



Company Highlights:

- Headquarters in New Jersey with local customer support.
- Provide factory-direct bulk fiber products at competitive price points.
- Just-in-time production system ensures 8~10 week lead times.
- Supply bulk fiber for RUS, RDOF, CARES act and other federal and state sponsored stimulus programs

Product Highlights:

- Gel or Gel-Free or Gel-Filled Loose Tube Fiber Optic Cables up to 288 strands.
- All-dielectric Self-Supporting Fiber Optic Cables up to 144 strands.
- Micro-duct (Air-Blown) Fiber Optic Cables up to 144 strands.
- Flat or Round Drop Cables with a toneable option.
- Closures, terminals, and connectorized fiber optic cables.

SMF G652.D Zero Water Peak Fiber Spec Comparison:

Items	Unit	Lexington Ames	Fujikura FutureGuide	Corning SMF-28e	OFS AllWave	
Attenuation at 1310 nm	dB/km	≤ 0.334	0.327	≤ 0.35	0.33 ~ 0.35	≤ 0.34
Attenuation at 1383 nm	dB/km	≤ 0.31	0.281	≤ 0.31	0.31 ~ 0.35	≤ 0.31
Attenuation at 1550 nm	dB/km	≤ 0.194	0.187	≤ 0.21	0.19 ~ 0.20	≤ 0.21
Attenuation at 1625 nm	dB/km	≤ 0.22	0.202	≤ 0.23	0.20 ~ 0.23	≤ 0.24
MFD at 1310 nm	μm	9.2 ± 0.4	9.15	9.2 ± 0.4	9.2 ± 0.4	9.2 ± 0.4
MFD at 1550 nm	μm	10.4 ± 0.5	10.3	10.4 ± 0.8	10.4 ± 0.5	10.4 ± 0.5
Dispersion value at 1550 nm	ps/nm.km	≤ 18.0	16.67	≤ 18	≤ 18.0	≤ 18.0
Zero dispersion slope	ps/(nm ² .km)	≤ 0.090	0.086	≤ 0.092	≤ 0.089	≤ 0.090
PMD link design value	ps/√km	< 0.1	0.05	≤ 0.08	≤ 0.06	< 0.06
PMD Individual value	ps/√km	< 0.15	0.03	≤ 0.1	≤ 0.2	< 0.1
Cladding diameter	μm	125 ± 0.7	125.1	125 ± 0.7	125 ± 0.7	125 ± 0.7
Core-clad concentricity	μm	≤ 0.5	0.11	≤ 0.8	≤ 0.5	≤ 0.5
Cladding non-circularity	%	≤ 0.7	0.22	≤ 1.0	≤ 0.7	≤ 1
Coating-cladding connectricity	μm	≤ 12	4.02	≤ 12.5	≤ 12	≤ 12
Tensile proof test	kpsi	≥ 120	125	≥ 120	≥ 100	≥ 100

- G.652D Single Jacket **Non-Armored** Gel Free or Gel Filled Loose Tube Fiber up to 576 Count
- G.652D Single Jacket **Single Armor** Gel Free or Gel Filled Loose Tube Fiber up to 576 Count
- G.652D **Microduct** Air Blown Gel Filled Single Jacket Non-Armored up to 288 Count
- G.652D **All Dielectric Self-Supporting** Gel Filled Loose Tube Fiber up to 144 Count (NESC-L/M/H)

Outside Plant Cables

Lexington Ames is specialized in loose tube fiber optic cables for FTTH projects. High quality glass fiber protected by resilient but flexible materials enhance optical performance and ease of installation at the same time. Our product offerings range from everyday dielectric gel-free to armored gel-free to air-blown for microduct to all-dielectric self-supporting to indoor/outdoor drop fiber optic cables.

An innovative exterior structure equips the fiber, handling stress from extreme fluctuating temperatures. Should excess moisture pose as a primary concern, water blocking yarn swells up to absorb any such leakage, thus protecting the fiber cores. Gel filling or water blocking tape insulation inside the loose tube fiber stops water penetration and prevents stress fractures as well, wholly enhancing the cable.



