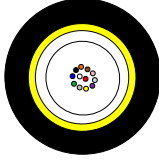


## 1. Application / Construction

Identification	GYCFXT6Y-12 G.652D		
Application	Micro cable for blowing into microducts		
Cross Section (not to scale)	12 fibers 		
Recommended for microduct dimension (O/I-Ø in mm)	7/4		
Configuration	<ul style="list-style-type: none"> <li>- Central loose tube 12 optical fibers, filled with thixotropic compound</li> <li>- Strength member: Aramid yarns</li> <li>- Outer sheath: HDPE</li> </ul>		
Temperature Range	Storage and transport -20 to +60°C	Installation -5 to +50°C	Operation -20 to +60°C
Standards	IEC 60793-1, IEC 60793-2, IEC 60794-5, IEC 60793-1-52		
ZTT Specification	ZTT 21-116460-2-D		
Customer Reference	3424011432		

## 2. Dimensions

Number of fibers		12
Loose tubes x fibers		1x12
Loose tube Ø/wall thickness	mm	1.6/0.3
Outer sheath thickness	mm	0.3
Outer diameter (±0.2)	mm	2.3(≤2.5)
Weight (± 20%)	kg	5.4

Note: sizes and values without tolerances are reference values

## 3. Mechanical Properties

Max. tensile load	54 N
Crush resistance / 10 cm	100 N
Bending radius (installation)	20x cable-Ø
Bending radius (operation)	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

Loose tube color: nature

Outer Sheath: black, ink jet or laser print, marking in 1 meter intervals as follows:

**0002 HT TO SM 03 Z 12xTxAxDxS ZTT 2021 0003**

## 5. Optical Fiber

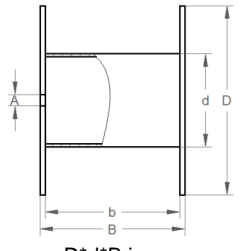
Standard	ITU-T G.652D ZTT-ALF®		
Optical	Fibre attenuation .. cabled	@ 1310 nm ≤0.38 dB/km	@ 1550 nm ≤0.23 dB/km
	Mode field diameter (MFD)	9.2 ± 0.5 μm	-
	Zero dispersion wavelength	1300~1324 nm	
	Zero dispersion slope	≤0.092 ps/nm <sup>2</sup> ·km	
	Dispersion coefficient	@ 1310 nm ≤3.5 ps/nm.km	@ 1550 nm ≤19.0 ps/nm.km
	PMD <sub>Q</sub> link design value (M=20 cables Q=0.01%)	≤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	≤0.6 μm	
	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 Sample length: ≥ 50 m, Test duration: 1 min	- Δα reversible - No damage
Crush resistance IEC 60794-1-2 E3	Crush: see Point 3 Test duration: 1 min, number of tests: 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	- Δα reversible - No damage
Torsion IEC 60794-1-2 E7	Sample length: 2 m ± 180°, 5 cycles	- 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 4 hours at each temperature step, 2 cycles	- Δα ≤ 0.1 dB/km - Δα reversible, no damage
Water penetration IEC 60794-1-2 F5	Sample length: 1 m, Test duration: 24 h Water column height: 1 m	- No water leakage

All optical measurements at 1550 nm

## 7. Logistics

Cable type	Standard Length (-1% +3%)	4 km	 <p>D*d*B in cm</p>
GYCFXT6Y-12 G.652D	Drum type Dimensions Weight	Plywood 72*60*43 30.4 kg	

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