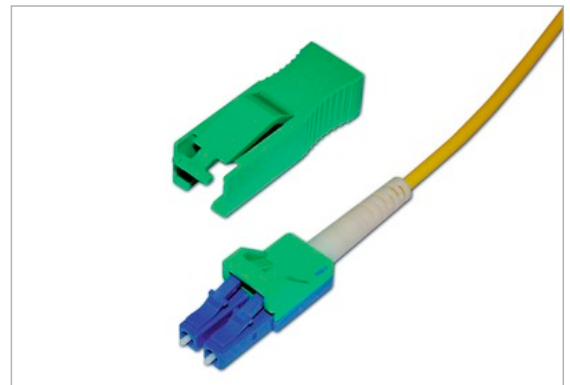


Description

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 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 Straight Split
Manufacturer	tde

Optical performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
50/125µ OM3	LC	850 nm	≤ 0.25 dB	0.45 dB	30 dB

FO Cables

Flame resistance	IEC 60332-3
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tde - Secure Patch cord LC/LC 50/125µ Duplex Round Cable LSOH OM3, length xxx in m

	IEC 60754
	IEC 61034-1
	IEC 61034-2

Cable construction

Type	DVH02G50-OM3
Tight buffer	2x 900µ coated fibers (free movable in the compound)
Fiber type	MM-OM3, 50/125µ, 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 ± 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 ClearCurve® 50/125µ 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 ≤3.0 dB/km and same 1.0 dB of connector loss for OM3 that the standard requires for OM4).

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

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. ≤ 2.3 dB/km At 1300 nm max. ≤ 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: ≤ 0.05 / ≤ 0.1 / ≤ 0.2 Induced Attenuation (dB) at 1300 nm: ≤ 0.15 / ≤ 0.3 / ≤ 0.5
Numerical Aperture	0.200 ± 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	$50.0 \pm 2.5 \mu\text{m}$
Cladding Diameter	$125.0 \pm 1.0 \mu\text{m}$
Core-Clad Concentricity	$\leq 1.5 \mu\text{m}$
Cladding Non-Circularity	$\leq 1.0\%$
Core Non-Circularity	$\leq 5.0\%$
Coating Diameter	$242 \pm 5 \mu\text{m}$
Coating-Cladding Concentricity	$< 12 \mu\text{m}$

Environmental

Environmental Test	Test Condition	Induced Attenuation 850 nm & 1300 nm (dB/km)
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 $\pm$ 2°C	≤ 0.20
Heat Aging	85°C $\pm$ 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 ≥ 100 kpsi (0.7 GN/m ²).
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tde - Secure Patch cord LC/LC 50/125µ Duplex Round Cable LSOH OM3, length xxx in m

Length	Fiber lengths available up to 17.6 km/spool.
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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 (λ_0): 1295 nm $\leq \lambda_0 \leq$ 1315 nm Zero Dispersion Slope (S0): ≤ 0.101 ps/(nm ² *km)

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)