



Outdoor Drop Cable - LODC

The specifications are suitable for the general requirements of fiber optic telecommunicating and FTTH application.

Features

- Figure 8 design with supporting wire for hanging
- Outdoor/Indoor short distance cabling
- Small bending,
- light weight and highly flexible
- Easy to Install and terminate
- PVC or LSZH jacket is available

Applications

- FTTH network
- Aerial application
- Outdoor/Indoor short distance cabling

Specifications

General	1 - 2 Core	4 - 12 Core
Flame resistance		IEC60332-1
Temperature cycling (-40°C-70°C)		Additional attenuation≤0.4dB/km
Temperature Range		
Storage		-40°C-70°C
Installation		-20°C-60°C
Operating		-40°C-60°C
Bending radius		
load	30 mm	60mm
unload	15 mm	30mm
Dimensions: bow-type drop cable portion	2.0 x 3.0 mm	3.0×4.0mm
overall	2.0 x 5.2 mm	3.0×6.3mm

Mechanical Characteristics	Value
Impact	1N.m,jacket no damage, additional attenuation≤0.4dB
Repeating bending	R=30H,20N,300cycles,jacket no damage, additional attenuation≤0.4dB
Torsion	20 N,20cycles, ±180°,jacket no damage, additional attenuation≤0.4dB
Max. Tension (Short-term)	600 N
Max. Tension (Long-term)	300 N
Max. Crushing Resistance (Short-term)	2200 N
Max. Crushing Resistance (Long-term)	1000 N
Bending Radius(Loading)	20 D
Bending Radius(Without Loading)	10 D

Fiber Specifications (Singlemode)

Characteristics		G652D	G657A1	G657A2
Optical Characteristics				
Attenuation	1310nm	≤ 0.40 dB/km	≤ 0.40 dB/km	≤ 0.40 dB/km
	1383nm*	≤ 0.34 dB/km	≤ 0.35 dB/km	≤ 0.35 dB/km
	1460nm*	-	≤ 0.25 dB/km	≤ 0.25 dB/km
	1490nm*	-	-	≤ 0.23 dB/km
	1550nm	≤ 0.30 dB/km	≤ 0.30 dB/km	≤ 0.30 dB/km
	1625nm*	≤ 0.23 dB/km	≤ 0.23 dB/km	≤ 0.23 dB/km
Attenuation vs. Wavelength	1285-1330nm*	≤ 0.03 dB/km	≤ 0.03 dB/km	≤ 0.03 dB/km
Max. α difference	1525-1575nm*	≤ 0.02 dB/km	≤ 0.02 dB/km	≤ 0.02 dB/km
Dispersion coefficient	1285-1340nm	≥ -3.4 ≤ 3.4 ps/(nm · km)	≥ -3.4 ≤ 3.4 ps/(nm · km)	-
	1550nm	≤ 18 ps/(nm · km)	≤ 18 ps/(nm · km)	-
	1625nm	≤ 22 ps/(nm · km)	≤ 22 ps/(nm · km)	-
Zero dispersion wavelength		1312±12 nm	1300-1324 nm	1300-1324 nm
Zero dispersion slope		≤ 0.091 ps/nm ² · km	≤ 0.092 ps/nm ² · km	≤ 0.092 ps/nm ² · km
Typical value		0.086 ps/nm ² · km	0.086 ps/nm ² · km	0.04 ps/nm ² · km
PMD				
Maximum Individual Fibre		≤ 0.1 ps/√km	≤ 0.1 ps/√km	≤ 0.1 ps/√km
Link Design Value(M=20,Q=0.01%)		≤ 0.06 ps/√km	≤ 0.06 ps/√km	≤ 0.06 ps/√km
Typical value		0.04 ps/√km	0.04 ps/√km	0.04 ps/√km
Cable cutoff wavelength λ _{cc}		≤ 1260 nm	≤ 1260 nm	≤ 1260 nm
Mode field diameter(MFD)	1310nm	8.7-9.5 um	8.4-9.2um	8.4-9.2 um
	1550nm	9.9-10.9 um	9.3-10.3 um	9.3-10.3 um
Effective group index of refraction(Neff)1310nm		1.466	1.466	1.466
	1550nm	1.467	1.467	1.467
Point discontinuities	1310nm	≤ 0.05 dB	≤ 0.05 dB	≤ 0.05 dB
	1550nm	≤ 0.05 dB	≤ 0.05 dB	≤ 0.05 dB
Geometrical Characteristics				
Fiber Core Diameter		9 +/-1um	9 +/-1um	9 +/-1um
Cladding diameter		125.0±0.7 um	125.0±0.7 um	125.0±0.7 um
Cladding non-circularity		≤ 1.0 %	≤ 0.7 %	≤ 0.7 %
Coating diameter		245.0±7 um	245.0±5 um	245.0±5 um
Coating-cladding concentricity error		≤ 12.0 um	≤ 12.0 um	≤ 12.0 um
Coating non-circularity		≤ 6.0 %	≤ 6.0 %	≤ 6.0 %
Core-cladding concentricity error		≤ 0.6 um	≤ 0.5 um	≤ 0.5 um
Curl(radius)		≥ 4 m	≥ 4 m	≥ 4 m
Delivery length		2.1 to 50.4 km/reel	2.1 to 50.4 km/reel	2.1 to 50.4 km/reel

