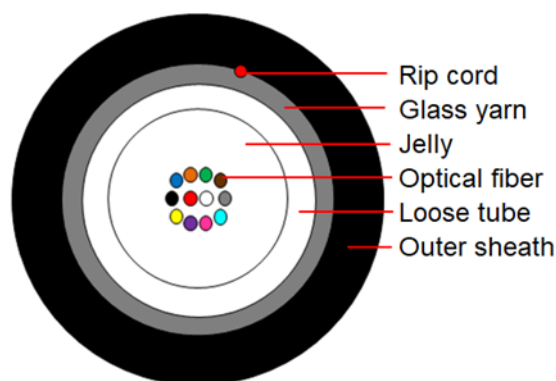


All-Dielectric Self-Supporting Fiber Cable

OM3-OM4-CLT-LSZH-1kN



Fiber Count	KN
6 / 12 / 24 FO	1

Cable description

Central loose tube, jelly compound filled, glass yarns reinforced, 1 ripcord, and then LSZH outer sheath.

Fiber & tube color

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
NO.	13	14	15	16	17	18
Color	Blue #	Orange #	Green #	Brown #	Gray #	White #
NO.	19	20	21	22	23	24
Color	Red #	Natural #	Yellow #	Violet #	Pink #	Aqua #

Note: # means a black single tracer with interval of nominal 50mm
Tube color is natural

Structure parameter

Item	Contents	Unit	Value		
Fiber count	Number	/	6	12	24
Cable structure	/	/	Central loose tube		
Strength members	Material	/	Glass yarns		
Outer sheath	Material	/	LSZH		
	Color	/	Black		
Cable diameter	±5%	mm	6.9	6.9	7.4
Cable weight	±10%	kg/km	53	53	60

Note: Sizes and values without tolerances are nominal values.

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

Mechanical & Environmental Performance

Item	Contents	Value
Max. tensile load	Short term	1000N
Max. crush resistance	Short term	1000N/100mm
Min. bending radius	Installation	20 x cable diameter
	Operation	10 x cable diameter
Temperature range	Operation	-10°C ~ +60°C
	Installation	-5°C ~ +50°C
	Short term	1000N

Optical fiber

Item	Contents	Value
OM3 Characteristic of Optical Fiber		
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	μm	245 ± 10
Coating/cladding concentricity error	μm	≤ 12
OFL Bandwidth	850nm	MHz·km
	1300nm	MHz·km
EMB Bandwidth	850nm	MHz·km
Attenuation Coefficient	850nm	dB/km
	1300nm	dB/km
Proof stress level	kpsi	≥ 100

Other parameters meet standard IEC 60793-2-10.

Item	Contents	Value
OM4 Characteristic of Optical Fiber		
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	μm	245 ± 10
Coating/cladding concentricity error	μm	≤ 12
OFL Bandwidth	850nm	MHz·km
	1300nm	MHz·km
EMB Bandwidth	850nm	MHz·km
Attenuation Coefficient	850nm	dB/km
	1300nm	dB/km
Proof stress level	kpsi	≥ 100

Other parameters meet standard IEC 60793-2-10.

Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 60794-1-21-E1	- Load: Short term tension - Length of cable: $\geq 50\text{m}$ - Load time: 1min	- Fiber strain $\leq 0.6\%$ - Loss change $\leq 0.1\text{dB}@1550\text{nm}$ after test for SM. - Loss change $\leq 0.3\text{dB}@1300\text{nm}$ after test for MM. - No fiber break and no sheath damage.
Crush Test IEC 60794-1-21-E3	- Load: Short term crush - Load time: 1min	- Loss change $\leq 0.1\text{dB}@1550\text{nm}$ after test for SM. - Loss change $\leq 0.3\text{dB}@1300\text{nm}$ after test for MM. - No fiber break and no sheath damage.
Water Penetration IEC 60794-1-22-F5	- Height of water: 1m - Sample length: 3m - Time: 24h	- No water leak from the cable core.
Temperature Cycling IEC 60794-1-22-F1	- Temperature: $-10^{\circ}\text{C}\sim+60^{\circ}\text{C}$ - Time of each step: 12h - Number of cycle: 2	- Loss change $\leq 0.15\text{dB/km}@1550\text{nm}$ for SM. - Loss change $\leq 0.6\text{dB/km}@1300\text{nm}$ for MM. - No fiber break and no sheath damage.
Flame retardant IEC 60332-1	- Pass the single cable vertical flame propagation test.	