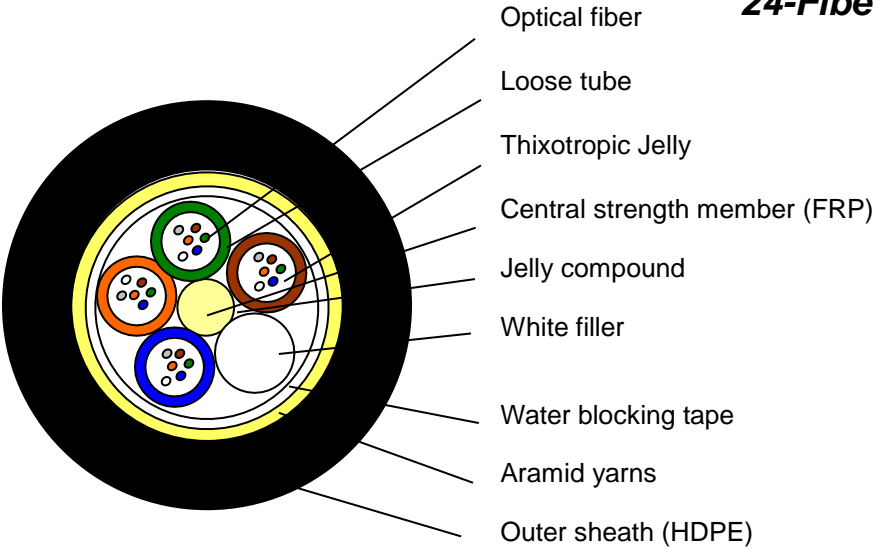


24-Fiber ADSS Single mode



Features:

- ADSS (nonmetallic Cable)
- Applications: Aerial and Duct installations
- Singlemode

Product Description:

Technical specifications for Aerial and Duct Application Non-Metallic type cable. This specification covers the general requirements and performance of cable, which FOC offered including optical characteristics, mechanical characteristics and geometrical characteristics.

Optical fiber characteristics (FPC G.652 FIBER)

| Category | Description | | Specifications |
|-------------------------------------|---|-----------------------|--------------------------------|
| | | | G.652 |
| Optical Specifications | Attenuation | @ 1310nm | ≤0.36dB/km |
| | | @ 1550nm | ≤0.22dB/km |
| | Attenuation discontinuity | | ≤0.05 dB |
| | Attenuation vs. Wavelength | 1285~1330 @ 1310nm | ≤0.05 dB/km |
| | | 1525~1575 @ 1550nm | ≤0.05 dB/km |
| | Zero Dispersion Wavelength | | 1300~1324nm |
| | Zero Dispersion Slope | | ≤0.092ps/(nm ² .km) |
| | Dispersion | @ 1310nm | ≤3.5 ps/nm.km |
| | | @ 1550nm | ≤18 ps/nm.km |
| | Cable Cutoff Wavelength(λ_{cc}) | | ≤1260nm |
| Effective Group Index of Refraction | @ 1310nm | 1.4675 | |
| | @ 1550nm | 1.4681 | |
| Geometric Specifications | Mode Field Diameter | @ 1310nm | 9.2±0.6μm |
| | | @ 1550nm | 10.4±0.8μm |
| | Cladding Diameter | | 125±1μm |
| | Cladding Non-Circularity | | ≤1.0% |
| | Coating Diameter | | 245±7μm |
| | Coating/Cladding Concentricity Error | | ≤12μm |
| Core/Cladding Concentricity Error | | ≤0.8μm | |
| Mechanical Specifications | Proof Test level | | ≥1.0% |
| | Fiber Curl Radius | | ≥4.0m |
| | Peak Coating Strip Force | | 1.3~8.9N |

| | | |
|---------------------------------------|-----------|---|
| Number of core | -- | 24 |
| Central Strength Member | Material | Fiberglass Reinforce with Plastic (FRP) |
| Loose Tube | Material | Polybutelene Terephthalate (PBT) |
| | -- | 6 Fiber per Tube |
| Element | -- | 5 (4LT+1FR) |
| Filling compound in loose tube | Material | Thixotropic jelly |
| Protective tape | Material | Water blocking tape |
| Strength Member | Material | Aramid yarns |
| Outer Sheath | Material | HDPE |
| | Thickness | *Nom.2.0mm |
| Overall Diameter | Diameter | **Nom.10.9mm |
| Weight | -- | Approx.84 kg/km |
| Max.Tensile strength | -- | 1.5KN |

