

Micro Duct Type Single Sheathed Fiber Optic Cables



A-DQ(ZN) 2Y mxn...LG
Fiber Type
Attenuation at 1310 nm
Attenuation at 1550 nm.

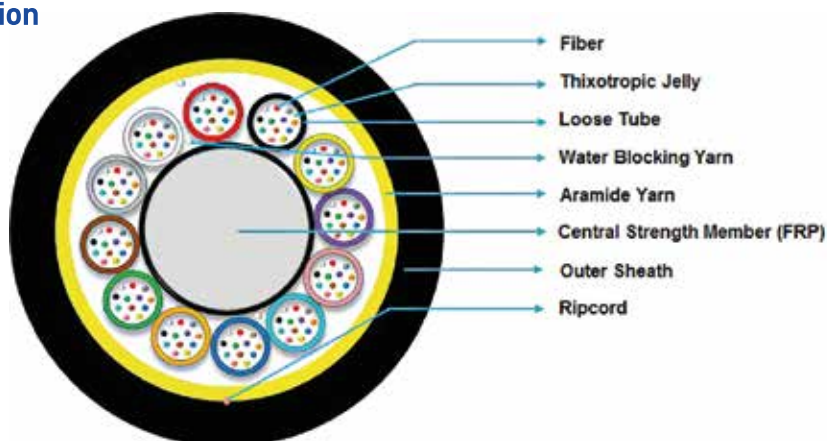
IEC 60794-3-12
SM 9/125 (G.652 d - G.657 A1)
Max .0,40 dB/km
Max. 0,25 dB/km

| Core Size | | 4 | 12 | 24 | 48 | 72 | 96 | 144 | 216 | 288 |
|---------------------------------|--------------|------|----|----|------|-----|-----|------|------|-----|
| Tube Diameter | ±0,10mm | 1,50 | | | | | | | | |
| FRP Diameter | ±0,10mm | 1,60 | | | 2,50 | | | 1,60 | 2,80 | |
| Diameter of PE Lay | ±0,10mm | NA | | | | | NA | 4,10 | NA | NA |
| Number of Tube | Pieces | 1 | 1 | 2 | 4 | 6 | 8 | 12 | 18 | 24 |
| Number of Dummy Tube | Pieces | 5 | 5 | 4 | 2 | 0 | 0 | 0 | 0 | 0 |
| Number of Fiber Per Tube | Fiber/Tube | 4 | 12 | | | | | | | |
| Nominal Outer Diameter of Cable | ±0.20mm | 5,9 | | | 6,8 | 8,6 | 9,1 | 9,3 | | |
| Nominal Cable Weight | ±%3 Kg/km | 27 | | | 44 | 49 | 80 | 110 | | |

Note: The cable specification can be changed the above value tolerances.

| | |
|--------------------------------|----------------------------------|
| Loose Buffer Tube | PBT (polybutylene terephthalate) |
| Filling Compound in Loose Tube | Thixotropic Jelly Compound |
| Water Blocking Material | Water Blocking Material |
| Central Strength Member | FRP |
| Auxiliary Strength Member | Aramid Yarn (If necessary) |
| Ripcord | 1 pieces under outer sheath |
| Outer Sheath Material | HDPE |
| Outer Sheath Thickness | Approx. 0,50±0,10 mm |
| Color of Outer Sheath | Black |
| Cable Length per Drum | 4.000±%5 metre |

Cable Construction



Note: Drawing is not scaled. Illustration is for 144 core cables

Identification of Optical Fiber and Loose Tube

| No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------------|------|--------|-------|-------|------|-------|-----|-------|--------|--------|------|-----------|
| Fiber | Blue | Orange | Green | Brown | Grey | White | Red | Black | Yellow | Violet | Pink | Turquoise |
| Tubes | Blue | Orange | Green | Brown | Grey | White | Red | Black | Yellow | Violet | Pink | Turquoise |

Note: Color code of loose tubes and fibers can be changed according to customer demands.

Mechanical & Environmental Characteristics

Parameters

| Cable Test | | Requirements | | Test Standard |
|----------------------|--------------|---|--------------------------------|--------------------|
| Tensile Strength (N) | | Short term Max.1.000N Long Term Max.500N Attenuation Change (Max.0,1dB) | | IEC 60794-1-21 E1 |
| Crush Strength | | Short Term 1200N/100mm, Long Term 200N/100mm, No fiber break on cable | | IEC 60794 -1-21 E3 |
| Cable Bend | | 10 x D, 10 Turns, 5 Cycles, Attenuation Change (Max.0,1dB), No Damage and breakage of the cable | | IEC 60794-1-21 E11 |
| Repeated Bending | | 20 x D, 25N Load, 25 Cycles, Attenuation Change (Max.0,1dB) | | IEC 60794-1-21 E6 |
| Impact Test | | 1 meter, 1N, Attenuation Change (Max 0,1dB) | | IEC 60794-1-21 E4 |
| Torsion Test | | ±180°C ,40N Load, 5 Cycles, Attenuation Change (Max.0,1dB) | | IEC 60794-1-21 E7 |
| Temperature Cycling | Installation | -10°C to +50°C | Attenuation Change (Max.0,1dB) | IEC 60794-1-22 F1 |
| | Operation | -30°C to +70°C | | IEC 60794-1-22 F1 |
| | Storage | -30°C to +70°C | | IEC 60794-1-22 F1 |
| Water Penetration | | Time : 24 hours Sample length : 3m Water height : 1m No water leakage | | IEC 60794-1-22 F5B |

Type Code of Optical Cable

A-DQ(ZN) 2Y mxn...LG
Refer to the type code of the optical cable for the description of the cable code.

Length Marking On The Cable

The outer sheath will be marked in one meter intervals as follows;
< Year of manufacturing > < number and type of fiber >
< length marking in meter >

Color of Sheath and Material

Outer sheath materials are HDPE and outer sheath color is black.

Packing

Shipment will be done with non-returnable wooden drums with protection.

Cable Design Information

- Fiber Type: SM 9/125 (G.652 d - G.657 A1)
- Loose tube design
- UV resistance Outer Sheath (MDPE or HDPE)
- Dielectric Strength member (FRP)
- Peripheral Strength Member is glass yarn or Aramid yarn (if necessary)