



For more Information
please call
1-800-Belden1

Description

The BelOptix® Public Network Fiber Series addresses the converging technologies of CATV, Broadband and Telephony providing cable solutions for longhaul, local exchange, and MAN/WAN applications.

Physical Characteristics (Overall):

Fiber Type	Single Mode 125/245 Micron, Non-Dispersion Shifted
Number of Fibers	12
Core Diameter	8.3
Mode Field Diameter @ 1310nm	9.2 +/- 0.4
Mode Field Diameter @1550nm	10.5 +/- 1.0
Clad Diameter	125 +/- 1
Clad Non-Circularity	< 1.0 µm
Core-clad Concentricity Error	< 0.8 µm
Primary Coating Material	Acrylate
Primary Coating Diameter	245 +/- 10

Fiber Color Code Chart

Color
Blue
Orange
Green
Brown
Gray
White

Buffer Tube Diameter	2.5
Buffer Tube Material	PBT - Polybutylene Terephthalate
Buffer Tube Filling Material	Synthetic Thixotropic Gel

Buffer Tube Color Code Chart

Number	Color
1	Blue
2	Orange

Outer Jacket:

Outer Jacket Material

Outer Jacket Material
MDPE - Medium Density Polyethylene

Outer Jacket Nominal Wall Thickness	.055
Outer Jacket Ripcord	Aramid
Outer Jacket Color	Black

Strength Member:

Strength Member Material	Fiberglass Epoxy Rod, Fiberglass Yarn
--------------------------	---------------------------------------

Overall Cabling:

Overall Cabling Fillers	Foam Polypropylene
Overall Nominal Diameter:	0.417 in.

Mechanical Characteristics (Overall):

Operating Temperature Range	-40°C To +75°C
-----------------------------	----------------

ENGLISH MEASUREMENT VERSION

D6012FM Fiber - All Dielectric

Storage Temperature Range	-40°C to +75°C
Bulk Cable Weight:	59 lbs/1000 ft.
Min. Bend Radius (Install):	8.400 in.
Min. Bend Radius for Long Term Application:	4.200 in.
Crush Resistance	Passes TIA/EIA 455-41
Impact Resistance	Passes TIA/EIA 455-25
Solar Radiation Resistance	High
Water Penetration	Passes TIA/EIA 455-82
Compound Flow	Passes TIA/EIA 455-81
Cyclic Flexing	Passes TIA/EIA 455-105
Twist Bend	Passes TIA/EIA 455-85
Max. Load for Installation:	600 lbs.
Max. Load for Long Term Application:	135 lbs.
Proof Test:	100 kpsi

Applicable Specifications and Agency Compliance (Overall):**Applicable Standards:**

Other Specification	RUS PE-90 Compliant
---------------------	---------------------

Suitability:

Suitability - Outdoor	Excellent
Suitability - Aerial	Fair
Suitability - Burial	Excellent
Sunlight Resistance	High

Plenum/Non-Plenum:

Plenum (Y/N)	N
--------------	---

Optical Characteristics (Overall):

Maximum Attenuation @ 1310nm	0.35
Maximum Attenuation @ 1550nm	0.25
Point Loss @ 1310 & 1550nm	0.1
Dispersion @ 1310nm	< 3.5
Dispersion @ 1550 nm	< 18
Dispersion Slope	0.092
Zero Dispersion Wavelength	1300 - 1322

PMD

PMD (ps/nm-km)
< 0.5

Cutoff Wavelength	< 1260
Refractive Index @ 1310nm	1.470
Refractive Index @ 1550nm	1.470

Revision Number: 1 Revision Date: 05-14-2007

© 2007 Belden, Inc.
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use,

or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with the following environmental regulations: California Proposition 65 Consent Judgment For Wire & Cable Mfgs.(San Francisco Superior Court Nos. 312962 And 320342); EU RoHS (Directive 2002/95/EC, 27-Jan-2003); Material manufactured prior to the compliance date may still be in stock at Belden facilities and in our Distributor's inventory; and China Ministry of Information Industry order#39 (China RoHS). EU ELV (Directive 2000/53/EC, 18-Sept-2000); EU WEEE (Directive 2002/96/EC, 27-Jan-2003); EU BFR (Directive 2003/11/EC, 6-Feb-2003). The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information and belief at the date of its publication. The information provided in the Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.