

2-12 Strand SSF™ Micro-Distribution LT, Riser, Plenum I/O, LSZH 9/125, G657 A2/B2 OS2



Cleerline SSF™ 2-12 strand fiber Micro Distribution cable is composed of loose tube style SSF™ cable with an overall 3.0 mm Riser, Plenum, or CPR-rated LSZH jacket.

SSF™ Micro Distribution is ideal for inter-building or intra-building data communication backbones.

Cleerline SSF™ Micro Distribution single-mode is fully compatible with all common connector systems for standard 9/125 single-mode fiber.

The included SSF™ fiber provides extreme durability and strength. Flex tested to 2000 cycles, impact to 1500 cycles, and crush to 100 kgf/mm.



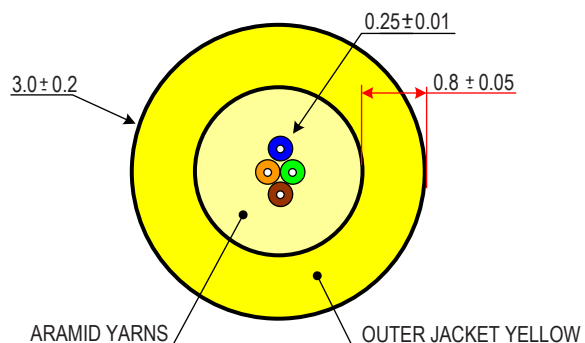
3D VIEW

FEATURES AND BENEFITS

- High mechanical strength, superior fatigue (Nd = 30)
- Compatible with common connector systems for 9/125 Single-mode
- Up to 10,000x the bend longevity of traditional fiber
- Integral SSF™ coating provides glass protection
- Increased safety due to incredible bend insensitivity
- Exclusive 250 µm Soft Peel acrylate

APPLICATIONS

- Inter-/Intra-building voice or data communication
- Installation in ducts or underground conduit
- Fiber-to-the-desk (FTTD) / Fiber-to-the-Home (FTTH)
- UL listed type OFNP for installation in ducts, plenums and other spaces used as environmental air returns when installed in accordance with NEC article 770-51 (a) and 770-53(a)



TYPICAL CROSS SECTION

PART NUMBER	FIBERS	DESCRIPTION	TYPE RISER/PLENUM/LSZH	O.D.	WEIGHT (LB / 1000 FT)
2D9125SMOS2X	2 Fibers	2 Strand 9/125 SSF - 1000 ft Spool	X= R/P/L	3.0 mm	6.9
2D9125SMOS2X-B	2 Fibers	2 Strand 9/125 SSF - Cut to Order	X= R/P/L	3.0 mm	6.9
4D9125SMOS2X	4 Fibers	4 Strand 9/125 SSF - 1000 ft Spool	X= R/P/L	3.0 mm	6.9
4D9125SMOS2X-B	4 Fibers	4 Strand 9/125 SSF - Cut to Order	X= R/P/L	3.0 mm	6.9
6D9125SMOS2X	6 Fibers	6 Strand 9/125 SSF - 1000 ft Spool	X= R/P/L	3.0 mm	6.9
6D9125SMOS2X-B	6 Fibers	6 Strand 9/125 SSF - Cut to Order	X= R/P/L	3.0 mm	6.9
6D9125SMOS2P-B2K	6 Fibers	6 Strand 9/125 SSF - 2000 ft Spool	Plenum	3.0 mm	6.9
12D9125SMOS2X	12 Fibers	12 Strand 9/125 SSF - 1000 ft Spool	X= R/P/L	3.0 mm	6.9
12D9125SMOS2X-B	12 Fibers	12 Strand 9/125 SSF - Cut to Order	X= R/P/L	3.0 mm	6.9

CONSTRUCTION

FIBER	
Fibers	2-12
Type	9/125 Single-mode OS2
Coating	250 µm "Soft Peel" S-Type Coating
Color Coding	Per TIA/EIA 598C

JACKET	
Type	Riser Rated PVC (Indoor) Plenum Rated PVC + UV I/O / CPR LSZH (I/O)
Color	Yellow
Outer Diameter	3.0 mm
Markings	Sequential Foot Markings
Strength Member	Aramid (Plenum + water blocking yarns)

PHYSICAL DATA	
Storage Temperature Range	-40°C to +80°C
Operating Temperature Range	-20°C to +75°C
Max Tensile Load (Installation)	225 lbf / 102 kgf (1000N)
Max Tensile Load Long Term	112 lbf / 50 kgf (500N)
Min. Bend Radius, Unloaded	1 x O.D.
Min. Bend Radius, Operation	3.0 mm
Cable Outside Diameter, Nominal	3.0 mm
Cable Package	1000 ft Reel or customer request, spooled
Rating	FT4 - Riser / FT6-Plenum / CPR LSZH
Crush Resistance (TIA/EIA 455-41A)	100 kgf / mm or 200 lbf / mm
Impact Resistance (TIA/EIA 455-25B)	1500 impact cycles
Flexing @ 90 degrees (TIA/EIA 455-104A)	2000 flexing cycles

ENVIRONMENTAL CHARACTERISTICS	
Temperature Dependence, 1310 nm and 1550 nm Induced Attenuation -60°C to + 85°C	≤ 0.5 dB / km
Watersoak Dependence, 1310 nm and 1550 nm Induced Attenuation at 20°C for 30 days	≤ 0.5 dB / km
Damp Heat Dependence, 1310 nm and 1550 nm Induced Attenuation at 85°C, 85% R.H., 30 days	≤ 0.5 dB / km

PHYSICAL CHARACTERISTICS (SSF™ FIBER)	
Core / Hybrid Cladding Concentricity Error	≤ 0.5 µm
Hybrid Cladding Diameter	125 ± 0.7 µm
Hybrid Cladding Non-Circularity	≤ 1.0%
Soft Peel Jacket Identifier	245 ± 10 µm
Coating Strip Force	≤ 100 g
Fiber Curl	≥ 2 m
Proof Test	0.69 Gpa (100 kpsi)
Dynamic Fatigue (n _d) 23°C, 41% R.H.	= 30

OPTICAL CHARACTERISTICS (SSF™ FIBER)		
Attenuation Coefficient	1310 nm	≤ 0.35 dB/km
	1550 nm	≤ 0.21 dB/km
Bend Induced Attenuation, 1550 nm	1 turn around a 7.5 mm radius mandrel	Typical = 0.15dB ITUT-T G657 ≤ 0.5 dB
	1 turn around a 7.5 mm radius mandrel	Typical = 0.35 ITUT-T G657 ≤ 1.0 dB
Bend Induced Attenuation, 1625 nm	1310 nm	8.6 ± 0.4 µm
	1550 nm	9.7 ± 0.5 µm
Mode Field Diameter		
Cable Cut-off Wavelength	≤ 1260 nm	
Zero Dispersion Wavelength	1300 nm - 1324 nm	
Zero Dispersion Slope	0.092 ps / (nm ² · km)	

BACKSCATTER CHARACTERISTICS		
Attenuation Directional Uniformity	≤ 0.03 dB/km	
Attenuation Uniformity	≤ 0.05 dB	
Group Index of Refraction	1310 nm	1.467
	1550 nm	1.468

COMPLIANCE	
UL Listed Type OFNR, CSA FT4, IECA S-83-596 & OFNP, CSA FT6 / IECA S-104-696. 2- 12 Strand LSZH Listed CPR Cca-s1a,d1,a1. DoP Available on Request. RoHS Compliant Directive 2011/65/EU	