniEMBc, per TIA/EIA 455-220A and IEC 60793-1-49, for high performance laser-based systems (up to 10 Gb/s).
**	OFL BW, per TIA/EIA 455-204 and IEC 60793-1-41, for legacy and LED-based systems (typically up to 100 Mb/s).

### Dimensional Specifications

Core Diameter	50.0 $\pm$ 2.5 $\mu$ m
Cladding Diameter	125.0 $\pm$ 1.0 $\mu$ m
Core-Clad Concentricity	$\leq$ 1.5 $\mu$ m
Cladding Non-Circularity	$\leq$ 1.0%
Core Non-Circularity	$\leq$ 5.0%
Coating Diameter	242 $\pm$ 5 $\mu$ m
Coating-Cladding Concentricity	< 12 $\mu$ m

### Environmental

Environmental Test	Test Condition	Induced Attenuation 850 nm & 1300 nm (dB/km)
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## tde - Secure Patch cord LC/LC 50/125 $\mu$ Duplex Round Cable LSOH OM3, length xxx in m

Temperature Dependence	-60°C to +85°C	≤ 0.10
Temperature Humidity Cycling	-10°C to +85°C and 4% to 98% RH	≤ 0.10
Water Immersion	23°C ± 2°C	≤ 0.20
Heat Aging	85°C ± 2°C	≤ 0.20
Damp Heat	85°C at 85% 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 $\geq$ 100 kpsi (0.7 GN/m <sup>2</sup> ).
Length	Fiber lengths available up to 17.6 km/spool.

### Performance Characterizations

Refractive Index Difference	1%
Effective Group Index of Refraction	850 nm: 1.480 1300 nm: 1.479
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 ( $\lambda_0$ ): 1295 nm $\leq \lambda_0 \leq$ 1315 nm Zero Dispersion Slope (S0): $\leq$ 0.101 ps/(nm <sup>2</sup> *km)

### Product variants & accessories

Art.-No.	Description
L-SLC-BLIND-yy	tde - Secure LC Blind Connector for Port Locking (yy-Colour Code)
L-SLC/SLC09DRxxx-yy	tde - Secure Patch cord LC/LC 9/125 $\mu$ Duplex Round Cable LSOH OS2, length: xxx in m
L-SLC/SLC50D3Rxxx-yy	tde - Secure Patch cord LC/LC 50/125 $\mu$ Duplex Round Cable LSOH OM3, length xxx in m
L-SLC-TOOL-yy	tde - Secure LC Extraction Tool (yy-Colour Code)