

PRODUCTPROFILE

Catalogue number: 010B01100M3BI

Partnumber: 767043

Cable A-DQ(ZN)B2Y12G50/125µm,OM3

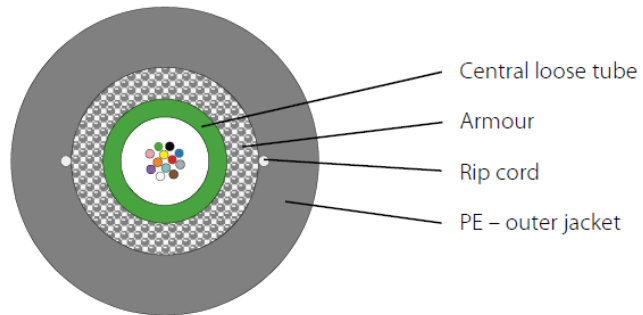
LWL Installationskabel für den Außenbereich
Typ: A-DQ(ZN)B2Y 1x12 G50/125µOM3
biegeunempfindlich
Zentrale Bündelader mit PE-Mantel,
Nagetierschutz
Zugkraft: max. 2500 N
Farbe: schwarz



Related documents:

DS_A-DQZNB2YN2500_L_OE
DS_FASER OM3BI_OE

Cable Data Sheet
Fiber Data Sheet



Standards

-IEC 60794-3

Structure

Loose tube:

- Jelly filled 2 layers loose tube: 2 to 12 optical fibers diameter 3.5 mm, 14 to 24 optical fibers diameter 4.0 mm
- Fiber color code 1 to 12: red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink
- Fiber color code 13 to 24: red, green, blue, yellow, white, grey, brown, violet, turquoise, transparent, orange, pink, all with black ring-marking

Armor:

- Multifunctional reinforced E-glass yarns as strain relief elements and non-metallic rodent protection

Outer jacket:

- Polyethylen PE
- Standard jacket color black
- Wall thickness 1.7 mm
- Inkjet marking white acc. to separate drawing

Geometrical properties

| Number of fibers | Outer diameter [mm] | Weight [kg/km] | Fire load [MJ/m] |
|------------------|---------------------|----------------|------------------|
| 12 | 9.2 | 76 | 1.9 |
| 24 | 9.7 | 81 | 2.0 |

Mechanical properties

- Min. bending radius fixed (static) acc. IEC 60794-1-2 E11A
15 x outside diameter
- Min. bending radius during installation (dynamic) with additional tensile strain acc. IEC 60794-1-2 E6
20 x outside diameter
- Max. tensile force acc. IEC 60794-1-2 E1 = 2500 N
- Max. crush resistance acc. IEC 60794-1-2 E3 long term = 3000 N/dm
- Longitudinally watertight acc. IEC 60794-1-2 F5A: l=3m, t=24h

Thermal properties

- Transport and storage - 25°C to + 70°C
- Installation - 5°C to + 50°C
- In use acc. IEC 60794-1-2 F1 - 20°C to + 60°C

Chemical properties

- UV resistance
- Good resistance to oil, petrol, acid, leach and water

Fire performance

- Halogen-free acc. to IEC 60754-1
- Acidity of the combustion gases acc. to IEC 60754-2

Transmission characteristics

See fiber data sheets

Applications

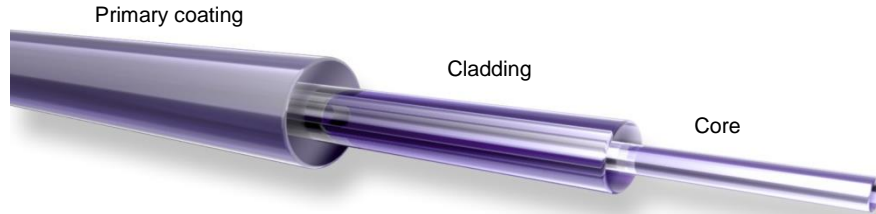
- Longitudinally and transversely waterproof fibre optic outdoor cable with non-metallic rodent protection and higher tensile force
- For fixed installation outdoors, in cable ducts, tubes and also suitable for interconnections
- Suitable for underground laying (direct buried)
- Mechanical installation is only permitted when using force measuring devices with recording function

Deliveryform

On one-way drums

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
|-------------|------------|----------|------------|------|---------------------------|-------------|------------|
| H. Jungbäck | 2003-02-19 | P. Maier | 2003-02-19 | 005 | without | H. Jungbäck | 2017-11-24 |



Standards

Graded index fiber 50/125µm according to
 -ISO/IEC 11801 and EN 50173-1 OM3
 -IEC 60793-2-10 type A1a.2
 -ITU G.651.1
 -TIA/EIA 492AAAC-B

Structure

Silica fiber with two layer acrylate primary coating

Geometrical properties

| | |
|--------------------------------|------------------|
| Core diameter | 50 µm +/- 2.5 µm |
| Cladding diameter | 125 µm +/- 1 µm |
| Core non-concentricity | < 5 % |
| Cladding non-circularity | < 1 % |
| Core-Cladding concentricity | < 1.5 µm |
| Primary coating diameter | 242 µm +/- 5 µm |
| Coating-Cladding concentricity | < 12 µm |

Mechanical properties

Break strength SCREEN-Test 1 % strain for 1 s @100 kpsi

Thermal properties

Operating temperature range -60 to +85°C

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Transmission characteristics

Attenuation:

@ 850 nm max. 2.3 dB/km
@ 1300 nm max. 0.6 dB/km

Macrobending, induced attenuation:

100 turns, 37.5 mm \leq 0.05 dB @ 850 nm
100 turns, 37.5 mm \leq 0.15 dB @ 1300 nm
2 turns, 15 mm \leq 0.1 dB @ 850 nm
2 turns, 15 mm \leq 0.3 dB @ 1300 nm
2 turns, 7.5 mm \leq 0.2 dB @ 850 nm
2 turns, 7.5 mm \leq 0.5 dB @ 1300 nm

Bandwidth (Overfilled launch):

@ 850 nm min. 1500 MHz x km
@ 1300 nm min. 500 MHz x km

Effective modal Bandwidth-length-product (EMB):

@ 850 nm min. 2000 MHz x km

Numerical aperture: 0.200 +/- 0.015

Effective group index of refraction:

@ 850 nm 1.480
@ 1300 nm 1.479

Backscatter attenuation @ 1ns pulse width:

@ 850 nm -68 dB
@ 1300 nm -76 dB

Maximum possible transmission channels lengths:

Ethernet:

1 GBE 1000BASE-SX: min. 1000 m @ max. 3.56 dB channel attenuation ¹⁾
10 GBE 10GBASE-SR: min. 300 m @ max. 2.60 dB channel attenuation ²⁾
40 GBE 40GBASE-SR4: min. 140 m @ max. 1.90 dB channel attenuation ¹⁾
100 GBE 100GBASE-SR10: min. 140 m @ max. 1.90 dB channel attenuation ¹⁾

Fibre Channel:

8 GFC (800-SN): min. 200 m @ max. 1.62 dB channel attenuation ¹⁾
16 GFC (1600-SN): min. 125 m @ max. 1.39 dB channel attenuation ¹⁾

¹⁾ Inclusive max. 1.0 dB for connections (connectors and splices)

²⁾ Inclusive max. 1.5 dB for connections (connectors and splices)

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| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
| H. Jungbäck | 10-26-15 | P. Maier | 10-27-15 | 004 | without | H. Jungbäck | 10-26-15 |