

Indoor/Outdoor Dual Purpose Subscriber Drop Cable

1-4f Dual Jacket, G657B3, CPR Cca

Features

- G657B3 Bend insensitive fibre
- Tight buffered
- UV stable outer jacket
- Small cable outer diameter
- Aramid yarn high tensile strength
- Inner LSZH cables compliant to Cca -s1a, d0 -a1
- Compliant to directive 2002/95/EC (RoHS)

Application

Drop cable for indoor/outdoor FTTx applications.

The drop cable is primarily intended for direct installation, i.e. installation with clips or routing inside cable raceways and mouldings. This installation technique puts extra tough requirements on the cables in terms of bend performance, crush resistance and other mechanical parameters.

The drop cable has extremely good bend performance due to the G657B3 fiber and the built in bend restriction of the cable design.

Design

The Hexatronic FTTx Internal / External FTTx Drop cable meets of indoor fibre optic distribution requirements and is CPR rated to Cca when the outer UV stable Jacket is removed. Crush resistant and suitable for installation with a bend radius down to 7.5mm.

Product Information

- 1 Optical fiber
- 2 Tight buffer
- 3 Inner strength member
- 4 Inner jacket
- 5 Outer strength member
- 6 Outer jacket

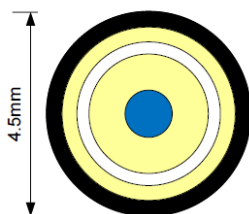
Technical Information

| | |
|---------------------------------------|-----------------------------------------------------------------------------|
| Product Color | Black |
| Color Code | TIA598 |
| Temperature, Operation [°C] | -20 to +70 |
| Temperature, Storage [°C] | -15 to +70 |
| Temperature, Installation [°C] | -20 to +70 |
| Water Blocking | Length water blocking according to IEC 60794-1-2-F5C (Outer jacket only) |
| Reaction to Fire | Cca -s1a, d0 -a1, IEC 60332-1 (inner jacket) |
| Fiber Type | G657B3 |
| Attenuation @Wavelength [nm] | 1310/1550 |
| Maximum Attenuation [dB/km] | 0.40/0.30 |

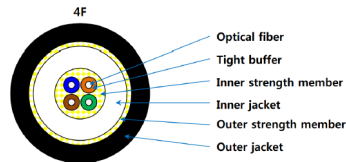
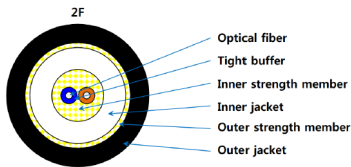
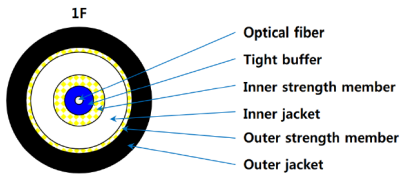
| | |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conformance | <p>Tensile, short term - IEC 60794-1-21, E1</p> <p>Tensile, long term - IEC 60794-1-21, E1</p> <p>Abrasion, cable sheath - IEC 60794-1-21, E2A</p> <p>Abrasion, cable sheath marking - IEC 60794-1-21, E2B</p> <p>Crush - IEC 60794-1-21, E3A</p> <p>Impact - IEC 60794-1-21, E4</p> <p>Bend, multiple turns - IEC 60794-1-21, E11A</p> <p>For details on test conditions, contact Hexatronic.</p> |
| Certifications | <p>Cca -s1a, d0 -a1 (Inner cable)</p> <p>RoHS 2002/95/EC</p> |
| Marking | <p>Example of sheath marking, 1 time/meter:</p> <p>"HEXATRONIC XXX yymmddtt TOL4063035/1C 1F G657B3 TIA-598 Cca-s1a,d0,a1 xxxx m"</p> <p>where XXX = plant code, yymmddhh = year, month, day of manufacture, xxxx=running meter marking</p> |
| Installation Notes | <p>To enable flame resistance for indoor installations, the black outer jacket shall be removed. The jacket shall not be removed for sections installed outdoors.</p> |

Technical Details

CONSTRUCTION Simplex 1F



| Test | Condition | Criteria | Specification |
|--------------------------|--------------------------------------------------|-------------------------|--------------------|
| Tensile strength | Applicable tensile load are followed by table 2. | after: ≤ 0.2 dB | IEC 60794-1-21-E1 |
| Crush | Load _{max} =1000N/10 cm, 5min., 3point | after: ≤ 0.2 dB | IEC 60794-1-21-E3 |
| Impact | 5J, 1impact, 3point | after: ≤ 0.2 dB | IEC 60794-1-21-E4 |
| Repeated Bend | 3bend, 3cycles, 15xD. | after: ≤ 0.2 dB | IEC 60794-1-21-E6 |
| Torsion | $\pm 180^\circ$, 2m, 10 cycle, under load 5N | after: ≤ 0.2 dB | IEC 60794-1-21-E7 |
| Bend | $\pm 180^\circ$, 20xD, 10 cycle | after: ≤ 0.2 dB | IEC 60794-1-21-E11 |
| Temperature cycling test | - Temperature +20°C → -20°C → +70°C +20°C | after: ≤ 0.2 dB/km | IEC 60794-1-22-F1 |
| Water Penetration | 1m height, 3m length, 24hr | No leakage of water | IEC 60794-1-22-F5B |
| UV resistance test | 300hrs, xenon-arc, 1cycle | $\geq 85\%$ | UL 1581 |
| Flame retardant | $\geq 85\%$ | UL 1581 | IEC 60332-1-2 |



Articles 3

| Article name | Color | No. of Fibers | Layout | Bend Radius [mm] | Tensile Force, Installation [N] | Tensile Force, Operation [N] | Crush [N/100 mm] | Impact [J] | Diameter Ø [mm] | Weight [kg/km] | Form of Delivery |
|---------------------------------------------------------|-------------|---------------|------------|------------------|---------------------------------|------------------------------|------------------|------------|-----------------|----------------|------------------|
| Drop cable Dual jacket ID/OD 1f G657B3 TOL4063035/1C | Black/White | 1 | 1 × 900 µm | 45 | 700 | 200 | 500 | 5 | 4.5 / 3 | 21 | 1000 mreel |
| Drop cable Dual jacket ID/OD 2f G657B3 TOL4063036/2C | Black/White | 2 | 2 × 600 µm | 52 | 1000 | 200 | 500 | 5 | 5.2 / 3.5 | 28 | 1000 mreel |
| Drop cable Dual jacket ID/OD 4f G657B3 TOL4063036/4C | Black/White | 4 | 4 × 600 µm | 52 | 1000 | 200 | 500 | 5 | 5.2 / 3.5 | 28 | 1000 mreel |