Specification

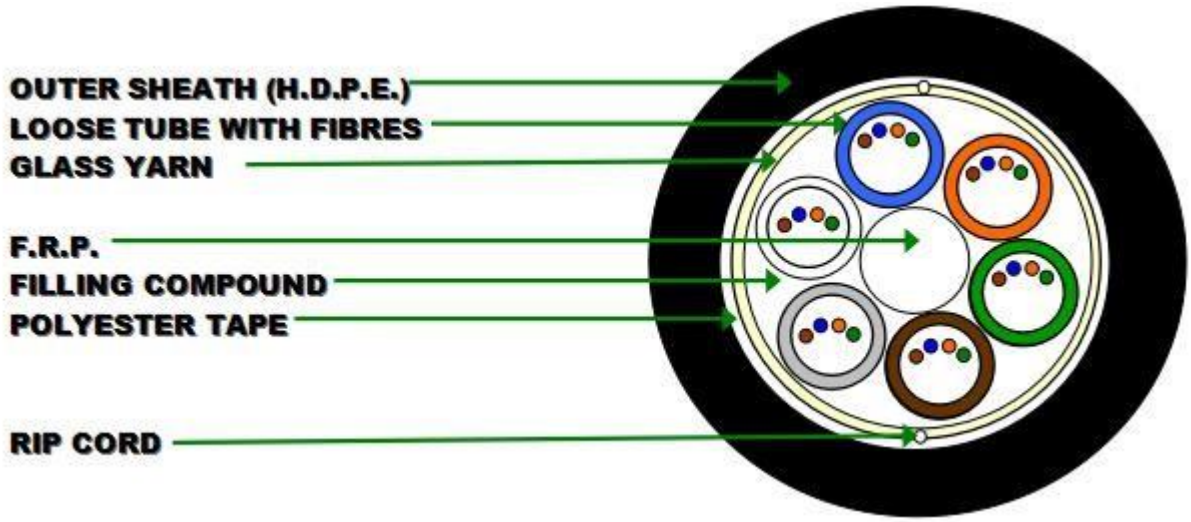
FOR

Non-Metal Optic Cable

[GYFTY]

1. CABLE CONSTRUCTION

1.1 CROSS SECTIONAL DIAGRAM



1.2 TECHNICAL SPECIFICATION

Fiber count		**24/G652D**
Loose Tube	OD(mm):	2.0±0.1
	Material：	PBT
Max fiber count/tube		4
No. of tubes		6
No. of fillers		0
FRP/Coating（mm）		2.2

Water Blocking Material		Filling Compound
Strength Member		FRP & Glass Yarn
Sequence of Tube		Blue, Orange, Green, Brown, Slate, White
Color of Fiber		Blue, Orange, Green, Brown
Sheath	Thickness:	Non. 1.6mm
	Material：	HDPE
OD of cable (mm)		10.1□0.5
Net weight (kg/km)		80
Max Tensile Loading (N)		3250

2. FIBER AND LOOSE BUFFER TUBE IDENTIFICATION

NO.	1	2	3	4	5	6	7	8	9	10	11	12
Tube Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Pink	Aqua
NO.	1	2	3	4	5	6	7	8	9	10	11	12
Fiber Color	Blue	Orange	Green	Brown	Slate	natural	Red	Black	Yellow	Violet	Pink	Aqua

3.OPTICAL FIBER

3.1 Single Mode Fiber

LTEMS	UNITS	SPECIFICATION	
Fiber type		G652D	G657A1
		1310nm ≤ 0.36 1550nm ≤ 0.22	
		1310nm≤ 3.5 1550nm≤ 18 1625nm≤ 22	
Zero Dispersion Slope	ps/nm^2.km	≤ 0.092	
Zero Dispersion Wavelength	nm	1300 ~ 1324	
Cut-off Wavelength (□cc)	nm	≤ 1260	

Attenuation vs. Bending (60mm x100turns)	dB	(30mm radius，100ring)≤ 0.1 @ 1625nm	(10mm radius，1ring)≤ 1.5 @ 1625nm
Mode Field Diameter	□m	9.2 □ 0.4 at 1310nm	9.2 □ 0.4 at 1310nm
Core-Clad Concentricity	□m	≤ 0.5	≤ 0.5
Cladding Diameter	□m	125±1	125±1
Cladding Non-circularity	%	≤ 0.8	≤ 0.8
Coating Diameter	□m	245±5	245±5
Proof Test	Gpa	≥ 0.69	≥ 0.69

