

Launch fiber specifications - OptiFiber Pro

Fluke Networks offers launch cords with reference grade connectors in accordance with standards such as ANSI/TIA-526-14-C and ISO/IEC 14763-3. The requirements of these standards for loss at the connector are 0.10 dB for multimode and 0.20 dB for singlemode.

Our launch cords are made to the following specifications:

Multimode 50/125 μm

- **Cable:** Prysmian, MaxCap-OM3
- **Jacket/Trim color:** Aqua
- **Insertion Loss (reference grade)¹** 0.1 dB maximum
- **Return Loss:** 40 dB maximum
- **Radius of Curvature per GR-326:** 7 mm to 25 mm
- **Apex Offset per GR-326:** 0 to 50 μm
- **Fiber Height (spherical fit) per GR-326:** -100 nm to + 100 nm
- **Angular Offset per GR-326:** -0.3 degrees to +0.3 degrees
- **Fiber Roughness (Rq) per GR-326:** 0 to 50 nm
- **Ferrule Roughness (Rq) per GR-326:** 0 to 50 nm
- **Length:** 105 m \pm 3 m

Multimode 62.5/125 μm

- **Cable:** OFS, Laser Optimized 62.5 XL \pm 1.0 μm core diameter
- **Jacket/Trim color:** Orange
- **Insertion Loss (reference grade)¹** 0.1 dB maximum
- **Return Loss:** 40 dB maximum
- **Radius of Curvature per GR-326:** 7 mm to 25 mm
- **Apex Offset per GR-326:** 0 to 50 μm
- **Fiber Height (spherical fit) per GR-326:** -100 nm to + 100 nm
- **Angular Offset per GR-326:** -0.3 degrees to +0.3 degrees
- **Fiber Roughness (Rq) per GR-326:** 0 to 50 nm
- **Ferrule Roughness (Rq) per GR-326:** 0 to 50 nm
- **Length:** 105 m \pm 3 m

Singlemode 9/125 μm (UPC)

- **Cable:** Corning, SMF 28e+
- **Jacket/Trim color:** Yellow
- **Insertion Loss (reference grade)²** 0.2 dB maximum
- **Return Loss:** 50 dB maximum
- **Radius of Curvature per GR-326:** 7 mm to 25 mm
- **Apex Offset per GR-326:** 0 to 50 μm
- **Fiber Height (spherical fit) per GR-326:** -100 nm to + 100 nm
- **Angular Offset per GR-326:** -0.3 degrees to +0.3 degrees
- **Fiber Roughness (Rq) per GR-326:** 0 to 50 nm
- **Ferrule Roughness (Rq) per GR-326:** 0 to 50 nm
- **Length:** 160 m \pm 3 m

Singlemode 9/125 μm (APC)

- **Cable:** Corning, SMF 28e+ (Non bend insensitive)
- **Jacket/Trim color:** Yellow/Green
- **Connector color:** Green
- **Step or conical endface:** Step (/knowledge-base/certifiber-pro/apc-step-vs-conical-end-faces)
- **Insertion Loss (reference grade)** 0.15 dB maximum³
- **Return Loss:** 65 dB maximum
- **Radius of Curvature per GR-326:** 5 mm to 12 mm
- **Apex Offset per GR-326:** 0 to 50 μm
- **Fiber Height (spherical fit) per GR-326:** -100 nm to + 100 nm
- **Angular Offset per GR-326:** 7.8 degrees to 8.2 degrees
- **Fiber Roughness (Rq) per GR-326:** 0 to 50 nm
- **Ferrule Roughness (Rq) per GR-326:** 0 to 50 nm
- **Length:** 160 m \pm 3 m

¹Maximum insertion loss for 2.5 mm ferrules is based on interoperability and 2 standard deviations. For maximum insertion loss, 95% should meet the specification. During testing of the insertion loss using a master test cord (MTC), the maximum allowed test is to be less than 0.07 dB to achieve interoperability

²Maximum insertion loss for 2.5 mm ferrules is based on interoperability and 2 standard deviations. For maximum insertion loss, 95% should meet the specification. During testing of the insertion loss using a master test cord, the maximum allowed test should be less than 0.17 dB to achieve interoperability

³Except for E2000 which is 0.40 dB maximum.

Environmental

- **Temperature:** -20°C to 60°C
 - **Relative Humidity (%RH operating without condensation):** 95% (10°C to 35°C); 75% (35°C to 40°C) uncontrolled < 10°C
 - **Vibration:** Random, 2g, 5-500 Hz
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