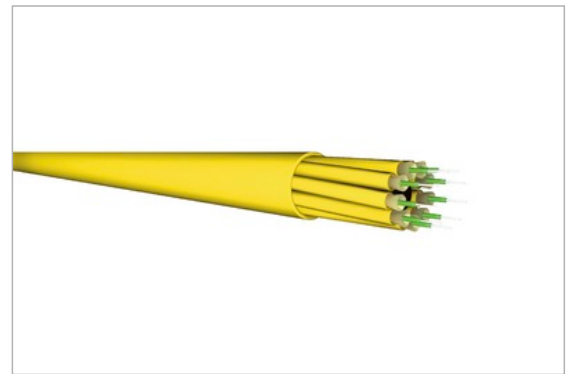


FO Breakout cable 8E9/125 μ G.652.D LSOH 2,0mm

Description

The standard fiber optic cable types of tde specifically for the assembling of patch and adapter cables, pigtails and trunk cables has been developed. Also the use in FTTH applications inside buildings is possible. The breakout cables have up to 24 individual elements with a 2mm diameter. The overall cable diameter is very slim.

These cables are characterized by very good termination properties. The cable jacket and the secondary coating are easy removable.



Technical Data

Cable Data

| | |
|----------------|--------------|
| Type | IVHH08E9/125 |
| Fiber Amount | 8 |
| Construction | 8 |
| Outer Diameter | 9.3 mm |
| Tolerance | ± 0.3 mm |

| | |
|-------------------|--|
| Subcable Diameter | 2.0 (± 0.1 mm) |
| Strength Members | Aramid yarns |
| Outer Jacket | LSOH (Halogen free, low smoke, flame retardant thermoplastic compound) |
| Jacket Colour | Yellow |
| Standard printing | "t d e – IVHH08E09-2.0" and sequential meter marking + Lot number |

Mechanical/Thermal Characteristics

| | |
|-----------------------|-------------------------------|
| Fiber Amount | 8 |
| Weight | 70 kg/km |
| Tensile load | 1200 N |
| Bending radius | 20 x outer diameter |
| Operating temperature | -5°C bis +60°C IEC 60794-2-20 |
| Fire resistance | EN 50266, IEC 60332 |

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| | |
|-----------------|--------------------------|
| Halogen content | EN 50267, IEC 60754 |
| Smoke density | EN 50268, IEC 61034-1/-2 |

Special features

| | |
|-----------------|--|
| Characteristics | Fiber and aramid yarn free movable in the compound |
| Identification | Numbers, min. every 25cm on subcables |

FO Fiber

| | |
|---|--|
| Type | Corning SMF-28e+ [®] 09/125 μ OS2 G.652.D singlemode fiber |
| Maximum Attenuation | At 1310 nm max. 0.33 - 0.35 dB/km At 1383 \pm 3 nm max. 0.31 - 0.35 dB/km At 1490 nm max. 0.21 - 0.24 dB/km At 1550 nm max. 0.19 - 0.20 dB/km At 1625 nm max. 0.20 - 0.23 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 |
| Macrobend Loss | Mandrel Diameter:32mm; Number of Turns: 1; Wavelength: 1550nm; Induced Attenuation: \leq 0.03 dB Mandrel Diameter:50mm; Number of Turns: 100; Wavelength: 1310nm; Induced Attenuation: \leq 0.03 dB Mandrel Diameter:50mm; Number of Turns: 100; Wavelength: 1550nm; Induced Attenuation: \leq 0.03 dB Mandrel Diameter:60mm; Number of Turns: 100; Wavelength: 1625nm; Induced Attenuation: \leq 0.03 dB |
| Point Discontinuity | Wavelength: 1310 nm; Point Discontinuity: \leq 0.05 dB Wavelength: 1550 nm; Point Discontinuity: \leq 0.05 dB |
| Cable Cutoff Wavelength (λ_{ccf}) | $\lambda_{ccf} \leq 1260$ nm |
| Mode-Field Diameter | At 1310 nm = 9.2 ± 0.4 μ m At 1550 nm = 10.4 ± 0.5 μ m |
| Dispersion | At 1550 nm = ≤ 18.0 [ps/(nm*km)] At 1625 nm = ≤ 22.0 [ps/(nm*km)] |
| | Zero Dispersion Wavelength (λ_0): 1310 nm $\leq \lambda_0 \leq$ 1324 nm Zero Dispersion Slope (S_0): ≤ 0.092 ps/(nm ² *km) |
| Polarization Mode Dispersion (PMD) | PMD Link Design Value = ≤ 0.06 ps/ \sqrt km Maximum Individual Fiber = ≤ 0.1 ps/ \sqrt km |
| Norm | ITU-T Recommendation G.652 (Tables A, B, C, and D) IEC Specifications 60793-2-50 Type B1.3 TIA/EIA 492-CAAB Telcordia Generic Requirements GR-20-CORE ISO 11801 OS2 |

FO Breakout cable 8E9/125 μ G.652.D LSOH 2,0mm

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 $+85^{\circ}\text{C}$ | ≤ 0.05 |
| Temperature Humidity Cycling | -10°C to $+85^{\circ}\text{C}$ up to 98% RH | ≤ 0.05 |
| Water Immersion | $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$ | ≤ 0.05 |
| Heat Aging | $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ | ≤ 0.05 |
| Operating Temperature Range | -60°C to $+85^{\circ}\text{C}$ | |

Mechanical Specifications

| | |
|------------|---|
| Proof Test | The entire fiber length is subjected to a tensile stress ≥ 100 kpsi (0.7 GPa). |
| Length | Fiber lengths available up to 63.0 km/spool. |

Performance Characterizations

| | |
|---|--|
| Core Diameter | $8.2 \mu\text{m}$ |
| Numerical Aperture | 0.14 |
| Zero Dispersion Wavelength (λ_0) | 1317 nm |
| Zero Dispersion Slope (S_0) | $0.088 \text{ ps}/(\text{nm}^2 \cdot \text{km})$ |
| 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 |

FO Breakout cable 8E9/125 μ G.652.D LSOH 2,0mm

| Art.-No. | Description |
|------------------|---|
| L-IVHH04E09X-2.0 | FO Breakout cable 4E9/125 μ G.657.A1 Ultra LSOH 2,0mm |
| L-IVHH08E09-2.0 | FO Breakout cable 8E9/125 μ G.652.D LSOH 2,0mm |
| L-IVHH12E09-2.0 | FO Breakout cable 12E9/125 μ G.652.D LSOH 2,0mm |
| L-IVHH24E09-2.0 | FO Breakout cable 24E9/125 μ G.652.D LSOH 2,0mm |