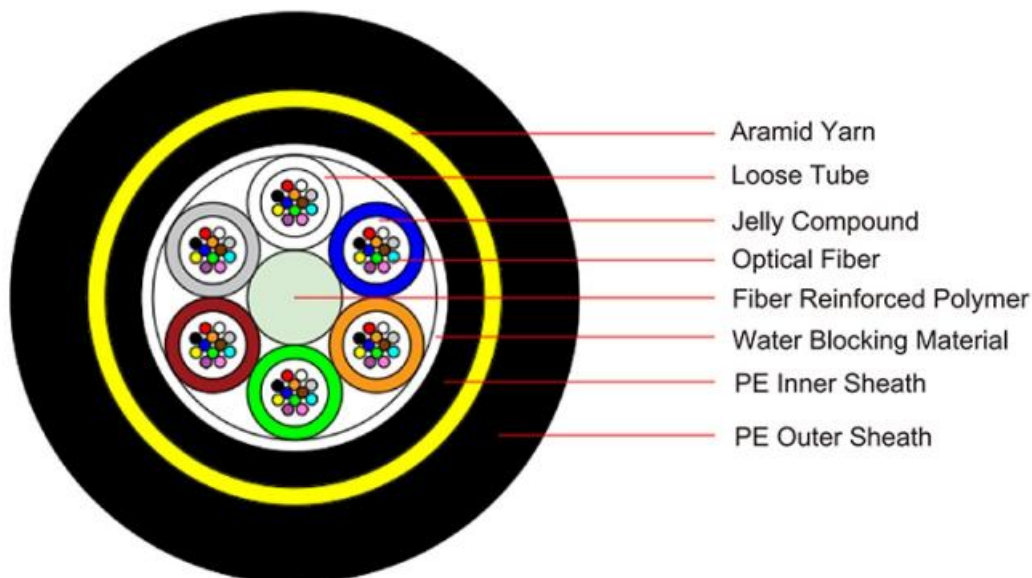


All-media Self-supporting Double Sheath ADSS-II fiber optic cable

Cable Design



Technical data

No. of cable		2-30	32-60	62-72	74-96	98-120	122-144
Fiber Model		G.652D	G.652D	G.652D	G.652D	G.652D	G.652D
Central Strength Member	Material	FRP	FRP	FRP	FRP	FRP	FRP
	Diameter (± 0.05) mm	1.5	1.5	2.1	2.1	2.1	2.1
Loose Tube	Material	PBT	PBT	PBT	PBT	PBT	PBT
	Diameter (± 0.1) mm	1.8	2.1	2.1	2.1	2.1	2.1
	Thickness (± 0.05) mm	0.3	0.35	0.35	0.35	0.35	0.35
Inner Sheath	Material	MDPE	MDPE	MDPE	MDPE	MDPE	MDPE
	Thickness (± 0.1) mm	0.8	0.8	0.8	0.8	0.8	0.8
Water Blocking layer (Material)		Water Blocking Yarn&Water Blocking Tape	Water Blocking Yarn&Water Blocking Tape	Water Blocking Yarn&Water Blocking Tape	Water Blocking Yarn&Water Blocking Tape	Water Blocking Yarn&Water Blocking Tape	Water Blocking Yarn&Water Blocking Tape
Strength Member (Material)		Aramid yarn	Aramid yarn	Aramid yarn	Aramid yarn	Aramid yarn	Aramid yarn
Outer Sheath	Material	MDPE	MDPE	MDPE	MDPE	MDPE	MDPE
	Thickness (± 0.1) mm	1.7	1.7	1.7	1.7	1.7	1.7
Cable Diameter (± 0.2) mm		10.7	11.2	11.9	13.2	14.7	16.2
Cable Weight (± 10) kg/km		85	95	104	130	162	197

Temperature range (°C)	Installation	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60	-20~+60
	Transport&Storage	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70
	Operation	-40~+70	-40~+70	-40~+70	-40~+70	-40~+70	-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	9	10	11	12
Color	Red	Black	Yellow	Violet	Pink	Aqua

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	≤ 0.35 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)
PMD _Q (Quadrature average*)	≤ 0.2 ps/km ^{1/2}
Mode field diameter @ 1310 nm	9.2±0.4 μm
Core / Clad concentricity error	≤ 0.6μm
Cladding diameter	125.0 ± 1 μm
Cladding non-circularity	≤ 1.0%
Primary coating diameter	245 ± 10 μm
Proof test level	100 kpsi (=0.69 Gpa), 1%
Temperature dependence 0°C~ +70°C @ 1310 & 1550nm	≤ 0.1 dB/km

Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 60794-1-2-E1	- Load: 4800N - Length of cable: about 50m	- Fiber strain $\leq 0.33\%$ - 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: 2200/100mm - Load time: 1 min	- Loss change $\leq 0.1 \text{ dB @ } 1550 \text{ nm}$ - 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 IEC60794-1-22-F1	- Temperature step: +20°C → -40°C → +70°C → +20°C - Time per each step: 12 hrs - Number of cycle: 2	- Loss change $\leq 0.1 \text{ dB/km @ } 1550 \text{ nm}$ - 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 $\pm 1\%$.

- Manufacturer's name
- Type of wire
- Year and month of manufacture
- Length marking each meter along the wire