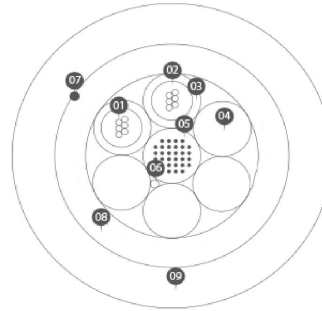
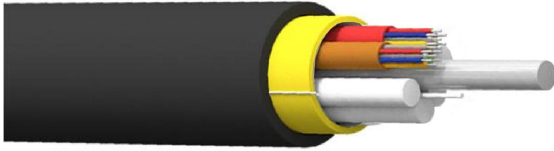


ADSS Fiber Optic Cable

All-Dielectric Self-Supporting



- 01. Optical Fiber
- 02. Inner Jelly
- 03. Loose Tube
- 04. Filler
- 05. Central Strength
- 06. Member Water Blocking Yarn
- 07. Rip Cord
- 08. Water Blocking Tape & Blinder/wrapping
- 09. HDPE 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

ANSI/TIA-568.3-D	ISO/IEC 11801:2011 (Ed.2.2)
ANSI/TIA-568-C.3	ISO/IEC 11801:2017
ANSI/ICEA 640	IEC 60793
IEEE P-1222	IEC 60794-1-2
Telcordia (Bellcore) GR-20-CORE	EN 50173-1
ITU-T G.652D (Singlemode)	TIS 2166-2548
ITU-T G.651 (Multimode)	RoHS Compliant

Specification

Cable Type		ADSS
Number of Fibers		6-24
Fiber	Construction	Consult 3.1
Central Strength Member	Material	FRP (Fiberglass Reinforce with Plastic)
Water Blocking Member	Material	Water Blocking Tape and Water Blocking Yarn
Loose Tube	Material	PBT (Polybutylene Terephthalate)
	Filling Compound Material	Thixotropic Jelly Compound
Filler	Material	Polypropylene (PP)
Additional Strength Member	Material	Aramid Yarn
Ripcord	no.	1
	Material	Polyester
Thickness	Material	HDPE(Black)
	Outer Sheath	1.6 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	9.2±1	60±10

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
Coating/Cladding Concentricity error		≤12 μm
Cladding diameter		125±1 μm
Cladding non-circularity		≤0.7%
Coating	Material	UV curable acrylate
	Diameter	245±5 μm (Primary/Uncolored) 250±15 μm (Secondary/Colored)
Fiber proof-tested Stress		0.69 GPa (1.0%, 100kpsi)
Group refractive index		1.4676 (1310nm)
		1.4682 (1550nm)

Optical characteristics

Attenuation (Max./Typ.)	@1310nm	≤ 0.35 / ≤ 0.33 dB/km
	@1380nm	≤ 0.35 / ≤ 0.31 dB/km
	@1550nm	≤ 0.21 / ≤ 0.19 dB/km
	@1625nm	≤ 0.23 / ≤ 0.20 dB/km
Zero-dispersion Wavelength		1300-1324 nm
Zero-dispersion slope		≤ 0.092ps/(nm ² /km)
Chromatic Dispersion Coefficient	1310 nm	≤ 3.5 ps/(nm.km)
	1550 nm	≤ 18.0 ps/(nm.km)
Cable Cut-off Wavelength (λ _{cc})		≤ 1260nm with EIA/TIA-455-170
Polarization Mode Dispersion(PMD)		≤ 0.2 ps/km ^{1/2}

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

Physical Specification

Item	Value
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
Maximum Wind Velocity	126 km/h
Max. Tensile load	1,800N (Installation) 1,000N (Operation)
Maximum Crush resistance	2,200N / 10cm

Standard

Tensile loading Test	TIA/EIA-455-33A and IEC 60794-1-2-E1A
Compression Test	TIA/EIA-455-41A and IEC 60794-1-2-E3
Repeated Bending Test	TIA/EIA-455-104A and IEC 60794-1-2-E6
Impact Test	TIA/EIA-455-25B and IEC 60794-1-2-E4
Cable Bending Test	IEC 60794-1-2-E11B
Cable Twist or Torsion Test	TIA/EIA-455-85A and IEC 60794-1-2-E7
Temperature Cycling Test	TIA/EIA-455-3A and IEC 60794-1-2-F1
Water Penetration Test	TIA/EIA-455-82B and IEC 60794-1-2-F5

Ordering Information

No. of core	Description
6	Indoor/Outdoor, 6C ADSS, Multi Loose Tube, Single Jacket, SM 9/125 μm
12	Indoor/Outdoor, 12C ADSS, Multi Loose Tube, Single Jacket, SM 9/125 μm
24	Indoor/Outdoor, 24C ADSS, Multi Loose Tube, Single Jacket, SM 9/125 μm