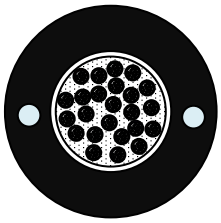
1. Application / Construction

Identification	GYFXT6P-288 G.652D		
Application	Duct Installation Cable		
Cross Section (not to scale)	288 fibers 		
Configuration	- Micro module with up to 12 optical fibres and jelly inside - Easy to strip the micro module - 2 Parallel strength members (FRP) in the cable sheath - Cable strand: dry, with water blocking yarns and water blocking tape - Glass yarns as additional strength member - Outer sheath: Black PE, UV proof		
Temperature Range	Storage and transport -30 to +70°C	Installation -5 to +50°C	Operation -20 to +60°C
Standards	IEC 60793-1, IEC 60793-2, IEC 60794-3-10, ITU-T G.652		
ZTT Specification	21-116461-18-B		
Customer Reference	3424011428		

2. Dimensions

Number of fibers		288
Fiber No. per module		12
No. of micro module		24
Outer sheath thickness	mm	Min. 1.8
Outer diameter (±5%)	mm	13.6
Weight/km	kg	111

Note: sizes and values without tolerances are nominal values

3. Mechanical Properties

Max. tensile load (N)	2500
Crush resistance (N/10cm)	1000
Bending radius (installation)	15x cable Ø
Bending radius (operation)	10x cable Ø

See Point 7: 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

Tube 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	black	orange	pink

Outer Sheath: black, ink jet or hot print, marking in 1 meter intervals as follows (for example):

telephone handset HT SVK <number of fibers> ZTT 2021 xxxxM

5. Optical Fiber

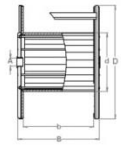
Standard	ITU-T G.652D ZTT-ALF®		
Optical	Fibre attenuation .. cabled	@ 1310 nm ≤0.38 dB/km	@ 1550 nm ≤0.23 dB/km
	Refractive index profile	Step	
	Mode field diameter (MFD)	9.2 ± 0.5 µm	-
	Zero dispersion wavelength	1300~1324 nm	
	Zero dispersion slope	≤0.092 ps/nm² ·km	
	Dispersion coefficient	@ 1310 nm ≤3.5 ps/nm.km	@ 1550 nm ≤19.0 ps/nm.km
	PMD individual value	≤0.2 ps/√km	
	Cut-off wavelength	≤1260 nm	
	Macro bending loss .. 100 turns Ø60 mm	@1550 nm ≤0.05 dB	@1625 nm ≤0.10 dB
Geometric	Cladding diameter	125 ± 1.0 µm	
	Coating Diameter	250 ± 15 µm	
	Core/clad concentricity error	Max. individual value: 1µm Max. average value: ≤0.5µm	
	Cladding non-circularity	≤1.0 %	
Mechanical	Proof stress	≥0.69 Gpa	

6. Test Methods

Test	Conditions	Acceptance criteria
Tensile strength IEC 60794-1-2 E1	Tensile strength: see Point 3 Length: ≥ 50 m, Duration: 1 min	- Fiber strain: ≤0.6%, △α ≤0.15dB - △α reversible after test
Crush resistance IEC 60794-1-2 E3	Crush: see Point 3 Test duration: 1 min, test number: 3	- △α ≤0.05dB after test - No damage
Impact IEC 60794-1-2 E4	Impact energy: 3J R = 10 mm, number of places: 3	- △α ≤0.05dB after test - No damage
Repeated bending IEC 60794-1-2 E6	Bending radius: 20x cable Ø 25 cycles	- △α ≤0.05dB after test - No damage
Torsion IEC 60794-1-2 E7	Sample length: 2 m ± 180°, 10 cycles	- △α ≤0.05dB after test - No damage
Bend IEC 60794-1-2 E11A	Bending radius: 10x cable Ø 3 turns, 3 cycles	- △α ≤0.05dB after test - No damage
Temperature cycling IEC 60794-1-2 F1	-20℃→ +60℃ 4 hours at each step, 2 cycles	- △α≤0.15dB/km and reversible
Water penetration IEC 60794-1-2 F5	Sample length: 3 m Water column height: 1 m Test duration: 24 h	- No leakage from outside of modules

All optical measurements at 1550 nm

7. Logistics

Cable type	Length Tolerance	4km -1% / +3%	 D*d*B in cm
GYFXT6P-288 G.652D	Drum Type Dimensions Weight	Wood 155*70*75 575 kg	

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