# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



# AX105208-S1 Modular Connectors - FX BRILLIANCE UNIVERSAL SC CONNECTOR



For more Information please call

1-800-Belden1

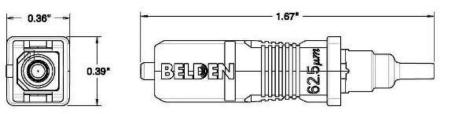


#### **General Description:**

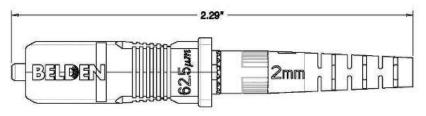
FX Brilliance Universal SC Field Installable Connector, Singlemode, OS2, Blue Housing, 1/Pack, with support for 250  $\mu$ m (using Breakout kit), 900  $\mu$ m, 2 mm and 3 mm fiber (using jacketed boots). Includes 900  $\mu$ m boot, other accessories (Breakout Kit & jacketed boots) sold separately.

#### Image

Image:



900 µm VERSION (OM1 SHOWN)



JACKETED VERSION (OM1 SHOWN)

# Usage (Overall) Suitable Applications: Field-termination of fiber optic cables within Patch Panels, Distribution Frames, Workstation Outlets for FTTD (Fiber to the Desk), drops for FTTH (Fiber to the home) and MDU (Multiple Dwelling Units). Related Parts: FX Brilliance Precision Installation Kit, Boots for 2mm and 3mm Jacketed Fiber, 250µm to 900µm break out kits.

# **Physical Characteristics (Connectivity)**

#### Materials

# Materials:

| Description            | Material | Color  |
|------------------------|----------|--------|
| Boot                   | Rubber   | Black  |
| Protective Ferrule Cap | Plastic  | Opaque |
| Connector Body         | Plastic  | Blue   |

# Weight

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| Weight:         | 0.003 kg  |
|-----------------|---|
| Included Parts  |   |
| Included Parts: | 900 μm boot, protective ferrule cap                 |
| Packaging       |   |
| Packaging:      | Single (1) connector sample in a sealed plastic bag |

# **Mechanical Characteristics (Connectivity)**

#### Mechanical Specifications:

| Parameters                                      | Specifications                                     |
|---|--|
| Interconnection Compatibility                   | TIA/EIA-604-10A (FOCIS 10)                         |
| Field Assembly Time                             | 40 seconds including fiber preparation             |
| Durability (Multimode)                          | 500 cycles, less than 0.2 dB change, FOTP-21       |
| Durability (Single-mode)                        | 500 cycles, less than 0.3 dB change, FOTP-21       |
| Nominal Fiber OD                                | 125 μm   |
| Storage Temperature                             | -40°F to +140°F (-40°C to +60°C)                   |
| Operating Temperature                           | -40°F to +167°F (-40°C to +75°C)                   |
| Tensile strength on 2 mm Jacketed fiber         | 11.24 lb (5.1 Kg), less than 0.2 dB change, FOTP-6 |
| Tensile strength on 900 µm tight buffered fiber | 1.12 lb (0.5 Kg), less than 0.2 dB change, FOTP-6  |
| Tensile strength on 250um fiber                 | 0.5lb (0.45Kg), less than 0.2 dB change, FOTP-6    |
| Ferrule   | Ceramic  |

# **Applicable Specifications and Agency Compliance (Overall)**

# Applicable Standards & Environmental Programs

|     | EU Directive 2002/95/EC (RoHS):       | Yes          |
|-----|---------------------------------------|--------------|
|     | EU RoHS Compliance Date (mm/dd/yyyy): | 07/01/2006   |
|     | MII Order #39 (China RoHS):           | EUP 50       |
|     | Telecommunications Standards:         | TIA 568-C.3  |
|     | Safety Listing:                       | ACA          |
| Sui | tability                              |              |
|     | Suitability - Indoor:                 | Yes - Indoor |

# **Transmission Characteristics (Connectivity)**

# Transmission Specifications:

| Fiber type      | Maximum Insertion Loss | Typical Insertion Loss | Minimum reflectance @ 1550 nm |
|-----------------|------------------------|------------------------|-------------------------------|
| Multimode       | 0.50 dB                | 0.20 dB                | -30 dB                        |
| Single-mode UPC | 0.50 dB                | 0.30 dB                | -50 dB                        |
| Single-mode APC | 0.50 dB                | 0.30 dB                | -60 dB                        |

# Notes (Overall)

Notes: Refer to Installation Guide PX105234 for installation procedures. Fiber can be reterminated up to 5 times with the same connector.

#### **Product Family**

### Part Number List:

| Description  | Color        | Belden Part Number |
|--|--------------|--------------------|
| FX Brilliance Universal SC for OM1 Contractor 25/PK      | Beige        | AX105205-B25       |
| FX Brilliance Universal SC for OM1 Sample 1/PK           | Beige        | AX105205-S1        |
| FX Brilliance Universal SC for OM2 Contractor 25/PK      | Black        | AX105206-B25       |
| FX Brilliance Universal SC for OM2 Sample 1/PK           | Black        | AX105206-S1        |
| FX Brilliance Universal SC for OM3/OM4 Contractor 25/PK  | Aqua         | AX105207-B25       |
| FX Brilliance Universal SC for OM3/OM4 Sample 1/PK       | Aqua         | AX105207-S1        |
| FX Brilliance Universal SC for OM4 Contractor 25/PK      | Erika Violet | AX105253-B25       |
| FX Brilliance Universal SC for OM4 Sample 1/PK           | Erika Violet | AX105253-S1        |
| FX Brilliance Universal SC for OS2 Contractor 25/PK      | Blue         | AX105208-B25       |
| FX Brilliance Universal SC for OS2 Sample 1/PK           | Blue         | AX105208-S1        |
| FX Brilliance Universal SC/APC for OS2 Contractor 25/PK  | Green        | AX105209-B25       |
| FX Brilliance Universal SC/APC for OS2 Sample 1/PK       | Green        | AX105209-S1        |
| FX Brilliance Universal 2mm Boot 25/PK                   | Black        | AX105214-B25       |
| FX Brilliance Universal 3mm Boot 25/PK                   | Black        | AX105215-B25       |
| Breakout Kit 6 fibers                                    | N/A          | AX101100           |
| Breakout Kit 12 fibers                                   | N/A          | AX101101           |
| Breakout Kit 6 fibers for Central Tube Loose Tube Cable  | N/A          | AX104695           |
| Breakout Kit 12 fibers for Central Tube Loose Tube Cable | N/A          | AX104696           |

# **Put Ups and Colors:**

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| Item #      | Putup | Ship Weight | Color | Notes | Item Desc                  |
|-------------|-------|-------------|-------|-------|----------------------------|
| AX105208-S1 | 1 EA  | 0.005 KG    |       |       | FX BR UNIVERSAL SC SM 1/PK |

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