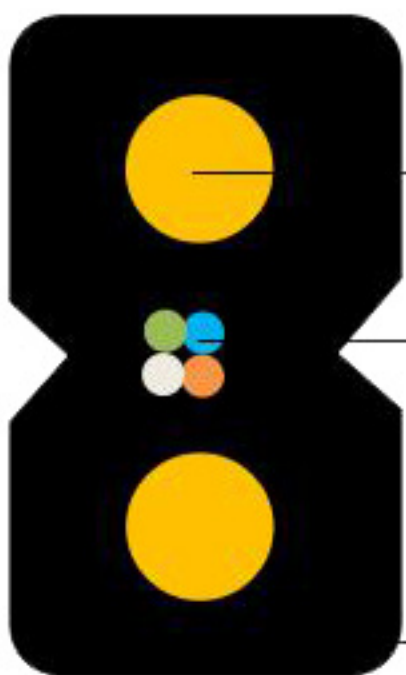
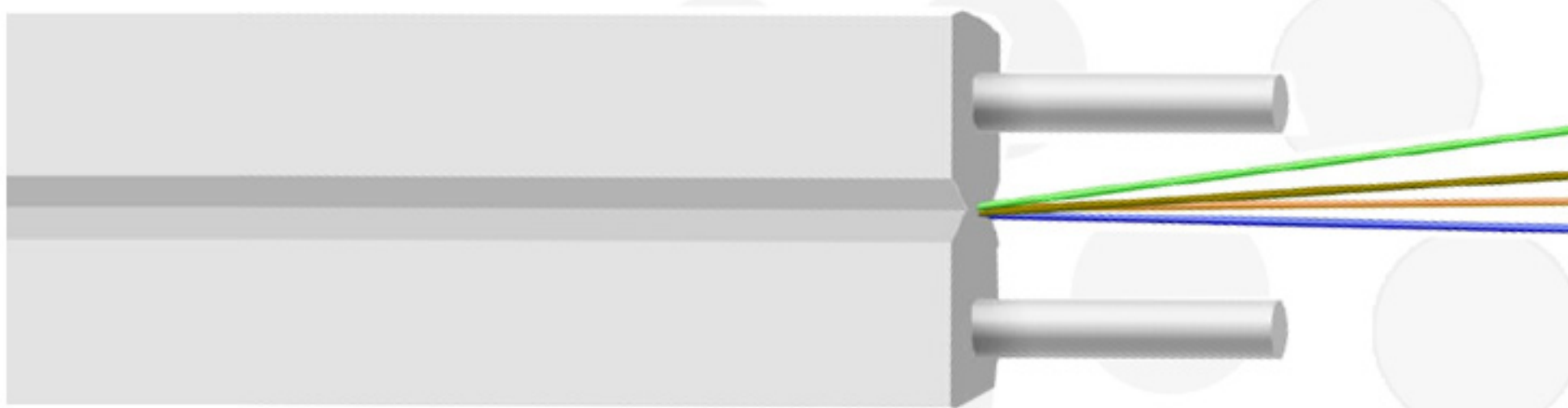


## FTTH FLAT DROP CABLE – INDOOR (WHITE)

### Structure Diagram & Description



Strength member: 0.45mm (Steel Wire) / 0.5mm (FRP)

Optical fiber: 4 core single mode fiber

Jacket: White LSZH

D-CONNECT FTTH Flat Indoor drop cable possesses high tensile strength and flexibility in a compact cable size while providing excellent optical transmission and physical performance.

The optical fiber unit is positioned in the centre. Two parallel Fiber Reinforced Plastic (FRP) or Steel wire are placed at the two sides. Then the cable is completed with a black LSZH sheath. We offer flat indoor drop cables in 1 core, 2 core and 4 core fiber options.

### DIMENSION AND PROPERTIES

#### PHYSICAL

Fiber Count	1, 2, 4
Strength member diameter	0.45mm (Steel Wire) / 0.5mm (FRP)
Sheath thickness	Nominal 0.4mm
Cable OD	3.0±0.1*2.0±0.1mm
Cable weight	10 kg/km ± 15%
Operation temperature range	-10°C to +60°C
Installation temperature range	0°C to +60°C
Transport and storage temperature range	-20°C to +60°C





## DIMENSION AND PROPERTIES

### MECHANICAL

Max. tensile load	Short term: 200N, Long term: 100N
Crush resistance	Installation: 2200N/10cm, working: 1000N/10cm
Minimal dynamic bending radius	30mm
Minimal static bending radius	15mm

### Reference:

D-CONNECT Drop cables are designed, manufactured and tested according to the following international standards:

#### - IEC 60793-1

Optical fiber Part 1: Generic specifications

#### - IEC 60793-2

Optical fiber Part 2: Product specifications

#### - IEC 60794-2

Optical fiber cables - Part 2 indoor cables -  
sectional specification

#### - ITU-T G.650

Definition and test methods for the relevant parameters of single-mode fibers

#### - ITU-T G.657

Characteristics of a bending-loss insensitive single-mode optical fiber

## DIMENSIONAL SPECIFICATIONS

Cladding Diameter	$125 \pm 1.0\mu\text{m}$
Cladding non-circularity	$\leq 1.0 \%$
Core/Clad concentricity error	$\leq 0.5\mu\text{m}$

