FiberHome Cable Specification

Wuhan FiberHome International Technologies Co., LTD

ADSS–12/24 B1.3 Span 80m

Max operating weather conditions: 25m/s wind speed and no ice load

Cable cross-section and dimensions

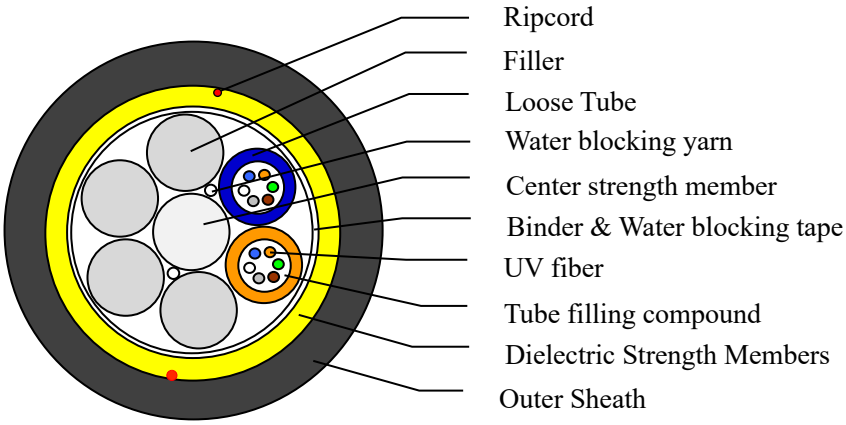

Figure. Cable Cross-Section (A-end)

Item	Material	Description
Outer sheath	HDPE	HDPE
Dielectric Strength Members	Aramid yarns	Additional strength member
Binder	Polyester yarn	Cable core binding
Water blocking yarn	Water blocking yarn	Water blocking & moisture proof
Water blocking tape	Water blocking tape	Water blocking & moisture proof
Filler	PP	Diameter same as tube
Loose tube	PBTP	Colors of tubes: 12FO: blue, orange 24FO:blue, orange, green, brown
Tube filling compound	Thyrotrophic gel	Water Blocking & Moisture Proof
Fiber	Silicon-based fiber(G.652D)	UV fiber, color with: blue, orange, green, brown, gray, white
Center strength member	FRP	FRP
Cable O.D.	10.2±0.5mm	
Cable weight	80±15kg	

Cable main mechanical properties and application

Serial No.	Item	Requirement
1	Allowable tensile resistance	2000N
2	Allowable crush resistance	1500N /10cm
3	Operation temperature	-20 º C +65º C

ADSS–48/72 B1.3 Span 80m

Max operating weather conditions: 25m/s wind speed and no ice load

Cable cross-section and dimensions

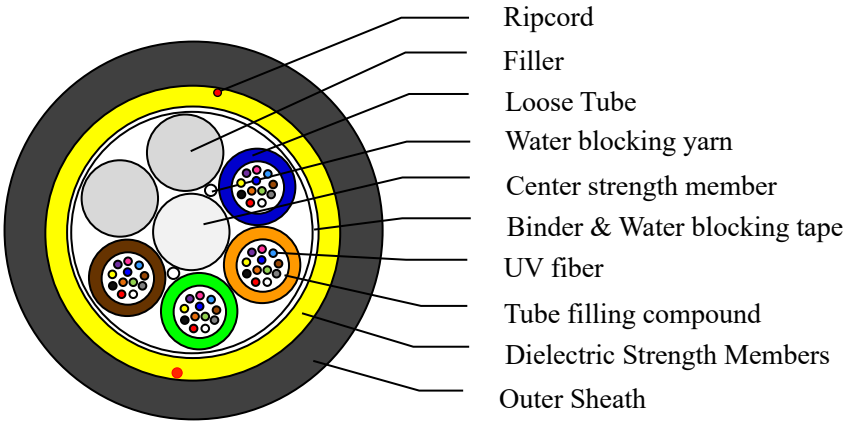

Figure. Cable Cross-Section (A-end)

Item	Material	Description
Outer sheath	HDPE	HDPE
Dielectric Strength Members	Aramid yarns	Additional strength member
Binder	Polyester yarn	Cable core binding
Water blocking yarn	Water blocking yarn	Water blocking & moisture proof
Water blocking tape	Water blocking tape	Water blocking & moisture proof
Filler	PP	Diameter same as tube
Loose tube	PBTP	Colors of tubes: 48FO:blue, orange, green, brown 72FO: blue, orange, green, brown, gray, white
Tube filling compound	Thyrotrophic gel	Water Blocking & Moisture Proof
Fiber	Silicon-based fiber(G.652D)	UV fiber, color with: blue, orange, green, brown, gray, white, red, black, yellow, violet, pink, aqua
Center strength member	FRP	FRP
Cable O.D.	10.8±0.5mm	
Cable weight	88±15kg	

