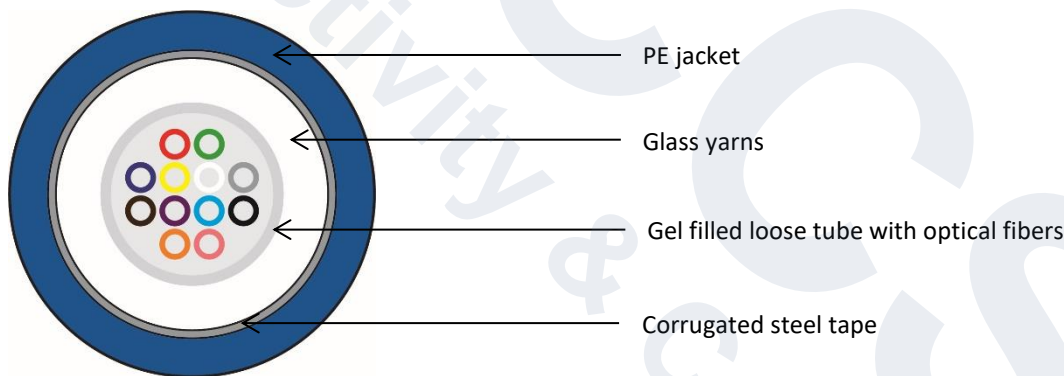


| | |
|-------------|--------------------------------------------------------------------|
| Cable type | A-DQ(BN)(SR)2Y |
| Description | Central loose tube cable, 4-24 OF, metallic armour, PE jacket, Fca |



A-DQ(bN)(SR)2Y

4 to 24 cores central loose tube optical cable for external use type A-DQ(BN)(SR)2Y, resistant longitudinally and transversally to the penetration of water, metallic armour with a corrugated steel tape that gives protection against the action of rodents and mechanical stresses, external jacket in PE (polyethylene), Euroclass Fca. The optical fibres, with primary coating of 250µm, are contained inside a single thermoplastic tube filled with a water-blocking gel to prevent moisture penetration.



Constructive characteristics

| | |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tube | Gel-filled Loose tube |
| Filler protection | Glass yarn |
| Optical fiber type | Single-mode 9/125; multimode 50/125; multimode 62,5/125 |
| Outer jacket material/color | PE (polyethylene)/blue |
| Armour | Corrugated steel tape |
| Cable outer diameter | from 7,7 to 9,6 mm |
| Nominal weight | from 70 to 115 Kg/Km |
| Marking | CCS by Qubix - "product code" - FO Cable A-DQ(BN)(SR)2Y - "1xn FO" - "fiber type" - corrugated steel tape armoured - PE jacket - meters - lotto - 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 | from 2000 N/dm |
| Installation temperature | from -5°C to +50°C |
| Operating temperature | from -20°C to +70°C |

| | |
|-------------|---------------------------------------------------------------------------|
| Cable type | A-DQ(BN)(SR)2Y |
| Description | Central loose tube cable, 4-24 OF, metallic 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

| | |
|----------------|------------------------|
| CPR 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).

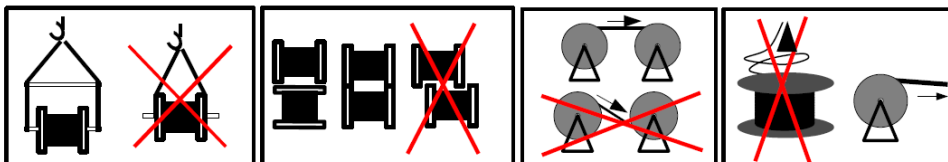
Packaging

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

Reference codes

| Cores number | 9/125 OS2 | 50/125 OM2 | 50/125 OM3 | 50/125 OM4 | 62,5/125 OM1 |
|--------------|--------------|--------------|-----------------|-----------------|--------------|
| 1x4 | Cod. 2008321 | Cod. 2008326 | Cod. 2008326OM3 | Cod. 2008326OM4 | Cod. 2008330 |
| 1x6 | - | Cod. 2008327 | Cod. 2008327OM3 | Cod. 2008327OM4 | - |
| 1x8 | Cod. 2008323 | Cod. 2008088 | Cod. 2008088OM3 | Cod. 2008088OM4 | Cod. 2008332 |
| 1x12 | Cod. 2008324 | Cod. 2008328 | Cod. 2008328OM3 | Cod. 2008328OM4 | Cod. 2008333 |
| 1x24 | Cod. 2008325 | Cod. 2008329 | Cod. 2008329OM3 | Cod. 2008329OM4 | Cod. 2008334 |

Recommendations of use



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

MULTIMODE OPTICAL FIBER SPECIFICATIONS

| Optical fiber type | 50/125 OM2 | 50/125 OM3 | 50/125 OM4 | 62,5/125 OM1 |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Core diameter | 50 ± 2,5 µm | 50 ± 2,5 µm | 50 ± 2,5 µm | 62,550 ± 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

| Optical fiber type | 9/125 OS2 (ITU G.652D) |
|-------------------------------------------|---------------------------------------------------|
| Core diameter | 9,0 ± 0,4 µm @ 1310 nm 10,1 ± 0,5 µm @ 1550 nm |
| Cladding diameter | 125 ± 0,7 µm |
| Primary coating diameter | 242 ± 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 | 0,31 – 0,35 dB/Km |
| Attenuation typical/max λ=1550 nm | 0,20 – 0,24 dB/Km |
| Attenuation typical/max λ=1625 nm | 0,21 – 0,26 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 | 1304-1324 nm |
| Slope at λ _o | S _o ≤ 0,092 ps/(nm ² ·Km) |
| PMD | ≤ 0,1 ps/√Km |

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