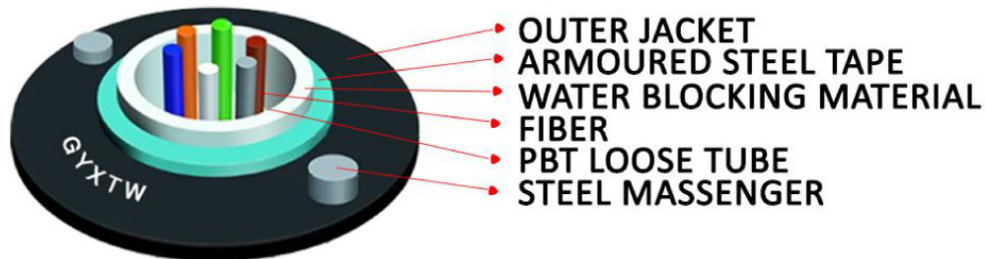


Outdoor Communication Cable(GYXTW)

Cable Design



Technical data

No. of fiber		6 -12
Fiber Model		G652D
Strength Member	Material	Steel Wire
	Diameter (± 0.05) mm	0.8
	NO.	2
Loose Tube	Material	PBT
	Diameter (± 0.1) mm	2.0
	Thickness (± 0.05) mm	0.3
Water Blocking layer (Material)		Water Blocking Tape
Armoring	Material	Steel Strip
	Thickness (± 0.05) mm	0.2
Outer Sheath	Material	MDPE
	Color	Black
Cable Diameter (± 0.2) mm		7.2
Cable Weight (± 5.0)		135 Kg / 2 Km
Min. bending radius	Without Tension	10×Cable- ϕ
	Under Maximum Tension	20×Cable- ϕ
Temperature range (°C)	Installation	-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

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)
PMD _Q (Quadrature average*)	<0.2 ps/km ^{1/2}
Mode field diameter @ 1310 nm	9.2±0.4 μm
Core / Clad concentricity error	< 0.5 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 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: 1500N - Length of cable: about 50m	- Loss change < 0.1 dB @1550 nm - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load:1000N/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	- Loss change < 0.1 dB/km@1550 nm - No fiber break and no sheath damage.

	- Number of cycle: 2	
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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 $\pm 1\%$.

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