



SPECIFICATION

FOR FTTH CABLE G657 A2

Single mode 1, 2FO LSZH

1. Scope of applications

The specifications are suitable for the general requirements of fiber optic telecommunicating and FTTH application.

Cable description

Construction: coloured optical fibers, 2 parallel FRP(Fiber Reinforced Plastic) strength member, LSZH Jacket

2. Optical fiber

Table 1. Characteristics of the Single Mode Fiber (ref. ITU-T G657A)

ITEMS	UNITS	SPECIFICATION
Attenuation	dB/km	≤ 0.35 at 1310nm ≤ 0.24 at 1550nm
Chromatic Dispersion	ps/nm.km	0 at 1285nm ~ 1330nm ≤ 18.0 at 1550nm
Zero Dispersion Wavelength	nm	1300 ~ 1324
Zero Dispersion Slope	ps/nm ² .km	≤ 0.095
Cut-off Wavelength (λ_{cc} , 22m of a cabled fiber)	nm	≤ 1260
Mode Field Diameter	μm	8.5-9.5
Mode Field Concentricity	μm	≤ 0.8
Cladding Diameter	μm	125 \pm 1.0
Cladding Non-circularity	%	≤ 1.0
Coating cladding concentricity error	μm	≤ 12.5
Coating Diameter	μm	245 \pm 10
Bending loss (Bare fiber) Radius :7.5mm x 1 turn	dB	≤ 0.5 at 1550nm
Proof Test	kpsi	≥ 100

3. Optical fiber cable

Construction of optical fiber cable, see
Table 2

Items	Description
No. of fiber	1, 2
Fiber model no.	Single mode: G.657 A2
Fiber colour	Blue, orange
Outer diameter of colour coating	250±15um
Dielectric strength member	FRP + steel wire
Jacket	LSZH
Colour of Jacket	White or black
Size of optical fiber cable	width 5.0±0.2 mm 5.6±0.2 mm height 2.0±0.2 mm 2.0±0.2 mm
Approx. weight cable Kg/KM	20.0±1.0 kg/km

Mechanical and environmental data:

Temperature range	Storage/Shipping Temperature range Operating temperature range	°C	-10°C-- +75°C
Min.Bending Radius (mm)	Dynamic	mm	30H
Min.Bending Radius (mm)	Static	mm	15H
Max.Tension (N)	Short-term	N	380
Max.Tension (N)	Long-term	N	200
Max.Crushing Resistance (N/100mm ²)		N/100mm ²	500

4. Packing and markings

Printings on optical fiber cable

White printings are printed at intervals of 1 metre with the following information. Clients can select their own wordings.

1. Metre marks
2. Type of cable and fiber count
3. Name of Manufacturer
4. Year of manufacture

Packing of optical fiber cable

Standard length is 1KM, other lengths subject to negotiation

Wooden reel

Contents of sticker on the wooden reel are as below:

1. Type of cable, fiber count
2. Length
3. Gross weight KGS
4. Reel no.
5. Year of manufacture
6. The following particulars marked on weather proof materials will appear on the outside of reel flanges

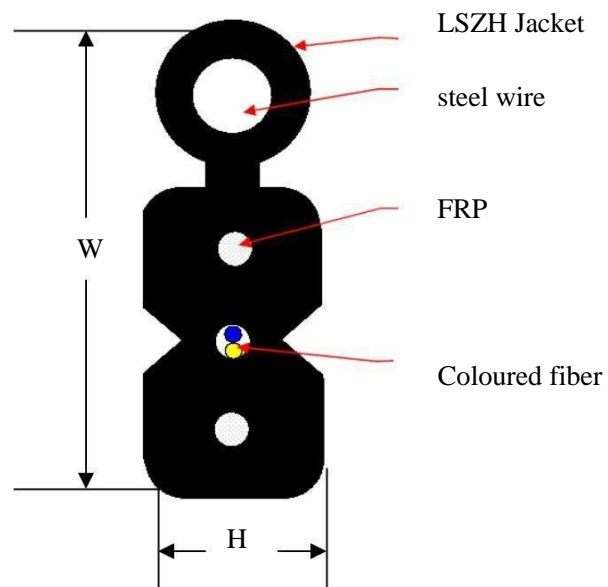
Cable needs to be wound tightly on the wooden reel to avoid damage during shipping and operation

Diameter, weight, minimum bending radius of optical fiber cable

No. of fibers	Approx. Cable outer diameter	Approx. weight of cableKg/KM	Minimum bending radius MM	
			No load	Under load
2	5.0MM*2.0MM	20.0	7.5	20
4	5.6MM*2.0MM	21.0	7.5	20

The actual weight and diameter of the cable can differ from the above values

Cross sectional drawings of cable



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