Cable main mechanical properties and application

Serial No.	Item	Requirement
1	Allowable tensile resistance	2000N
2	Allowable crush resistance	1500N /10cm
3	Operation temperature	-20º C +65º C

ADSS–96 B1.3 Span 80m

Max operating weather conditions: 25m/s wind speed and no ice load

Cable cross-section and dimensions

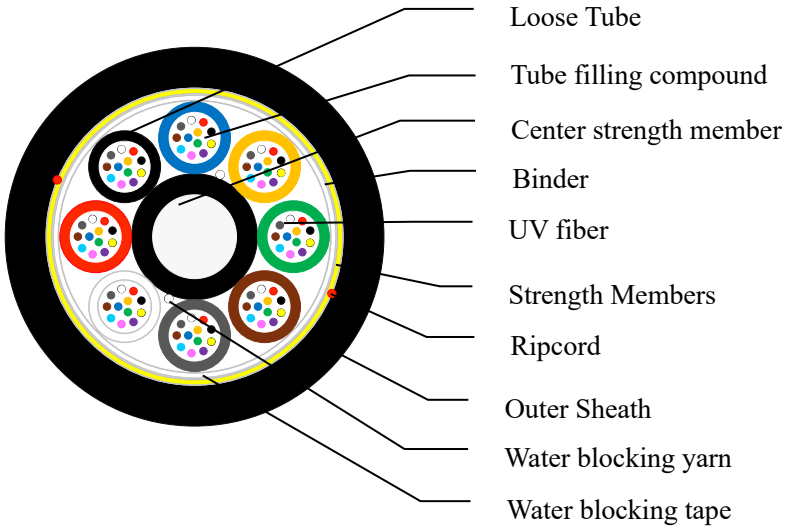

Figure. Cable Cross-Section (A-end)

Item	Material	Description
Outer sheath	HDPE	HDPE
Strength Members	Aramid yarns	Additional strength member
Binder	Polyester yarn	Cable core binding
Water blocking yarn	Water blocking yarn	Water blocking & moisture proof
Water blocking tape	Water blocking tape	Water blocking & moisture proof
Loose tube	PBTP	Color of tubes: blue, orange, green, brown, gray, white, red, black
Tube filling compound	Thyrotrophic gel	Water Blocking & Moisture Proof
Fiber	Silicon-based fiber(G.652D)	UV fiber, color with: blue, orange, green, brown, gray, white, red, black, yellow, purple, pink, aqua
Center strength member	FRP	FRP+PE
Cable O.D.	12.4±0.5mm	
Cable weight	116±15kg/km	

Cable main mechanical properties and application

Serial No.	Item	Requirement
1	Allowable tensile resistance	2200N
2	Allowable crush resistance	1500N /10cm
3	Operation temperature	-20º C +65º C

G.652D fiber characteristics

Optics specifications		
Attenuation	@1310nm	≤0.35dB/km
	@1550nm	≤0.22dB/km
	@1625nm	≤0.24dB/km
Dispersion	@1285nm～1340nm	-3.0ps/(nm·km)～3.0ps/(nm·km)
	@1550nm	≤18ps/(nm·km)
	@1620nm	≤22ps/(nm·km)
Zero-Dispersion wavelength		1300nm～1324nm
Zero-Dispersion slope		≤0.092ps/(nm^2·km)
Mode field diameter (MFD) at 1310nm		9.2±0.4μm
Mode field diameter (MFD) at 1550nm		10.4±0.8μm
PMD	Max. for fiber on the reel	0.20ps/km$^{1/2}$
	Max. for link designed value	0.10ps/km$^{1/2}$
Cable cutoff wavelength λ_{cc}(nm)		≤1260nm
Back scatter characteristics (at 1310nm&1550nm)		
Point discontinuity		≤0.05dB
Attenuation uniformity		≤0.05dB/km
Attenuation coefficient difference for bi-directional measurement		≤0.05dB/km
Geometrical characteristics		
Cladding diameter		125±1.0μm
Cladding non-circularity		≤1%
Core/cladding concentricity error		≤0.8μm
Fiber diameter with coating (uncolored)		245±10μm
Cladding/coating concentricity error		≤12.0μm
Mechanical characteristics		
Proof stress		≥0.69GPa(100kpsi)
Macrobend loss at 1550nm	Φ60mm,100 turns	≤0.05dB
	Φ32mm,1 turns	≤0.05dB