

Product Datasheet

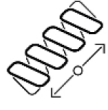
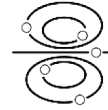
Fiber Optic Cable: Blowing MT 12

A-DQ4Y G.652D 40N Ø 3.6mm

Order information

| Design | Part number |
|-------------------------------------|-----------------------|
| A-DQ4Y 12 (1x12) G.652D 40N Ø 3.6mm | 0124-78179-18-FC00090 |
| A-DQ4Y 24 (2x12) G.652D 40N Ø 3.6mm | 0124-78180-18-FC00090 |
| A-DQ4Y 36 (3x12) G.652D 40N Ø 3.6mm | 0124-78181-18-FC00090 |
| A-DQ4Y 48 (4x12) G.652D 40N Ø 3.6mm | 0124-78147-18-FC00090 |

Product Pros



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

Blowing track: 2000 m
Performance confirmed

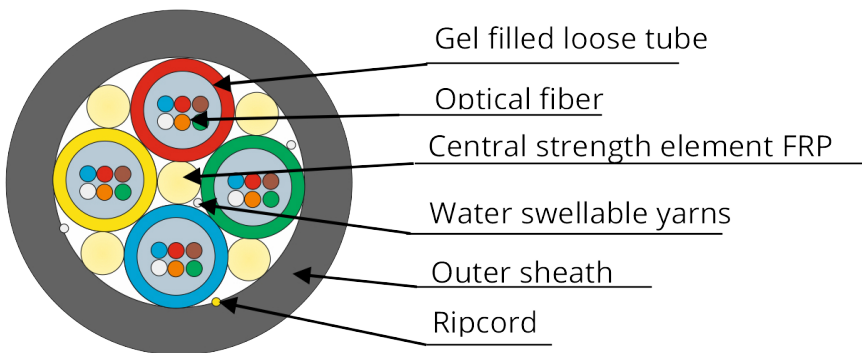
Tube inner diameter suitable for blowing

All-dielectric design

Tension:
installation 100N
operation 40N

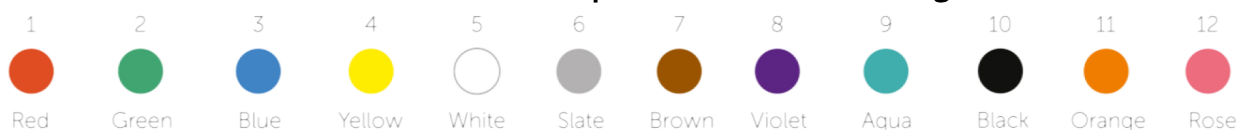
Application and design

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 DIN VDE 0888-100-1



Other colors upon request

Cable marking example

Marking is made on each meter of cable

| | | | | | | | | | | | | |
|-------------------|-----------|--------|----|---|---|----|-----------------|-----|---------|-------|------|-------------|
| Fiber optic cable | = EMCAB = | A-DQ4Y | 48 | 4 | x | 12 | G652.D+G.657.A1 | 40N | Ø 3.6mm | 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 | | 12 | 24 | 36 | 48 |
| Number of loose tubes | | 1 | 2 | 3 | 4 |
| Fibers per loose tube | | | | 12 | |
| Number of PBT fillers | | 3 | 2 | 1 | - |
| Cable diameter ±0.2 | mm | | | 3.6 | |
| Cable weight | kg/km | | | 10.0 | |

Other designs upon request

Operating parameters

| | |
|--|-------------------------------|
| Operation temperature | -30°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 |

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

Additional information about optical fibers on www.ma-fia.cz

Blowing performance

| | |
|-------------------------------|--------------------------|
| Tube outer/inner diameter, mm | Installation distance, m |
| 8/5 | 1000 |
| 10/6 | 1300 |

Cable parameters

| Parameter | Nominal value | | Evaluation criterion |
|---|--|--|--|
| | operation (fiber strain $\leq 0.2\%$) | installation (fiber strain $\leq 0.6\%$) | |
| Tensile strength (IEC 60794-1-21 method E1) | 40 N | 100 N | - $\Delta\alpha^* \leq 0.05$ dB - no damage |
| Crush (IEC 60794-1-21 method E3) | 0.05 kN/cm | | |
| Repeated bending (IEC 60794-1-21 method E6) | 20 cycles, bending radius $\pm 90^\circ$ | | |
| Torsion (IEC 60794-1-21 method E7) | - 10 cycles - torsion angle $\pm 360^\circ$ 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 -30°C to 70°C - 2 cycles - cycle period ≥ 16 hours | | $\Delta\alpha^* \leq 0.05$ 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.