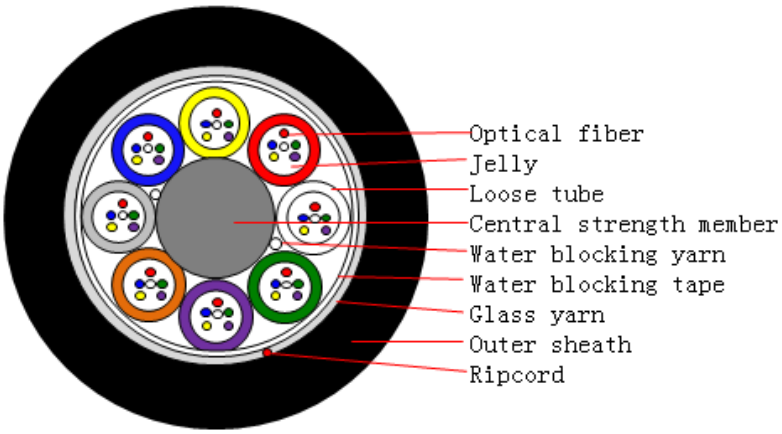
ADSS-96FO.-60span.

1. Cable cross-section



2. Cable Specification

2.1 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, glass yarn reinforced and HDPE outer sheath.

2.2 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	Yellow	Red	White	Green	Violet	Orange	Grey	W.Blue	Black	Brown	Pink

2.3 Color codes for loose tube

Tube color starts from No. 1 Blue.

1	2	3	4	5	6	7	8
Blue	Yellow	Red	White	Green	Violet	Orange	Gray

2.4 Cable structure and parameter

SN	Item	Unit	Value
1	No. of fibers	count	**96**
2	No. of fibers per tube	count	**8**
3	No. of elements	count	**12**
4	Tube diameter(nominal)	mm	**2.3**
5	FRP diameter(nominal)	mm	**3.9**
6	Cable diameter(±5%)	mm	**12.7**
7	Cable weight(±10%)	kg/km	**126**
8	MAT	N	**6000**

9	Short term crush	N/100mm	1500

Note: Mechanical sizes are nominal values.

3. Characteristic of Optical Cable

3.1 Min. bending radius for installation

Static: 10 x cable diameter

Dynamic: 20 x cable diameter

3.2 Application temperature range

Operation: -40℃~ +70℃

Installation: -10℃~ +50℃

Storage/transportation: -40℃~ +70℃

3.3 Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 60794-1-2-E1	- Load: MAT - Length of cable: about 50m - Load time: 1min	- Fiber strain ≤ 0.6% - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: Short term crush - Load time: 1min	- Loss change ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Impact Test IEC 60794-1-2-E4	- Number of impact: 5 - Times of per point: 1 - Impact energy: 3J - Impact hammer radius:12.5mm	- Loss change ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Repeated Bending IEC 60794-1-2-E6	- Bending radius: 20 x OD - Load: 100N - No. of cycle: 35	- Loss change ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Torsion IEC 60794-1-2-E7	- Length: 1m - Twist angle: ±180° - No. of cycle: 5	- Loss change ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Cable bend IEC 60794-1-2-E11	-Diameter of mandrel:20 x OD -Number of cycles: 3	- Loss change ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Water Penetration IEC 60794-1-2-F5B	- Height of water: 1m - Sample length: 3m - Time: 24h	- No water leak from the cable core of the opposite end
Temperature Cycling IEC 60794-1-2-F1	- Temperature: -40ºC~+70ºC - Time of each step: 24h - Number of cycle: 2	- Loss change ≤ 0.1dB/km@1550nm - No fiber break and no sheath damage.

4. Characteristic of Optical Fiber

G652D fiber information

Mode field diameter (1310nm):	9.2μm±0.4μm
Mode field diameter (1550nm):	10.4μm±0.8μm
Cut off wavelength of cabled fiber (λ_{cc}):	≤1260nm
Attenuation at 1310nm:	≤0.32dB/km
Attenuation at 1550nm:	≤0.20dB/km
Bending loss at 1550nm (100 turns, 30mm radius):	≤0.05dB
Dispersion in the range 1288 to 1339nm:	≤3.5ps/ (nm•km)
Dispersion at 1550nm:	≤18ps/ (nm•km)
Dispersion slope at zero dispersion wavelength:	≤0.092ps/ (nm^2•km)