# **Detailed Specifications & Technical Data**





# M9A384 Fiber - Loose Tube Armored - Flooded Core/Single Armor/Double Jacket

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For more Information please call

1-800-Belden1



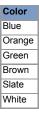
# **Description:**

FiberExpress Loose Tube (Campus) Armor Optical Fiber Cable Series is made up of rugged fiber cables for applications in hostile environments. This series of cables has corrugated steel armor which provides added protection for direct burial applications

Physical Characteristi	cs (Overall)
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Fiber Type:	50/125/250 Micron
Number of Fibers:	24
Core Diameter:	50 +/- 2.5
Core Non-Circularity:	5% Maximum
Clad Diameter:	125 +/- 2
Clad Non-Circularity:	1% Maximum
Primary Coating Material:	Acrylate
Primary Coating Diameter:	245 +/- 10
Secondary Coating Material:	Engineering Thermoplastic
Secondary Coating Diameter:	250

#### **Fiber Color Code Chart:**



Buffer	Tube	Diameter:	1.9

Buffer Tube Material:	PBT - Polybutylene Terephthalate
Buffer Tube Filling Material:	Synthetic Thixotropic Gel

### **Buffer Tube Color Code Chart:**

Number	Color
1	Blue
2	Orange
3	Green
4	Brown

Core-clad Offset: 1.5 Microns Maximum

### **Inner Jacket**

Inner Jacket Nominal Wall Thickness: 0.030

## Inner Jacket Color Code Chart:



#### **Outer Jacket**

**Outer Jacket Material:** 



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#### **ENGLISH MEASUREMENT VERSION**



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Outer Jacket Material

MDPE - Medium Density Polyethylene

Outer Jacket Nominal Wall Thickness: .060

Outer Jacket Diameter:

Nom. Dia. (in.) 0.530

Outer Jacket Ripcord: Aramid

Outer Jacket Color: Black

Strength Member

Strength Member Material: Fiberglass Epoxy Rod, Aramid Yarn

**Armor** 

Armor Type: Corrugated

Armor Material: Steel

Armor Thickness: .006

**Overall Cabling** 

Overall Cabling Fillers: Polyethylene

Overall Nominal Diameter: 0.530 in.

**Mechanical Characteristics (Overall)** 

Storage Temperature Range: -50°C To +80°C

Operating Temperature Range: -40°C To +70°C

Min. Bend Radius (Install)/Minor Axis: 10.600 in.

Min. Bend Radius for Long Term Application: 8 in.

Crush Resistance: Passes TIA/EIA 455-41, 2000 N/cm

Impact Resistance: Passes TIA/EIA 455-25, 2000 Impacts w/1.6 N-m

Yes

Solar Radiation Resistance: High

Water Penetration: Passes TIA/EIA 455-82

Compound Flow: Passes TIA/EIA 455-81

Cyclic Flexing: Passes TIA/EIA 455-104

Twist Bend: Passes TIA/EIA 455-85

Max. Load for Installation: 600 lbs.

Max. Load for Long Term Application: 180 lbs.

Proof Test: 100 kpsi

# **Applicable Specifications and Agency Compliance (Overall)**

**Applicable Standards & Environmental Programs** 

EU Directive 2002/95/EC (RoHS):

IEEE Specification: 802.3Z

EU Directive 2000/53/EC (ELV): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2006

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

Telecommunications Standards: 568B



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Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Burial:	Yes
Sunlight Resistance:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No
Optical Characteristics (Overall)	
Maximum Attenuation @ 850nm:	3.5 dB/km
Maximum Attenuation @ 1300nm:	1.0 dB/km
Point Loss @ 850nm & 1300nm:	.2
Minimum Bandwidth @ 850nm:	500 MHz*km
Minimum Bandwidth @ 1300nm:	500 MHz*km
Refractive Index @ 850nm:	1.496
Refractive Index @ 1300nm:	1.491
Numerical Aperature:	.2

### **Notes (Overall)**

Notes: Cable is flooded for moisture protection.

Maximum Gigabit Ethernet Length @ 850nm:

Maximum Gigabit Ethernet Length @ 1300nm:

## **Put Ups and Colors:**

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Item #	Putup	Ship Weight	Color	Notes	Item Desc	

600

600

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