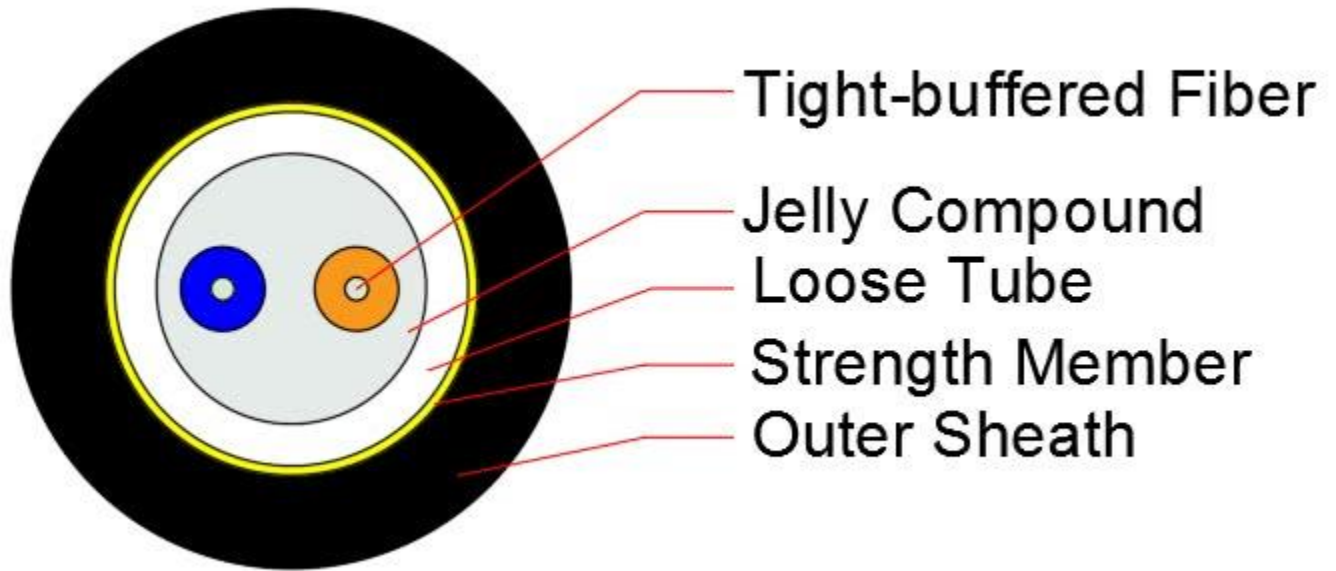
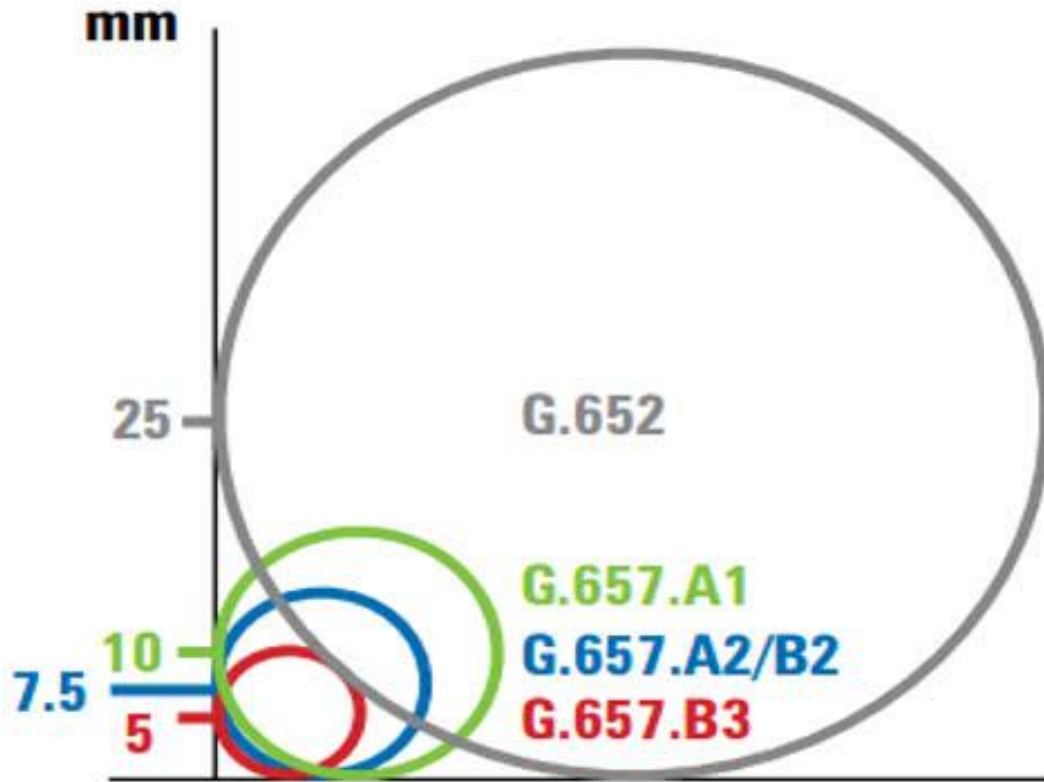


## Specifications:

- Indoor/Outdoor Cable
- Diameter : 5mm with Outer PVC
- Kevlar strength member
- **2** Fiber Cores
- G.657A2 Specification
- LSZH (Low Smoke, Zero Halogen)
- UV resistant



