# **Dielectric Optical Cable For Ducts - Gelly Filled Core**



Temperature Range

Operating : -40°C to +70°C Storage : -50°C to +70°C Installation : -30°C to +70°C

Bending Radius: Static 10D Dynamic 20D

Fiber
Loose Tube Filled with Jelly
Central Strength Member
Cable Filling Compound

Strength Member
Outer Jacket

**Cable Structure** 

## **Description**

Totally dielectric cable with fibers placed in loose buffer tube stranded around dielectric central member. The cable core is protected with water blocking material to prevent water intrusion and migration, reinforced with dielectric fiber yarns and covered with black polyethylene outer jacket.

### **Product Construction**

Fiber:

2-288 fibers

Loose tube gel-filled

Central Strength Member:

FRP (Fiber reinforce plastic)

Strength Member

Fiber glass yarns.

**Outer Jacket:** 

Black UV-and moisture-resistant polyethylene (PE).

#### **Features**

Totally dielectric structure.

Up to 288 fibers.

Loose tube gel-filled construction for superior fiber protection. \\

UV and moisture-resistant design.

### **Applications**

Interbuilding voice or data communication backbones. Installed in ducts, underground conduits, lashed/aerial.

### **Optical Characteristics**

Fiber T	уре	G.652	G.655	50/125μm	62.5/125μm	
	850 nm			≤3.0 dB/km	≤3.3 dB/km	
Attenuation	1300 nm			≤1.0 dB/km	≤1.0 dB/km	
(+20°C)	1310 nm	≤0.36 dB/km	≤0.40 dB/km			
	1550 nm	≤0.22 dB/km	≤0.23 dB/km			
Bandwidth	850 nm			≥500 MHz·km	≥200 Mhz·km	
Dandwidth	1300 nm			≥500 MHz·km	≥500 Mhz·km	
Numerical	Numerical Aperture			0.200±0.015 NA	0.275±0.015 NA	
Cable Cut-off Wavelength λcc		≤1260 nm	≤1450 nm			

## **Structure and Technical Specifications**

Fiber Count	Nominal Diameter (mm)	Nominal Weight (kg/km)	Max Fiber Per Tube	Max No. of (Tubes+fillers)	Allowable Tensile Load (N)		Allowable Crush Resistance (N/100mm)			
					Short Term	Long Term	Short Term	Long Term		
2~30	9.8	75	6	5	2700	1000	1000	300		
32~48	10.8	97	8	6	2700	1000	1000	300		
50~72	11.3	102	12	6	2700	1000	1000	300		
74~96	12.6	126	12	8	2700	1000	1000	300		
98~144	15.6	191	12	12	2700	1000	1000	300		
>144	Available upon customer's request									

Note: This datasheet can only be a reference, but not a supplement to the contract. Please contact our sales people for more detailed information.