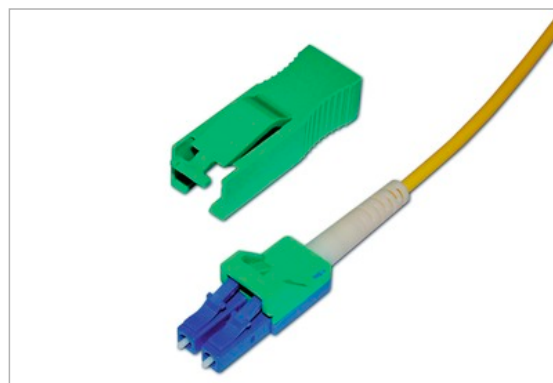


Description

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.



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 Straight Split
Manufacturer	tde

Optical performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
9/125µ	LC	1550 nm	≤ 0.20 dB	0.45 dB	45 dB

FO Cables

Flame resistance	IEC 60332-3
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tde - Secure Patch cord LC/LC 9/125µ Duplex Round Cable LSOH OS2, length: xxx in m

	IEC 60754
	IEC 61034-1
	IEC 61034-2

Cable construction

Type	DVH02E09
Tight buffer	2x 900µ 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 ± 0.1 mm
Weight	15 kg/km
Maximum tensile load, short term	500 N
Maximum tensile load, long term	300 N
Bending radius	30 mm (10D)
Temperature range (operation)	-5°C to +60°C

FO Fiber

Type	Corning Ultra SMF-28® 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. λ: 1310 nm; Max. Difference: 0.03 dB/km Range: 1525 - 1575 nm; Ref. λ: 1550 nm; Max. Difference: 0.02 dB/km

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

Macrobend Loss	Mandrel Radius: 10mm; Number of Turns: 1; Wavelength: 1550nm; Induced Attenuation: ≤ 0.50 dB Mandrel Radius: 10mm; Number of Turns: 1; Wavelength: 1625nm; Induced Attenuation: ≤ 1.5 dB Mandrel Radius: 15mm; Number of Turns: 10; Wavelength: 1550nm; Induced Attenuation: ≤ 0.05 dB Mandrel Radius: 15mm; Number of Turns: 10; Wavelength: 1625nm; Induced Attenuation: ≤ 0.30 dB Mandrel Radius: 25mm; Number of Turns: 100; Wavelength: 1310nm, 1550nm, 1625nm; Induced Attenuation: ≤ 0.01 dB
Point Discontinuity	Wavelength: 1310 nm; Point Discontinuity: ≤ 0.05 dB Wavelength: 1550 nm; Point Discontinuity: ≤ 0.05 dB
Cable Cutoff Wavelength (λ_{ccf})	$\lambda_{ccf} \leq 1260$ nm
Mode-Field Diameter	At 1310 nm = 9.2 ± 0.4 µm At 1550 nm = 10.4 ± 0.5 µm
Dispersion	At 1550 nm = ≤ 18.0 [ps/(nm*km)] At 1625 nm = ≤ 22.0 [ps/(nm*km)]
	Zero Dispersion Wavelength (λ_0): 1304 nm ≤ λ_0 ≤ 1324 nm Zero Dispersion Slope (S_0): ≤ 0.092 ps/(nm ² * km)
Polarization Mode Dispersion (PMD)	PMD Link Design Value = ≤ 0.04 ps/√km Maximum Individual Fiber = ≤ 0.1 ps/√km

Dimensional Specifications

Fiber Curl	≥ 4.0 m radius of curvature
Cladding Diameter	125.0 ± 0.7 µm
Core-Clad Concentricity	≤ 0.5 µm
Cladding Non-Circularity	≤ 0.7%
Coating Diameter	242 ± 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	≤ 0.05
Temperature Humidity Cycling	-10°C to +85°C up to 98% RH	≤ 0.05
Water Immersion	23°C ± 2°C	≤ 0.05
Heat Aging	85°C ± 2°C	≤ 0.05
Operating Temperature Range	-60°C to +85°C	

Mechanical Specifications

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

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

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

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-T00L-yy	tde - Secure LC Extraction Tool (yy-Colour Code)