## G.657A2 Bend Ratio vs Other Specifications



Fibre Type	Bending Radii	Attenuation Increase (db)
G652D	100 turns on 25mm mandrel at 1310/1550nm	$\leq 0.03$
G652D	100 turns on 30mm mandrel at 1625nm	$\leq 0.1$
G657A2	10 turns on 15mm mandrel at 1550nm	$\leq 0.05$
G657A2	10 turns on 15mm mandrel at 1625nm	$\leq 0.1$
G657A2	1 turn on 10mm mandrel at 1550nm	$\leq 0.1$
G657A2	1 turn on 10mm mandrel at 1625nm	$\leq 0.2$
G657A2	1 turn on 7.5mm mandrel at 1550nm	$\leq 0.5$
G657A2	1 turn on 7.5mm mandrel at 1625nm	$\leq 1.0$

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**Technical data**

No. of fiber cores		<b>2</b>
Fiber Model	G.657A2	
Tight-buffered Layer	Material	PVC
	Diameter	0.9±0.05mm
	Color	Blue & Orange
Loose Tube	Material	PBT
	Diameter	3.8±0.10mm
	Thickness	0.45±0.05 mm
	Color	Nature
Strength Member	Material	Aramid yarn
Outer Sheath	Material	PE
	Thickness	1.0±0.1 mm
Cable Diameter	6.0±0.1 mm	
Cable Weight	30.0±3.0 kg/km	
Min. bending radius	Without Tension	10.0×Cable-φ
	Under Maximum Tension	20.0×Cable-φ
Temperature range	Installation	-20~+60
	Transport &Storage	-40~+70
(°C)	Operation	-40~+70

## The properties of optical fiber (ITU-T Rec. G.657A2)

### Optical properties

Attenuation	1310nm	≤0.35	dB/km
	1383nm(Hydrogen after aging)	≤0.35	dB/km
	1490nm	≤0.23	dB/km
	1550nm	≤0.22	dB/km
	1625nm	≤0.23	dB/km
Relative wavelength attenuation	1285~1330nm	≤0.05	dB/km
@1310nm	1525~1575nm	≤0.05	dB/km
@1550nm			
Dispersion in the wavelength range of	1285~1340nm	≤3.5	ps/(nm.km)
	1550nm	≤18	ps/(nm.km)
Zero dispersion wavelength		1300~1324	nm
A zero-dispersion slope		≤0.092	ps/(nm <sup>2</sup> .km)

Polarization Mode Dispersion Coefficient PMD		≤0.2	ps/
Single fiber maximum		≤0.1	ps/
Fiber link value (M=20, Q=0.01%)		0.04	ps/
Typical value			
Cable cut-off wavelength ( $\lambda_{cc}$ )		≤1260	nm
Mode field diameter (MFD)	1310nm	8.8±0.4	μm
	1550nm	9.8±0.5	μm
Attenuation discontinuities	1310nm	≤0.05	dB
	1550nm	≤0.05	dB

### Geometric characteristics

Core diameter		125±0.7	μm
Cladding roundness		≤0.7	%
Coating diameter		245±5	μm
Coating / package concentricity error		≤12.0	μm
Core / package concentricity error		≤0.5	μm
The warpage (radius)		≥4	m

### Environmental characteristics (1310nm、1550nm、1625nm)

Temperature additional attenuation	-60°C ~ +85°C	≤0.05	dB/km
Temperature-humidity cycle additional attenuation	- 10°C ~ +85°C, 98% Relative humidity	≤0.05	dB/km
Flooding additional attenuation	23°C, 30 days	≤0.05	dB/km
Hot and humid additional attenuation	85°C和85% Relative humidity, 30 days	≤0.05	dB/km
Dry heat aging	85°C	≤0.05	dB/km

### Mechanical properties

Screening tension		≥9.0	N
The macro bend Additional attenuation			
10 CircleΦ30mm			
10 CircleΦ30mm	1550nm	≤0.03	dB
1 CircleΦ20mm	1625nm	≤0.1	dB
1 CircleΦ20mm	1550nm	≤0.1	dB
1 CircleΦ15mm	1625nm	≤0.2	dB
1 CircleΦ15mm	1550nm	≤0.5	dB
	1625nm	≤1.0	dB
Coating peeling force	Typical average	1.5	N
Dynamic fatigue parameters		≥20	

- **Optical Fiber Cables are marked per meter to ensure distances can be calculated after installation.**

**The Connectors below can be used with this Fiber Cable**

<https://www.hdcabling.co.za/product/lc-apc-green-fiber-optic-connector-field-terminated-connector/>

<https://www.hdcabling.co.za/product/fiber-optic-sc-connector-field-installable-for-125-micron-fiber-optic-ffth-fiber-to-the-home-ftp-fiber-to-the-premises-or-hdmi-over-fiber-extenders/>

<https://www.hdcabling.co.za/product/20km-single-mode-dual-lc-1-25gbit-1310nm-gigabit-sfp-transceiver-module-cisco-huawei-dell-compatible/>

<https://www.hdcabling.co.za/product/20km-single-mode-bidi-sfp-transceiver-module-set-cisco-huawei-dell-compatible-1000basebx-bi-directional/>

<https://www.hdcabling.co.za/product/3km-single-mode-bi-directional-sfp-transceiver-module-set-cisco-huawei-dell-compatible-1000basebx-bidi-sfp/>