



# STRUCTURED CABLING SYSTEMS

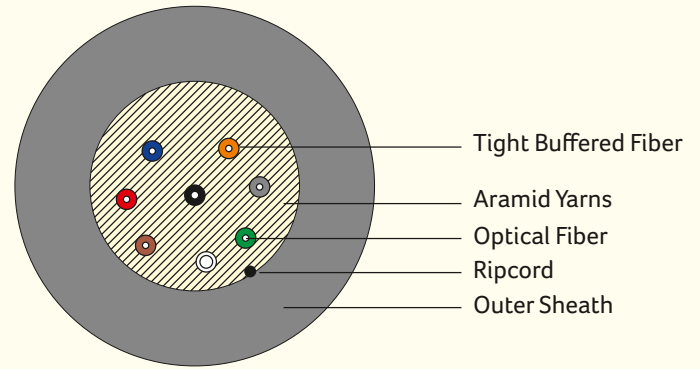
## DIGISOL Fiber Optic Cable, Multi Mode, Tight Buffered

### Introduction:-

DIGISOL Multi Mode (OM1/OM2/OM3/OM4) are tight buffered fiber optic cables made without jelly compound. Aramid yarn as strength members gives stability and strength to the cable along with outer sheath made of LSZH compounds. Cable construction is suitable for easy and direct termination with standard connector which is suitable for fiber to desktop applications. These cables have high strength and good bend performance.

### Key Features:-

- Suitable for aerial, pipeline, bracket Lying, ducts, conduits
- Suitable for Indoor and Outdoor applications
- Light Weight, all dielectric self supporting (ADSS)
- Good tensile strength and crush resistance
- Good bending performance



### Constructional Specifications:-

Parameters	Fiber Core : 04, 06, 08, 12, 24 F
Number of Tight Jacketed Fibers	04, 06, 08, 12, 24 nos.
Fiber Colours	Natural
Tight Jacketing over Fibers	850 ± 50µm
Tight Jacketing Colours	* *
Peripheral Strength Member	Aramid yarn
Number of Rip Cords	01 no. (Polyester)
Outer Sheath Thickness	1.1 mm (Nominal) (LSZH Orange)

Jacketing Colours: \* \*

04 Fibers: Blue, Orange, Green, Brown

06 Fibers: Blue, Orange, Green, Brown, Slate, White

08 Fibers: Blue, Orange, Green, Brown, Slate, White, Red, Black

12 Fibers: Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink, Aqua

24 Fibers: Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink, Aqua

Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Pink, Aqua

(Ring marking for the next 12 colors)

### Environmental Specifications:-

Storage Temperature : -20 °C to +85° C  
 Installation Temperature : -20 °C to +85° C  
 Operating Temperature : -10 °C to +60° C

### Standards:-

IEC 60793-1, IEC60794-1, IEC 60332-1  
 ANSI/TIA 568-C.3 & ISO/IEC 11801  
 Telecordia GR-20 Core

### Cable Size & Standard Length:-

4F to 24F : 2.0 kms ± 10%

### Ordering Information:-

Part Codes	Description
DGF-CUZZTUSX-Y	DIGISOL ZZZ Tight Buffered, YY Core, XX

Note: X / XX - Sheath Material - L / LSZH

Y / YY - Number of fiber cores - 4 / 4, 6 / 6, 8 / 8, 12 / 12, 24 / 24.

ZZ / ZZZ - M1 / MM(OM1)

M2 / MM(OM2)

M3 / MM(OM3)

M4 / MM(OM4)

Example: DGF-CUM1TUSL-4 - DIGISOL MM (OM1) Tight Buffered, 4 Core, LSZH

### Mechanical Specifications:-

Parameters	Fiber Core				
	04 F	06 F	08 F	12 F	24 F
Cable Diameter (mm)	5.4 ± 0.3	6.2 ± 0.3	6.5 ± 0.3	7.0 ± 0.3	8.5 ± 0.5
Cable Weight (kg/km)	22.0	32.0	38.0	45.0	68.0
Tensile Strength (N)	640	700	730	1100	1500
Crush Resistance (N/100mm)	1500	1500	1500	1500	1500
Torsion	± 360°	± 360°	± 360°	± 360°	± 360°
Minimum Bend Radius	Static	20D	20D	20D	20D
	Dynamic	10D	10D	10D	10D

### Optical Fiber Specifications:-

Parameters	Fiber Core : 04, 06, 08, 12, 24 F			
	62.5 µm (OM1)	50 µm (OM2)	50 µm (OM3)	50 µm (OM4)
Fiber Type	62.5 µm (OM1)	50 µm (OM2)	50 µm (OM3)	50 µm (OM4)
Attenuation (@850 nm)	≤ 3.5 dB/km	≤ 2.7 dB/km	≤ 3.0 dB/km	≤ 3.0 dB/km
Attenuation (@1300 nm)	≤ 1.5 dB/km	≤ 0.8 dB/km	≤ 1.0 dB/km	≤ 1.0 dB/km
Bandwidth (@850 nm)	≥ 200 MHz.km	≥ 500 MHz.km	≥ 1500 MHz.km	≥ 3500 MHz.km
Bandwidth (@1300 nm)	≥ 600 MHz.km	≥ 500 MHz.km	≥ 500 MHz.km	≥ 500 MHz.km
Core Diameter	62.5 ± 2.5 µm	50.0 ± 2.5 µm	50.0 ± 2.5 µm	50.0 ± 2.5 µm
Core Cladding Concentricity Error	≤ 1 µm	≤ 1 µm	≤ 1 µm	≤ 1 µm
Cladding Diameter	125 ± 1 µm	125 ± 1 µm	125 ± 1 µm	125 ± 1 µm
Cladding Non-circularity	≤ 1 %	≤ 1 %	≤ 1 %	≤ 1 %
Coating Diameter	250 ± 15 µm	250 ± 15 µm	250 ± 15 µm	250 ± 15 µm