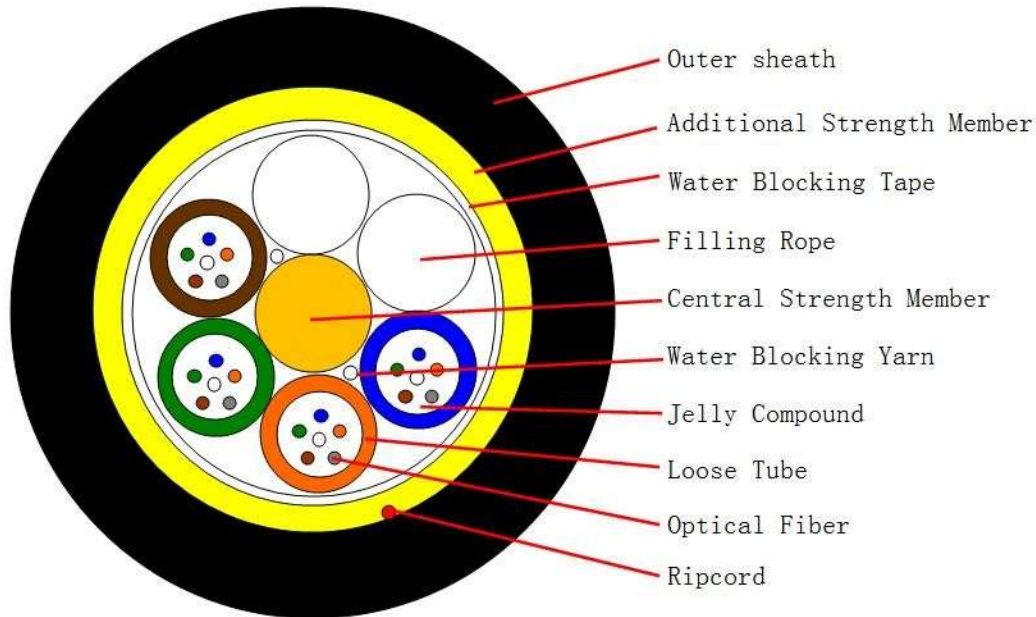


All-media Self-supporting, PE Sheath, Span 50m and 100m

Cable Design



Technical data

No. of fiber		/	4-12	24	48
Span			30-50		
Design (StrengthMember+Tube&Filler)		/	1+6		1+8
Fiber type		/	G.652D		
Central Strength Member	Material	mm	FRP		
	Diameter (± 0.05)		2.0		3.2
Loose Tube	Material	mm	PBT		
	Diameter (± 0.1)		1.8	2.0	
	Thickness (± 0.05)		0.3	0.32	
	The.NO./per		6	12	
Water Blocking Layer	Material	/	Water Blocking Yarn&Water Blocking Tape		
Additional Strength Member (Material)		/	Aramid Yarn		
Ripcord	Material	mm	Nylon		
Outer Sheath	Material	mm	HDPE		
	Thickness (± 0.1)		1.8		



	Color		Black.		
Cable Diameter(± 0.2 mm)		mm	9.8	10.2	11.4
Cable Weight(± 5.0 kg/km)		kg/km	76	82	97
bending radius	Without Tension	mm	15.0×Cable- ϕ		
	Under Maximum Tension		20.0×Cable- ϕ		
Temperature range (°C)	Installation	°C	-20~+60		
	Transport&Storage		-40~+70		
	Operation		-40~+70		

Fibre Color

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

Loose Tube Color

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Gray	White
No.	7	8				
Color	Red	Black				

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	≤ 0.35 dB/km
@ 1383 nm	≤ 0.32 dB/km
@ 1550 nm	≤ 0.21 dB/km
@ 1625 nm	≤ 0.24 dB/km
Point discontinuity	≤ 0.05 dB
Cable cut-off wavelength	≤ 1260 nm
Zero-dispersion wavelength	1300 ~ 1324 nm
Zero-dispersion slope	≤ 0.092 ps/(nm ² .km)
Chromatic dispersion	
@ 1288 ~ 1339 nm	≤ 3.5 ps/(nm. km)
@ 1271 ~ 1360 nm	≤ 5.3 ps/(nm. km)
@ 1550 nm	≤ 18 ps/(nm. km)
@ 1625 nm	≤ 22 ps/(nm. km)



PMD _o (Quadrature average*)	≤0.2 ps/km ^{1/2}
Mode field diameter @ 1310 nm	9.2±0.4 μm
Core / Clad concentricity error	≤ 0.5 μm
Cladding diameter	125.0 ± 0.7 μm
Cladding non-circularity	≤1.0%
Primary coating diameter	245 ± 10 μm
Proof test level	100 kpsi (=0.69 Gpa), 1%
Temperature dependence 0oC~ +70oC @ 1310 & 1550nm	≤ 0.1 dB/km

Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 60794-1-2-E1	- Load:2000N - Length of cable: about 50m	- Fiber strain ≤ 0.33% - Loss change ≤ 0.1 dB @1550 nm - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: 2200N/100mm - Load time: 1min	- Loss change ≤ 0.1dB@1550nm - 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 ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Temperature Cycling Test IEC 60794-1-2-F1	- Temperature step: +20°C → -40°C → +70°C → +20°C - Time per each step: 12 hrs - Number of cycle: 2	- Loss change ≤ 0.1 dB/km@1550 nm - No fiber break and no sheath damage.

Sheath marking

The optical fiber drop cable shall have sequentially numbered length marking at intervals of approximately 1 meter. The starting number of ordering length for any coil shall begin with zero meter. The accuracy of the measurement of length marking shall be held within the limits of ± 1%.

- a) Manufacturer's name
- b) Type of wire
- c) Year and month of manufacture
- d) Length marking each meter along the wire

