

# FC to FC Patch cord, 1 fibre, tight-buffered cable, LSZH, 2.8 mm legs

E9/125 SMF-28® ULTRA TB, 5 m

CORNING

Patch cables are used for non-permanent connections between patch panels, transmission equipment, etc. Pre-assembled cables allow for the implementation of complete Plug & Play solutions. When such a solution is adopted with accurate dimensioning and appropriate cable routing, it is possible to install even large cabling systems rapidly.

## Features and Benefits

### Connectors

- FC connector according to TIA/EIA-604 -4
- All connectors are tested to FOTP -21.
- Connectors are pre-radius polished to provide the optimal end-face geometry for long-term performance.

### Cable

- Low smoke (IEC 61034) and zero-halogen (LSZH), flame retardant to IEC 60332-3-24 (C) and noncorrosive to IEC 60754-2 (FRNC)
- Cables are metal free; hence, there are no ground-loop or potential-equalization problems. Completely dry design (without gel)
- Colour of outer sheath: OM1, OM2 – orange; OM3, OM4 – turquoise; OS2 – yellow



Part Number: 545401G3Z31005M

## Standards

Intermateability TIA/EIA-604-4 / TIA/EIA-604-4

## Specifications

| General Specifications |                     |
|------------------------|---------------------|
| Flame rating           | LSZH™/FRNC          |
| Cable assembly type    | Single Fibre        |
| Fibre Category         | SMF-28® Ultra fibre |

| Temperature Range         |                 |
|---------------------------|-----------------|
| Operation                 | -10 °C to 60 °C |
| Installation and assembly | -5 °C to 50 °C  |
| Storage                   | -10 °C to 60 °C |

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## Design - Connector A

|                  |            |
|------------------|------------|
| Connector type   | FC         |
| Ferrule Material | Ceramic    |
| Polish           | UPC        |
| Housing material | Metal      |
| Housing Colour   | Nickel     |
| Boot type        | Individual |
| Boot colour      | Blue       |
| Keyed (security) | No         |

## Mechanical Specifications - Connector A

|                                 |                                  |
|---------------------------------|----------------------------------|
| Durability                      | ≤ 0.2 dB 1000 rematings, FOTP-21 |
| Tensile strength jacketed cable | 44 N                             |

## Optical Specifications - Connector A

|                         |          |
|-------------------------|----------|
| Insertion loss, typical | 0.15 dB  |
| Insertion loss, max.    | 0.4 dB   |
| Reflectance, typical    | ≤ -59 dB |

## Design - Connector B

|                  |            |
|------------------|------------|
| Connector type   | FC         |
| Ferrule Material | Ceramic    |
| Polish           | UPC        |
| Housing material | Metal      |
| Housing Colour   | Nickel     |
| Boot type        | Individual |
| Boot colour      | Blue       |
| Keyed (security) | No         |

## Mechanical Specifications - Connector B

|                                 |                                  |
|---------------------------------|----------------------------------|
| Durability                      | ≤ 0.2 dB 1000 rematings, FOTP-21 |
| Tensile strength jacketed cable | 44 N                             |

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## Optical Specifications - Connector B

|                         |          |
|-------------------------|----------|
| Insertion loss, typical | 0.15 dB  |
| Insertion loss, max.    | 0.4 dB   |
| Reflectance, typical    | ≤ -59 dB |

## Cable Design

|                               |              |
|-------------------------------|--------------|
| Fibre count                   | 1            |
| Outer diameter                | 2.8 mm       |
| Outer jacket colour           | Yellow       |
| Outer jacket material         | LSZH™/FRNC   |
| Minimum Bend Radius           | 14 mm        |
| Crush resistance (reversible) | 1000 N/10 cm |
| Tensile strength              | 200 N        |

## Chemical Characteristics

|      |   |
|------|---|
| RoHS | Free of hazardous substances according to RoHS 2011/65/EU |
|------|---|

## Fibre Specifications

### Optical Characteristics (cabled)

|   |                                      |
|---|--------------------------------------|
| Fibre name                              | SMF-28® Ultra TB Cable Optical Fibre |
| Mode-Field Diameter at 1310 nm          | 9.2 µm                               |
| Fibre code                              | Z                                    |
| Coating diameter                        | 242 µm                               |
| Cladding diameter                       | 125 µm                               |
| Wavelengths                             | 1310 nm / 1383 nm / 1550 nm          |
| Maximum attenuation                     | 0.38 dB/km / 0.38 dB/km / 0.25 dB/km |
| Serial 1 gigabit ethernet               | 5000 m / -                           |
| Serial 10 gigabit ethernet              | 10000 m / 40000 m                    |
| Cable cutoff wavelength                 | 1260 nm                              |
| Dispersion in the range 1285 to 1330 nm | ≤ 3.5 ps / (nm * km)                 |
| Dispersion @ 1550 nm                    | ≤ 18 ps / (nm * km)                  |
| PMD Link Design Value                   | ≤ 0.04 PS / √km                      |
| PMD maximum individual fibre            | ≤ 0.1 PS / √km                       |
| Fibre compliance                        | ITU-T G.652.D and ITU-T G.657.A1     |

Notes: 1) Contact a Corning Customer Care Representative for additional information

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## Fibre Specifications

| Optical Characteristics (cabled) |  |
|----------------------------------|--|
| PMD maximum individual fibre     | $\leq 0.1 \text{ PS} / \sqrt{\text{km}}$ |
| Fibre compliance                 | ITU-T G.652.D and ITU-T G.657.A1         |

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## Ordering Information

|                     |   |
|---------------------|---|
| Part Number         | 545401G3Z31005M   |
| Product Description | FC to FC patch cord on single-fibre cable, with an outer diameter of 2.8 mm and a low-smoke, zero-halogen sheath. Length is variable. |
| Length              | 5 m   |
| Weight              | 0.05 kg   |

## Shipping Information

|                                |                          |
|--------------------------------|--------------------------|
| Packing type                   | Cardboard box            |
| Packing dimensions (L x W x H) | 380 mm x 250 mm x 180 mm |
| Units Per Delivery             | 1/1                      |



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