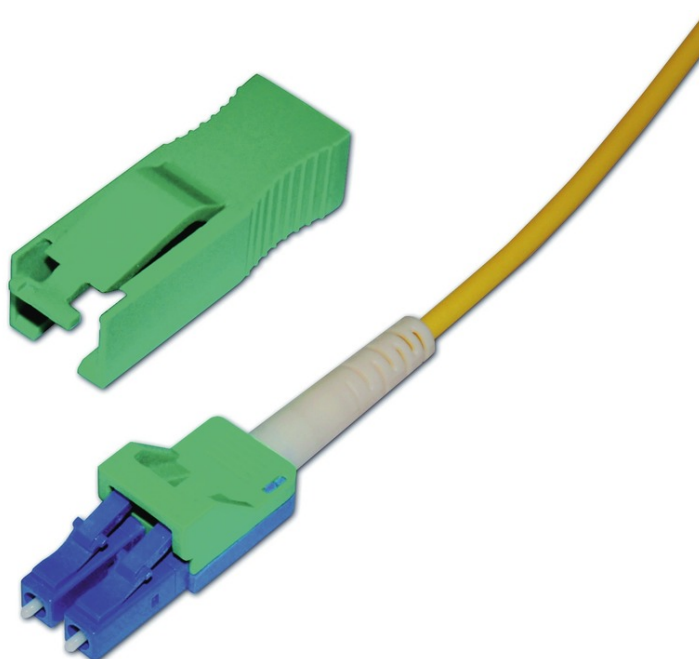


tde - Secure Patch cord LC/LC 9/125 $\mu$  Duplex Round Cable LSOH OS2, length: xxx in m



## 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 3mm diameter, distribution cable construction, LSOH
Connector	LC Duplex
Tests	Insertion Loss, Return Loss, Interferometer Test and Visual Inspection
Cable Colour	Yellow
Connector Colour	yy = WS (white), GR (grey), GN (green), BL (blue), GE (yellow), RT (red), OR (orange), SW (black)
Length	xxx in m

## FO Connectors

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

## Optical performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
9/125 $\mu$	LC	1550 nm	$\leq$ 0.20 dB	0.45 dB	45 dB

## FO Cables

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

## Cable construction

Type	DVH02E09
Tight buffer	2x 900 $\mu$ coated fibers (free movable in the compound)
Fiber type	Corning G652.D / G657.A1
Strength members	Aramid yarn (free movable in the compound)
Outer jacket	LSZH (Halogen free, low smoke, flame retardant thermoplastic compound)
Jacket color	Yellow, RAL 1021
Identification	"t d e – DVH02E09 Ultra 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

## tde - Secure Patch cord LC/LC 9/125µ Duplex Round Cable LSOH OS2, length: xxx in m

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

### FO Fiber

Type	Corning Ultra SMF-28 <sup>®</sup> 09/125µ OS2 singlemode fiber
Maximum Attenuation	At 1310 nm max. 0.32 dB/km At 1383 nm max. 0.32 dB/km At 1490 nm max. 0.21 dB/km At 1550 nm max. 0.18 dB/km At 1625 nm max. 0.20 dB/km
Attenuation vs. Wavelength	Range: 1285 - 1330 nm; Ref. $\lambda$ : 1310 nm; Max. Difference: 0.03 dB/km Range: 1525 - 1575 nm; Ref. $\lambda$ : 1550 nm; Max. Difference: 0.02 dB/km
Macrobend Loss	Mandrel Radius: 10mm; Number of Turns: 1; Wavelength: 1550nm; Induced Attenuation: $\leq 0.50$ dB Mandrel Radius: 10mm; Number of Turns: 1; Wavelength: 1625nm; Induced Attenuation: $\leq 1.5$ dB Mandrel Radius: 15mm; Number of Turns: 10; Wavelength: 1550nm; Induced Attenuation: $\leq 0.05$ dB Mandrel Radius: 15mm; Number of Turns: 10; Wavelength: 1625nm; Induced Attenuation: $\leq 0.30$ dB Mandrel Radius: 25mm; Number of Turns: 100; Wavelength: 1310nm, 1550nm, 1625nm; Induced Attenuation: $\leq 0.01$ dB
Point Discontinuity	Wavelength: 1310 nm; Point Discontinuity: $\leq 0.05$ dB Wavelength: 1550 nm; Point Discontinuity: $\leq 0.05$ dB
Cable Cutoff Wavelength ( $\lambda_{ccf}$ )	$\lambda_{ccf} \leq 1260$ nm
Mode-Field Diameter	At 1310 nm = $9.2 \pm 0.4$ µm At 1550 nm = $10.4 \pm 0.5$ µm
Dispersion	At 1550 nm = $\leq 18.0$ [ps/(nm*km)] At 1625 nm = $\leq 22.0$ [ps/(nm*km)]
	Zero Dispersion Wavelength ( $\lambda_0$ ): $1304 \text{ nm} \leq \lambda_0 \leq 1324 \text{ nm}$ Zero Dispersion Slope ( $S_0$ ): $\leq 0.092$ ps/(nm <sup>2</sup> *km)
Polarization Mode Dispersion (PMD)	PMD Link Design Value = $\leq 0.04$ ps/√km Maximum Individual Fiber = $\leq 0.1$ ps/√km

### Dimensional Specifications

Fiber Curl	$\geq 4.0$ m radius of curvature
Cladding Diameter	$125.0 \pm 0.7$ µm
Core-Clad Concentricity	$\leq 0.5$ µm
Cladding Non-Circularity	$\leq 0.7\%$
Coating Diameter	$242 \pm 5$ µm
Coating-Cladding Concentricity	$< 12$ µm

### Environmental Specifications

Environmental Test	Test Condition	Induced Attenuation 1310 nm, 1550 nm & 1625 nm
Temperature Dependence	-60°C to +85°C	$\leq 0.05$
Temperature Humidity Cycling	-10°C to +85°C up to 98% RH	$\leq 0.05$
Water Immersion	23°C $\pm$ 2°C	$\leq 0.05$
Heat Aging	85°C $\pm$ 2°C	$\leq 0.05$
Operating Temperature Range	-60°C to +85°C	

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## Mechanical Specifications

Proof Test	The entire fiber length is subjected to a tensile stress $\geq 100$ kpsi (0.69 GPa).
Length	Fiber lengths available up to 63.0 km/spool.

## Performance Characterizations

Core Diameter	8.2 µm
Numerical Aperture	0.14
Effective Group Index of Refraction	1310 nm: 1.4676 1550 nm: 1.4682
Fatigue Resistance Parameter (nd)	20
Coating Strip Force	Dry: 0.6 lbs (3N) Wet: 14 days room temperature: 0.6 lbs (3N)
Rayleigh Backscatter Coefficient (for 1 ns Pulse Width)	1310 nm: -77 dB 1550 nm: -82 dB

## 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 9/125µ Duplex Round Cable LSOH OS2, length: xxx in m
L-SLC/SLC50D3Rxxx-yy	tde - Secure Patch cord LC/LC 50/125µ Duplex Round Cable LSOH OM3, length xxx in m
L-SLC-TOOL-yy	tde - Secure LC Extraction Tool (yy-Colour Code)