



**Product:** [GCFJ844](#)

Universal OFC MLT: ARAMID + LSZH + FRP + LSZH with 12 Tubes of Ø1.9mm 144f SM OS2 G.652.D & G.657.A1.

**Product Description**

Universal (Indoor/Outdoor) dry core optical fiber Multi Loose Tube cable with aramid yarns as strength member, Low Smoke Zero Halogen inner jacket, Fiber Reinforced Plastic armor and Low Smoke Zero Halogen outer jacket. Existing out of 12 tubes with a diameter of 1.9mm with 144 fibers SM OS2 G.652.D & G.657.A1.

**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. Suitable for Direct Burial.

**Construction**

**Fiber Cable Construction**

Fiber Type	Fiber Grade acc. ITU-T	Fiber Count	Subunit Color
OS2	G.652D & G.657A1	144	TIA coding (Gxxxxx.T): Blue, Orange, Green, Brown, Gray, White, Red, Black, Yellow, Violet, Pink, Aqua
Fiber Color Coding:	TIA coding (Gxxxxx.T): Blue, Orange, Green, Brown, Gray, White, Red, Black, Yellow, Violet, Pink, Aqua		
Central Strength Member:	GRP		
Cable Core Water Tight:	Yes		
Cable Core Water Blocking:	Waterblocking Aramid Yarns + Tape		
Bulk Cable Weight:	334 kg/km		

**SubUnit Specifications**

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

**Jacket Specifications**

Number of Jackets:	Double Jacket
Type of Armor:	Fiber Reinforced Plastic

**Inner Jacket**

Material:	LSZH - Low Smoke Zero Halogen (Flame Retardant)
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**Outer Jacket Specifications**

**Outer Jacket**

Material	Nominal Diameter	Ripcord
LSZH - Low Smoke Zero Halogen (Flame Retardant)	17.7 mm	1

Table Notes:	Standard color: Black. Available colors: Black, Orange, Yellow, Turquoise, Erika Violet, Red, Blue, Green, Brown, Violet, Pink, Grey, White, Lime Green
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## Optical Characteristics

Fiber Core Diameter:	9 µm
Max. Attenuation at 1310 nm:	0.40 dB/km
Max. Attenuation at 1550 nm:	0.24 dB/km
Max. Attenuation at 1625 nm:	0.29 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	354 mm	IEC 60794-3-10
Cable Min. Bend Radius Operation (Long Term)	IEC 60794-1-21-E11	354 mm	IEC 60794-3-10
Cable Max. Tensile Strength Installation (Short Term)	IEC 60794-1-21-E1	6000 N (1349 lbf)	IEC 60794-3-10
Cable Max. Tensile Strength Operation (Long Term)	IEC 60794-1-21-E1	2000 N (450 lbf)	IEC 60794-3-10
Cable Max. Crush Resistance Installation (Short Term)	IEC 60794-1-21-E3	22 kN/m	IEC 60794-3-10
Cable Max. Crush Resistance Operation (Long Term)	IEC 60794-1-21-E3	11 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 Temp Range:	-30 °C to +70 °C
Installation Temp Range:	-5 °C to +50 °C
Storage Temp Range:	-30 °C to +70 °C

## Standards

UL Rating/Flame Test:	Non-UL Rated
IEC Flammability:	IEC 60332-1-2
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:	10 µS/mm
IEC 60754-2 - Halogen Acid Gas Amount - Min. pH:	4.3
IEC 61034-2 - Smoke Density Min. Transmittance:	60%
REACH:	Compliant
ISO/IEC Compliance:	IEC 60794
EU Directive 2011/65/EU (RoHS 2):	Compliant
UV/ Sunlight Protection:	Yes

## History

Update and Revision:	Revision Number: 0.30 Revision Date: 12-15-2021
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