*Attenuation loss of barefiber

Fiber Specifications (Multimode)

Characteristics		62.5/125 (OM1)	50/125 (OM2)	OM3/OM4	OM5
Geometry Characteristics					
Core Diameter		62.5±2.5 um	50±2.5 um	50±2.5 um	50±2.5 um
Core Non-circularity		≤ 5.0 %	≤ 5.0 %	≤ 5.0 %	≤ 5.0 %
Cladding Diameter		125.0±1.0 um	125.0±1.0 um	125.0±1.0 um	125.0±1.0 um
Cladding Non-circularity		≤ 1.0 %	≤ 1.0 %	≤ 0.6 %	≤ 0.6 %
Coating Diameter		245±7 um	245±7 um	245±7 um	245±7 um
Coating/Cladding Concentricity Error		≤ 10.0 um	≤ 10.0 um	≤ 10.0 um	≤ 10.0 um
Coating Non-circularity		≤ 6.0 %	≤ 6.0 %	≤ 6.0 %	≤ 6.0 %
Core/Cladding Concentricity Error		≤ 1.5 um	≤ 1.5 um	≤ 1.0 um	≤ 1.0 um
Delivery Length		up to 17.6 km/reel	up to 17.6 km/reel	up to 8.8 km/reel	up to 8.8 km/ reel
Optical Characteristics					
Attenuation	850nm	≤ 3.5 dB/km	≤ 3.5 dB/km	≤ 3.5 dB/km	≤ 3.5 dB/km
	953nm*	-	-	-	≤ 1.7 dB/km
	1300nm	≤ 1.5 dB/km	≤ 1.5 dB/km	≤ 1.5 dB/km	≤ 1.5 dB/km
Overfilled Modal Bandwidth	850nm	≥ 200 MHz · km	≥ 500 MHz · km	≥ 1500/ ≥ 3500 MHz · km	≥ 3500 MHz · km
	953nm	-	-	-	≥ 1850 MHz · km
	1300nm	≥ 500 MHz · km	≥ 500 MHz · km	≥ 500/ ≥ 500 MHz · km	≥ 500 MHz · km
Effective Modal Bandwidth	850nm	-	-	≥ 2000/ ≥ 4700 MHz · km	≥ 4700 MHz · km
	953nm	-	-	-	≥ 2470 MHz · km
10Gb/sWDM		-	-	-100/150 m	150 m
40Gb/sWDM		-	-	300/500 m	440 m
40GBASE-SR4 / 100GBASE SR10	850nm	-	-	1000/1100 m	200 m
10GBASE-SR	850nm	-	150 m	300/550 m	-
1000BASE-SR	850nm	-	750 m	1000/1100 m	-
DMD Specidication					
Numerical Aperture		0.275±0.015	0.200±0.015	0.200±0.015	0.200±0.015
Group Refractive index		1,496	1,482	1,482	1,482
		1,491	1,477	1,477	1,477
Zero Dispersion Wavelength, λ ₀		1320-1365 nm	1295-1340 nm	1295-1340 nm	1297-1328 nm
Zero Dispersion Slope,S ₀		-	-	-	≤ 4(-103)/(840λ√840) ⁴
		-	-	-	ps/nm ² · km
Zero Dispersion Slope,S ₀ 1295nm ≤ λ ₀ ≤ 1310nm	1310nm ≤ λ ₀ ≤ 1340nm	-	≤ 0.105 ps/nm ² · km	≤ 0.105 ps/nm ² · km	-
	1320nm ≤ λ ₀ ≤ 1348nm	-	≤ 0.000375(1590-λ ₀) ps/nm ² · km	-	-
	1348nm ≤ λ ₀ ≤ 1365nm	≤ 0.11 ps/nm ² · km	-	≤ 0.000375(1590-λ ₀)ps/nm ² · km	-
	1348nm ≤ λ ₀ ≤ 1365nm	≤ 0.001(1458-λ ₀) ps/nm ² · km	-	-	-

*Attenuation loss of barefiber

Ordering Information

* Ordering Code Example

