

Unitube SM G652D Unarmoured Cable

1. Cable Description

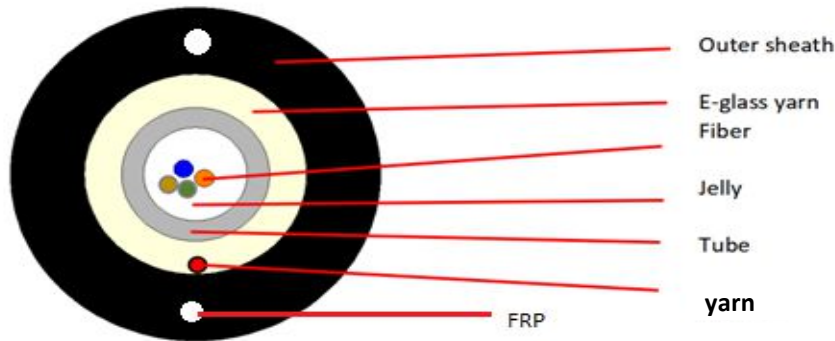
The fibers are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant thixotropic gel as filling compound. The tube is wrapped with a layer of E-glass yarn for strength and water-blocking. Then the cable is completed with HDPE sheath along with embedded FRP Rods for strength.

2. Application

Adopted to indoor or outdoor distribution and covers the general requirements of Center Tube Optical cable for aerial overhead, duct

3. Characteristics

- Small cable size, light weight;
- With excellent waterproofing performance.
- Excellent mechanical and environmental characteristics.
- E-glass yarn with FRP for high tension and strength.



4. Standard color of fiber

The color of the individual fibers, shall be in accordance with the table as below:

Standard Color Identification						
No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	grey	White
No.	7	8	9	10	11	12
Color	Red	Black	Yellow	Violet	Pink	Aqua

5. Cable Mechanical characteristic

Items	Cable diameter	Weight
2 cores	5.8.0±0.5	27.00kg/km
4 cores	5.8.0±0.5	27.00kg/km
6 cores	5.8.±0.5	27.00kg/km
8 cores	5.8±0.5	27.00kg/km
10 cores	5.8±0.5	27.00kg/km
12 cores	6.00±0.5	30.00kg/km
Tube OD	2.1mm PBT Tube filled with Thixotropic Gel	
Strength Member	E-glass yarn	
Strength Member	FRP EAA COATED - 2nos	

Outer Sheath		HDPE
Operating Temperature (°C)		-20°C to +80°C
Min Bending Radius(mm)	Long term	10D
Min Bending Radius(mm)	Short term	20D
Min Allowable Tensile Strength(N)	Long term	400
Min Allowable Tensile Strength(N)	Short term	800
Crush Load (N/100mm)	Long term	200
Crush Load (N/100mm)	short term	1000

6. Fiber characteristic

Fiber style		Unit	SM G652D
Condition		nm	1310/1550
Attenuation	1310nm	dB/km	≤0.34
	1550nm	dB/km	≤0.22
Dispersion	1285-1625nm	Ps/(nm*km)	≤3.5
	1270-1340nm	Ps/(nm*km)	≤5.3
	1550nm	Ps/(nm*km)	≤18.0
Zero Dispersion Wavelength		nm	1300-1324nm
Zero Dispersion Slope		Ps/(nm ² *km)	≤0.091
PMD Maximum Individual Fibr			≤0.2
PMD Design Link Value		Ps/(nm ² *km)	≤0.08
Fibre Cutoff Wavelength λc		nm	≤1330
Cable Shutoff Wavelength λcc		nm	≤1260
MFD	1310nm	um	9.2+/-0.4
	1550nm	um	10.4+/-0.8
Step (mean of bidirectional measurement)		dB	≤0.05
Irregularities over fiber length and point		dB	≤0.05

7. Dicontinuity

Difference Backscatter Coefficient	dB/km	≤0.03
Attenuation Uniformity	dB/km	≤0.01
Core Diameter	um	
Cladding Diameter	um	125+/-0.1
Cladding Non-Circularity	%	≤1.0
Coating Diameter	um	242+/-7
Coating/chaffinch Concentricity Error	um	≤12.0
Coating Non Circularity	%	≤6.0
Core/cladding Conentricity Error	um	≤0.6
Curl(radius)	um	≤4

8. Package

1.Packing Type: Standard packing in Coils or if required can be customized.

2.Packing length: Standard length of cable shall be 2 km or can be customized.