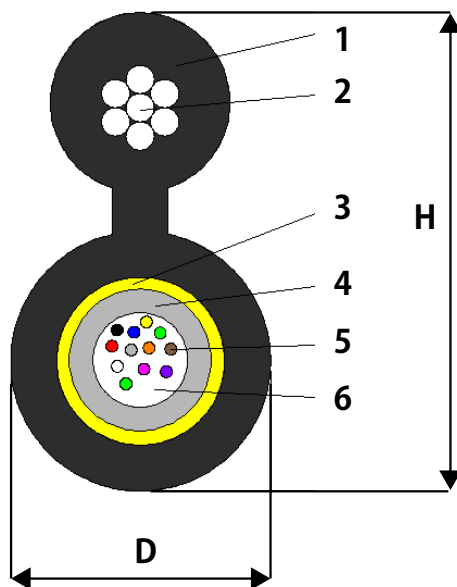




## CENTRAL TUBE SMALL FIGURE-8 CABLE

AR-1UD-FIG8-LI-PE  
50M-xxF-G652D

## CABLE DESCRIPTION



- 1. Outer sheath:** black polyethylene.
- 2. Messenger wires:** shall be **7X0.6 mm** wire extra high strength grade.
- 3. Aramid yarn:** Additional strengthening elements.
- 4. Loose tube:** high modulus thermoplastic material.
- 5. Optical fiber:** The fiber shall be made of high grade silica, compound silica glasses or equivalent material.
- 6 Tube filling:** suitable water tightness compound

## FEATURES AND APPLICATION

Fiber excess length control and stability .  
 Strand self-supporting aerial, installation is simple, fast construction.  
 Performance is excellent adaptation to the environment.













## OPTICAL CHARACTERISTICS

|                              |                                   | G652D        |
|------------------------------|-----------------------------------|--------------|
| Attenuation                  | @850nm                            |              |
|                              | @1300nm                           |              |
|                              | @1310nm                           | ≤ 0.36 dB/km |
|                              | @1550nm                           | ≤ 0.22 dB/km |
| Bandwidth                    | @850nm                            |              |
|                              | @1300nm                           |              |
| Polarization mode dispersion | Individual fibre                  | ≤0.20ps√km   |
|                              | design link value (M=20, Q=0.01%) | ≤0.1ps√km    |

## TECHNICAL DATA

| Item                                       | Contents            | Value                   |    |
|--|---------------------|-------------------------|----|
|  |                     | 6                       | 12 |
| Loose tube                                 | Outer diameter (mm) | 2.8                     |    |
| Steel wire                                 | Material            | Galvanized Steel Wires  |    |
|  | Diameter (mm)       | <b>7x0.6</b>            |    |
| Sheat                                      | Thickness (mm)      | Nominal: 0.8            |    |
| Cable diameter(mm) Approx.                 |                     | <b>4.4×9.2 ± 0.4 mm</b> |    |
| Cable weight(kg/km) Approx.                |                     | <b>45 ± 5</b>           |    |
| Operating temperature Range(°C)            |                     | -40~+70                 |    |
| Tensile Strength Short/ Long Term(N)       |                     | 1500/600                |    |
| Crush Resistance Short/Long Term (N/100mm) |                     | 1000/300                |    |
| Bend Radius Static/Dynamic (mm)            |                     | 55/110                  |    |
| Maximum Installation Span (m)              |                     | <b>50</b>               |    |
| Installation Sag (%)                       |                     | 1                       |    |

## COLOR OF OPTICAL FIBER

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

## MAIN MECHANICAL AND ENVIRONMENTAL PERFORMANCE

| Items   | Test Standard    | Specified value    | Requirements                                |
|---------|------------------|--------------------|---|
| Tension | IEC 60794-1-2-E1 | See Technical data | Additional attenuation: ≤0.05dB after test. |
| Crush   | IEC 60794-1-2-E3 | See Technical data | Additional attenuation: ≤0.05dB after test. |

| Items               | Test Standard              | Specified value  | Requirements  |
|---------------------|----------------------------|--|---|
| Impact              | IEC 60794-1-2-E4           | R=300mm, 5Nm,<br>one in 3 different places                                 | Additional attenuation: $\leq 0.05$ dB<br>after test. |
| Repeat bending      | IEC 60794-1-2-E6           | R=20*D, Cycles: 25   | Additional attenuation: $\leq 0.05$ dB<br>after test. |
| Torsion             | IEC 60794-1-2-E7           | Cycles:10<br>Length under test: 1m<br>Turns: $\pm 180^\circ$<br>Load: 150N | Additional attenuation: $\leq 0.05$ dB<br>after test. |
| Water penetration   | IEC 60794-1-2-F5           | Sample length=3m,<br>Water height=1m, 24 hour                              | No water leakage                                      |
| Kink                | IEC 60794-1-2-E10          | R=10*D(without messenger)  | No damage to the jacket and<br>inner element          |
| Temperature Cycling | IEC 60794-1-2-F1           | -40°C ~ +70°C  | Attenuation change: $\leq 0.05$ dB/km<br>after test   |
| Other parameters    | According to IEC 60794-1-2 |  |   |

\*All optical measurements at 1550nm

## PACKAGING AND DRUM

### Cable Sheath Marking

Unless otherwise specified, the cable sheath marking shall be as follows:

- Color: white.
- Contents: ARTIC, the year of manufacture, the type of cable, cable number, length marking.
- Interval: 1 m.

Outer sheath marking legend can be changed according to user's requests.

### Reel Length

Standard reel length: 2/4 km/reel, other length is also available.

### Cable Drum

The cables are packed in fumigated wooden drums.

### Cable Packing

Both ends of the cable will be sealed with suitable plastic caps to prevent the entry of moisture during shipping, handling and storage. The inner end is available for testing.