

1.03.2023

Product Datasheet

Fiber Optic Cable: A-DQ4Y

Blowing MT 12 PA 96 (8x12) G.657.A1 950N Ø5.1mm (ANSI)

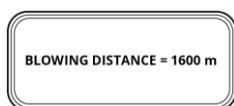
Order information

| Design | Part number |
|--|-------------|
| Blowing MT 12 PA 96 (8x12) G.657.A1 950N Ø5.1mm (ANSI) | 543712 |

Product Pros



Cables are tested according to IEC 60794-1-21:2015



Performance at the blowing test track confirmed



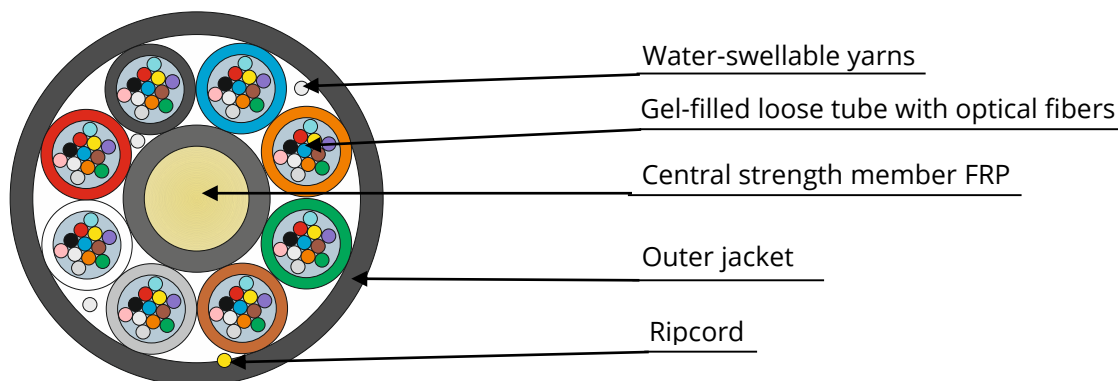
All-dielectric design



Tension:
installation 950N
operation 350N



Application and design

- Blowing into microducts
- Installation into indoor/outdoor cable conduits and trays



Cable consists of stranded core with central strength member (FRP), gel-filled loose tubes with optical fibers. Stranded core is fixed by water-swellable yarns. Outer jacket is made of polyamide PA12. Color of outer jacket is black. Ripcord is laid under the cable jacket.

Color identification of loose tubes and optical fibers is according to ANSI/TIA-598-D-2014

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Blue | Orange | Green | Brown | Slate | White | Red | Black | Yellow | Violet | Rose | Aqua |

Other colors upon request

Cable marking example

Marking is made on each meter of cable

| | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|----|----|
| Fiber optic cable = INCAB EUROPE = Blowing MT 12 PA 96 8 x 12 G.657.A1 950N Ø 5.1mm BATCH 2023 = 00001 m = | | | | | | | | | | | |
| | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

| | | | |
|---|-----------------------|----|----------------------|
| 1 | Cable name | 7 | Installation tension |
| 2 | Jacket type | 8 | Cable diameter |
| 3 | Fiber count | 9 | Batch number |
| 4 | Number of loose tubes | 10 | Year of production |
| 5 | Fibers per loose tube | 11 | Meter marking |
| 6 | Fiber type | | |

Design details

| | | |
|-----------------------|-------|------|
| Fiber count | | 96 |
| Number of loose tubes | | 8 |
| Fibers per loose tube | | 12 |
| Cable diameter ±0.2 | mm | 5.1 |
| Cable weight | kg/km | 17.4 |

Other designs upon request

Operating parameters

| | |
|--|-------------------------------|
| Operating temperature | -40°C...+70°C |
| Installation temperature | -30°C...+50°C |
| Transportation and storage temperature | -60°C...+70°C |
| Minimum bending radius | 15 x cable diameter |
| Design life | 25 years (per fiber supplier) |

Optical fiber

| | |
|----------------------|----------------------------|
| Fiber type | «G.657.A1» |
| Fiber brand | Corning® SMF 28® ULTRA 200 |
| ITU-T Recommendation | G.657.A1 |

Dimensional Specifications

| | |
|--------------------------|-------------|
| Core-Clad Concentricity | 0.5 µm |
| Cladding Diameter | 125 ±0.7 µm |
| Cladding Non-Circularity | 0.7 % |
| Coating Diameter | 200 ±5 µm |

Transmission Specifications

| | |
|---------------------------------------|-------------|
| Attenuation in the cable (dB/km)*: | |
| 1310 nm wavelength (Typical** / Max.) | 0.32 / 0.35 |
| 1550 nm wavelength (Typical** / Max.) | 0.19 / 0.21 |

* Local attenuation discontinuities caused by cable winding on a reel are allowed.

** Typical attenuation is the real level of optical attenuation of at least 90% fibers after cabling

Additional information about optical fibers on www.incabeurope.com

Blowing performance

| | |
|-------------------------------|--------------------------|
| Tube outer/inner diameter, mm | Installation distance, m |
| 10/6 | 550 |
| 12/8 | 1600 |

Cable parameters

| Parameter | Nominal value | | Evaluation criterion |
|---|--|---|---|
| Tensile strength (IEC 60794-1-21 method E1) | Long term calc. OF strain ≤ 0.20 % 0.35 kN | Short term calc. OF strain ≤ 0.60 % 0.95 kN | - Δα* ≤ 0.10 dB after test - no damage |
| Crush (IEC 60794-1-21 method E3) | 0.05 kN/cm | | - Δα* ≤ 0.10 dB - no damage |
| Repeated bending (IEC 60794-1-21 method E6) | 20 cycles, bending radius ±90° | | - Δα* ≤ 0.10 dB - no damage |
| Torsion (IEC 60794-1-21 method E7) | - 10 cycles - torsion angle ±360° length 4 m | | |
| Impact (IEC 60794-1-21 method E4) | Impact energy 2 J | | |
| Water penetration (IEC 60794-1-22 method F5C) | Sample length: 3 m Testing time: 24 hours | | No water at the cable end |
| Temperature cycling** (IEC 60794-1-22 method F1) | - temperature range from -40°C to 70°C - 2 cycles - cycle period ≥16 hours | | Δα* ≤ 0.10 dB/km |
| Compound flow (IEC 60794-1-21 method E14) | at 70°C | | No dripped compound |

* - attenuation increasing at standard wavelengths

** - other temperature range upon request

Safety standards compliance

RoHS: 2011/65/EU; 2015/863/EU

"Restriction on the use of certain Hazardous Substances"

REACH: 1907/2006/EU

"Registration, Evaluation, Authorisation and Restrictions of Chemicals"

Reel packing and marking

Cables are supplied on non-returnable wooden reels. Reel diameter is not less than 40 diameters of the cable. Not less than 2 m of inside end of the cable is fixed to the reel flange. The cable ends are sealed with waterproof covers.

The label on the outer reel flange contains our trademark, cable type, customer's name and PO, reel number, production date, cable length, cable weight net/gross.

The following information is printed on the reel flange: manufacturer's name and website, rotation direction, cable end indication, shipping and handling summary, labels "Fragile" and "Handle with care".

Our cable passport shows: cable type, technical standard number, cable length, fiber type, fiber coloring, fibers per tube, tube identification coloring, final attenuation for all fibers, refractive index of the fiber, fiber manufacturer and production date.

Cable passport is affixed to the inner flange in a plastic bag. Additional information can be included on the passport upon request.

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