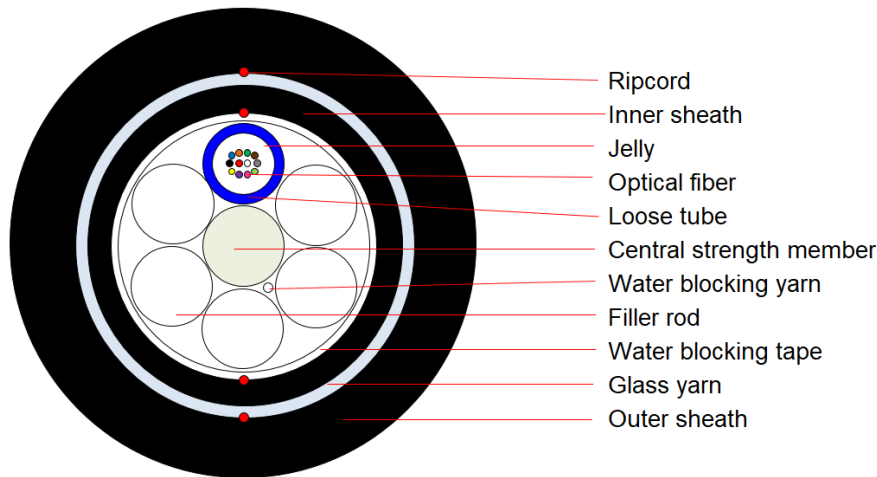


GYFZY73-12 OM4

1. Cable cross-section (only for reference, not to scale)



(Not to scale, color is only for showing, may be not exact same as real product color)

2. Cable description

Loose tube construction, tubes with jelly filled, elements (tubes and filler rods when necessary) laid up around non-metallic central strength member, polyester yarns used to bind the cable core, water blocking tape wrapped, 2 ripcords, PE inner sheath, glass yarns reinforced, 2 ripcords and then LSZH 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
No.	7	8	9	10	11	12
Color	Red	Black	Yellow	Violet	Pink	Aqua

3.2 Loose tube color code

No.	1
Color	Blue

3.3 If there are any fillers, the color will be nature.

4. Structure parameter

Item	Contents	Unit	Value
Fiber count	Number	/	12
Cable structure	/	/	1+6
Fiber No. per tube	Number	/	12
Loose tube	Number	/	1

Document Type	Spec. No.
Tech. Specification	32024110613

Approved by	Prepared by	Date	Rev	Page
<i>Bryan</i>	<i>Roy</i>	2024/11/7	1.0	1 / 3



Item	Contents	Unit	Value
Central strength member	Material	/	FRP
Inner sheath	Material	/	PE
Outer sheath	Material	/	LSZH
	Thickness	mm	1.8
Cable diameter	±5%	mm	12.9
Cable weight	±10%	kg/km	166

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

For ripcord, the “opposite position” means the angle between the two ripcords should be 120° to 240°.

It's advised to notch the cable before splitting the sheath for better ripping.

5. Mechanical & Environmental Performance

Item	Contents	Value
Max. tensile load	Short term	2700 N
Max. crush resistance	Short term	2200 N/100mm
Min. bending radius	Installation	25 x cable diameter
	Operation	12.5 x cable diameter
Temperature range	Operation	-30°C ~ +70°C
	Installation	-10°C ~ +70°C
	Storage/transportation	-30°C ~ +70°C

6. Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 60794-1-21-E1	- Load: Short term tension - Length of cable: ≥ 50m - Load time: 10min	- Fiber strain ≤ 0.6% - Loss change ≤ 0.3dB@1300nm after test. - No fiber break and no sheath damage.
Crush Test IEC 60794-1-21-E3	- Load: Short term crush - Load time: 1min	- Loss change ≤ 0.3dB@1300nm after test. - No fiber break and no sheath damage.
Impact Test IEC 60794-1-21-E4	- Radius: 300 mm - Points of impact: 3 - Times of per point: 1 - Impact energy: 10J	- Loss change ≤ 0.3dB@1300nm after test. - No fiber break and no sheath damage.
Repeated Bending IEC 60794-1-21-E6	- Bending radius: 25 x OD - No. of cycle: 25	- Loss change ≤ 0.3dB@1300nm after test. - No fiber break and no sheath damage.
Torsion IEC 60794-1-21-E7	- Length: 1m - Twist angle: ±90° - No. of cycle: 10	- Loss change ≤ 0.3dB@1300nm after test. - No fiber break and no sheath damage.
Cable bend IEC 60794-1-21-E11	- Diameter of mandrel: 25 x OD - Number of turns: 4 - Number of cycles: 3	- Loss change ≤ 0.3dB@1300nm after test. - No fiber break and no sheath damage.

Document Type	Spec. No.
Tech. Specification	32024110613

Approved by	Prepared by	Date	Rev	Page
<i>Bryan</i>	<i>Roy</i>	2024/11/7	1.0	2 / 3



Item	Test Method	Acceptance Condition
Water Penetration IEC 60794-1-22-F5B	- Height of water: 1m - Sample length: 3m - Time: 24h	- No water leak from the cable core of the opposite end.
Temperature Cycling IEC 60794-1-22-F1	- Temperature: -30°C~+70°C - Time of each step: 12h - Number of cycle: 2	- Loss change $\leq 0.4\text{dB/km}$ @1300nm. - No fiber break and no sheath damage.
Flame retardant IEC 60332-1	- Pass the single cable vertical flame propagation test.	

7. OPTICAL FIBER

OM4 Characteristic of Optical Fiber

Item	Unit	Specification	
		OM4	
Core diameter	μm	50 ± 2.5	
Cladding diameter	μm	125.0 ± 1.0	
Cladding non-circularity	%	≤ 1.0	
Core/Clad concentricity error	μm	≤ 1.5	
Coating diameter(uncolored)	μm	245 ± 10	
Coating/cladding concentricity error	μm	≤ 12	
OFL Bandwidth	850nm	MHz·km	≥ 3500
	1300nm	MHz·km	≥ 500
EMB Bandwidth	850nm	MHz·km	≥ 4700
Attenuation Coefficient	850nm	dB/km	≤ 3.5
	1300nm	dB/km	≤ 1.5
Proof stress level	kpsi		≥ 100

Other parameters meet standard IEC 60793-2-10.

Document Type	Spec. No.
Tech. Specification	32024110613

Approved by	Prepared by	Date	Rev	Page
<i>Bryan</i>	<i>Roy</i>	2024/11/7	1.0	3 / 3