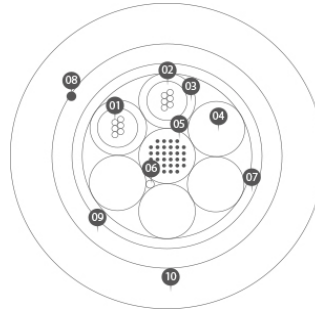


# ADSS Fiber Optic Cable

All-Dielectric Self-Supporting



- 01. Optical Fiber
- 02. Inner Jelly
- 03. Loose Tube
- 04. Filler
- 05. Central Strength
- 06. Member Water Blocking Yarn
- 07. Water Blocking Tape
- 08. Rip Cord
- 09. Strength Member
- 10. Outer Sheath



## Application

ADSS are All-Dielectric self supporting cable and single jacket designed for aerial or duct installation. The optical fiber cable(ADSS) design provides no supporting part or messenger wire required. Cable provides for hardware part for installation with ADSS cable supporting on the pole. The cable inside multi-loose tube filled with a water resistant filling compound or design for waterblocked with water blocking material in side cable. The cable high tensile by aramid yarns and FRP strength member rod inside. Outer sheath made from HDPE. It's can be customized by adding FRP armor for rodent protection (Optional).

It supports application such as 40/100Gbps Ethernet, IEEE802.3ae, 10G Ethernet, IEEE802.3z, Gigabit Ethernet, Fast Ethernet, IEEE 802.3 Ethernet,100BASE-F, 52/155/622Mbps and 1.2Gbps ATM, FDDI, Fiber channel and others.

## Standard

TIA/EIA-598-C (Rev. TIA/EIA-598-A)	ISO/IEC 11801:2017
EIA-359-A, ANSI/TIA-568.3-D	IEC 60811-410
ANSI/TIA-568-C.3	IEC 60811-607
ANSI/ICEA 640	IEC 60793
Telcordia (Bellcore) GR-20-CORE	IEC 60794-1-2
ITU-T G.652D (Singlemode)	EN 50173-1
ITU-T G.651 (Multimode)	TIS 2166-2548
ISO/IEC 11801:2011 (Ed.2.2)	RoHS Compliant

## Specification

### Construction

Cable Type		ADSS
Number of Fibers		6-24
Central Strength Member	Material	FRP
Water Blocking Member	Material	Water Blocking Tape and Water Blocking Yarn
Loose Tube	Material	PBT
	Filling Compound Material	Thixotropic Jelly
Filler	Material	Polypropylene (PP)
Additional Strength Member	Material	Aramid Yarn
Ripcord	no.	1
	Material	Polyester
Inner Sheath	Material, Thickness	FRP (Rodent Protection Armor), 1 mm
Outer Sheath	Material	HDPE(Black), add-on Rodent Repellent
	Thickness	1.8 mm

# ADSS Fiber Optic Cable

All-Dielectric Self-Supporting

## Construction Specification

### Buffer Tube Stranding

Fiber count	Fiber number per tube	Number of tube / filler	Diameter (mm)	Approx. Weight Kg/km
6-24	6	4/1	9.5	68

### Identification

Color Code for Fibers and Tubes TIA/EIA-598-C (Rev. TIA/EIA-598-A).

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Slate	White
No.	7	8	9	10	11	12
Color	Red	Black	Yellow	Violet	Rose	Aqua

## Optical Fiber in the Cable

### Construction

Fiber	Type	Single mode type ITU-T G.652.D
	Material	Ge doped fused silica
Mode field diameter	1310 nm	9.2±0.4 μm
Core / Cladding concentricity error		≤0.5 μm
Cladding diameter		125±1 μm
Cladding non-circularity		≤1.0%
Coating	Material	UV curable acrylate
	Diameter	245±5 μm(Uncolored) 250±15 μm(Colored)
Fiber proof-tested		0.69 GPa ( 1.0%, 100kpsi)

### Optical characteristics

Attenuation	@1310nm	≤ 0.36 dB/km
	@1550nm	≤ 0.22 dB/km
Zero-dispersion Wavelength		1300~1324 nm
Zero-dispersion slope		≤ 0.092ps/(nm <sup>2</sup> /km)
Chromatic Dispersion Coefficient	1310 nm	≤ 3.5 ps/(nm.km)
	1550 nm	≤ 18.0 ps/(nm.km)
Cable Cut-off Wavelength (λ <sub>cc</sub> )		≤ 1260nm with EIA/TIA-455-170
Polarization Mode Dispersion(PMD)		≤ 0.2 ps/km <sup>1/2</sup>

## Physical Specification

Item	Value
Tensile Loading	3,000 N
Max span length	40 - 80 m
Operation temperature	-40 ~ +70 C
Storage temperature	-40 ~ +75 C
Static bending radius	10 x cable OD
Dynamic bending radius	20 x cable OD

# ADSS Fiber Optic Cable

## All-Dielectric Self-Supporting

### Cable sheath Marking

The length and identification marking are printed (hot stamp) on the sheath at every one meter interval in white color. The accuracy of the length marking shall be  $\pm 1.0\%$ . The contents of sheath marking as customer's requirement.

- Project owner name (English, Chinese, Thai, etc.)
- TIS 2166 2548
- Name of manufacture
- Year of manufacture
- Type and size of OFC
- Length marking

### Ordering Information

No. of core	Description
6	Indoor/Outdoor, 6C ADSS, Multi Loose Tube, Single Jacket, SM 9/125 $\mu\text{m}$
12	Indoor/Outdoor, 12C ADSS, Multi Loose Tube, Single Jacket, SM 9/125 $\mu\text{m}$
24	Indoor/Outdoor, 24C ADSS, Multi Loose Tube, Single Jacket, SM 9/125 $\mu\text{m}$