Simplex SSF™

Riser/Plenum I/O/LSZH, 50/125, OM3

Cleerline SSF™ Simplex cable is composed of a single SSF™ fiber with an overall 3.0 mm Riser, Plenum, or CPR-rated LSZH jacket.

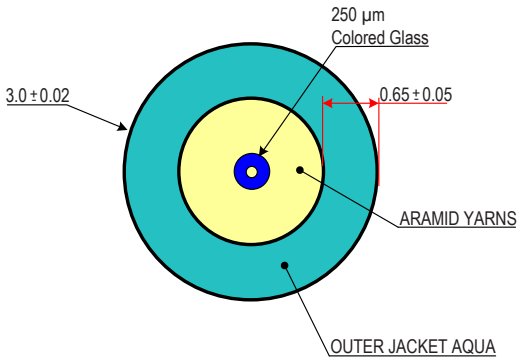
SSF™ Simplex is ideal for inter-building or intra-building data communication backbones.

Cleerline SSF™ Simplex multimode is fully compatible with all common connector systems for standard 50/125 multimode fiber. The included SSF™ fiber provides extreme durability and strength, with up to 10,000 times the bend insensitivity of traditional fiber.

3D VIEW

FEATURES AND BENEFITS

- High mechanical strength, superior fatigue (Nd = 30)
- Compatible with common connector systems for 50/125 Multimode
- 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



TYPICAL CROSS SECTION

APPLICATIONS

- Inter-/Intra-building voice or data communication
- Installation in ducts or underground conduit
- Fiber-to-the-desk (FTTD) / Fiber-to-the-Home (FTTH)
- ETL 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)

PART NUMBER	FIBERS	DESCRIPTION	TYPE RISER/PLENUM/LSZH	O.D.	WEIGHT (LB / 1000 FT)
S50125MOM3X	1 Fiber	Simplex 50/125 SSF - 1000 ft Spool	X= R/P/L	3.0 mm	6.61
S50125MOM3X-B	1 Fiber	Simplex 50/125 SSF - Cut to Order	X= R/P/L	3.0 mm	6.61

CONSTRUCTION

FIBER	
Fibers	1
Type	50/125 Multimode OM3
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-rated LSZH (Indoor/Outdoor)
Color	Aqua
Outer Diameter	3.0 m
Markings	Sequential Foot Markings
Strength Member	(Plenum + water blocking yarns)

PHYSICAL DATA	
Storage Temperature Range	-40°C to +85°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.
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
Impact Resistance (TIA/EIA 455-25B)	1500 impact cycles
Flexing @ 90 degrees (TIA/EIA 455-104A)	2000 flexing cycles

ENVIRONMENTAL CHARACTERISTICS (SSF™ FIBER)	
Temperature Dependence, 850 nm and 1300 nm Induced Attenuation -60°C to + 85°C	≤ 0.5 dB / km
Watersoak Dependence, 850 nm and 1300 nm Induced Attenuation at 20°C for 30 days	≤ 0.5 dB / km
Damp Heat Dependence, 850 nm and 1300 nm Induced Attenuation at 85°C, 85% R.H., 30 days	≤ 0.5 dB / km
Dry Heat Dependence, 850 nm and 1300 nm Induced Attenuation at 85°C, 30 days	≤ 0.5 dB / km

PHYSICAL CHARACTERISTICS (SSF™ FIBER)	
Core Diameter	50.0 ± 2.5 µm
Core Non-circularity	≤ 6%
Core / Hybrid Cladding Concentricity Error	≤ 3.0 µm
Hybrid Cladding Diameter	125 ± 2 µm
Hybrid Cladding Non-Circularity	≤ 2.0%
Soft Peel Jacket Identifier	245 ± 10 µm
Coating Strip Force	100 g
Fiber Curl	≥ 2 m
Proof Test	100 kpsi
Dynamic Fatigue (n_d) 23°C, 41% R.H.	= 30
Length	1.0 - 8.8 Km

OPTICAL CHARACTERISTICS (SSF™ FIBER)		
Attenuation Coefficient	850 nm	≤ 3.5 dB/km
	1300 nm	≤ 1 dB/km
Bend Induced Attenuation, 850 nm	2 turns around 15 mm radius mandrel	≤ 0.2 dB
	2 turns around 7.5 mm radius mandrel	≤ 0.5 dB
Numerical Aperture		0.200 ± 0.015
Overfilled Modal Bandwidth	850 nm	≥ 1500 MHz · km
	1300 nm	≥ 500 MHz · km
High Performance EMB	850 nm	≥ 2000 MHz · km

BACKSCATTER CHARACTERISTICS		
Attenuation Directional Uniformity	≤ 0.05 dB/km	
Attenuation Uniformity	≤ 0.05 dB	
Group Index of Refraction	850 nm	1.481
	1300 nm	1.476

COMPLIANCE
ETL Listed Type OFNR, CSA FT4, IECA S-83-596 & OFNP, CSA FT6 / IECA S-104-696. LSZH Listed CPR Cca-s1a,d1,a1. DoP Available on Request. RoHS Compliant Directive 2011/65/EU SSF™ conforms to the requirement of IEC 60793 A1a, ISO/IEC 11801 & ITU-T G.651.1 850 nm Laser-Optimized 50 µm core multimode fiber for 10 Gb/s and above applications.