

| No. | REVISION | DATE |
|-----|------------------|------------|
| 1 | GJXJH- 6-12-24FO | 06/06/2017 |
| 2 | | |
| 3 | | |

Specification

FOR FTTH Flat Fiber Cable [GJXJH]

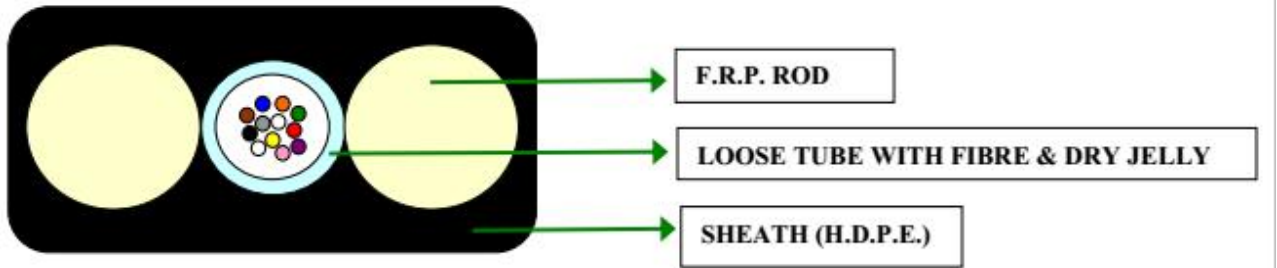
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1. CABLE CONSTRUCTION

1.1 CROSS SECTIONAL DIAGRAM



1.2 TECHNICAL SPECIFICATION

| Cable Type | | GJXJH | | |
|------------------------|------------|--|--|--|
| Fiber Count | | 6FO | 12FO | 24FO |
| Fiber Type | | ITU-G. 652D | | |
| Loose Tube | OD(mm) | 1.6 ^{±0.2} | 1.6 ^{±0.2} | 1.6 ^{±0.2} |
| | Tube No. | 1 | 1 | 2 |
| | Material | PBT | PBT | PBT |
| Max Fiber Count/Tube | | 6 | 12 | 12 |
| Strength Member | | G-FRP | G-FRP | G-FRP |
| FRP OD (mm) | | 2*1.8 | 2*1.8 | 2*1.8 |
| Sheath | Thickness: | Non. 1.0 ^{±0.2} mm | | |
| | Material: | Black HDPE UV Stable | | |
| Nominal Weights (kgs) | | 30 ^{±3.0} | 30 ^{±3.0} | 37 ^{±3.0} |
| OD of cable (mm) | | 3.6 ^{±0.2} X6.8 ^{±0.2} | 3.6 ^{±0.2} X7.0 ^{±0.2} | 3.6 ^{±0.2} X8.6 ^{±0.2} |
| Max. Tensile Load (N) | | 1800 | 1800 | 1800 |
| Standard put-up length | | 2/3/4 (± 5 %) KM/ Plywood Drum | | |

2. FIBER AND LOOSE BUFFER TUBE IDENTIFICATION

| | | | | | | | | | | | | |
|-------------|------|--------|-------|-------|-------|---------|-----|-------|--------|--------|------|------|
| NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Tube Color | Blue | Orange | Green | Brown | Slate | White | Red | Black | Yellow | Violet | Pink | Aqua |
| NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Fiber Color | Blue | Orange | Green | Brown | Slate | natural | Red | Black | Yellow | Violet | Pink | Aqua |

3. OPTICAL FIBER

3.1 Single Mode Fiber

| LTEMS | UNITS | SPECIFICATION |
|---------------------------------------|------------------------|---|
| Fiber type | | ITU – T G . 652D |
| Attenuation | dB/km | 1310nm ≤ 0.33 1383nm ≤ 0.30 1490nm ≤ 0.23 1550nm ≤ 0.20 1625nm ≤ 0.21 |
| Chromatic Dispersion | ps/nm.km | 1310nm ≤ 3.5 1550nm ≤ 18 1625nm ≤ 22 |
| Zero Dispersion Slope | ps/nm ² .km | ≤ 0.092 |
| Zero Dispersion Wavelength | nm | 1300 ~ 1324 |
| Cut-off Wavelength (λ_{cc}) | nm | ≤ 1260 |
| Attenuation vs. Bending | dB | (10mm radius, 1ring) ≤ 0.2 @ 1625nm (10mm radius, 1ring) ≤ 0.1 @ 1550nm |
| Mode Field Diameter | μm | 9.2 ± 0.4 at 1310nm |
| Core-Clad Concentricity | μm | ≤ 0.5 |
| Cladding Diameter | μm | 125±1 |
| Cladding Non-circularity | % | ≤ 0.8 |
| Coating Diameter | μm | 245±5 |
| Proof Test | Gpa | ≥ 0.69 |

