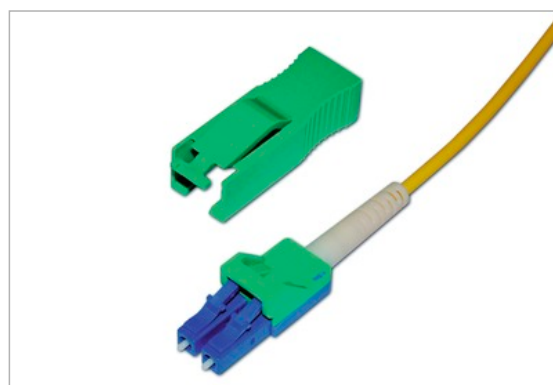


Description

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 |
|------------------|-------------|

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 9/125 μ 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 = $9.2 \pm 0.4 \mu\text{m}$ At 1550 nm = $10.4 \pm 0.5 \mu\text{m}$ |
| Dispersion | At 1550 nm = ≤ 18.0 [ps/(nm*km)] At 1625 nm = ≤ 22.0 [ps/(nm*km)] |
| | Zero Dispersion Wavelength (λ_0): $1304 \text{ nm} \leq \lambda_0 \leq 1324 \text{ nm}$ Zero Dispersion Slope (S_0): ≤ 0.092 ps/(nm ² *km) |
| Polarization Mode Dispersion (PMD) | PMD Link Design Value = ≤ 0.04 ps/ $\sqrt{\text{km}}$ Maximum Individual Fiber = ≤ 0.1 ps/ $\sqrt{\text{km}}$ |

Dimensional Specifications

| | |
|--------------------------------|----------------------------------|
| Fiber Curl | ≥ 4.0 m radius of curvature |
| Cladding Diameter | $125.0 \pm 0.7 \mu\text{m}$ |
| Core-Clad Concentricity | $\leq 0.5 \mu\text{m}$ |
| Cladding Non-Circularity | $\leq 0.7\%$ |
| Coating Diameter | $242 \pm 5 \mu\text{m}$ |
| Coating-Cladding Concentricity | $< 12 \mu\text{m}$ |

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 \pm 2°C | ≤ 0.05 |
| Heat Aging | 85°C \pm 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 9/125 μ Duplex Round Cable LSOH OS2, length: xxx in m

Performance Characterizations

| | |
|---|--|
| Core Diameter | 8.2 μ m |
| 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 9/125 μ Duplex Round Cable LSOH OS2, length: xxx in m |
| L-SLC/SLC50D3Rxxx-yy | tde - Secure Patch cord LC/LC 50/125 μ Duplex Round Cable LSOH OM3, length xxx in m |
| L-SLC-TOOL-yy | tde - Secure LC Extraction Tool (yy-Colour Code) |