

Micro Cable (GCYFTY xxB1.3)

CORNING

1. Scope

This document details external cables generally for installation into a micro duct by air blown installation.

2. Transmission Performance

Fiber Name	SMF-28® Ultra fiber
Fiber Category	G.652.D
Maximum Cabled Attenuation (dB/km)	0.34 at 1310nm 0.34 at 1383nm 0.20 at 1550nm
Fiber Mode Field Diameter (um)	9.2±0.4 at 1310nm

3. Cable construction

3.1. A typical cable construction can be seen in Appendix 1.

3.2. Fiber and tube color code(12 fibers / tube)

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Grey	White
No.	7	8	9	10	11	12
Color	Red	Black	Yellow	Violet	Pink	Aqua

3.3. Cable sheath marking

3.3.1. Marking legend: According to user's requests

3.3.2. Marking interval: 1m

3.3.3. Marking method: ink jet printing (White color)

(IEC 60794-1-21-E2B Method 2: Load:4.5N, No. of cycle: 3, marking legible)

3.4. Both ends of cable are sealed with heat shrinkable end cap to prevent ingress of water.

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4. Cable Properties

4.1. Mechanical & Environmental properties

4.1.1. Cable bending radius: 15 x cable diameter (during operation)
20 x cable diameter (during installation)

4.1.2. Operating temperature range : -40°C to + 70°C
Storage/Transport temperature range : -40°C to + 70°C
Installation temperature range : -5°C to + 50°C

4.2. Mechanical & Environmental Requirements

No	Item	Test Specification	Test Method	Specification
1	Tensile strength Test	IEC 60794-1-2-E1	- Load:1000N(short term) - Time: 1 minutes	- Attenuation change: ≤ 0.1dB at 1550nm after the test
2	Crush Resistance	IEC 60794-1-2-E3	- Load : 500N - Time : 1 minutes - Plate dimension:100mmx100mm	- Attenuation change: ≤ 0.1dB at 1550nm after the test
3	Cable Bend test	IEC 60794-1-2-E11	- Bend Radius: 20 x OD* - Number of Turn : 10 - Number of cycles: 4	- Attenuation change: ≤ 0.1dB at 1550nm after the test
4	Repeated bending	IEC 60794-1-E6	- Bending radius: 20 x OD* - Load: 25N - No. of cycle: 25	- Attenuation change: ≤ 0.1dB at 1550nm after the test
5	Twist/Torsion	IEC 60794-1-E7	- Length: 1 m - Load: 40N - Twist angle: ±180° - No. of cycle: 5	- Attenuation change: ≤ 0.1dB at 1550nm after the test
6	Temp. Cycling test	IEC 60794-1-2-F1	- Temperature step: +20°C→-40°C→+70°C→+20°C - Time per each step: 12hrs	- Attenuation change: ≤ 0.1 dB/km at 1550nm
7	Water penetration	IEC 60794-1-2-F5B	- Water height: 1 m - Sample length: 3m - Duration of test: 24hrs	- No water leakage

“G” is the weight of cable per kilometer, the unit is Newton (N).

*OD is the cable Outer diameter.

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5. Packing

- 5.1. Non-returnable wooden drum with wooden coverage protection. All wood apply methyl bromide treatment with IPPC stamp mark.



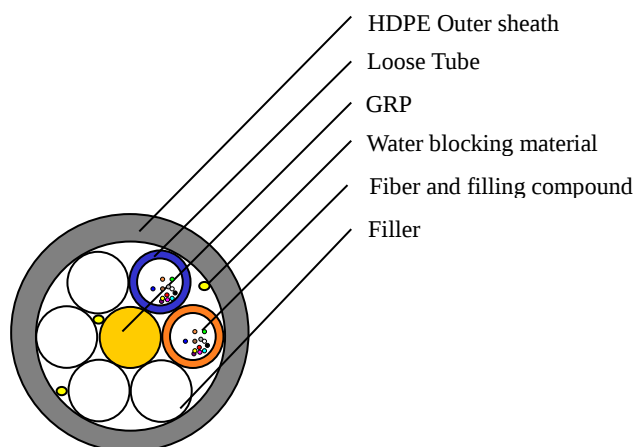
- 5.2. Cable label and test report are fixed on the side of drum.

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Appendix 1

1. Air Blown Micro Cable drawing of 24 fibers (not to scale)



2. Detail information

Fiber Count	Number of Total Unit (Tube + Filler)	Number of Fibers per tube	Outer Diameter (Nominal)	Weight (Nominal)	Nominal Delivery Length per Reel	Tensile Strength (short term)
			mm	kg/km	m	N
24	(2+4)	12	5.3±0.2	25	2000,3000	350
12~72	6	12	5.3±0.2	25	2000,3000	350
96	8	12	6.2±0.2	34	2000,3000	1000
144	12	12	8.1±0.2	54	2000,3000	1000

3. Part Number:

COFCC:

Fiber Count	Part Number
12 ~ 72	GCYFTY 12~72B1.3
96	GCYFTY 96B1.3
144	GCYFTY 144B1.3