# **ADALTRA**

49823

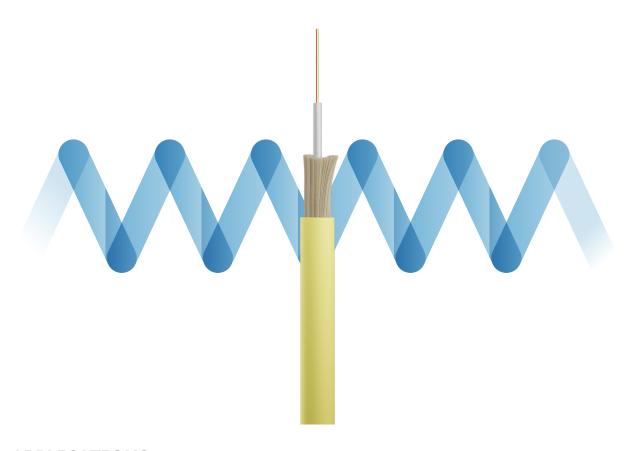
2-fiber dielectric optical cable [9/125  $\mu$ m] with tight buffer, Dca, s2, d2, a1, G-657A2 for indoor use



## **DESCRIPTION**

The 9/125  $\mu$ m 2-fiber dielectric optical cable with tight buffer and Dca, s2, d2, a1 classification is a professional solution designed for telecommunications installations and high-speed networks that require stable performance, enhanced safety and complete immunity to electromagnetic interference.

This cable provides excellent long-distance transmission capability while maintaining an improved bending radius, allowing installation in confined spaces, narrow cable trays, complex conduits or environments where tight bends are required without compromising attenuation.



## **APPLICATIONS**

- FTTH / FTTx networks.
- Backbone and building distribution.
- Rack installations and technical rooms.
- Indoor or vertical conduits.
- Surveillance and control systems.
- Data center and industrial applications.



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#### **ADVANTAGES**

- Fully dielectric.
- High-quality single-mode performance (9/125 µm).
- Ideal for long distances and high-speed transmission with low attenuation.
- Reduced bending radius.
- Greater installation flexibility.
- Minimizes bending losses even in demanding routes.
- Suitable for point-to-point networks.
- Easy to strip and simple to handle during connectorization.
- Covers long distances without splicing, speeding up deployment and reducing failure points.
- Robust jacket that protects against abrasion, moderate humidity and handling during installation.
- High durability and resistance.

#### **STANDARDS**

| IEC 60793-1  | UNE-EN 50266 (IEC 60332/1-2)  |
|--------------|-------------------------------|
| IEC 60793-2  | UNE-EN 50267 (IEC 60754-1-2)  |
| IEC 60794-2  | CPR Euroclass                 |
| IEC60332-1-2 | Fire reaction Dca, s2, d2, a1 |
| IEC60754-1   |                               |
| IEC60754-2   |                               |

## **TECHNICAL SPECIFICATIONS**

| Number of fibers                  | 2            |
|-----------------------------------|--------------|
| Fiber type                        | G.657.A2     |
| Mode field diameter @1310 nm      | 8,8±0,4 μm   |
| Mode field diameter @1550 nm      | 9,8±0,5 μm   |
| Cladding diameter                 | 124,8±0,7 μm |
| Cladding non-circularity          | ≤0,7 %       |
| Core-cladding concentricity error | ≤0,5 µm      |
| Cut-off wavelength                | ≤1260 nm     |
| Attenuation @1310 nm              | ≤0,4 dB/Km   |
| Attenuation @1550 nm              | ≤0,3 dB/Km   |



# **TECHNICAL SPECIFICATIONS**

| Macrobending loss @ 1 turn x 7.5 mm radius @1550 nm | ≤0,5 dB       |  |
|---|---------------|--|
| Macrobending loss @ 1 turn x 7.5 mm radius @1625 nm | ≤1 dB         |  |
| Coating diameter                                    | 245±5 μm      |  |
| Coating non-circularity                             | ≤6 %          |  |
| Cladding-coating concentricity error                | ≤12 µm        |  |
| Buffer diameter                                     | 850±50 μm     |  |
| Buffer material                                     | LSZH          |  |
| Buffer color  | green and red |  |
| Strength yarn                                       | Aramid        |  |
| Outer jacket diameter                               | 4,0±0,2 mm    |  |
| Outer jacket thickness                              | 0,8 mm        |  |
| Outer jacket type                                   | FR-LSZH       |  |
| CPR level   | Dca           |  |
| Outer jacket color                                  | yellow        |  |
| Tension (long term)                                 | 250 N         |  |
| Tension (short term)                                | 500 N         |  |
| Crush resistance (long term)                        | 300           |  |
| Crush resistance (short term)                       | 1000          |  |
| Minimum bending radius (dynamic)                    | 10D mm        |  |
| Minimum bending radius (static)                     | 5D mm         |  |
| Installation temperature                            | -20~60 °C     |  |
| Operating temperature                               | -40~70 °C     |  |
| Storage temperature                                 | -40~70 °C     |  |



# **ORDER INFORMATION**

| P/N   | DESCRIPTION  | APPLICATION | CPR | JACKET | Ø<br>FIBER  | NO.<br>FIBERS               | PACKAGING |
|-------|--|-------------|-----|--------|-------------|-----------------------------|-----------|
| 49823 | Dielectric optical fiber<br>cable [9/125 µm] with<br>2 tight-buffer fibers,<br>G-657A2 | indoor      | Dca | LSZH   | 9/125<br>μm | 2 fibers<br>tight<br>buffer | 500 m     |