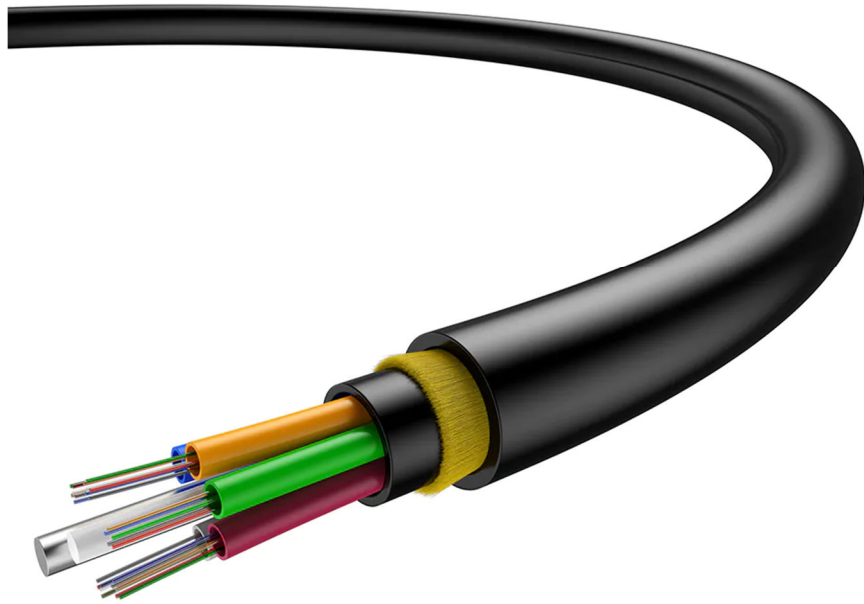


Optical Fiber CABLE

TECHNICAL DATA SHEET

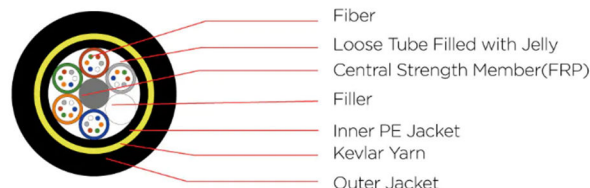
Double Jacket All-Dielectric Self-Supporting (ADSS) Cable



Double Jacket All-Dielectric Self-Supporting (ADSS) Cable

Product Description:

Double Jacket All-Dielectric Self-Supporting (ADSS) Fiber Optic Cable is an outdoor aerial optical cable designed for self-supporting installation, including applications near or on power-line infrastructure. The cable uses a non-metallic central strength member, stranded loose tubes, water-blocking protection, aramid yarn reinforcement, and double PE sheathing for mechanical and environmental protection.



Features

- All-dielectric, self-supporting construction.
- Double PE jacket for enhanced mechanical and environmental protection.
- FRP central strength member.
- Aramid yarn additional strength member.
- Loose-tube structure for fiber protection.
- Water-blocking protection against moisture ingress.
- Suitable for aerial installation.
- Designed for outdoor telecommunications and access/backbone networks.

Dimensions and Construction

Items	Descriptions	6–30 FO	32–60 FO	62–72 FO	96 FO	144 FO
Optical Fiber	Fiber Type	G.652D	G.652D	G.652D	G.652D	G.652D
Optical Fiber	Fiber Count	6–30	32–60	62–72	96	144
Structure	Strength Member + Tube/Filler	1+5	1+5	1+6	1+8	1+12
CSM	Material	FRP	FRP	FRP	FRP	FRP
CSM	Diameter	1.5 mm	1.5 mm	2.0 mm	2.0 mm	2.0 mm
Loose Tube	Material	PBT	PBT	PBT	PBT	PBT
Loose Tube	Diameter	1.8 mm	2.0 mm	2.0 mm	2.0 mm	2.0 mm
Loose Tube	Maximum No. per Tube	6	12	12	12	12
Loose Tube	Thickness	0.32 mm	0.35 mm	0.35 mm	0.35 mm	0.35 mm

Water Blockin g	Material	Flooding Compou nd	Flooding Compou nd	Flooding Compou nd	Flooding Compou nd	Flooding Compou nd
Additio nal Strength Member	Material	Aramid Yarn	Aramid Yarn	Aramid Yarn	Aramid Yarn	Aramid Yarn
Inner Sheath	Material	PE	PE	PE	PE	PE
Inner Sheath	Color	Black	Black	Black	Black	Black
Inner Sheath	Thickness	0.9 mm nominal	0.9 mm nominal	0.9 mm nominal	0.9 mm nominal	0.9 mm nominal
Outer Sheath	Material	PE	PE	PE	PE	PE
Outer Sheath	Color	Black	Black	Black	Black	Black
Outer Sheath	Thickness	1.8 mm nominal	1.8 mm nominal	1.8 mm nominal	1.8 mm nominal	1.8 mm nominal
Cable Diamete r	±0.2 mm	10.6	11.1	11.8	13.6	16.5

Cable Weight	kg/km ±10%	95	105	118	130	155
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Mechanical Specifications

Parameter	Specification
Rated Tensile Strength (RTS)	$\geq 5 \text{ kN}$
Maximum Working Tension (MAT)	$\geq 2 \text{ kN}$
Wind Velocity	30 m/s
Ice Thickness	5 mm
Maximum Span	100 m
Crush Resistance – Short Term	$\geq 2200 \text{ N/100 mm}$
Crush Resistance – Long Term	$\geq 1100 \text{ N/100 mm}$
Minimum Bending Radius – Without Tension	$10 \times \text{Cable Diameter}$
Minimum Bending Radius – Under Maximum Tension	$20 \times \text{Cable Diameter}$

Temperature Range

Condition	Temperature Range
Operation	-40°C to +70°C
Installation	-20°C to +60°C
Transport & Storage	-40°C to +70°C

Optical Fiber Specifications

Parameter	G.652D
Mode Field Diameter @ 1310 nm	$9.1 \pm 0.5 \mu\text{m}$
Mode Field Diameter @ 1550 nm	$10.3 \pm 0.7 \mu\text{m}$
Attenuation @ 1310 nm	$\leq 0.35 \text{ dB/km}$
Attenuation @ 1550 nm	$\leq 0.21 \text{ dB/km}$
Attenuation Non-uniformity	$\leq 0.05 \text{ dB}$
Zero Dispersion Wavelength	1300–1324 nm
Maximum Zero Dispersion Slope	$\leq 0.093 \text{ ps}/(\text{nm}^2 \cdot \text{km})$
PMD Coefficient	$\leq 0.2 \text{ ps}/\text{km}^{1/2}$
Cable Cut-off Wavelength	$\leq 1260 \text{ nm}$
Dispersion @ 1288–1339 nm	$\leq 3.5 \text{ ps}/(\text{nm} \cdot \text{km})$

Dispersion @ 1550 nm	$\leq 18 \text{ ps}/(\text{nm} \cdot \text{km})$
Cladding Diameter	$125.0 \pm 1.0 \text{ }\mu\text{m}$
Coating Diameter	$245.0 \pm 10.0 \text{ }\mu\text{m}$
Cladding Non-circularity	$\leq 1.0\%$
Coating Non-circularity	$\leq 6.0\%$
Core-Cladding Concentricity Error	$\leq 0.8 \text{ }\mu\text{m}$
Coating-Cladding Concentricity Error	$\leq 12.0 \text{ }\mu\text{m}$