4. Mechanical and Environmental Performance of the Cable

| NO. | ITEMS | TEST METHOD | ACCEPTANCE CRITERIA |
|-----|----------------------|--|--|
| 1 | Tensile Loading Test | #Test method: IEC 60794-1-E1 -. Long-tensile load: 0.5 times the short-term pulling force -. Short-tensile load: Clause 1.2 -. Cable length: ≥ 50m Testing Time : 1h | - . Attenuation increment @ 1550nm: ≤ 0.1dB -. No jacket cracking and fiber breakage -Fiber Strain ≤ 0.33% |

| | | | |
|---|--------------------------|---|--|
| 2 | Crush Resistance Test | #Test method:IEC 60794-1-E3 -.Long load: 300 N/100mm -.Short load: 1000 N/100mm Load time: 1 minutes | -. Attenuation increment@1550nm:≤0.1dB -. No jacket cracking and fiber breakage |
| 3 | Impact Resistance Test | #Test method:IEC 60794-1-E4 -.Impact height: 1m -.Impact weigh: 100g -.Impact point: ≥3 -.Impact frequency: ≥1/point | -. Attenuation increment@1550nm:≤0.1dB -. No jacket cracking and fiber breakage |
| 4 | Repeated Bending | #Test method:IEC 60794-1-E6 -.Mandrel diameter:20D (D = cable diameter) -.Subject weight: 25kg -.Bending frequency: 30 times -.Bending speed: 2s/time | -. Attenuation increment@1550nm:≤0.1dB -. No jacket cracking and fiber breakage |
| 5 | Torsion Test | #Test method:IEC 60794-1-E7 -.Length: 1m -.Subject weight:25kg -.Angle: ±180 degree -.Frequency: ≥10/point | -. Attenuation increment@1550nm:≤0.1dB -. No jacket cracking and fiber breakage |
| 6 | Temperature Cycling Test | #Test method:IEC 60794-1-F1 -.Temperature steps: +20℃、-40℃、+70℃、+20℃ -.Testing Time: 24 hours/step -.Cycle index: 1 | -. Attenuation increment@1550nm:≤0.1dB -. No jacket cracking and fiber breakage |
| 7 | Drop Performance | #Test method:IEC 60794-1-E14 -.Testing length: 30cm -.Temperature range: 70±2℃ -.Testing Time: 24 hours | -. No filling compound drop out |
| 8 | Temperature | Operating: -40℃~+60℃ Store/Transport: -50℃~+70℃ Installation: -20℃~+60℃ | |

5. FIBER OPTIC CABLE BENDING RADIUS

Static bending: ≥ 10 times than cable out diameter

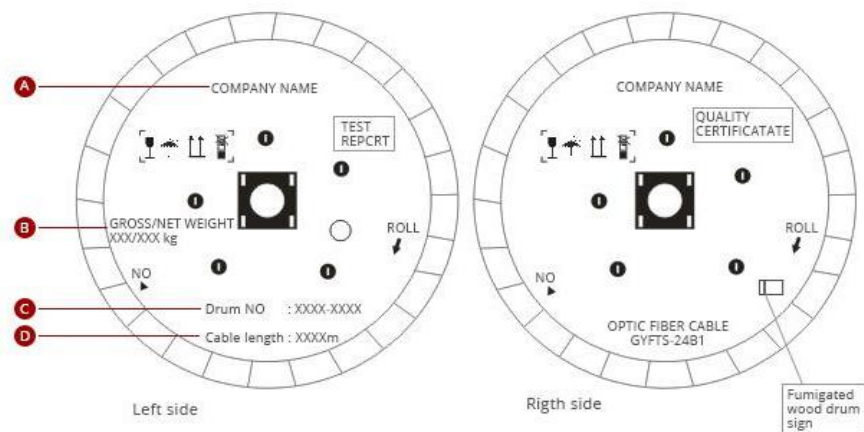
Dynamic bending: ≥ 20times than cable out diameter.

6. PACKAGE AND MARK

6.1 PACKAGE

Not allowed two length units of cable in one drum, two ends should be sealed,. Two ends should be packed inside drum, reserve length of cable not less than 3 meters. Customized markings are available upon request.

Mark



Usually we only attach Test Report on the out package of the cable, but we could also mark as your requirements, such as:

1. Company Name
2. Gross / Net weight
3. Drum No: XX
4. Cable Length : XX

6.2 CABLE MARK

Cable Mark: Brand、Cable type、Fiber type and counts、Year of manufacture、Length marking. Customized markings are available upon request.

7. TEST REPORT

Test report and certification supplied.