

**EVT Indoor/Outdoor Single Loose Tube Un-Armored Single Sheathed Fiber Cables are Excellent for Intra-Building Connectivity.**

- ✓ Suitable for Environments where Rodent Resistance is Required
- ✓ Ideal for Intra-Building Links in Campus Environments
- ✓ Suitable for Internal/External Duct Applications
- ✓ Up to 24 Fiber Core
- ✓ Standard SM and MM Options
- ✓ High Water Resistivity



## **EVT-FxMxxCUO**

**IN/OUT-DOOR SINGLE LOOSE TUBE AND UNARMORED SINGLE SHEATHED SINGLE/MULTI-MODE FIBER OPTIC CABLE**

**1. Cable Type: A-DQ (BN) 2Y**
**mxn....1.200N CT**

Fiber type	SM 9/125 G.652 d
Attenuation at 1310 nm	Max 0,36 dB/km
Attenuation at 1550 nm	Max 0,22 dB/km

Segment	Unit	Up to 24-Core
Tube Diameter	mm±0,07	2,90
Tube inner diameter	mm±0,07	1,70
Number of Tube	Pieces	1
Number of Fiber per Tube	Fiber/tube	Up to 24 fiber
Tensile Strength (Installation)	N	1,200
Nominal Outer Diameter of Cable	Nom.mm ± 0,5	6,5
Nominal Cable Weight	Kg/km	40
Nominal Gross Weight	Kg/drum	110
Drum Flange Diameter (WxHxD)	Cm	85x85x55
Nominal Cable Length on Drum	Meter/drum ± %5	2,000

Loose Buffer Tube	PBT (polybutylene terephthalate)	
Filling Compound in Loose Tube	Thixotropic Jelly Compound	
Core Wrapping Tape	Water Swellable Material	
Auxiliary Strength Member	Glass Yarn	
Corrugated Steel Tape Thickness	NA	
Co-Polymer Thickness	NA	
Outer Sheath Material	MDPE-HDPE	
Outer Sheath Color	Blue	
Outer Sheath Thickness	Nom.1,20 ± 0,1 mm	
Ripcord	1 pieces under the sheath	
Cable drum	2.000 ± %5 mt	
Tensile Strength for Short Term	1.200N	IEC 60794-1-E1
Tensile Strength for Long Term	800N	IEC 60794-1-E1
Bending Radius	20xD	IEC 60794-1-2-E11
Repeated Bending Radius	5xD,10 cycle,50 N	IEC 60794-1-2-E6
Torsion Test	±180°,1 meter,10 Cycle	IEC 60794-1-2-E7
King Test	Min 20xD	IEC 60794-1-2-E10
Impact Test	1 meter 5 N	IEC 60794-1-2-E4
Crush Test	1.000N/100mm	IEC 60794-1-2-E3
Temperature Cycling	-30°C/+80°C	
Operation Temperature	-10°C/+40°C - Installation -30°C/+60°C - Operation	

## **2. Color Code of Fibers**

No of Fiber	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua
No of Fiber	13	14	15	16	17	18	19	20	21	22	23	24
Color	Blue Black	Orange Black	Green Black	Brown Black	Grey Black	White Black	Red Black	Natural Black	Yellow Black	Violet Black	Pink Black	Aqua Black

## **3. Length marking on the cable**

The outer sheath will be marked in one-meter intervals as following example;

EVT CABLES <2021> 24 CORE 9/125 SM UNARMORED PE JACKET OUTDOOR EN 60794 FIBER OPTICAL CABLE <2000M>

## **4. Color of Sheath**

Outer sheath is HDPE&MDPE blue that is including %2,5 ±0,5 carbon black that is including UV protection. The outer Sheath will be in accordance with ASTM D 1248 Type I, Class C, Category 4, Grade J3, E4, E5, W2-4.

## **5. Packing**

Shipment will be done with non-returnable wooden drums with protection.

## **6. Cable Life Time**

Designed cable has a minimum 25 years' service life time, if the cable is correctly installed.

