

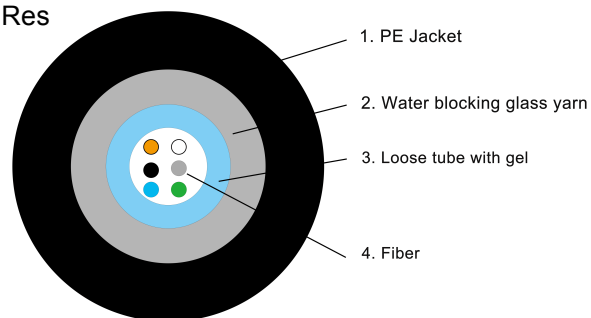
**SCP PART#: EF-OS2-6LT-DB**

**Description:**

Direct Burial/Outdoor 6 Strand OS2 9/125 Single Mode, Loose Tube,  
SCP-EasyFiber Bend Insensitive G-657.A2, Gel Filled UV Sun Res  
PE Jacket - Black -1000ft/305m Spool

**Regulatory:**

EU RoHS 2011/65 EU Compliant  
ITU-T G.657.A1 -10mm Macrobend Radius SMF



**Cable Technical Parameters (Meet IEC 60794-2):**

|                               |                           |                           |
|-------------------------------|---------------------------|---------------------------|
| Fiber                         | Count                     | 6                         |
|                               | Type                      | Corning SMF-28®Ultra      |
| Cable                         | OD(mm)                    | 6.0±0.3                   |
|                               | Wall Thickness            |                           |
|                               | Material                  | PE                        |
|                               | Color                     | Black                     |
| Buffer                        | OD(um)                    | 2.8±0.2                   |
|                               | Material                  | PBT                       |
|                               | Color                     |                           |
| Nominal weight(kg/km)         |                           |                           |
| Max.tensile Strength(N)       | Short-term                | 1200                      |
|                               | Long-term                 | 400                       |
| Min.Bending Radius(mm)        | Dynamic                   | 20D                       |
|                               | Static                    | 10D                       |
| Max.Crush Resistance(N/100mm) | Short-term                | 1500N/100mm               |
|                               | Long-term                 | 500N/100mm                |
| Cable attenuation             | 1310nm ( SMF )            | ≤0.4 dB/km                |
|                               | 1550nm ( SMF )            | ≤0.3 dB/km                |
| Strength Members              |                           | Water blocking glass yarn |
| Environmental Protection      |                           | RoHS COMPLIANT            |
| Temperature range             | Storage or transportation | -40~70℃                   |
|                               | Operation                 | -40~60℃                   |
|                               | Installation              | -20~60℃                   |

# Optical Characteristics:

## Corning SMF-28®Ultra

| Characteristics                                 | Conditions                    | Specified Values | Units                    |
|-------------------------------------------------|-------------------------------|------------------|--------------------------|
| Geometrical characteristics                     |                               |                  |                          |
| Cladding diameter                               |                               | 125.0±1.0        | um                       |
| Cladding non-circularity                        |                               | ≤0.7             | %                        |
| Coating diameter                                |                               | 242±5            | um                       |
| Coating/cladding concentricity error            |                               | <12              | um                       |
| Core/cladding concentricity error               |                               | ≤0.5             | um                       |
| Optical characteristics                         |                               |                  |                          |
| Attenuation                                     | 1310nm                        | ≤0.32            | dB/km                    |
|                                                 | 1383nm                        | ≤0.32            | dB/km                    |
|                                                 | 1490nm                        | ≤0.21            | dB/km                    |
|                                                 | 1550nm                        | ≤0.18            | dB/km                    |
|                                                 | 1625nm                        | ≤0.20            | dB/km                    |
| Attenuation vs. Wavelength<br>max. A difference | 1285~1330nm                   | ≤0.03            | dB/km                    |
|                                                 | 1525~1575nm                   | ≤0.02            | dB/km                    |
| Zero dispersion wavelength                      |                               | 1304~1324        | nm                       |
| Zero dispersion slope                           |                               | ≤0.092           | ps/(nm <sup>2</sup> *km) |
| Polarization mode dispersion                    |                               |                  |                          |
| PMD maximum individual fibre                    |                               | ≤0.1             | ps/km <sup>1/2</sup>     |
| PMD design link value                           |                               | ≤0.04            | ps/km <sup>1/2</sup>     |
| Cable cut off wavelength                        |                               | ≤1260            | nm                       |
| Mode field diameter                             | 1310nm                        | 8.8~9.6          | um                       |
|                                                 | 1550nm                        | 9.9~10.9         | um                       |
| Group index of refraction                       | 1310nm                        | 1.4691           |                          |
|                                                 | 1550nm                        | 1.4696           |                          |
| Environmental characteristics                   | 1310nm、1550nm&1625nm          |                  |                          |
| Temperature cycling                             | -60℃ to +85℃                  | ≤0.05            | dB/km                    |
| Temperature-humidity cycling                    | -10℃ to +85℃,<br>4% to 98% RH | ≤0.05            | dB/km                    |
| Water immersion                                 | 23℃, 30 days                  | ≤0.05            | dB/km                    |
| Dry heat                                        | 85℃, 30 days                  | ≤0.05            | dB/km                    |
| Damp heat                                       | 85℃, 85%RH, 30 days           | ≤0.05            | dB/km                    |
| Mechanical specification                        |                               |                  |                          |
| Proof test                                      |                               | ≥100             | Kpsi                     |

|                                                   |                   |       |    |
|---------------------------------------------------|-------------------|-------|----|
| Macro bending induced loss                        |                   |       |    |
| 1Turns @10mm Radius                               | 1550nm            | ≤0.5  | dB |
| 1Turns @10mm Radius                               | 1625nm            | ≤1.5  | dB |
| 10Turns @15mm Radius                              | 1550nm            | ≤0.05 | dB |
| 10Turns @15mm Radius                              | 1625nm            | ≤0.30 | dB |
| 100Turns @25mm Radius                             | 1310&1550&1625 nm | ≤0.01 | dB |
| Dynamic stress corrosion susceptibility parameter |                   | 20    |    |

## Cable Sheath Marking:

STRUCTURED CABLE PRODUCTS --- EF-OS2-6LT-DB ---Direct Burial/Outdoor 6 Strand OS2  
 Loose Tube Single Mode SCP-EASYFIBER™ Indoor/Outdoor UV Sun Res RoHS \*\*\*\*FT MMY