



Product: GRAI284 ☑

Universal OFC MLT: LSZH + ARAMID + LSZH with 8 Tubes of Ø1.9mm 84f MM OM2.

## **Product Description**

Universal (Indoor/Outdoor) dry core optical fiber Multi Loose Tube cable with Low Smoke Zero Halogen inner jacket, aramid yarns as strength member and Low Smoke Zero Halogen outer jacket. Existing out of 8 tubes with a diameter of 1.9mm with 84 fibers (7t x 12f) MM OM2.

## **Technical Specifications**

#### **Product Overview**

Construction Type:	Multi Loose Tube
Environmental Space:	Indoor/Outdoor
Suitable Applications:	For outdoor and indoor use in structured (data) wiring systems such as industrial backbone, campus backbone, building backbone (riser) and/or horizontal cabling. For outdoor and indoor use in networks for industrial, telecom, cable TV and/or broadcast. Easy to install in ducts, tunnels and/or tubes.

#### Construction

### Fiber Cable Construction

Fiber Type	Fiber Count		Subunit Color	
OM2	84	TIA coding (	TIA coding (Gxxxxxx.T): Blue, Orange, Green, Brown, Gray, White, Red	
Fiber Color Coding: TIA coding (Gxxxxxx.T): Blue, Orange, Green, Brown, Gra				
Central Strength Member: GRP				
Cable Core Water Tight: Yes		Yes		
Cable Core Waterblocking:			Waterblocking Aramid Yarns + Tape	
Bulk Cable Weight: 204 kg/km				

### **SubUnit Specifications**

Number of Active Subunits:	7
Number of Subunit Positions:	8
Fibers Per Subunit:	12
Subunit Diameter:	1.9 mm
Subunit Waterblocking:	Gel Filled

# **Jacket Specifications**

Number of Jackets:	Double Jacket
Type of Armor:	Non-Armored

### **Inner Jacket**

Material:	LSZH - Low Smoke Zero Halogen (Flame Retardant)

## **Outer Jacket Specifications**

#### **Outer Jacket**

	Material		Nominal Diameter	Ripcord
L	LSZH - Low Smoke Zero Halogen (Flam	e Retardant)	13.2 mm	Yes
T	Table Notes:	Standard co	lor: Orange. Available	e colors: (

### **Optical Characteristics**

Max. Attenuation at 1300 nm:	0.9 dB/km
Max. Attenuation at 850 nm:	2.9 dB/km

### **Mechanical Characteristics**

#### **Mechanical Tests**

Description	Tested Standard	Requirement/Value	According to Family Specification
Cable Min. Bend Radius Installation (Short Term)	IEC 60794-1-21-E6	264 mm	IEC 60794-3-10
Cable Min. Bend Radius Operation (Long Term)	IEC 60794-1-21-E11	264 mm	IEC 60794-3-10
Cable Max. Tensile Strength Installation (Short Term)	IEC 60794-1-21-E1	5400 N (1214 lbf)	IEC 60794-3-10
Cable Max. Tensile Strength Operation (Long Term)	IEC 60794-1-21-E1	1800 N (405 lbf)	IEC 60794-3-10
Cable Max. Crush Resistance Installation (Short Term)	IEC 60794-1-21-E3	15 kN/m	IEC 60794-3-10
Cable Max. Crush Resistance Operation (Long Term)	IEC 60794-1-21-E3	7.5 kN/m	IEC 60794-3-10
Cable Impact Resistance	IEC 60794-1-21-E4	10 J, 300 mm Radius, 3 Cycles	IEC 60794-3-10
Cable Torsion Resistance	IEC 60794-1-21-E7	180°, 2 m, 10 cycles	IEC 60794-3-10

#### **Temperature Range**

Operating Temperature Range:	-30 °C to +70 °C
Installation Temperature Range:	-5 °C to +50 °C
Storage Temperature Range:	-30 °C to +70 °C

#### **Standards**

UL Rating/Flame Test:	Non-UL Rated	
OL Rating/Flame Test.	NOIF-OL Nateu	
Reaction to Fire - Bundle Flame Test:	IEC 60332-3-24	
IEC 60754-1 - Halogen Amount:	Zero	
IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity:	) μS/mm	
IEC 60754-2 - Halogen Acid Gas Amount - Min. pH:	4.3	
REACH:	Compliant	
ISO/IEC Compliance:	IEC 60794, ISO/IEC 11801-1	
EU Directive 2011/65/EU (RoHS 2):	Compliant	
UV/ Sunlight Protection:	Yes	

## **History**

Update and Revision:	Revision Number: 0.84 Revision Date: 09-17-2024

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