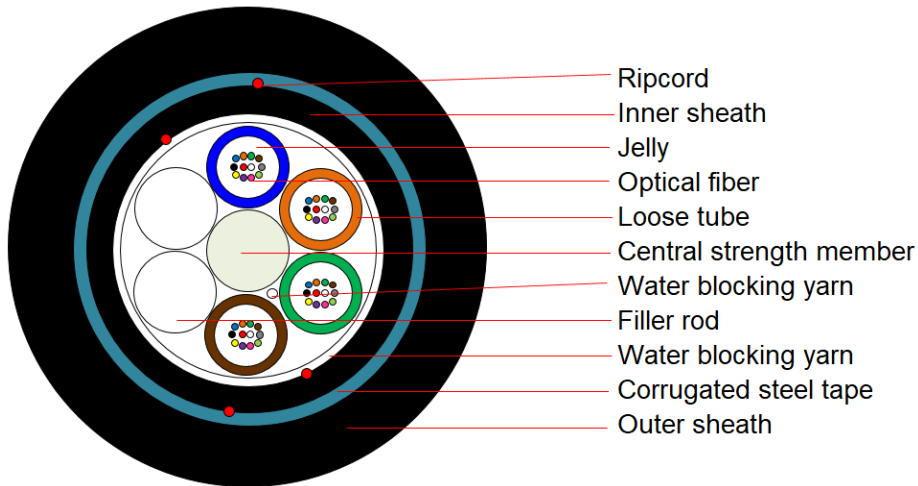


GYFZY53

1. Cable cross-section (only for reference, not to scale)



(Not to scale, color is only for showing, may be not exact same as real product color)

2. Cable description

Loose tube construction, tubes with jelly filled, elements (tubes and filler rods when necessary) laid up around non-metallic central strength member, yarns used to bind the cable core, water blocking material wrapped, 2 ripcords, PE inner sheath, 2 ripcords, corrugated steel tape armored and then LSZH outer sheath.

3. Fiber & tube color

3.1 Fiber color code.

| | | | | | | |
|-------|------|--------|--------|--------|------|-------|
| 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 |

3.2 Loose tube color code

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

3.3 If there are any fillers, the color will be natural.

4. Structure parameter

| Item | Contents | Unit | Value |
|--------------------|----------|------|-------|
| Fiber count | Number | / | 48 |
| Cable structure | / | / | 1+6 |
| Fiber No. per tube | Number | / | 12 |

| | | | | | | |
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| Item | Contents | Unit | Value |
|-------------------------|-----------|-------|-------|
| Loose tube | Number | / | 4 |
| Central strength member | Material | / | FRP |
| Inner sheath | Material | / | PE |
| Outer sheath | Material | / | LSZH |
| | Thickness | mm | 1.8 |
| Cable diameter | ±5% | mm | 13.0 |
| Cable weight | ±10% | kg/km | 175 |

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

It's advised to notch the cable before splitting the sheath for better ripping.

5. Mechanical & Environmental Performance

| Item | Contents | Value |
|-----------------------|------------------------|-----------------------|
| Max. tensile load | Short term | 2700 N |
| Max. crush resistance | Short term | 2200 N/100mm |
| Min. bending radius | Installation | 25 x cable diameter |
| | Operation | 12.5 x cable diameter |
| Temperature range | Operation | -30°C ~ +70°C |
| | Installation | -10°C ~ +70°C |
| | Storage/transportation | -30°C ~ +70°C |

6. Main mechanical & environmental performance test

| Item | Test Method | Acceptance Condition |
|--|--|--|
| Tensile Strength IEC 60794-1-21-E1 | - Load: Short term tension - Length of cable: ≥ 50m - Load time: 10min | - Loss change ≤ 0.1dB@1550nm after test. - No fiber break and no sheath damage. |
| Crush Test IEC 60794-1-21-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 60794-1-21-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. |
| Water Penetration IEC 60794-1-22-F5B | - Height of water: 1m - Sample length: 3m - Time: 24h | - No water leak from the cable core of the opposite end. |
| Temperature Cycling IEC 60794-1-22-F1 | - Temperature: -30°C~+70°C - Time of each step: 12h - Number of cycle: 2 | - Loss change ≤ 0.15dB/km @1550nm. - No fiber break and no sheath damage. |

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7. OPTICAL FIBER

G652D Characteristic of Optical Fiber

| Item | Contents | Value |
|--|--------------------------|--------------------------------|
| G.652D Optical characteristics | | |
| Attenuation | @1310nm | ≤0.36dB/km |
| | @1550nm | ≤0.22dB/km |
| Dispersion | @1288nm~1339nm | ≤3.5ps/(nm·km) |
| | @1550nm | (13.3-18.6)ps/(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 |
| Coating diameter(uncolored) | | 242 ± 7μm |
| Cable cutoff wavelength λ _{cc} (nm) | | ≤1260nm |
| Macro-bend loss | @1550nm (100turns;Φ60mm) | ≤0.05dB |
| Link polarization dispersion (PMD ₀) | | ≤0.1ps/km ^{1/2} |

Other parameters meet standard ITU-T G.652.

| | |
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