DATASheet

Loose Tube (Campus) Indoor/Outdoor Plenum Series



OUTER JACKET

OVERALL
TAPE BARRIER

12 FIBERS

COLOR CODED
JACKET

UPJACKETED CENTRAL
STRENGTH FLEMENT

OVERALL
TAPE BARRIER

>12-144 FIBERS

BUNDLES OF UP TO
12 FIBERS EACH

Fiber Bundle Detail

Belden CDT Loose Tube (Campus) Optical Fiber Indoor/Outdoor Plenum cables are loose-tube buffered cables suited for outdoor applications such as lashed aerial or underground conduit.

The cables use dry waterblocking technology within the tubes and under the cables' jacket. The dry waterblocking technology is applied so that it remains in place while the cables are handled and installed. These cables are available in all-dielectric indoor/outdoor plenum rated constructions. Belden CDT offers these cables in 62.5 and 50 µm Multimode fiber and 8/125 µm Singlemode Enhanced fiber compositions.

Features & Benefits

- > Available in fiber counts up to 144 fibers
- > Dry waterblocking technology within the tubes and under the cables' jacket
- ➤ Available as Plenum rated OFNP/FT6 thereby eliminating the need for service entrance splicing to in-building cable
- > Full dielectric construction, no grounding required
- Fiber and sub-units are color coded for easy identification
- > Length markings in meters for easy determination of cable length
- > Small diameter and bend radius facilitate installation in tight spaces
- > Fibers grouped into sets of 12 for maximum density
- Available in Multimode 50 μm, 62.5 μm, Singlemode, and hybrid constructions
- Available in colored jackets for indoor only installations.

Applications

- > Medium to high fiber count requirements
- > Interbuilding installations
- > Lashed aerial
- > Indoor/outdoor
- > Campus Backbones
- > Data Centers
- > High Density Cable Trays.

Technical Specifications

Construction

- > Buffer Tube: Aramid reinforced Thermoplastic
- > Strength Member: E-Glass and Aramid Yarn
- > Central Strength Member: Upjacketed
- > Jacket:

Plenum (non-unitized): PVC Plenum (unitized): PVDF.

> Buffer:

Plenum: PVC Color coding (Jacket and Fibers): TIA/EIA 568-B.3, TIA/EIA 598-B.

Cable Color Code

The Indoor/Outdoor Plenum jacket is black in color. The buffer tubes are color coded as per ANSI/TIA/EIA-568 specifications. The standard color code allows for easy identification of fibers and is as follows: Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose and Aqua.





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Product Specifications

Crush Resistance (EIA-455-41)	2000 N/cm
Impact Resistance (EIA-455-25)	2000 Impacts
	w/1.6 N-m
Flexure (EIA-455-104)	2000 cycles min.
Minimum Bend Radius	
Installation (Short Term) - Load	20x cable diameter
Long Term - No Load	15x cable diameter
Plenum	UL/cUL rated Type OFNP / OFN FT6
	Flame Resistance NFPA 262
Temperature Range	
Storage	-40 to +80°C
Operating	-40 to +70°C

For More Information

For any other product information call: 1-800-262-9334 (USA & Canada), 1-514-822-7533 (International) or visit us at www.BeldenIBDN.com

All information is subject to change without notice, since Belden CDT reserves the right to change its products as progress in engineering and manufacturing methods or other circumstances may warrant.

