

# 9/125 SSF™ Single Mode OS2 3.0 mm Distribution Micro Distribution Riser / Plenum I/O / LSZH

Type: OS2, OFNR, OFNP, CPR LSZH Type G.657.A2, G657.B2, G652.D

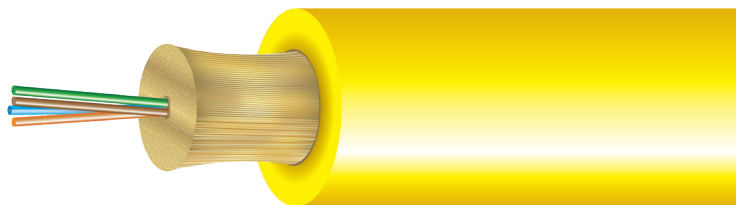


Cleerline SSF™ 2-12 strand fiber Micro Distribution cable is composed of distribution style SSF™ cable with an overall 3.0 mm Riser, Plenum, or CPR-rated LSZH jacket.

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.



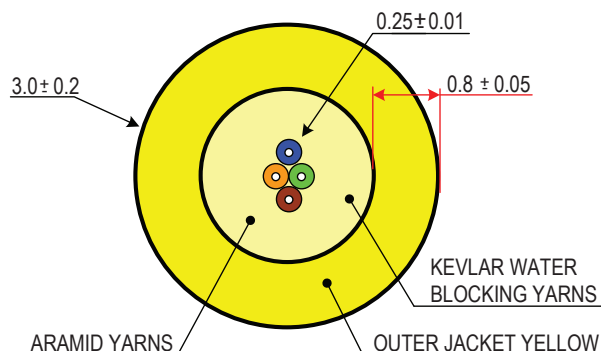
3D VIEW

## 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
12D9125SMOS2X	12 Fibers	12 Strand 9/125 SSF - 1000 ft Spool	X= R/P/L	3.0 mm	6.9
12D9125SMOS24X-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	Kevlar (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)	1000 N (225 lbf)
Max Tensile Load Long Term	500 N (112 lbf)
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
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	≤ 0.05 dB / km
Induced Attenuation	-40°C to + 85°C
Watersoak Dependence, 1310 nm and 1550 nm	≤ 0.05 dB / km
Induced Attenuation at 20°C for 30 days	
Damp Heat Dependence, 1310 nm and 1550 nm	≤ 0.05 dB / km
Induced Attenuation at 85°C, 85% R.H., 30 days	
Dry Heat Dependence, 1310 nm and 1550 nm	≤ 0.05 dB / km
Induced Attenuation at 85°C, 30 days	

PHYSICAL CHARACTERISTICS		
Core / Hybrid Cladding Concentricity Error	≤ 0.5 µm	
Hybrid Cladding Diameter	125 ± 0.7 µm	
Hybrid Cladding Non-Circularity Error	≤ 1.0%	
Soft Peel Jacket Identifier	250 ± 0.7 µm	
Coating Strip Force	≤ 100 g	
Fiber Curl	≥ 2 m	
Proof Test	100 kpsi	
Dynamic Fatigue 23°C, 41% R.H.	> 30 nD	
Bend Induced Attenuation, 1550 nm	1 turn around 10 mm radius	≤ 0.3 dB
	10 turns around 15 mm radius mandrel	≤ 0.03 dB
Bend Induced Attenuation, 1625 nm	1 turn around 10 mm radius	≤ 1.0 dB
	10 turns around 15 mm radius mandrel	≤ 0.2 dB

OPTICAL CHARACTERISTICS		
Attenuation Coefficient	1310 nm	≤ 0.35 dB/km
	1550 nm	≤ 0.21 dB/km
Mode Field Diameter	1310 nm	8.6 ± 0.4 µm
	1550 nm	9.7 ± 0.5 µm
Cable Cut-off Wavelength	≤ 1260 nm	
Zero Dispersion Wavelength	1310 nm - 1324 nm	
Zero Dispersion Slope	0.092 ps / nm <sup>2</sup> · km	

BACKSCATTER CHARACTERISTICS		
Attenuation Directional Uniformity	≤ 0.03 dB/km	
Attenuation Uniformity	≤ 0.05 dB/km	
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. GR-409 2- 12 Strand LSZH Listed CPR Cca-s1a,d1,a1. DoP Available on Request. RoHS Compliant Directive 2011/65/EU	