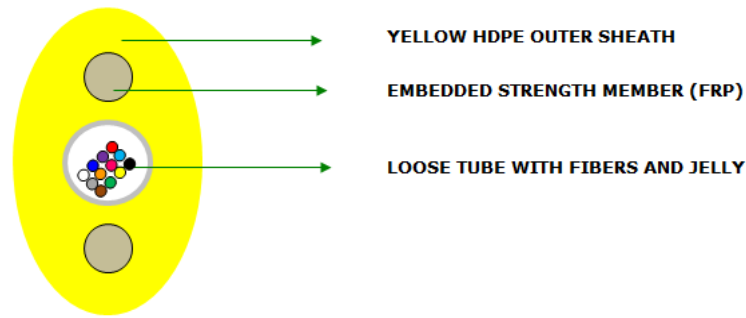


Sr No.	Description	Specifications
1	Fiber Type	Single Mode ITU-T G.657A1
2	Fiber Per Tube	2/4/6/8/12
3	Outer Sheath Material	UV Proof HDPE
4	Outer Sheath Color	Yellow
5	Cable Diameter	4.0x6.4 ± 1.0 mm Width x Height
6	Strength Member	FRP Rod embedded in sheath on either side of loose tube
7	Maximum Tensile strength	750 N
8	Span Length	65 mts
9	Embedded Strength Member Diameter	1.4 +/- 0.1 mm
10	Crush resistance	1000/100*100mm
11	Impact resistance	25 Nm
12	Min Bend radius	20D
13	Cable attenuation At 1310 nm	≤ 0.35
14	Cable attenuation At 1550 nm	≤ 0.22
15	No of loose tube	1
16	Loose Tube Material	PBT
17	Cable Weight	25 ± 10%
18	Operating Temperature	-30°C to +70° C



<b>Fiber parameters</b>		
<b>S. No.</b>	<b>Geometrical Characteristics:</b>	<b>Specifications</b>
22	MFD at 1310nm	8.8 - 9.4 $\mu\text{m}$
23	Cladding Diameter	125 $\mu\text{m}$ +/- 0.7 $\mu\text{m}$
24	Cladding Non-circularity	$\leq 0.8\%$
25	Core Clad concentricity error	$\leq 0.5 \mu\text{m}$
26	Diameter over primary coated with (Shall be measured on un-colored fibre)	242 $\mu\text{m} \pm 5 \mu\text{m}$ double UV cured acrylate.
27	Coating/Cladding Concentricity	$\leq 12 \mu\text{m}$
28	Coloured Fiber Diameter	252 $\mu\text{m}$ +/- 10 $\mu\text{m}$
29	Fibre attenuation before Cabling	
A	At 1310 nm	$\leq 0.34 \text{ dB/km}$
B	At 1550 nm	$\leq 0.20 \text{ dB/km}$
C	At 1625 nm	$\leq 0.23 \text{ dB/km}$
31	Total Dispersion	
A	In 1285-1330 nm band	$\leq 3.5 \text{ ps/nm.km}$
B	In 1270-1340 nm band	$\leq 5.3 \text{ ps/nm.km}$
C	At 1550 nm	$\leq 17.5 \text{ ps/nm.km}$
D	At 1625 nm	$\leq 22.0 \text{ ps/nm.km}$
32	Polarization mode dispersion at 1310 & 1550 nm	
A	Fiber	$\leq 0.2\text{ps}/\sqrt{\text{km}}$

B	Cabled Fiber	$\leq 0.2 \text{ ps}/\sqrt{\text{km}}$
C	Link design value (Fiber Stage)	$\leq 0.2 \text{ ps}/\sqrt{\text{km}}$
D	Zero Dispersion Slope	$\leq 0.090 \text{ ps}/(\text{nm}^2 \text{ km})$
E	Zero dispersion wave length range	1300 - 1324
F	Cable cut off wavelength	1260 nm Max
33	Mechanical Characteristics	
A	Proof test for minimum strain level (Test method IEC- 60793 - 1-30)	1%

B	Stripability force to remove primary coating of the fibre. (Test method IEC- 60793 -1-32)	$1.3 \leq F \leq 8.9 \text{ N}$
C	The force required to remove 30 mm $\pm$ 3 mm of the fibre coating shall not exceed 8.9 N and shall not be less than 1.3 N.	
D	Dynamic Tensile Strength (Test method IEC- 60793 -1-31)	
D.1	Un-aged	$\geq 550 \text{ KPSI (3.80 Gpa)}$
D.2	Aged	$\geq 440 \text{ KPSI (3.00 Gpa)}$
E	Dynamic Fatigue (Test method IEC- 60793 - 1-33)	$\geq 20$
F	Static Fatigue (Test method IEC- 60793 - 1-33)	$\geq 20$
34	Fibre Macro bend	
a	Change in attenuation when fiber is coiled 10 turns on 15 mm radius mandrel	$\leq 0.25 \text{ dB at } 1550 \text{ nm}$
		$\leq 1.0 \text{ dB at } 1625 \text{ nm}$
b	Change in attenuation when fiber is coiled 1 turns on 10 mm radius mandrel	$\leq 0.75 \text{ dB at } 1550 \text{ nm}$
		$\leq 1.50 \text{ dB at } 1625 \text{ nm}$