Optical Specification

Fiber Type	Att	enuation (m dB/km			• •	RML Bandwidth (min.) MHz-km	
	850 nm	1300 nm	1550 nm	850 nm	1300 nm	850 nm	1300 nm
FX300 (62.5 μm)	3.50	1.25		200	500	220	500
FX600 (50 μm)	3.50	1.25		500	500	510	500
FX2000 (50 μm)	3.50	1.25		1500	500	2000**	500
Singlemode Enhanced		0.80*	0.50				

OFL: Overfill launch	RML: Restricted mode launch	* Wavelength: 1310 nm	** EMB: Effective Modal Bandwidth

Fiber Type	Gigabit Ethernet Reach (meters) IEEE 802.3z		10 Gigabit Ethernet Reach (meters)	10 Gigabit Ethernet Reach (meters)
	1000Base SX	1000Base LX	10GBase-S	10GBase-L
FX300 (62.5 μm)	300	550	33	300
FX600 (50 μm)	600	600	82	300
FX2000 (50 μm)	2000	600	300	300
Singlemode Enhanced		5000		10000

Mode launch conditioning patch cord is not required. For proper design, please refer to the Belden IBDN Optical Fiber Design Guide.

Singlemode Enhanced is a low Water Peak Singlemode for CWDM applications and complies with ITU G.652.c/d. Links longer than 550 m (as per standard) for the same link power budget are considered engineered links. To achieve a distance of 2000 m, please contact the Belden IBDN Technical support.





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Mechanical Characteristics

Fiber	Fibers	Outside	Weight	Minimum Bend Ra	adius	Maximum Load
Count	per Tube	Diameter		Installation	Long Term	Installation
6	6	6.7 mm (0.265 in.)	49 kg/km (33 lb/kft)	13.5 cm (5.3 in.)	10.2 cm (4.0 in.)	1423 Newton (320 lb)
12	12	6.7 mm (0.265 in.)	49 kg/km (33 lb/kft)	13.5 cm (5.3 in.)	10.2 cm (4.0 in.)	1423 Newton (320 lb)
24	12	9.12 mm (0.359 in.)	70 kg/km (47 lb/kft)	18.3 cm (7.2 in.)	13.7 cm (5.4 in.)	1801 Newton (405 lb)
36	12	9.12 mm (0.359 in.)	70 kg/km (47 lb/kft)	18.3 cm (7.2 in.)	13.7 cm (5.4 in.)	1801 Newton (405 lb)
48	12	9.12 mm (0.359 in.)	71 kg/km (48 lb/kft)	18.3 cm (7.2 in.)	13.7 cm (5.4 in.)	1801 Newton (405 lb)
72	12	10.9 mm (0.429 in.)	106 kg/km (71 lb/kft)	21.8 cm (8.6 in.)	16.3 cm (6.4 in.)	2602 Newton (585 lb)
96	12	12.73 mm (0.501 in.)	156 kg/km (105 lb/kft)	25.4 cm (10.0 in.)	19.1 cm (7.5 in.)	4017 Newton (903 lb)
144	12	16.89 mm (0.665 in.)	281 kg/km (189 lb/kft)	33.8 cm (13.3 in.)	25.4 cm (10.0 in.)	5618 Newton (1263 lb)

Ordering Information

> Alternative fiber counts are available. All fiber optic products can be supplied in compliance with RoHS regulations. A cable cut cost or minimum order quantity may apply. Please contact Customer Service for more details.

Loose Tube (Campus) Indoor/Outdoor Plenum Cable, UV Rated, all dielectric, UL/cUL OFNP FT6

FIBER COUNT	ORDERING NUMBER	ORDERING NUMBER	ORDERING NUMBER	ORDERING NUMBER
	MULTIMODE FX300, 62.5 μm	MULTIMODE FX600, 50 μm	MULTIMODE FX2000, 50 µm	SINGLEMODE ENHANCED
6 fibers	M9B202	M9A202	M9C202	M9W202
12 fibers	M9B204	M9A204	M9C204	M9W204
24 fibers	M9B205	M9A205	M9C205	M9W205
36 fibers	M9B206	M9A206	M9C206	M9W206
48 fibers	M9B207	M9A207	M9C207	M9W207
72 fibers	M9B209	M9A209	M9C209	M9W209
96 fibers	M9B211	M9A211	M9C211	M9W211
144 fibers	M9B215	M9A215	M9C215	M9W215

