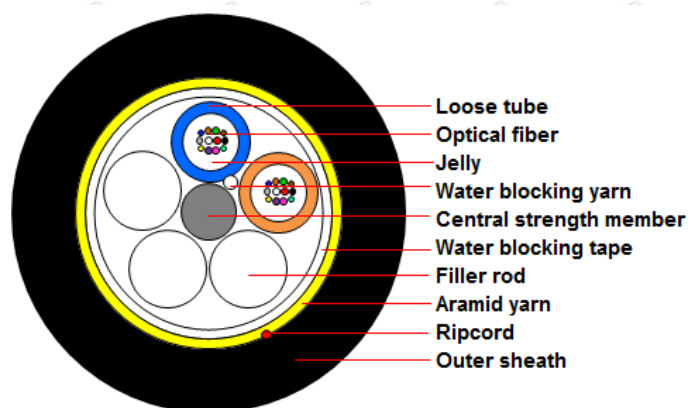


ADSS-Single Jacket-200M

1. Cable cross-section



2. Cable Specification

Loose tube construction, tubes jelly filled, elements (tubes and filler rods when necessary) laid up around non-metallic central strength member, polyester yarns used to bind the cable core, water blocking tape wrapped around the cable core, then aramid yarns reinforced, a ripcord and HDPE outer sheath.

3. Fiber & tube color

| | | | | | | |
|-------|------|--------|--------|--------|------|-------|
| No. | 1 | 2 | 3 | 4 | 5 | 6 |
| Color | Blue | Orange | Green | Brown | Gray | White |
| No. | 7 | 8 | 9 | 10 | 11 | 12 |
| Color | Red | Black | Yellow | Violet | Pink | Aqua |

4. Structure parameter

| Item | Contents | Unit | Value | | |
|-------------------------|-----------|-------|-------------|-----|-----|
| Fiber count | Number | / | 12 | 24 | 48 |
| Cable structure | / | / | 1+5 | | |
| Fiber per tube | Number | / | 12 | | |
| Loose tube | Number | / | 1 | 2 | 4 |
| Central strength member | Material | / | FRP | | |
| Outer sheath | Material | / | HDPE | | |
| | Thickness | mm | Nominal 2.1 | | |
| Cable diameter | ±5% | mm | 12.2 | | |
| Cable weight | ±10% | kg/km | 97 | 100 | 105 |
| Weather condition | / | / | NESC Light | | |
| Max. span | / | m | 200 | | |

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| Item | Contents | Unit | Value |
|-------------|----------|------|-------|
| Initial Sag | / | % | ≥ 1.2 |

Note: Sheath thickness not consider ripcord portion, sizes and values without tolerances are nominal values.

5. Mechanical & Environmental Performance

| Item | Contents | Value |
|-----------------------|------------------------|---------------------|
| Max. tensile load | MAT | 4700 N |
| Max. crush resistance | Short term | 1500 N/100mm |
| Min. bending radius | Installation | 20 x cable diameter |
| | Operation | 10 x cable diameter |
| Temperature range | Operation | -40°C ~ +70°C |
| | Installation | -10°C ~ +60°C |
| | Storage/transportation | -40°C ~ +70°C |

6. Main mechanical performance test

| Item | Test Method | Acceptance Condition |
|---|--|--|
| Tensile Strength IEC 60794-1-2-E1 | - Load: MAT - Length of cable: ≥ 50m - Load time: 1min | - Fiber strain ≤ 0.33% - Loss change ≤ 0.1dB@1550nm after test. - No fiber break and no sheath damage. |
| Crush Test IEC 60794-1-2-E3 | - Load: Short term crush - Load time: 1min | - Loss change ≤ 0.1dB@1550nm after test. - No fiber break and no sheath damage. |
| Impact Test IEC 60794-1-2-E4 | - Radius: 300 mm - Points of impact: 3 - Times of per point: 1 - Impact energy: 10J | - Loss change ≤ 0.1dB@1550nm after test. - No fiber break and no sheath damage. |
| Repeated Bending IEC 60794-1-2-E6 | - Bending radius: 20 x OD - No. of cycles: 25 | - Loss change ≤ 0.1dB@1550nm after test. - No fiber break and no sheath damage. |
| Torsion IEC 60794-1-2-E7 | - Length: 1m - Twist angle: ±90° - No. of cycles: 10 | - Loss change ≤ 0.1dB@1550nm after test. - No fiber break and no sheath damage. |
| Cable bend IEC 60794-1-2-E11 | - Diameter of mandrel: 20 x OD - No. of turns: 4 - No. of cycles: 3 | - Loss change ≤ 0.1dB@1550nm after test. - No fiber break and no sheath damage. |
| Compound flow IEC 60794-1-2-E14 | - Length: 30cm - Temperature: 70°C ± 2°C - Period: 24h | - No outflow or dripping |
| Water Penetration IEC 60794-1-2-F5 | - Height of water: 1m - Sample length: 3m - Time: 24h | - No water leak from the cable core of the opposite end |
| Temperature Cycling IEC 60794-1-2-F1 | - Temperature: -20°C ~ +70°C - Time of each step: 12h - No. of cycles: 2 | - Loss change ≤ 0.1dB/km@1550nm. - No fiber break and no sheath damage. |

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7. OPTICAL FIBER

| Item | Contents | Value | |
|---|--------------------------|--------------------------------|--------------------------|
| | | Before cable | After cable |
| G.652D Optical characteristics | | | |
| Attenuation | @1310nm | ≤0.35dB/km | ≤0.36dB/km |
| | @1550nm | ≤0.20dB/km | ≤0.22dB/km |
| Dispersion | @1288nm~1339nm | ≤3.5ps/(nm·km) | |
| | @1550nm | ≤18ps/(nm·km) | |
| Zero-Dispersion wavelength | | 1300nm~1324nm | |
| Zero-Dispersion slope | | ≤0.092ps/(nm ² ·km) | |
| Mode field diameter (MFD) | @1310nm | 9.2±0.4μm | |
| | @1550nm | 10.4±0.5μm | |
| Cable cutoff wavelength λ _{cc} (nm) | | ≤1260nm | |
| Micro bending Attenuation | @1550nm (100turns;Φ60mm) | ≤0.05dB | |
| Link polarization mode dispersion (PMD ₀) | | ≤0.06ps/km ^{1/2} | ≤0.1ps/km ^{1/2} |
| Maximum Individual Fiber PMD | | ≤0.1ps/km ^{1/2} | ≤0.2ps/km ^{1/2} |

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