LA-LT-035 Series (SJNA)
Dielectric Dry LT Cable up to 576F



LA-LT-041 Series (SJSA)
Light-armored Dry LT Cable up to 576F



LA-LT-018 Series (ADSS)
ADSS up to 300FT NESC-H & 144F



LA-MICRO-001 Series (SJNA)
Air-Blown for Microduct up to 144F

Indoor/Outdoor Cables

Lexington Ames offers the flat and round indoor/outdoor cables with a toneable option that are economical yet fully equivalent to the existing cables in its characteristics. Various drop cable types include: flat LT cables up to 12F, pushable/blowable LT cables up to 24F, flame-retardant DJ tight-buffered cable, steel-wire armored cable up to 24F. These are indoor/outdoor rated distribution cables intended for long distance runs at high speeds.



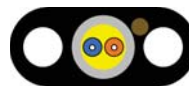
LA-FD-160107A



LA-FD-14031A



LA-1701192A Pushable



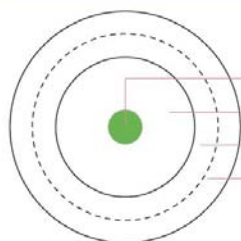
LA-FD-16TB02



LA-DRA-D150121A AMR

Glass Fiber

Cross Section of Single Mode Fiber



- Step Index Core(Silica Doped with Germanium Dioxide):SiO₂ + GeO₂
- Matched Silica Cladding : SiO₂
- Low Modulus Inner Coating : Natural Color Acrylate
- Abrasion Resistance Outer Coating : Natural Color Acrylate

Optical Specifications

Attenuation

Wavelength(nm)	Attenuation(dB/km)
1310nm	≤ 0.35
1383nm	≤ 0.30**
1550nm	≤ 0.21
1625nm	≤ 0.24

** Attenuation at 1383nm is only applied for WideBand Fiber.

→ Attenuation uniformity

Point discontinuity is less than 0.1dB at 1550nm

Attenuation vs. wavelength

Wavelength(nm)	Attenuation(dB/km)
1285 ~ 1330	≤0.05 (Max. - Min.)
1525 ~ 1565	≤0.03 (Max. - Min.)
1565 ~ 1610	≤0.03 (Max. - Min.)

Attenuation with bending

Mandrel Diameter(mm)	Number of Turns	Wavelength (nm)	Induced Attenuation(dB)
60	100	1625	≤0.1

Chromatic dispersion

Dispersion (ps/nm.km)	1290 ~ 1330nm	≤2.8
	1550nm	≤18.0
Zero Dispersion Wavelength(λ ₀) (nm)	1300~1324	
Zero Dispersion Slope(S ₀) (ps/nm ² .km)	≤0.092	

Polarization mode dispersion

PMD Link Value (ps/√km)	≤0.1
Maximum Individual Fiber (ps/√km)	≤0.2

Cutoff wavelength

Fiber Cutoff Wavelength(λ _c) (nm)	1150~1330
Cable Cutoff Wavelength(λ _{cc}) (nm)	≤ 1260

Mode field diameter

Wavelength(nm)	MFD(μm)
1310	9.3 ± 0.4
1550	10.3 ± 0.5

Geometrical specifications

Cladding Diameter(μm)	125 ± 1.0
Core/Cladding Concentricity(μm)	≤ 0.8
Cladding Non-Circularity(%)	≤ 0.8
Coating Diameter (μm)	245 ± 10
Coating/Cladding Concentricity(μm)	≤ 10
Fiber Curl(m)	≥4

Mechanical specifications

→ Proof test

The entire fiber length is subjected to a tensile proof stress ≥ 100 kpsi(0.69GPa)

→ Coating strip force : 1.3N ≤ SF ≤ 8.9N

Environmental specifications

Test Condition	Induced Attenuation(dB/km)	
	1310nm	1550nm
Temperature Dependence(-60°C to +80°C)	≤0.05	≤0.05
Temp-Humid Cycling(-10°C to +85°C)(85~98%RH)	≤0.05	≤0.05
Water Immersion(23±2°C)	≤0.05	≤0.05
Heat Aging(85±2°C)	≤0.05	≤0.05