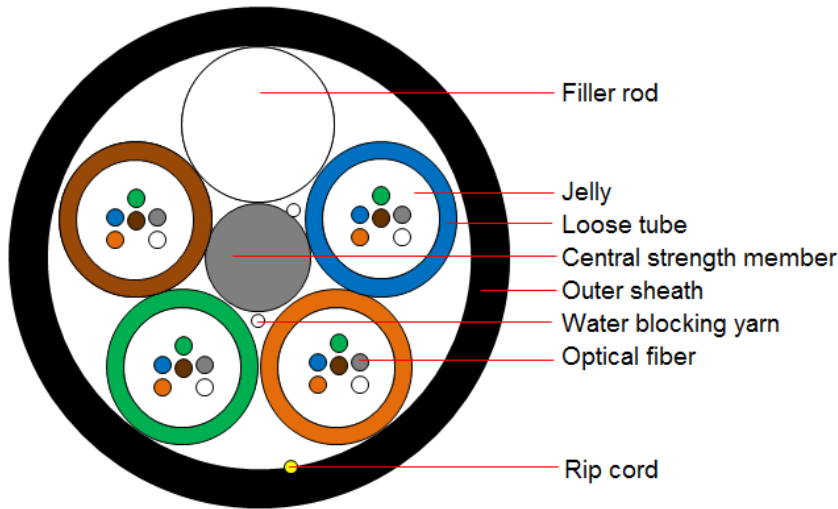


GCYFY

1. Cable structure (for reference, not to scale)



2. Cable description

Loose tube construction, tubes with jelly filled, elements (tubes and filler rods when necessary) and water blocking yarn laid up around non-metallic central strength member, aramid yarn used to bind the cable core, a ripcord and PE outer sheath.

3. Fiber & tube color

3.1 Fiber color code:

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Gray	White

3.2 Loose tube color code:

No.	1	2	3	4
Color	Blue	Orange	Green	Brown

4. Structure parameter

Item	Contents	Unit	Value	
Fiber	Count	/	6	24
Cable structure	/	/	1+5	1+5
Fiber No. per tube	Number	/	6	6
Loose tube	Number	/	1	4
Outer sheath	Thickness	mm	Nominal 0.5	
Cable diameter	±5%	mm	5.0	
Cable weight	±10%	kg/km	19	

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Item	Contents	Unit	Value
Micro duct inner diameter	Recommend	mm	8
Air blowing length	Approx.	m	1000
Reference	/	/	ITU-T L.108 (Route A)

Note: Sheath thickness not consider ripcord portion, sizes and values without tolerances are nominal values.

*Before installation don't keep the cable under direct sun light.

5. Mechanical & Environmental Performance

Item	Contents	Value
Max. tensile load	Short term	1*G
Max. crush resistance	Short term	500 N/100 mm
Min. bending radius	Installation	20 x cable diameter
	Operation	10 x cable diameter
Temperature range	Operation	-30°C ~ +70°C
	Installation	-10°C ~ +50°C
	Storage/transportation	-30°C ~ +70°C

Remark: G is the weight of 1km cable.

6. Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 60794-1-2-E1	- Load: Short term tension - Length of cable: about 50m - Load time: 1min	- Fiber strain $\leq 0.6\%$ - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: Long term crush - Load time: 1min	- No fiber break and no sheath damage.

7. Optical fiber

G.652D Optical characteristics

Item	Contents	Value
Attenuation	@1310nm	$\leq 0.36\text{dB/km}$
	@1550nm	$\leq 0.22\text{dB/km}$
Dispersion	@1288nm~1339nm	$\leq 3.5\text{ps}/(\text{nm}\cdot\text{km})$
	@1550nm	$\leq 18\text{ps}/(\text{nm}\cdot\text{km})$
	@1625nm	$\leq 22\text{ps}/(\text{nm}\cdot\text{km})$
Zero-Dispersion wavelength		1300nm ~ 1324nm
Zero-Dispersion slope		$\leq 0.092\text{ps}/(\text{nm}^2\cdot\text{km})$
Mode field diameter (MFD)	@1310nm	$9.2\pm 0.4\mu\text{m}$
	@1550nm	$10.4\pm 0.5\mu\text{m}$
Cable cutoff wavelength $\lambda_{cc}(\text{nm})$		$\leq 1260\text{nm}$
Link polarization dispersion (PMD ₀)		$\leq 0.2\text{ps}/\text{km}^{1/2}$
Geometrical characteristics		
Cladding diameter		$125\pm 0.7\mu\text{m}$

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