* The nominal sheath thickness may have a tolerance with ± 0.2 mm.

** The nominal diameter may have a tolerance with ± 0.4 mm

Fiber coding: The color coding of the optical fiber shall be in accordance with Table 4.2.1

| | | | | | | |
|----------------|------|--------|-------|-------|-------|-------|
| No. of fiber | 1 | 2 | 3 | 4 | 5 | 6 |
| Color of fiber | Blue | Orange | Green | Brown | Slate | White |

Identification of optical tube

| | | | | | | |
|---------------|------|--------|-------|-------|--|--|
| No. of tube | 1 | 2 | 3 | 4 | | |
| Color of tube | Blue | Orange | Green | Brown | | |

Make-up of cable, No. of Fibers in each Tube

| | | | | | | | |
|---------------|-------------|--------------|------|--------|-------|-------|--------|
| No. of Fibers | No. of Tube | | 1 | 2 | 3 | 4 | 5 |
| 24B1 | 4 | Tube color | Blue | Orange | Green | Brown | Filler |
| | | No. of fiber | 6B1 | 6B1 | 6B1 | 6B1 | -- |

TEST REQUIREMENTS

| No | Item | Test standard | Method | Acceptance criteria |
|----|--------------|----------------|---|---|
| 1 | Tensile test | IEC-60794-1-E1 | -Max. Tensile strength: 1500N -Sample length:50 meters -Time: 1minutes; | -No fiber break. -Attenuation increase \leq 0.10dB |
| 2 | Crush test | IEC-60794-1-E3 | -Load:1000N -Time: 1 minutes -Length: 100mm | -No splits or cracks in the outer jacket; -Attenuation increase $<$ 0.10dB, |
| 3 | Impact test | IEC-60794-1-E4 | -Impact energy: 450g -Height:1 meter -Impact points: min.1 -Number of impacts: 5 | -No splits or cracks in the outer jacket -Attenuation increase \leq 0.10dB(after the test) |
| 4 | Torsion test | IEC-60794-1-E7 | -1m cable length with 150N weight - \pm 90 degrees, 10 cycles | -No splits or cracks in the outer jacket -Attenuation increase \leq 0.10B(after the test) |

| | | | | |
|---|--------------------------|-----------------|--|---|
| 5 | Repeated bending | IEC-60794-1-E6 | -R=20xcable outer diameter -1m cable length with 150N weight,30 cycles | - No splits or cracks in the outer jacket -Attenuation increase $\leq 0.10\text{dB}$ (after the test) |
| 6 | Temperature cycling test | IEC-60794-1-F1 | - Temperature step: +20°C→-40°C→+60°C →+20°C - Time per each step: 12 hrs - Number of cycle: 2 | -Attenuation variation for reference value(the attenuation to be measured before test at +20±3°C) $\leq 0.10\text{dB/km}$, |
| 7 | Water penetration test | IEC-60794-1-F5 | -Water height: 1m -Sample length:3m -Duration of test: 24hrs | -No water leakage at the end of the sample |
| 8 | Drip test | IEC-60794-1-E14 | -Five 0.3m samples suspended vertically in a climate chamber, raised temperature to +70°C | -No filling compound shall drip from tubes after 24 hr |

Ordering Information:

| Part Number | Description |
|-------------|--|
| NEW-9440024 | 24-Fiber ADSS Singlemode Span = 100 meters (sells in 2Km reels only) |