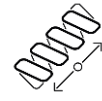
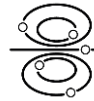
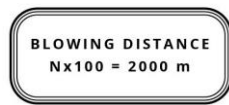


05.08.2020

**Product Datasheet**  
**Fiber Optic Cable: Blowing MT 12**  
A-DQ4Y 96 (8x12) G.652D+G.657.A1 350N Ø 5.1mm

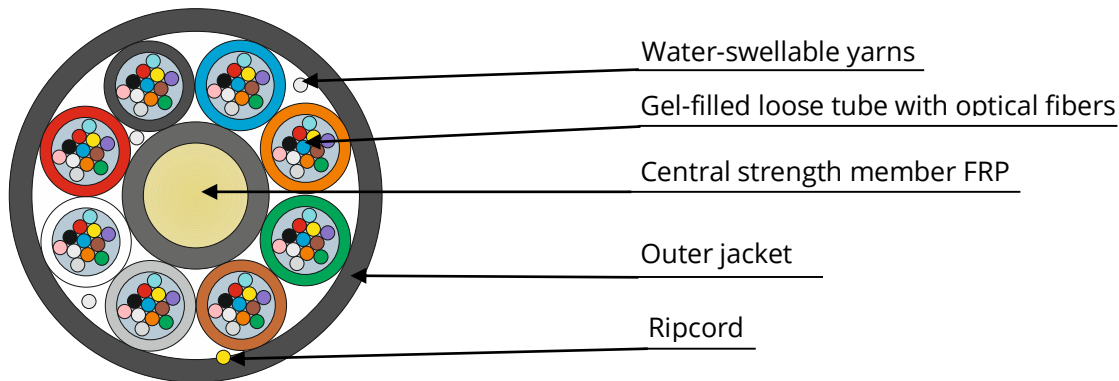
**Order information**

| Design  | Part number  |
|---|--------------|
| A-DQ4Y 96 (8x12) G.652D+G.657.A1 350N Ø 5.1mm | upon request |



|  |  |                       |   |
|--|--|-----------------------|---|
| Cables are tested according to IEC 60794-1-21:2015 | Blowing track: 2000 m<br>Performance confirmed | All-dielectric design | Tension:<br>installation 950N<br>operation 350N |
|--|--|-----------------------|---|

For blowing in duct or micro duct.



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**



Other colors upon request

## Cable marking example

Marking is made on each meter of cable

|                   |   |       |   |        |    |   |   |    |                 |      |         |       |      |             |
|-------------------|---|-------|---|--------|----|---|---|----|-----------------|------|---------|-------|------|-------------|
| Fiber optic cable | = | EMCAB | = | A-DQ4Y | 96 | 8 | x | 12 | G652.D+G.657.A1 | 350N | Ø 5.1mm | BATCH | 2020 | = 00001 m = |
|                   |   |       |   | 1      | 2  | 3 |   | 4  | 5               | 6    | 7       | 8     | 9    | 10          |

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

## 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

|  |                               |
|--|-------------------------------|
| Operation 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           |
| Life time                              | 25 years (per fiber supplier) |

## Optical fiber

|                                       |                          |
|---------------------------------------|--------------------------|
| Fiber brand                           | Corning SMF 28®ULTRA 200 |
| ITU-T Recommendation                  | G.652D + 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              |

\* Point discontinuity in attenuation associated with winding the cable on a drum 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.emcab.co](http://www.emcab.co)

## 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<br>(IEC 60794-1-21 method E1)      | operation<br>(fiber strain $\leq 0.2\%$ )<br>350 N   | installation<br>(fiber strain $\leq 0.6\%$ )<br>950 N | - $\Delta\alpha^* \leq 0.05$ dB after test<br>- no damage |
| Crush<br>(IEC 60794-1-21 method E3)                 | 0.05 kN/cm   |   |   |
| Repeated bending<br>(IEC 60794-1-21 method E6)      | 20 cycles, bending radius $\pm 90^\circ$   |   | - $\Delta\alpha^* \leq 0.05$ dB                           |
| Torsion<br>(IEC 60794-1-21 method E7)               | - 10 cycles<br>- torsion angle $\pm 360^\circ$ length 4 m  |   | - no damage   |
| Impact<br>(IEC 60794-1-21 method E4)                | Impact energy 2 J  |   |   |
| Water penetration<br>(IEC 60794-1-22 method F5C)    | Sample length: 3 m<br>Testing time: 24 hours   |   | No water at the cable end                                 |
| Temperature cycling**<br>(IEC 60794-1-22 method F1) | - temperature range from $-40^\circ\text{C}$ to $70^\circ\text{C}$<br>- 2 cycles<br>- cycle period $\geq 16$ hours |   | $\Delta\alpha^* \leq 0.05$ dB/km                          |
| Compound flow<br>(IEC 60794-1-21 method E14)        | at $70^\circ\text{C}$  |   | 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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