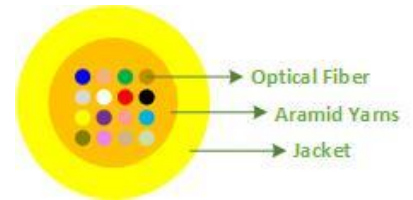


16f 2.4mm Micro Internal OFNR or OFNP Cable

AaChen CABLE CONSTRUCTIONS

Description

The cable uses 250μm OM1, OM2, OM3, OM4, OM5 multimode or ITU-T G.652.D, ITU-T G.657.A1 and ITU-T G.657.A2 single mode Optical fibers as optical transmission medium, covered with aramid yarns strength member in a Riser or Plenum Jacket.



Structure Diagram

Features

- High-integrated colored bare fiber design
- Aramid yarns providing excellent tensile performance
- Stranded non-metallic strength member structure ensure the cable endure larger tensile strength
- Anti-corrosion, flame-retardant and environment-friendly

Applications

- Ideal for internal inter-connect using MPO or MTP connectivity
- Specialist cable for high density connectivity including data centers
- Interconnection between instruments and communication equipment

Optical Fiber Characteristic

| Fiber Type | After cabled max attenuation(dB/km) | | | | Overfilled modal bandwidth(OFL) | Effective modal bandwidth | Minimum bending radius |
|------------|-------------------------------------|--------|-------|--------|---------------------------------|---------------------------|------------------------|
| | 1310nm | 1550nm | 850nm | 1300nm | 850/1300nm (MHZ.km) | 850/953nm (MHZ.km) | mm |
| G.652.D | 0.4 | 0.3 | - | - | - | - | 16 |
| G.657.A1 | 0.4 | 0.3 | - | - | - | - | 10 |
| G.657.A2 | 0.4 | 0.3 | - | - | - | - | 7.5 |
| G.657.B3 | 0.4 | 0.3 | - | - | - | - | 5 |
| OM1 | - | - | 3.5 | 1.5 | ≥200/500 | - | 37.5 |
| OM2 | - | - | 3.5 | 1.5 | ≥500/500 | - | 7.5 |
| OM3 | - | - | 3.5 | 1.5 | ≥1500/500 | ≥2000 | 7.5 |
| OM4 | - | - | 3.5 | 1.5 | ≥3500/500 | ≥4700 | 7.5 |
| OM5 | - | - | 3.5 | 1.5 | ≥3500/500 | ≥4700/2470 | 7.5 |

Buffer Identification (IEC TR 63194)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------|---------|-------|-------|------|-------|-----|-------|--------|--------|------|------|
| Blue | Orange | Green | Brown | Gray | White | Red | Black | Yellow | Purple | Pink | Aqua |
| 13 | 14 | 15 | 16 | | | | | | | | |
| Olive | Magenta | Tan | Lime | | | | | | | | |

or

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------|----------|---------|---------|------|-------|-----|-------|--------|--------|------|------|
| Blue | Orange | Green | Brown | Gray | White | Red | Black | Yellow | Purple | Pink | Aqua |
| 13 | 14 | 15 | 16 | | | | | | | | |
| Blue+b | Orange+b | Green+b | Brown+b | | | | | | | | |

Constructions and Technical Parameters

| Items | | Descriptions |
|--|----------------------|-------------------|
| Fiber counts | | 16 |
| Outer sheath | Material | PVC |
| | Color | TBD |
| | Strength member | Aramid yarns |
| | Diameter(mm) approx. | 2.40 +0.05/-0.10 |
| Minimum bending radius | Static | 10×Cable diameter |
| | Dynamic | 20×Cable diameter |
| Plywood drum Dimensions(mm) approx.(Flange, Barrel, Width) | | F400, B200, W330 |
| Cable weight(kg/km) approx. | | 5.6 |

Mechanical and Environmental Characteristics

| Items | Descriptions | | Test Method | Requirements |
|--|------------------|-----------|--------------------------|----------------|
| Tensile performance | Short-term | 100N | IEC 60794-1-21 Method E1 | IEC 60794-2-20 |
| | Long-term | 30N | | |
| Crush resistance | Short-term | 350N/10cm | IEC 60794-1-21 Method E3 | IEC 60794-2-20 |
| | Long-term | 100N/10cm | | |
| Temperature range | -20 °C to +70 °C | | IEC 60794-1-22 Method F1 | IEC 60794-2-20 |
| Other parameters: according to IEC 60794-2-20 and IEC 60794-1-21 | | | | |

Environmental Temperature

| Items | OFNR | OFNP |
|--------------------------|------------------|------------------|
| Installation temperature | -10 °C to +60 °C | 0 °C to +60 °C |
| Operation temperature | -20 °C to +70 °C | 0 °C to +70 °C |
| Storage temperature | -40 °C to +70 °C | -40 °C to +70 °C |

Fire Performance

| Fire Test Description | Fire Test Specification | Requirement |
|----------------------------|-------------------------|-------------|
| NFPA 262 Plenum Flame Test | OFNP | PASS |
| UL 1666 Riser Flame Test | OFNR | PASS |

Identification

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

OPTICAL CABLE D/125 AAA 16F OFN* E516857(UL) YYWWD xxxxM *****

- Ink Color: Black
- D/125: is the optical fiber core size where OM1 will be printed 62.5/125, OM2, OM3, OM4, OM5 will be printed 50/125. ITU-T G.657.A1, G.657.A2 will be printed 9/125
- AAA: is the fiber Type OM1, OM2, OM3, OM4, OM5, G.652.D, G.657.A1 or G.657.A2
- OFN*: is the Flame Rated OFNR or OFNP
- E516857(UL): Aachen UL Authentication No.
- YYWWD: Year + Week + Day
- xxxxM: Sequential meter marking, Interval: 1m
- *****: Cable Reel No., Per Manufacturer or owner

Jacket Color(Pantone Color)

| Blue | Orange | Green | Brown | Gray | White | Red | Black |
|----------|----------|---------|---------|-------------|------------|--------------|----------|
| PT 2945C | PT 1645C | PT 347C | PT 478C | PT 430C | RAL 9003 | PT 201C | RAL 9005 |
| Yellow | Purple | Pink | Auqa | Light Green | Lime Green | Erika Violet | |
| PT 116C | PT 268C | PT 183C | PT 325C | PT 363C | PT 374C | RAL 4003 | |

Packing

Plywood drums protection. During transportation, right tools should be used to avoid damaging the package and to handle with ease. Cables should be protected from moisture; kept away from high temperature and fire sparks; protected from over bending and crushing; protected from mechanical stress and damage.

Delivery Length

Standard delivery length is 2km/drum. Other lengths available upon agreement.

Chemical Characteristics

Free of hazardous substances according to RoHS 2011/65/EU