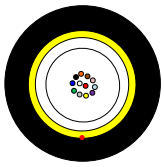
1. Application / Construction

Identification	GYCFXT6Y-2/4/6 G.657A1		
Application	Micro cable for blowing into microducts		
Cross Section (not to scale)	2..6 fibers 		
Recommended for microduct dimension (O/I-Ø in mm)	7/4		
Configuration	- Central loose tube with up to 6 optical fibers, filled with thixotropic compound - Strength member: Aramid yarns - Outer sheath: Black HDPE, UV resistant, 1 ripcord under sheath		
Temperature Range	Storage and transport -25 to +70°C	Installation -5 to +40°C	Operation -20 to +60°C
Standards	IEC 60793-1, IEC 60793-2, IEC 60794-5		
ZTT Specification	23-XJ28384-1-C		
Customer Reference	Common standard		

2. Dimensions

Number of fibers		2	4	6
Loose tube Ø	mm	1.6		
Outer sheath thickness	mm	0.3		
Outer diameter (±0.2)	mm	2.4±0.2		
Weight /km(± 20%)	kg	5		

Note: sizes and values without tolerances are reference values

3. Mechanical Properties

Max. tensile load	80 N
Crush resistance / 10 cm	500 N
Bending radius (installation)	90mm
Bending radius (operation)	50mm

See Point 6: Test Methods

4. Marking

Fiber Colors	1	2	3	4	5	6
	red	green	blue	yellow	white	grey

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 2023 0003

5. Optical Fiber

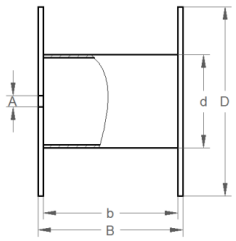
Standard	ITU-T G.657A1 UBIF®R10		
Optical	Fibre attenuation (after cabling) .. @ 1310 nm .. @ 1383 nm .. @ 1490 nm .. @ 1550 nm .. @ 1625 nm	 ≤0.35 dB/km ≤0.33 dB/km ≤0.23 dB/km ≤0.21 dB/km ≤0.23 dB/km	
	Mode field diameter (MFD)	@1310 nm 9.0 ± 0.6 μm	@1550 nm 10.2 ± 0.6 μm
	Zero dispersion wavelength	1300 ~ 1324 nm	
	Zero dispersion slope	≤0.092 ps/nm² ·km	
	Chromatic Dispersion @1300 +30/-15nm	≤3.0 ps/nm·km	
	Chromatic Dispersion @1300 +60/-40nm	≤12.0 ps/nm·km	
	Chromatic Dispersion @1550 +30/-70nm	≤19 ps/nm·km	
	PMD max. Individual Value	≤0.1 ps/√km	
	PMD max. Link Value	≤0.06 ps/√km	
	Cut-off wavelength	≤1260 nm	
	Macro bending loss (1 turn Ø20 mm)	@1550 nm ≤0.6 dB	@1625 nm ≤1.0 dB
Geometric	Coated diameter (colored)	250 ± 10 μm	
	Cladding diameter	125 ± 0.7 μm	
	Core/clad concentricity error	≤0.5 μm	
	Cladding non-circularity	≤ 0.5 %	
Mechanical	Proof stress	≥ 0.69 Gpa	
	Average coating strip force	1~5 N	

6. Test Methods

Test	Conditions	Acceptance criteria
Tensile strength IEC 60794-1-2 E1	Tensile load: see Point 3 Sample length: ≥ 50 m Test duration: 1 min	- Fibre strain <0.2% - Δα ≤ 0.05 dB - 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: 1J; R = 300 mm Impact points: 3; Impact number: 1	- Δα reversible - No damage
Repeated bending IEC 60794-1-2 E6	Bending radius: 90 mm Cycles: 25 cycles	- Δα reversible - No damage
Torsion IEC 60794-1-2 E7	Sample length: 2 m; Angles: ± 180° Cycles: 5 cycles	- Δα reversible - No damage
Bend IEC 60794-1-2 E11A	Mandrel radius: 50 mm; Turn number: 4 Cycles: 3 cycles	- Attenuation change ≤ 0.05 dB - No damage
Temperature cycling IEC 60794-1-2 F1	Loop diameter:40cm Total length of fiber after splicing: ≥1km TA1→TB1: -20°C .. +60°C TA2→TB1: -25°C .. +70°C Time per each step: 4 hours, cycles: 2	- TA1→TB1: Δα ≤ 0.05 dB/km - TA2→TB1: Δα ≤ 0.10 dB/km - Attenuation reversible - No damage
Water penetration IEC 60794-1-2 F5	Sample length: 1 m Water column height: 1 m, test duration: 24 h	- No water leakage

All optical measurements at 1550 nm

7. Logistics

Cable type	Standard Length (-1% +3%)	6 km	 D*d*B in cm
GYCFXT6Y-2..6	Drum type Dimensions Weight	Wooden 80*55*36 52 kg	

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