

# **Product Bulletin**

**PB 305** 

# Brilliance® MaxiBend™ Tactical Fiber Optic Cables

Belden's field-rugged and bendresilient MaxiBend Tactical Fiber Optic cables are available in bulk cable or pre-terminated assemblies with a variety of connector options.



#### **Key Features**

- Available with core counts of 2, 4, 6, 8, 10 and 12. Other core counts available as special orders.
- Available in multi-mode (OM1) and single-mode (OS2)
- Crush-resistant and resilient with a thick layer of aramid strength members
- Round cable design for easy installation and survivability
- Polyurethane jacketed for abrasion, cut and chemical resistance
- Assemblies are precision machine-polished
- Assemblies available in custom lengths and with or without OX-Frame reel.
- 500 µm acrylate primary buffer coating over each optical fiber
- 900 µm diameter hard elastomeric secondary tight buffer protection on each optical fiber

#### **Assembly Connector Options**

- Hermaphroditic Expanded Beam Connectors
- Neutrik OpticalCON
- Delphi Harsh Environment Connectors
- Standard LC, ST or SC connectors

Broadcasters covering professional sporting events outdoors – such as PGA golf tournaments and NASCAR motor sports – face tough challenges in installing their mobile communications and broadcast systems. They are constantly seeking smaller, lighter weight equipment and cabling that can be easily transported in their mobile trucks and installed quickly and easily.

Belden MaxiBend Tactical Fiber cables are designed and constructed to facilitate fast, easy field deployment and to withstand the abuse from the harshest environments. These single-mode and multimode cables are ideal for use in digital camera transmissions such as HD-SDI, 3G-SDI, 4K, electronic news gathering (ENG) or electronic field production vehicles. Tactical Fiber cables are also appropriate for emergency communications systems, as well as mining and industrial applications, where ruggedness, long-runs, and bendtolerance are essential.

# Rugged, Yet Flexible Construction Ensures Reliable Outdoor Performance

Designed to military standards, Belden Tactical Fiber cables are ruggedly constructed for maximum performance, superior bend tolerance, and reliability. These tight buffered cables feature an aramid yarn strength member and an exceptionally tough, sunlight-resistant polyurethane outer jacket, making them highly resistant to abrasion, crushing and cut-through.

Belden Tactical Fiber is available in machine-polished, factory-terminated assemblies, with a wide range of connector options. From standard LC, SC, and ST fan-outs, to rugged and contamination-resistant expanded beam and Neutrik OpticalCON connectors, as well as Delphi harsh environment connectors. Most assemblies come packaged on our strong but lightweight, OX-Frame reels, for easy deployment and retrieval.

For more information on Belden Tactical Fiber bulk cable and assemblies visit info.belden.com/assembly-configurators



There is no better reel in the broadcast industry than OX-Frame Reels. Available only with Belden TAC fiber assemblies, not sold separately.



**UV-resistant PU** 

## Field Deployable Tactical Fiber Optic Cables

#### **Applications**

- ENG vehicles
- · Outdoor news, sporting or other events
- Digital camera transmission
- · Military communications
- Re-deployable communications
- Mining and industrial applications

#### **Product Description**

**Jacket Material** 

Small and lightweight with a rugged jacket, Tactical Cable provides a durable design for repeated deployment and retrieval cycles and a superior level of crush resistance. Designed to military standards.

Buffer	Polyester			
Strength Member	Aramid Yarn			
Color Code				
Jacket	Black			
Fiber/Buffer	Per EIA/TIA 598-C			
Fiber/Buffer 1	Blue			
Fiber/Buffer 2	Orange			
Fiber/Buffer 3	Green			
Fiber/Buffer 4	Brown			
Fiber/Buffer 5	Slate			
Fiber/Buffer 6	White			
Fiber/Buffer 7	Red			
Fiber/Buffer 8	Black			
Fiber/Buffer 9	Yellow			
Fiber/Buffer 10	Violet			
Fiber/Buffer 11	Rose			
Fiber/Buffer 12	Aqua			
Specifications				
Temperature Range				
Storage	-70 to +85°C			
Operating	-55 to +85°C			
Crush Resistance (EIA-455-41)	440 N/cm			
Impact Resistance (EIA-455-25)	200 Impacts @ 2.2 N-m			
Cyclic Flexing (EIA-455-104)	2000 cycles, min.			
Min. Bend Radius				
Installation	15 x OD			

## **Optical Specifications**

Single-mode Enhanced*	
Operating Wavelength (nm)	1310/1550
Max. Attenuation Tight Buffered (dB/km)	0.80/0.50
Multimode 62.5/125 μm Std./1Gbe	
Operating Wavelength (nm)	850/1300
Max. Attenuation Tight Buffered (dB/km)	3.50/1.25

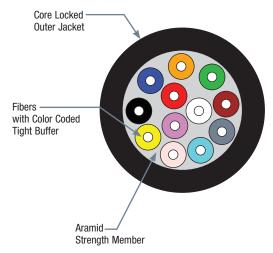
<sup>\*</sup>Low water peak Single-mode suitable for CWDM use complies with ITU G.652.c/d

Belden Part	Number		Outside Diameter		Weight		Max. Install Load	
Singlemode	62.5/ 125 μm	No. of Fibers	Inch	mm	Lbs./1000'	kg/km	Lbs.	N
B96566	B96571	2	0.210	5.5	19	28	330	1468
B96639	B96551	4	0.225	5.7	21	31	330	1468
B96567	B96572	6	0.240	6.0	23	34	330	1468
B96568	B96573	8	0.250	6.3	26	12	330	1468
B96569	B96574	10	0.265	6.7	28	13	330	1468
B96570	B96575	12	0.255	7.1	31	46	330	1468

Belden's 4 channel singlemode and multimode tactical cable has been tested and certified by Neutrik for use with the OpticalCon connector in Belden assemblies and for use by other Neutrik approved assembly facilities.

All optical fiber products can be supplied in compliance with RoHS regulations. Other glass types, strand counts, jacket formulations and colors are available by special order. Contact your authorized Belden distributor (www. belden.com) or call Belden Customer Service at 1.800.235.3361 (1.800.BELDEN.1)

# **Fiber Bundle Detail**



8 x OD

Long Term