## MECHANICAL SPECIFICATIONS

Proof stress	$\geq 1.05 \%$
Fatigue Resistance Parameter (Nd)	$\geq 22$
Peak Coating Strip Force	1.3 ~ 8.9N





## OPTICAL SPECIFICATIONS

Description	Specifications	
	Before cable	After cable
Attenuation @1310 nm	$\leq 0.34$ dB/km	$\leq 0.40$ dB/km
Attenuation @1550 nm	$\leq 0.21$ dB/km	$\leq 0.30$ dB/km
Fiber irregularities point and whole length @1310 nm & 1550 nm	$\leq 0.05$ dB	
Attenuation inhomogeneity @1310 nm & 1550 nm	$\leq 0.05$ dB	
Dispersion coefficient	@1310nm $\leq 3.4$ ps/nm•km @1550nm $\leq 18$ ps/nm•km	
Zero Dispersion Wavelength	1300 ~ 1324 nm	
Zero Dispersion Slope	$\leq 0.092$ ps/nm <sup>2</sup> •km	
Cable cut-off wavelength ( $\lambda_{cc}$ )	$\leq 1260$ nm	
Macro bending Loss (10 turns; $\phi 30$ mm) @1550 nm (10 turns; $\phi 30$ mm) @1625 nm ( 1 turn; $\phi 20$ mm) @1550 nm ( 1 turn; $\phi 20$ mm) @1625 nm	$\leq 0.25$ dB $\leq 1.0$ dB $\leq 0.75$ dB $\leq 1.5$ dB	
Mode Field Diameter @1310 nm	$8.8 \pm 0.4\mu\text{m}$	



**TNS TECHNOLOGIES**  
TELECOM • NETWORKING • STRUCTURED CABLING

## FTTH FLAT DROP CABLE – INDOOR (WHITE)

### MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

#### ITEM DESCRIPTION

Tensile performance	IEC 60794-1-2-E1	short-term	200N
		long-term	100N
Crush Resistance	IEC 60794-1-E3	short-term	2200N
		long-term	1000N
Cable Impact	IEC 60794-1-E4	No obvious change after test	
Repeat Bending	IEC 60794-1-E6		
Torsion	IEC 60794-1-E7		
Cable Bend	IEC 60794-1-E11		
Temperature Range	IEC 60794-1-2-F1	-20° to +60°	
Bending Radius	Static	30mm	
	Dynamic	15mm	



STRUCTURE AND TECHNICAL PARAMETERS

Type	Strength Member	Fibre Count	Cable Size (mm)	Cable Weight	Tensile strength Long / Short Term (N)	Crush resistance Long/Short Term (N/100mm)	Bending Radius Static / Dynamic (mm)	Storage, Operating Temp. (°C)
DC-1-ID-W-7A1-S-N	Steel Wire	1	2.0mm*3.0mm	10.5 (kg/km)	100/200	1000/2200	15/30	-20 ~ + 75
DC-2-ID-W-7A1-S-N		2	2.0mm*3.0mm	10.5 (kg/km)	100/200	1000/2200	15/30	-20 ~ + 75
DC-1-ID-W-7A1-F-N	FRP	1	2.0mm*3.0mm	8.5 (kg/km)	100/200	1000/2200	15/30	-20 ~ + 75
DC-2-ID-W-7A1-F-N		2	2.0mm*3.0mm	8.5 (kg/km)	100/200	1000/2200	15/30	-20 ~ + 75

Marking

DConnect OPTICAL DROP FTTH FIBRE CABLE – INTERNAL / EXTERNAL – LSZH – 1X9/125 – G.657A1 – 2016 – BATCH xxxxm  
DConnect OPTICAL DROP FTTH FIBRE CABLE – INTERNAL / EXTERNAL – LSZH – 1X9/125 – G.657A2 – 2016 – BATCH xxxxm

Delivery Length

Standard delivery length is 1km/drum or 2km/drum

Packing: Wooden Drum in Carton Box

ORDERING INFORMATION

DROP CABLES

DC-(X)-(XX)-(X)-(XXX)-(X)-(X)

No. of Fibre

1F = 1  
2F = 2  
4F = 4

Outdoor / Indoor

OUTDOOR = OD  
INDOOR = ID

Messenger Wire

WITH MESSENGER WIRE = M  
WITHOUT M WIRE = N

Strength Member

STEEL = S  
FRP = F

Fibre Type

G.652D = 52D  
G.657A1 = 7A1  
G.657A2 = 7A2

Jacket Colour

BLACK = B  
WHITE = W

DC-(X)-ID-W-7A1-(Y)-N\*:

INDOOR DROP CABLE, WHITE JACKET WITH STRENGTH MEMBER

\* X denotes number of fiber, i.e., 1F, 2F, 3F, 4F ...

\* Y denotes type of strength member