## **7. Technical Specification for Single Mode Optical Fiber (ITU-T SM G.652 d) Optical Specifications**

Attenuation	@1310 nm @1550 nm @ 1383±3 nm	Max.0,334 dB/km Max. 0,194 dB/km Max. 0,310 dB/km
Attenuation Change	@1285-1330 nm @1525-1575 nm	≤ 0,03 dB/km (1310 nm reference) ≤ 0,02 dB/km (1550 nm reference)
Cable Cut-off Wavelength		≤ 1260
Chromatic Dispersion	at 1285~1330 nm at 1550 nm at 1625 nm	≤ 3,5 (ps nm/km) ≤ 18 (ps nm/km) ≤ 22 (ps nm/km)
Zero Dispersion Wavelengths		1302-1322 nm
Zero Dispersion slope		≤ 0,090 ps/(nm <sup>2</sup> .km)
Polarization Mode Dispersion Coefficient		≤ 0,2 PS/ km

Geometrical Specifications	
Mode Field Diameter at 1310 nm	9,2μm ± 0,4
Mode Field Diameter at 1550 nm	10,4μm ±0,5
Cladding Diameter	25μm ±0,7μm
Core/Cladding Concentricity Error	≤ 0,5μm
Cladding Non-Circularity	≤ 0,7%
Coating Diameter	250±15μm
Coating Concentricity Error	≤ 15μm
Coating/cladding Non-Circularity Error	≤ 12%
Fiber proof test level	≥ 100 kpsi (1,0 % strain)

### **8. Life Time Technical Specification of 62,5/125 OM1 MM Optical Fiber (ISO IEC 11801**

#### **OM1) Optical Specifications**

Attenuation	at 850 nm	Max 3,00 dB/km
	at 1300 nm	Max 0,70 dB/km
Band width	at 850 nm	Min 160 M Hz km
	at 1300 nm	Min 300 M Hz km
Numerical Aperture		0,275±0,015

Geometrical Specifications	
Core Diameter	62,5±3μm
Coating Diameter	245 ±10μm
Cladding Diameter	125 ±-2 μm
Cladding Non-Circularity	Max.2%

### **9. Technical Specification of 50/125 OM2 MM Optical Fiber (ISO IEC 11801 OM2) Optical**

#### **Specifications**

Attenuation	at 850 nm	Max 2,50 dB/km
	at 1300 nm	Max 0,70 dB/km
Band width	at 850 nm	Min 500 M Hz km
	at 1300 nm	Min 500 M Hz km
Numerical Aperture		0,200 ± 0,015

Geometrical Specifications	
Core Diameter	50±2.5µm
Coating Diameter	245 ±10µm
Cladding Diameter	125 ±-2 µm
Cladding Non-Circularity	Max.2%
Coating	Dual Layer PVC Coat

### **10. Technical Specification of 50/125 OM3 MM Optical Fiber (ISO IEC 11801 OM3) Optical Specifications**

Attenuation	at 850 nm	Max 2,50 dB/km
	at 1300 nm	Max 0,70 dB/km
Band width	at 850 nm	Min 1.500 M Hz km
	at 1300 nm	Min 500 M Hz km
Numerical Aperture		0,200 ± 0,015

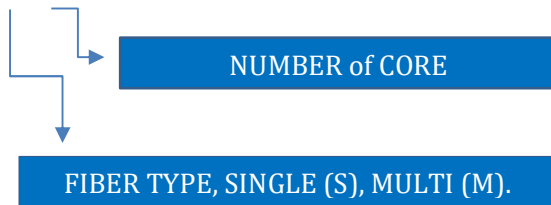
Geometrical Specifications	
Core Diameter	50±2.5µm
Coating Diameter	245 ±10µm
Cladding Diameter	125 ±-2 µm
Cladding Non-Circularity	Max.2%
Coating	Dual Layer PVC Coat

### **11. Technical Specification of 50/125 OM4 MM Optical Fiber (ISO IEC 11801 OM4) Optical Specifications**

Attenuation	at 850 nm	Max 2,50 dB/km
	at 1300 nm	Max 0,60 dB/km
Zero Dispersion wavelength		1295-1340 nm
Zero Dispersion Slope		≤0,105ps/nm <sup>2</sup> -km(1295≤λ0≤1310nm)
Band width	at 850 nm	Min 4.000 M Hz km
	at 1300 nm	Min 500 M Hz km
Numerical Aperture		0,200 ± 0,015

Geometrical Specifications	
Core Diameter	50±2.5µm
Coating Diameter	245 ±10µm
Cladding Diameter	125 ±-1 µm
Cladding Non-Circularity	Max.1%
Coating Non-Circularity	Max.5%
Coating –Clad Concentricity Error	≤ 8µm
Tensile Proof Test	100 kpsi
Coating	Dual Layer PVC Coat

**ORDERING INFORMATION: -**  
**EVT-FxMxxCUO**



All rights reserved. Appearance and specifications are subject to change without prior notice

Distributed By