4.Mechanical and Environmental Performance of the Cable

NO.	ITEMS	TEST METHOD	ACCEPTANCE CRITERIA
1	Tensile Loading Test	#Test method:IEC 60794-1-E1 -. Long-tensile load：2500N -. Short-tensile load：3250N -. Cable length：≥50m	-. Attenuation increment@1550nm:≤0.1dB -. No jacket cracking and fiber breakage
2	Crush Resistance Test	#Test method:IEC 60794-1-E3 -.Long load：300 N/100mm -.Short load：1000 N/100mm Load time：1 minutes	-. Attenuation increment@1550nm:≤0.1dB -. No jacket cracking and fiber breakage
3	Impact Resistance Test	#Test method:IEC 60794-1-E4 -.Impact height： 1 m -.Impact weigh： 450 g -.Impact point：≥5 -.Impact frequency：≥3/point	-. Attenuation increment@1550nm:≤0.1dB -. No jacket cracking and fiber breakage
4	Repeated Bending	#Test method:IEC 60794-1-E6 -.Mandrel diameter：20D (D = cable diameter) -.Subject weight：15kg -.Bending frequency：30 times -.Bending speed：2s/time	-. Attenuation increment@1550nm:≤0.1dB -. No jacket cracking and fiber breakage

5	Torsion Test	#Test method:IEC 60794-1-E7 -.Length：1m -.Subject weight:25kg -.Angle：±180 degree -.Frequency：≥10/point	-. Attenuation increment@1550nm:≤0.1dB -. No jacket cracking and fiber breakage
6	Water Penetration Test	#Test method:IEC 60794-1-F5B -.Height of pressure head：1m -.Length of specimen：3m -.Test time: 24 hours	-. No leakage through the open cable end
7	Temperature Cycling Test	#Test method:IEC 60794-1-F1 -.Temperature steps：＋20℃、－ 40℃、＋70℃、＋20℃ -.Testing Time：24 hours/step -.Cycle index：2	-. Attenuation increment@1550nm:≤0.1dB -. No jacket cracking and fiber breakage
8	Drop Performance	#Test method:IEC 60794-1-E14 -.Testing length：30cm	-. No filling compound drop out

		-.Temperature range：70±2℃ -.Testing Time：24 hours	
9	Temperature	Operating:-30℃~+70℃ Store/Transport :-40℃~+70℃ Installation: -30℃~+70℃	

5. FIBER OPTIC CABLE BENDING RADIUS

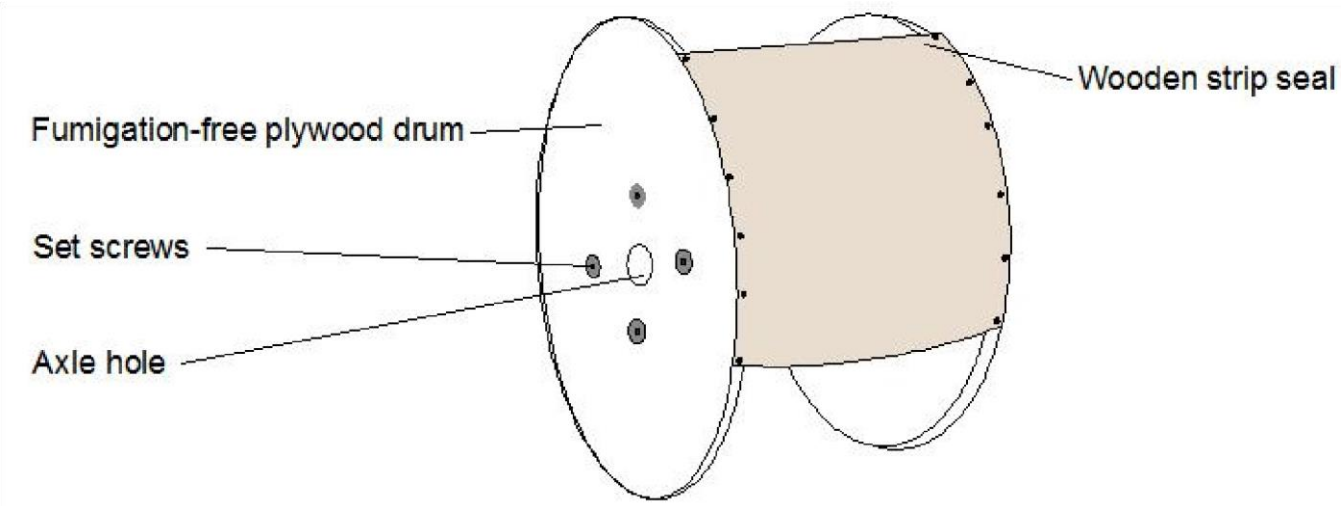
Static bending：≥10 times than cable out diameter

Dynamic bending：≥20times than cable out diameter.

6. PACKAGE AND MARK

6.1 PACKAGE

Not allowed two length units of cable in one drum, two ends should be sealed,. Two ends should be packed inside drum, reserve length of cable not less than 3 meters.



6.2 MARK

Cable Mark: Brand、Cable type、Fiber type and counts、Year of manufacture、Length marking 。

8. TEST REPORT

Test report and certification supplied.