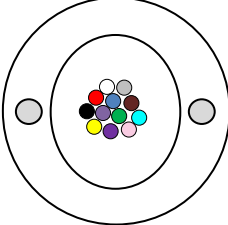


1. Application / Construction

| | | | |
|---------------------------------|--|------------------------------|---------------------------|
| Identification | GJPFJH-12/24G.657A1 | | |
| Application | Indoor installation | | |
| Cross Section (not to scale) | <p style="text-align: center;">12/24 fibers</p>  | | |
| Configuration | <ul style="list-style-type: none"> - Bare fiber - Semi-tight buffer (LSZH), strip at least 50cm at 1 time - Talc powder if needed - Outer sheath: LSZH, White, with 2 FRP embedded in the sheath symmetrically | | |
| Temperature Range | Storage and transport -20 to +60°C | Installation -10 to +50°C | Operation -20 to +60°C |
| Standards | IEC 60793-1, IEC 60793-2, IEC 60794-2 | | |
| ZTT Specification | 21-118269-7-A | | |
| Customer Reference | Common standard | | |

2. Dimensions

| | | | |
|-----------------------|----|-----|------|
| Number of fibers | | 12 | 24 |
| Outer diameter (±0.5) | mm | 9.0 | 11.0 |
| Weight/km | kg | 63 | 84 |

Note: sizes and values without tolerances are nominal values

3. Mechanical Properties

| | | |
|--------------------------|---------------------|-------|
| Max. tensile load | 400 N | 600 N |
| Crush resistance / 10 cm | 500 N | |
| Bending radius | Without Tension 10D | |

See Point 6: Test Methods

4. Marking

| | | | | | | | | | | | | |
|---------------|------|--------|-------|-------|-------|-------|-----|-------|--------|--------|------|------|
| Buffer Colors | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| | blue | orange | green | brown | slate | white | red | black | yellow | violet | rose | aqua |

Note: 13~24 buffer colors same as 1~12 buffer with black tracer, except 20th buffer with white tracer.

Outer Sheath: white, ink jet, marking in 1 meter intervals as follows (for example):

| |
|---|
| ZTT OPTICAL CABLE GJPFJH-12 G.657A1 <batch ID> <meter marking > |
|---|

5. Optical Fiber

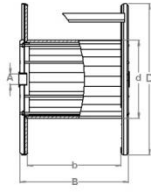
| Standard | ITU-T G.657A1 UBIF [®] R10 | | |
|------------|--|----------------------------------|--------------------------------|
| Optical | Fiber attenuation .. cabled | @ 1310 nm ≤0.36 dB/km | @ 1550 nm ≤0.22 dB/km |
| | Mode field diameter (MFD) | (8.6~9.2) ± 0.4 μm @1310nm | |
| | Zero dispersion wavelength | 1300~1324 nm | |
| | Zero dispersion slope | ≤0.092 ps/nm ² ·km | |
| | Cable cut-off wavelength | ≤1260 nm | |
| | Macro bending loss .. 10 turns Ø30 mm .. 1 turn Ø20 mm | @1550 nm ≤0.25 dB ≤0.75 dB | @1625 nm ≤1.0 dB ≤1.5 dB |
| Geometric | Coating diameter (Colored) | 250 ± 15μm | |
| | Cladding diameter | 125 ± 0.7μm | |
| | Core/clad concentricity error | ≤0.5μm | |
| | Cladding non-circularity | ≤ 1.0% | |
| Mechanical | Proof stress | ≥ 0.69Gpa | |

6. Test Methods

| Test | Conditions | Acceptance criteria |
|---|---|--|
| Tensile strength IEC 60794-1-2 E1 | Tensile strength: see Point 3 Sample length: ≥ 50 m, Duration: 1 min | - Δα reversible - No damage |
| Crush resistance IEC 60794-1-2 E3 | Crush: see Point 3 Test duration: 1 min, number of test: 3 | - Δα reversible - No damage |
| Impact IEC 60794-1-2 E4 | Impact energy: 1 J R = 300 mm, number of places/tests: 3 | - Δα reversible - No damage |
| Repeated bending IEC 60794-1-2 E6 | Bending radius: 20x cable Ø 25 cycles, 100N load | - Δα reversible - No damage |
| Torsion IEC 60794-1-2 E7 | Sample length: 2 m ± 180°, 10 cycles, 100N | - Δα reversible - No damage |
| Bend IEC 60794-1-2 E11A | Bending radius: 10x cable Ø 4 bends, 3 cycles | - Δα reversible - No damage |
| Temperature cycling IEC 60794-1-2 F1 | -20°C → +60°C 8 hours at each step, 2 cycles | - Δα ≤ 0.15dB/km and reversible - No damage |

All optical measurements at 1550 nm

7. Logistics

| Cable type | Length Tolerance | 2km -1% / +3% |  |
|-------------------|---|--------------------------|---|
| GJPFJH-12 G.657A1 | Drum Type Dimensions (tolerance: ±5cm) Weight (kg) | Wood 100*60*75 185 | |
| GJPFJH-24 G.657A1 | | Wood 105*60*75 227 | |

Dimensions including protection. Indicative values, actually delivered drum sizes and weights may deviate. Cable ends sealed with caps

| | | | | | |
|----------------|--------------|-----------------|-----------------|-----------------|---------------|
| A | Mar.23, 2021 | Samson | Erica | Xue Zhaojian | / |
| Version | Date | Prepared | Reviewed | Approved | Remark |

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