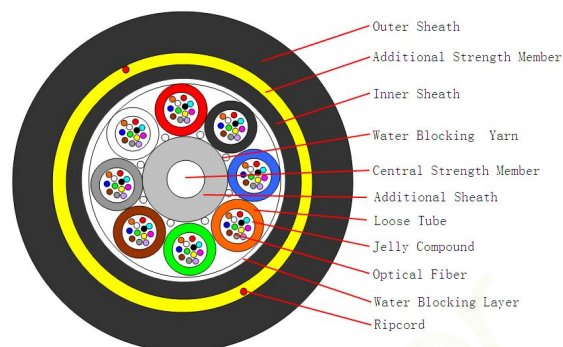
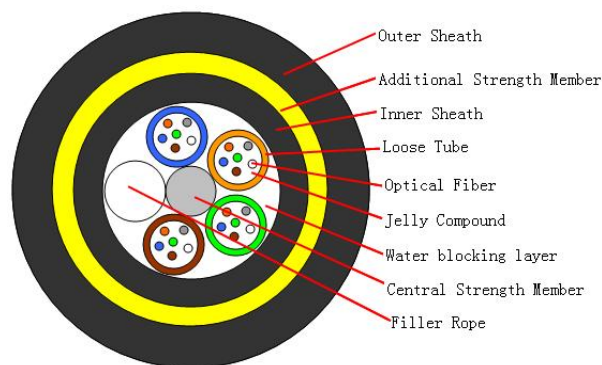




ADSS Fiber Optic Cable|Aerial Cable Outdoor Single Mode 48cores

Stranded Loose Tube Span 50m Double Jacket

Cable Design



Technical data

No. of cable		/	6~30	32~60	62~72	96	144
Design (StrengthMember+Tube&Filler)		/	1+5	1+5	1+6	1+8	1+12
Fiber type		/	G.652D				
Central Strength Member	Material	mm	FRP				
	Diameter ($\pm 0.05\text{mm}$)		1.5	1.5	2.0	2.0	2.0
Loose Tube	Material	mm	PBT				
	Diameter ($\pm 0.05\text{mm}$)		1.8	2.0	2.0	2.0	201
	Thickness ($\pm 0.03\text{mm}$)		0.32	0.35	0.35	0.35	0.35
	MAX.NO./per		6	12	12	12	12
Water Blocking Layer	Material	/	Flooding Compound				
Inner Sheath	Material	mm	MDPE				
	Thickness		0.9 (nominal)				
	colour		black.				
Additional Strength Member	Material	/	Aramid Yarn				
Outer Sheath	Material	mm	HDPE				
	Thickness		1.8 (nominal)				
	colour		black.				
Cable Diameter($\pm 0.2\text{mm}$)		mm	10.6	11.1	11.8	13.6	16.5
Cable Wetght($\pm 10.0\text{kg/km}$)		kg/km	95	105	118	130	155
Attenuation coefficient	1310nm	dB/km	≤ 0.35				
	1550nm		≤ 0.21				

Cable breaking strength(RTS)		kn	≥ 5.5
Working Tension (MAT)		Kn	≥ 2.2
Wind velocity		m/s	30
Icing		mm	5
Span		M	50
Crush Resistance	Short Term	N/100m	≥ 2200
	Long Term	m	≥ 1100
Min. bending radius	Without Tension	mm	$10.0 \times \text{Cable-} \phi$
	Under Maximum Tension		$20.0 \times \text{Cable-} \phi$
Temperature range (°C)	Installation	°C	-20~+60
	Transport&Storage		-40~+70
	Operation		-40~+70

Fibre Colours&Loose Tube Colours

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

The color of marking is white, but if the remarking is necessary, the **white color** marking shall be printed newly on a different position.

An occasional unclear of length marking is permitted if both of the neighboring markings are clear.

The both cable ends are sealed with heat shrinkable end caps to prevent water ingress

The properties of single mode optical fiber (ITU-T Rec. G.652.D)

Item	Specification
Fiber type	Single mode
Fiber material	Doped silica
Attenuation coefficient	
@ 1310 nm	$\leq 0.36 \text{ dB/km}$
@ 1383 nm	$\leq 0.32 \text{ dB/km}$
@ 1550 nm	$\leq 0.22 \text{ dB/km}$
@ 1625 nm	$\leq 0.30 \text{ dB/km}$
Point discontinuity	$\leq 0.05 \text{ dB}$
Cable cut-off wavelength	$\leq 1260 \text{ nm}$
Zero-dispersion wavelength	1300 ~ 1324 nm
Zero-dispersion slope	$\leq 0.092 \text{ ps}/(\text{nm}^2 \cdot \text{km})$
Chromatic dispersion	
@ 1288 ~ 1339 nm	$\leq 3.5 \text{ ps}/(\text{nm} \cdot \text{km})$
@ 1271 ~ 1360 nm	$\leq 5.3 \text{ ps}/(\text{nm} \cdot \text{km})$
@ 1550 nm	$\leq 18 \text{ ps}/(\text{nm} \cdot \text{km})$
@ 1625 nm	$\leq 22 \text{ ps}/(\text{nm} \cdot \text{km})$
PMD _Q (Quadrature average*)	$\leq 0.2 \text{ ps}/\text{km}^{1/2}$
Mode field diameter @ 1310 nm	$9.2 \pm 0.4 \mu\text{m}$

Core / Clad concentricity error	$\leq 0.5 \mu\text{m}$
Cladding diameter	$125.0 \pm 0.7 \mu\text{m}$
Cladding non-circularity	$\leq 1.0\%$
Primary coating diameter	$245 \pm 10 \mu\text{m}$
Proof test level	100 kpsi (=0.69 Gpa), 1%
Temperature dependence 0oC~ +70oC @ 1310 & 1550nm	$\leq 0.1 \text{ dB/km}$

Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 794-1-2-E1	- Load: Short term tension - Length of cable: about 50m	- Fiber strain $\leq 0.15\%$ - Loss change $\leq 0.1 \text{ dB @}1550 \text{ nm}$ - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: Short term crush - Load time: 1min	- Loss change $\leq 0.05\text{dB@}1550\text{nm}$ - No fiber break and no sheath damage.
Impact Test IEC 60794-1-2-E4	- Points of impact: 3 - Times of per point: 1 - Impact energy: 5J	- Loss change $\leq 0.1\text{dB@}1550\text{nm}$ - No fiber break and no sheath damage.
Temperature Cycling Test YD/T901-2001-4.4.4.1	- Temperature step: +20°C→-40°C→+70°C →+20°C - Time per each step: 12 hrs - Number of cycle: 2	- Loss change $\leq 0.05 \text{ dB/km@}1550 \text{ nm}$ - No fiber break and no sheath damage.