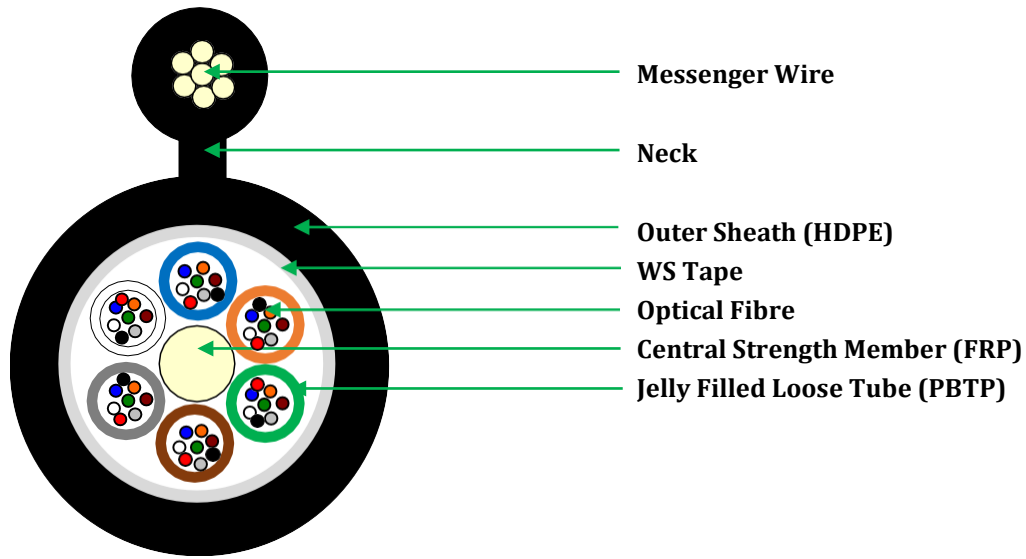


12/24/48/96F SM MT FIGURE-8 OPTICAL FIBRE CABLE



PHYSICAL CHARACTERISTICS

Fibre Type

Single Mode G.652D

Fibre Count	12F	24F	48F	96F
No. of Fibre per tube	6	6	12	12
No. of Tubes	2	4	4	8
No. of Fillers	4	2	2	0
Tube Dia. (mm)	2.0 ± 0.1	2.0 ± 0.1	2.0 ± 0.1	2.0 ± 0.1
Cable Height. (mm)	17.0 ± 0.5	17.0 ± 0.5	18.9 ± 0.5	18.9 ± 0.5
Cable Dia. (mm)	11.6 ± 0.5	11.6 ± 0.5	11.6 ± 0.5	13.3 ± 0.5
Cable Weight (kg/km)	150 ± 10%	150 ± 10%	150 ± 10%	185 ± 10%

Central Strength Member (mm)

FRP 2.0 mm ± 0.1

Support Wire(stranded Messenger wire)

Un-insulated GI Wire (7/1.2mm)

Core Type

Dry Core with WS yarn & WS tape

Outer Sheath Material

HDPE-Black UV Resistant

Outer Sheath thickness (mm)

3 (nominal)

Fibre Type

Single Mode G.652D

Ripcord

Yes, 2 below Armor

Rodent Protection

Yes

MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Tensile Strength (KN) (Long Term/ Short Term)	6KN/12KN
Crush Resistance (N/100 mm)	2000
Impact Strength (N. m)	10 impacts ,50N weight , 500mm height
Torsion	±180° 2 m sample 75N weight
Bending Diameter	280 (Dynamic) 140 (Static)
Temperature Range	-30°C to +70°C (Operation)

TRANSMISSION CHARACTERISTICS (CABLED FIBRE)

Attenuation (dB/km)	@ 1310 nm: ≤ 0.36 @ 1550 nm: ≤ 0.23
Water peak attenuation @ 1383 nm (dB/km)	≤ attn. at 1310 nm
Chromatic Dispersion (ps/nm.km)	@ 1288-1339 nm: ≤ 3.5 @ 1270-1340 nm: ≤ 5.3 @ 1550 nm: ≤ 18.0
PMD @ 1310 and 1550 nm Individual fibre (ps/√km)	≤ 0.2
Zero Dispersion Slope (ps/nm ² .km)	≤ 0.092
Zero Dispersion wavelength (nm)	1300 to 1324 nm
Cut off Wavelength (nm) on 2m fiber	≤ 1320
MFD (μm)	9.3 ± 0.5(@1310 nm) 10.5 ± 0.5(@1550 nm)
Clad dia. (μm)	125 ± 1.0
Clad non-circularity (%)	≤ 1
Core-Clad concentricity error (μm)	≤ 0.6
Coating dia. (μm)	245± 10
Coating-Cladding concentricity (μm)	≤ 12.0

LOOSE TUBE COLOUR CODE

1	2	3	4	5	6	7	8
Blue	Orange	Green	Brown	Grey	White	Red	Black/Nat

FIBRE COLOUR CODE

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua/Nat

PRINTING, PACKING AND LENGTHS

Printing Message: Bhutan Telecom Limited <Fibre Type> <Fibre Count> <Type of Cable> <MONTH> <YEAR>
<XXXX> METER <Cable ID>

Packing type: Wooden Drums

Length: 2 km (As per customer requirement)

Length Tolerance: ± 10%