



# Product: FMLU72HA144BKAA-C

Universal OFC MLT: Dry Tubes (12F/T), Dry Core, Glass Yarn + CST + LSZH Outer Jacket (black) 144f SM G.657.A2. IEC 60332-3-24 rated.

# **Product Description**

Universal (Indoor/Outdoor) Dry tubes (12F/T), Dry core, optical fiber Multi Loose Tube cable with Glass Yarn strength member, Corrugated Steel Tape armor and Low Smoke Zero Halogen outer jacket (black), 144 fibers SM G.657.A2. IEC 60332-3-24 rated.

## **Technical Specifications**

## **Product Overview**

Product Category:	Fiber Multi-Loose Tube Cable	
	For outdoor/indoor use in structured (data) wiring systems such as industrial backbone, campus backbone, building backbone cabling. For outdoor/indoor use in networks for industrial, telecom, cable TV and/or broadcast. Easy to install in ducts, tunnels and trenches and/or tubes. Suitable for Direct Burial.	

## **Fiber Specifications**

Fiber Type:	OS2, G.657.A2
Fiber Core Diameter:	9 µm
Fiber Diameter:	125 µm
Buffer Material:	PBT – Polybutylene Terephthalate
Fiber Count:	144
Fiber Color Coding:	TIA-598-D

## **Cable Construction**

Number of Active Subunits:	12
Fibers Per Subunit:	12
Subunit Waterblocking:	Gel Free
Subunit Color:	TIA-598-D
Central Strength Member:	GRP
Cable Core Waterblocking:	Waterblocking Yarns + Tape

#### **Armor Specifications**

Armor Type and Material:	CST - Corrugated Steel Tape

#### **Outer Jacket Specifications**

Jacket Material:	LSZH - Low Smoke Zero Halogen (Flame Retardant)
Nom. Diameter:	16.4 mm (0.646 in)
Color:	Black

#### **Optical Characteristics**

Wavelength	1310 nm	1550 nm
Max. Attenuation	0.36 dB/km	0.22 dB/km
Mode Field Diameter	8.8 µm	9.8 µm

## **Mechanical Characteristics**

Min. Bend Radius During Installation:	20 x Cable OD
Min. Bend Radius During Operation:	10 x Cable OD

Max. Tensile Strength During Installation:	2700 N (610 lbf)
Max. Tensile Strength During Operation:	900 N (200 lbf)
Crush Resistance:	2200N/100mm for Short Term & 1100N/100mm for Long Term

#### Mechanical Tests

Descript	ion	Tested Standard
Cable Min. Bend Radius Installation (Short Term)		IEC 60794-1-21-E11
Cable Min. Bend Radius Operation	ation (Long Term)	IEC 60794-1-21-E11
Cable Max. Tensile Strength In	nstallation (Short Term)	IEC 60794-1-21-E1
Cable Max. Tensile Strength Operation (Long Term)		IEC 60794-1-21-E1
Cable Max. Crush Resistance Installation (Short Term)		IEC 60794-1-21-E3
Cable Max. Crush Resistance Operation (Long Term)		IEC 60794-1-21-E3
Cable Impact Resistance		IEC 60794-1-21-E4
Waterblocking		IEC 60794-F5
Bulk Cable Weight: 271 kg/km (182 lbs/1000ft)		)ft)

# Temperature Range

Operating Temperature Range:	-40 °C to +70 °C
Storage Temperature Range:	-40 °C to +70 °C

#### **Standards and Compliance**

Environmental Suitability:	door/Outdoor, Indoor, Outdoor, Non-Halogenated, Burial	
Flammability / Reaction to Fire:	60332-3-24	
ISO/IEC Compliance:	IEC 60793-1-1IEC 60794-1-1, IEC 61034-2 - Smoke Density Min Transmittance = 60%	
European Halogen Free Standards:	EC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 10 , IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3	
European Directive Compliance:	EU Directive 2011/65/EU (RoHS 2)	

## History

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Update and Revision: Revision Number: 0.6 Revision Date: 07-18-2024
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