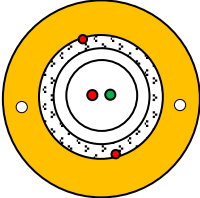


1. Application / Construction

Identification	GYFXT6P-2/4/8/12/24 B1.3/B6a1		
Application	Duct installation cable		
Cross Section (not to scale)	2/4/8/12/24 fibers 		
Configuration	<ul style="list-style-type: none"> - PBT loose tubes with up to 24 optical fibers, filled with thixotropic compound - Natural central loose tube - Strength member: Laminated glass yarns - Parallel FRP as additional strength member - Outer sheath: PE, orange, UV resistant, two red ripcords under the sheath 		
Temperature Range	Storage and transport -40 to +70°C	Installation -20 to +50°C	Operation -30 to +60°C
Standards	IEC 60793-1, IEC 60793-2, IEC 60794-3-10, ITU-T G.650, ITU-T G.652		
ZTT Specification	20-108106-B		
Customer Reference	Common standard		

2. Dimensions

Number of fibers	/	2	4	8	12	24
Loose tube Ø	mm	2.1				3.0
Strength member	/	Glass yarns				
Outer sheath thickness	mm	1.2				
Outer diameter (±0.3)	mm	5.3				6.2
Weight (± 15%)	kg/km	24				35

Note: sheath thickness not consider ripcord portion, sizes and values without tolerances are reference values

3. Mechanical Properties

Max. tensile load	500 N
Crush resistance / 10 cm	1000 N
Bending radius (load)	20x cable Ø
Bending radius (unload)	10x cable Ø

See Point 6: Test Methods

4. Marking

Fiber Colors	1	2	3	4	5	6	7	8	9	10	11	12
	red	green	blue	yellow	white	grey	brown	violet	aqua	black	orange	pink
	13	14	15	16	17	18	19	20	21	22	23	24
	red	green	blue	yellow	white	grey	brown	violet	aqua	natural	orange	pink

Tube color: Natural

Outer Sheath: orange, ink jet, marking in 1 meter intervals as follows:

ZTT	OPTICAL CABLE	GYFXT6P-2/4/8/12/24 B1.3	<fiber counts>	<batch ID>	<meter marking >
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5. Optical Fiber

Standard	ITU-T G.652D			
Optical	Fibre attenuation .. cabled	@ 1310 nm ≤0.40 dB/km	@ 1550 nm ≤0.30 dB/km	
	Mode field diameter (MFD)	9.2 ± 0.4 μm	10.4 ± 0.5 μm	
	Dispersion	@ 1300 + 30/ - 15 nm	≤3.5 ps/(nm·km)	
		@ 1550 nm	≤18.0 ps/(nm·km)	
		@ 1625 nm	≤22.0 ps/(nm·km)	
	Zero dispersion wavelength	1300~1324 nm		
	Zero dispersion slope	≤0.092 ps/nm ² ·km		
	Polarisation mode dispersion (PMD)	≤0.2 ps/√km		
	Cut-off wavelength	≤1260 nm		
Macro bending loss .. 100 turns Ø50 mm	@1550 nm ≤0.05 dB	@1625 nm ≤0.10 dB		
Geometric	Cladding diameter	125 ± 1.0 μm		
	Core/clad concentricity error	≤0.6 μm		
	Cladding non-circularity	≤0.8 %		
	Fiber diameter with coating (uncooled)	245 ± 10 μm		
	Cladding/coating concentricity error	≤12.0 μm		
Mechanical	Proof stress	≥0.69 Gpa (100 kpsi)		
	Dynamic stress corrosion susceptibility parameter (typical value)	≥20		

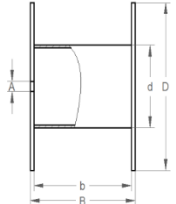
Standard	ITU-T G.657A1			
Optical	Fiber attenuation .. cabled	@ 1310 nm ≤0.35 dB/km	@ 1550 nm ≤0.22 dB/km	
		@ 1383 nm ≤0.34 dB/km	@ 1625 nm ≤0.23 dB/km	
	Mode field diameter (MFD)	8.6 ± 0.4 μm @1310nm 9.8 ± 0.5 μm @1550nm		
	Zero dispersion wavelength	1300~1324 nm		
	Zero dispersion slope	≤0.092 ps/nm ² ·km		
	Dispersion	@ 1300 + 30/ - 15 nm	≤3.5 ps/(nm·km)	
		@ 1550 nm	≤18.0 ps/(nm·km)	
		@ 1625 nm	≤22.0 ps/(nm·km)	
	Polarization mode dispersion (PMD)	≤0.2 ps/√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 (uncooled)	245 ± 5μm		
	Cladding diameter	125 ± 0.7μm		
	Core/clad concentricity error	≤0.5μm		
	Cladding non-circularity	≤ 0.7%		
	Cladding/coating concentricity error	≤12 μm		
Mechanical	Proof stress	≥ 0.69Gpa		
	Dynamic Fatigue	≥ 20		

6. Test Methods

Test	Conditions	Acceptance criteria
Tensile strength IEC 60794-1-2 E1	Tensile strength: see Point 3 Sample length: ≥ 50 m, Duration: 5 min	- Fiber strain $\leq 0.6\%$, $\Delta\alpha$ reversible
Crush resistance IEC 60794-1-2 E3	Crush: see Point 3 Test duration: 1 min, number of test: 3	- $\Delta\alpha$ reversible - No damage
Impact IEC 60794-1-2 E4	Impact energy: 5 J R = 300 mm, number of test: 3	- $\Delta\alpha$ reversible - No damage
Repeated bending IEC 60794-1-2 E6	Bending radius: 20x cable \varnothing 100 cycles, 100N load	- $\Delta\alpha$ reversible - No damage
Torsion IEC 60794-1-2 E7	Sample length: 2 m $\pm 180^\circ$, 5 cycles, 100N	- $\Delta\alpha$ reversible - No damage
Temperature cycling IEC 60794-1-2 F1	-30°C \rightarrow +60°C 4 hours at each step, 2 cycles	- $\Delta\alpha \leq 0.1$ dB/km - No damage

All optical measurements at 1550 nm

7. Logistics

Cable type	Length Tolerance	4km -1% / +3%	 D*d*B in cm
GYFXT6P-2/4/8/12 B1.3/B6a1	Drum Type Dimensions Weight	Wooden 95*60*75 148 kg	
GYFXT6P-24 B1.3/B6a1		Wooden 95*60*75 192 kg	

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

B	April 12,2024	John	Erica	Felix	Update color code
A	Mar.24,2020	Dendi	Erica	Felix	/
Version	Date	Prepared	Reviewed	Approved	Remark

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