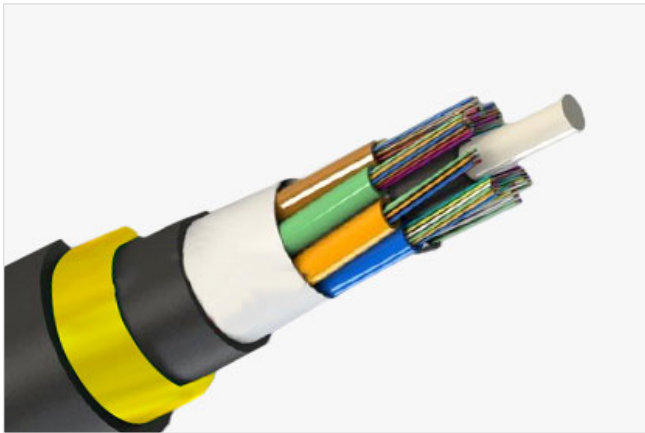


OFC – ADSS



PTCL Cables offer ADSS (All Dielectric Self-Supporting) Aerial Optical Fiber Cables. ADSS Optical Fiber Cables are solution for High Performance Aerial Environments including Power Transmission and Distribution Networks. All-Dielectric Construction reduces installation costs by avoiding the need for expensive cable shielding and grounding.

Applications:

- ♦ Aerial Installation - Lightning Protection - Junction Communication System, Subscriber Network System

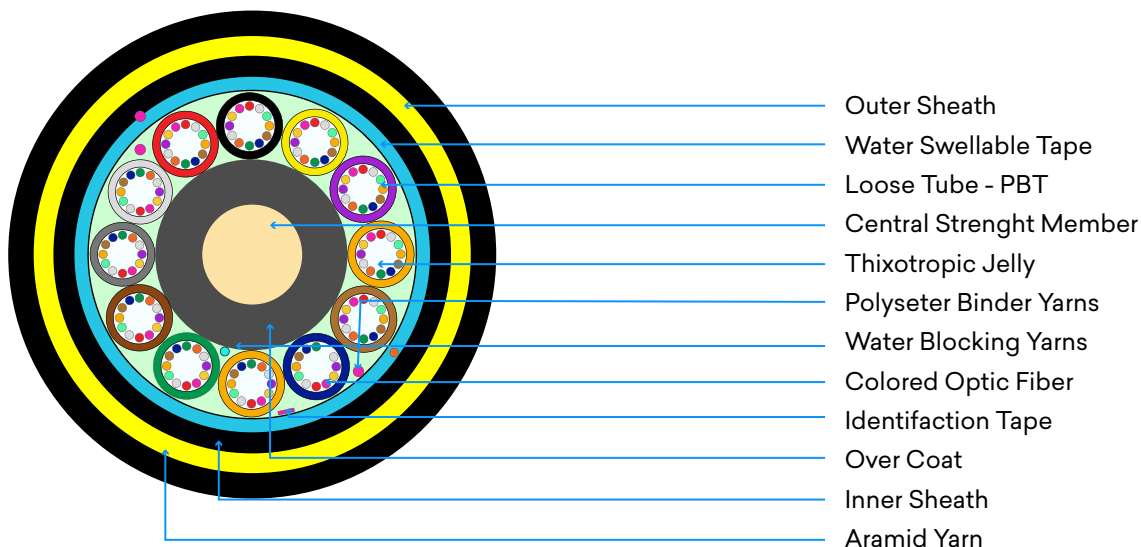
Cable Constructions:

- ♦ Loose Tube Filled With Gel-Stranded around Central Strength Member - Dry Core - Core Wrap - Water Blocking Material - Polyethylene Inner Sheath - Peripheral Strength Member (Layer of Aramid Yarn) - Polyethylene Outer Jacket

Technical Characteristics:

- ♦ The unique extruding technology provides the fibers in the tube with good flexibility and bending endurance
- ♦ The unique fiber excess length control method provides the cable with excellent mechanical and environmental properties
- ♦ Multiple water blocking material filling provides dual water blocking function
- ♦ Provides good crush resistance

Diagram is for reference only



Construction Parameters

Fiber Type	ITU-T G.652D
Fiber Count	02 to 144 Fibers
Loose tube Filling Material	Thixotropic Terephthalate (PBT)
Central Strength Member	Fiber/Glass Reinforced Plastic (FRP/GRP)
Peripheral Strength Member (if required)	Aramid /Glass yarn
Filler Material	Polyethylene
Core Moisture Protection Methodology	Dry Block Design, Water Blocking Yarns/Tapes
Armouring/ Peripheral Strength Member	Aramid Yarn
Outer Sheath Material	Medium/High Density Polyethylene (HDPE/MDPE)
Printing on Outer Sheath	Engraved Hot Foil Ink or Inkjet Printing
Drum Length	4000 Meter & 6000 Meters \pm 5%

Optical Characteristics

Fiber Type	CORNING® SMF-28e+ G.652D
Fiber Colour Coding	As per TIA/EIA-598A&C
Mode Field Diameter, μ m	8.6 to 9.5 \pm 0.7
Cladding Diameter, μ m	125 \pm 1
Core Clad Concentricity error, μ m	\leq 0.8 μ m
Cladding Non-Circularity, %	\leq 2 %
Cable Cut-off Wavelength, nm	\leq 1260 nm
Chromatic Dispersion (ps/nm.km)	\leq 3.5 @ 1310nm \leq 18 @ 1550nm
Cabled Attenuation @ 1310 nm (dB/km)	\leq 0.35 (average)
Cabled Attenuation @ 1550 nm (dB/km)	\leq 0.21 (average)
Polarized Mode Dispersion (PMD) ps/ \sqrt km	\leq 0.2

Mechanical Characteristics

Tensile Strength (N) (Max)	5000
Minimum Bending Radius	10 x outer without load
Diameter of cable (mm)	20 x outer with load
Crush Strength (N) (max)	2500
Temperature Range	-20 °C to +70 °C

Features & Benefits

Supports all grades of single Mode & Multimode Fibers

Cable round profile minimizes wind loading and tensile and ice loading (reducing cable SAG and Tensile Force)

All dielectric Loose Tube Design is immune to Electro Magnetic Interface