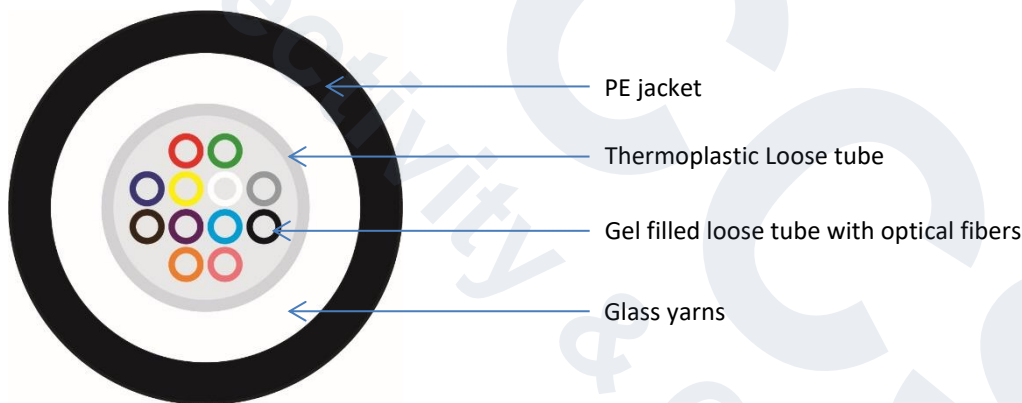


| | |
|-------------|-----------------------------------------------------------------------------|
| Cable type | A-DQ(BN)2Y |
| Description | Central loose tube cable, 4-24 OF, dielectric armour, PE jacket, Fca |



A-DQ(BN)2Y

4 to 24 cores central Loose tube optical cable for outdoor use type A-DQ(BN)2Y, longitudinally resistant to water penetration, dielectric protection against the action of rodents, external jacket in PE (polyethylene), Euroclass Fca. The optical fibers, with primary coating of 250µm, are contained within a single thermoplastic tube filled with a water-blocking gel to prevent moisture penetration.



Constructive characteristics

| | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tube | Gel-filled Loose tube |
| Filler protection | Glass yarns |
| Optical fiber type | Single-mode 9/125; multimode 50/125; multimode 62,5/125 |
| Outer jacket material | PE (polyethylene) |
| Armour | Dielectric |
| Cable outer diameter | from 5,4 to 7,2 mm |
| Nominal weight | from 27 to 65 Kg/Km |
| Marking | CCS by Qubix - "product code" - FO Cable A-DQ(BN)2Y - "1xn FO" "fiber type" - dielectric armoured - PE jacket- meters - lot - FID - Euroclass Fca - n° DOP |

Mechanical and environmental properties

| | |
|-----------------------------|---------------------------|
| Use | Outdoor |
| Bend. radius (installation) | 20 x outer diameter |
| Bend. radius (long term) | 15 x outer diameter |
| Max. pull strength | from 1000 N (100 kg max.) |
| Crush resistance | 2000 N/dm |
| Installation temperature | from -5°C to +50°C |
| Operating temperature | from -20°C to +70°C |

| | |
|-------------|-----------------------------------------------------------------------------|
| Cable type | A-DQ(BN)2Y |
| Description | Central loose tube cable, 4-24 OF, dielectric armour, PE jacket, Fca |

Reference standards

| | |
|---------------------------|-------------------------------------------------|
| Cables and optical fibers | EN 60793 EN 60794-1 |
| Structured cabling | EN 50173-1 ISO/IEC 11801 ANSI/TIA 568.3-D |

Fire behavior

| | |
|----------------|------------------------|
| CRP regulation | EN 50575 Euroclass Fca |
|----------------|------------------------|

Optical cables suitable for outdoor installations; these cables are not intended for indoor use (where the use of cables at least in Euroclass Eca or higher is required).

Outer jacket color

| | |
|--------------|--------------|
| 9/125 OS2 | Yellow |
| 50/125 OM2 | Black |
| 50/125 OM3 | Aqua |
| 50/125 OM4 | Erika Violet |
| 62,5/125 OM1 | Grey |

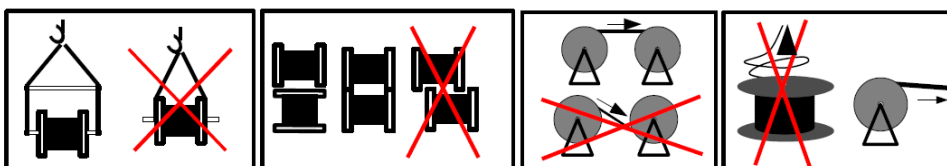
Packaging

| | |
|------|----------------------|
| Drum | 2000 or 4000 mt ± 5% |
|------|----------------------|

