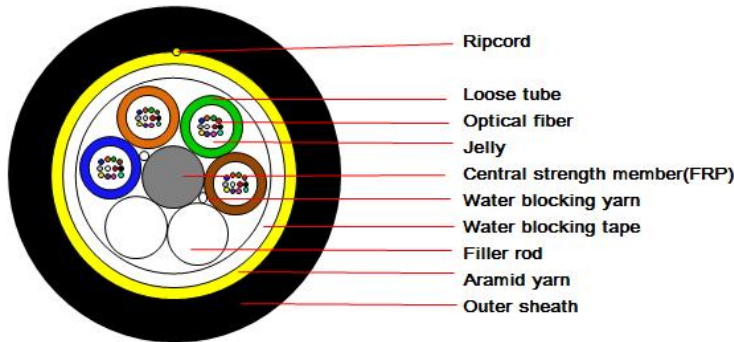


ADSS

All Dielectric Self- Supporting Optical Fiber Cable

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



Cable Specification

1 Introduction

Loose tube construction, tubes jelly filled, elements (tubes and filler rods) laid up around non-metallic central strength member, polyester yarns used to bind the cable core, water blocking tape wrapped the cable core, aramid yarns reinforced and PE outer sheath.

2 Fiber color code

Fiber color in each tube starts from No. 1 Blue.

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Gray	White	Red	Black	Yellow	Purple	Pink	Aqua

3 Color codes for loose tube & filler rod

Tube color starts from No. 1 Blue. If there are fillers, the color is natural.

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Gray	White	Red	Black	Yellow	Purple	Pink	Aqua

4 Cable structure and parameter

SN	Item	Unit	Value				
1	No. of fibers	count	6/8/12	24	36/48	96	144
2	No. of fibers per tube	count	4	4	12	12	12
3	No. of elements	count	6	6	6	8	12
4	Thickness of outer sheath	mm	1.7	1.7	1.7	1.7	1.7
5	Cable diameter (±5%)	mm	10.5	10.5	11.2	12.8	16.3
6	Cable weight (±10%)	kg/km	83	89	99	133	202
7	Maximum allowable tension	N	3000				
8	Short term crush	N/100mm	1000				
9	Span	m	120				

10	Wind speed	Km/h	≤ 35
11	Ice thickness	mm	0

Note: Mechanical sizes are nominal values.

Characteristic of Optical Cable

1 Min. bending radius for installation

Static: 10 x cable diameter

Dynamic: 20 x cable diameter

2 Application temperature range

Operation: $-40^{\circ}\text{C} \sim +60^{\circ}\text{C}$

Installation: $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$

Storage/transportation: $-40^{\circ}\text{C} \sim +60^{\circ}\text{C}$

3 Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 60794-1-2-E1	- Load: Maximum allowable tension - Length of cable: about 50m - Load time: 1min	- Fiber strain $\leq 0.33\%$ - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: Short term crush - Load time: 1min	- Loss change $\leq 0.1\text{dB}@1550\text{nm}$ - No fiber break and no sheath damage.

Characteristic of Optical Fiber

G652D fiber information

Mode field diameter (1310nm): $9.2\mu\text{m} \pm 0.4\mu\text{m}$

Mode field diameter (1550nm): $10.4\mu\text{m} \pm 0.8\mu\text{m}$

Cut off wavelength of cabled fiber (λ_{cc}): $\leq 1260\text{nm}$

Attenuation at 1310nm: $\leq 0.36\text{dB/km}$

Attenuation at 1550nm: $\leq 0.22\text{dB/km}$

Bending loss at 1550nm (100 turns, 30mm radius): $\leq 0.05\text{dB}$

Dispersion in the range 1288 to 1339nm: $\leq 3.5\text{ps}/(\text{nm}\cdot\text{km})$

Dispersion at 1550nm: $\leq 18\text{ps}/(\text{nm}\cdot\text{km})$

Dispersion slope at zero dispersion wavelength: $\leq 0.092\text{ps}/(\text{nm}^2\cdot\text{km})$

Product Display

24 fibers



48 fibers



Packing

4000meter/Wooden Drum