Reference codes

| Cores number | 9/125 OS2 | 50/125 OM2 | 50/125 OM3 | 50/125 OM4 | 62,5/125 OM1 |
|--------------|--------------|--------------|-----------------|-----------------|--------------|
| 1x4 cores | Cod. 2008302 | Cod. 2008306 | Cod. 2008306OM3 | Cod. 2008306OM4 | Cod. 2008309 |
| 1x6 cores | Cod. 2008314 | - | Cod. 2008313OM3 | - | - |
| 1x8 cores | Cod. 2008303 | Cod. 2008087 | Cod. 2008087OM3 | Cod. 2008087OM4 | Cod. 2008310 |
| 1x12 cores | Cod. 2008304 | Cod. 2008307 | Cod. 2008307OM3 | Cod. 2008307OM4 | Cod. 2008311 |
| 1x24 cores | Cod. 2008305 | Cod. 2008308 | Cod. 2008308OM3 | Cod. 2008308OM4 | Cod. 2008312 |

Recommendations of use



| | |
|-------------|-----------------------------------------------------------------------------|
| Cable type | A-DQ(BN)2Y |
| Description | Central loose tube cable, 4-24 OF, dielectric armour, PE jacket, Fca |

MULTIMODE OPTICAL FIBER SPECIFICATIONS

| <i>Optical fiber type</i> | <i>50/125 OM2</i> | <i>50/125 OM3</i> | <i>50/125 OM4</i> | <i>62,5/125 OM1</i> |
|--------------------------------------|-------------------|-------------------|-------------------|---------------------|
| Core diameter | 50 ± 2,5 µm | 50 ± 2,5 µm | 50 ± 2,5 µm | 62,5 ± 2,5 µm |
| Cladding diameter | 125 ± 1 µm | 125 ± 1 µm | 125 ± 1 µm | 125 ± 1 µm |
| Primary coating diameter | 242 ± 5 µm | 242 ± 5 µm | 242 ± 5 µm | 242 ± 5 µm |
| Cladding Non-Circularity | ≤ 0,7% | ≤ 0,7% | ≤ 0,7% | ≤ 0,7% |
| Core Non-Circularity | ≤ 5% | ≤ 5% | ≤ 5% | ≤ 5% |
| Concentricity error core/cladding | ≤ 1 µm | ≤ 1 µm | ≤ 1 µm | ≤ 1 µm |
| Concentricity error cladding/coating | ≤ 10 µm | ≤ 10 µm | ≤ 10 µm | ≤ 10 µm |
| Atten. typical/max λ=850 nm | 2,0 – 3,5 dB/Km | 2,0 – 3,5 dB/Km | 2,0 – 3,5 dB/Km | 2,6 – 3,5 dB/Km |
| Atten. typical/max λ=1300 nm | 0,5 – 1,5 dB/Km | 0,5 – 1,5 dB/Km | 0,5 – 1,5 dB/Km | 0,5 – 1,5 dB/Km |
| Bandwidth λ=850 nm | 500 MHz·Km | 1500 MHz·Km | 3500 MHz·Km | 220 MHz·Km |
| Bandwidth λ=1300 nm | 500 MHz·Km | 500 MHz·Km | 500 MHz·Km | 500 MHz·Km |
| Group Index @ 850 nm | 1,482 | 1,482 | 1,482 | 1,496 |
| Group Index @ 1300 nm | 1,477 | 1,477 | 1,477 | 1,491 |
| Numerical aperture | 0,200 ± 0,015 | 0,200 ± 0,015 | 0,200 ± 0,015 | 0,275 ± 0,015 |

SINGLE-MODE OPTICAL FIBER SPECIFICATIONS

| <i>Optical fiber type</i> | <i>9/125 OS2 (ITU G.652D)</i> |
|-------------------------------------------|--------------------------------------------------|
| Core diameter | 9,0 ± 0,4 µm @1310 nm 10,1 ± 0,5 µm @ 1550 nm |
| Cladding diameter | 125 ± 0,10 µm |
| Primary coating diameter | 245 ± 7 µm |
| Cladding Non-Circularity | ≤ 0,7% |
| Concentricity error core/cladding | ≤ 0,5 µm |
| Concentricity error cladding/coating | ≤ 12 µm |
| Attenuation typical/max λ=1310 nm | ≤ 0,36 dB/Km |
| Attenuation typical/max λ=1550 nm | ≤ 0,23 dB/Km |
| Attenuation typical/max λ=1625 nm | ≤ 0,27 dB/Km |
| Group Index @ 1310 nm | 1,4676 |
| Group Index @ 1550 nm | 1,4682 |
| Chromatic @ 1550 nm | ≤ 18 ps/(nm·Km) |
| Chromatic @ 1625 nm | ≤ 22 ps/(nm·Km) |
| Cable cut-off wavelength | λ _{cc} ≤ 1260 nm |
| Zero-dispersion wavelength λ _o | 1302-1322 nm |
| Slope at λ _o | S _o ≤ 0,092 ps/(nm ² ·Km) |
| PMD | ≤ 0,2 ps/√Km |

Optical fibers are fully compliant with IEC/EN 60793-1, IEC/EN 60793-2, EN 50173 and ISO/IEC 11801