

# 50/125 SSF™ Multimode OM3 24 - 144 Strand Cable Micro Distribution Riser / Plenum I/O / LSZH

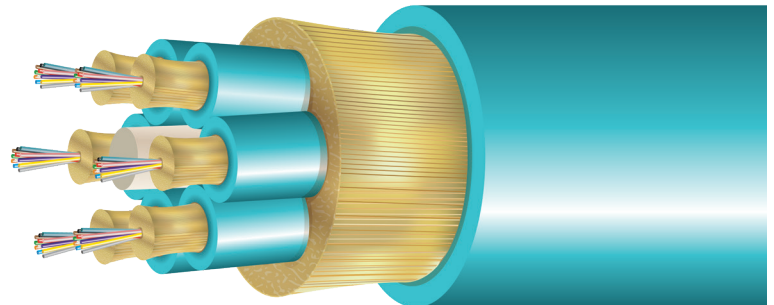
Type: OM3, OFNR, CSA FT4 / OFNP, CSA FT6 / LSZH



Cleerline SSF™ 24-144 strand fiber Micro Distribution cable is composed of 2 to 12 distribution style subunits and optional strength member contained in an overall Riser, Plenum, or LSZH jacket.

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

Cleerline SSF™ Micro Distribution Multimode is fully compatible with all common connector systems for standard 50/125 multimode fiber. The included SSF™ fiber provides extreme durability and strength.



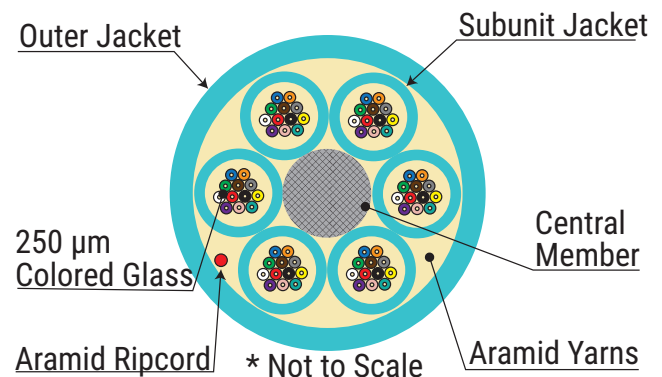
3D VIEW

## FEATURES AND BENEFITS

- High mechanical strength, superior fatigue (nd = 30)
- 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
- 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)	MIN. BEND RADIUS, INSTALLATION	MIN. BEND RADIUS, OPERATION
24D50125MOM3X	24 Fibers	24 Strand - 1000 ft Spool	X= R/P/L	8.2 mm	31.5	12.3 cm	8.2 cm
24D50125MOM3X-B	24 Fibers	24 Strand - Cut to Order	X= R/P/L	8.2 mm	31.5	12.3 cm	8.2 cm
48D50125MOM3X	48 Fibers	48 Strand - 1000 ft Spool	X= R/P/L	8.6 mm	51	12.9 cm	8.6 cm
48D50125MOM3X-B	48 Fibers	48 Strand - Cut to Order	X= R/P/L	8.6 mm	51	12.9 cm	8.6 cm
72D50125MOM3X	72 Fibers	72 Strand - 1000 ft Spool	X= R/P/L	10.5 mm	75.6	15.75 cm	10.5 cm
72D50125MOM3X-B	72 Fibers	72 Strand - Cut to Order	X= R/P/L	10.5 mm	75.6	15.75 cm	10.5 cm
96D50125MOM3X2	96 Fibers	96 Strand - 1000 ft Spool	X= R/P/L	9.3 mm	60.9	18.6 cm	9.3 cm
96D50125MOM3X2-B	96 Fibers	96 Strand - Cut to Order	X= R/P/L	9.3 mm	60.9	18.6 cm	9.3 cm
144D50125MOM3X2	144 Fibers	144 Strand - 1000 ft Spool	X= R/P/L	10.6 mm	76.2	21.2 cm	10.6 cm
144D50125MOM3X2-B	144 Fibers	144 Strand - Cut to Order	X= R/P/L	10.6 mm	76.2	21.2 cm	10.6 cm

## CONSTRUCTION

FIBER	
Fibers	24, 48, 72, 96, 144
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 / LSZH (Indoor/Outdoor)
Color	Aqua
Outer Diameter	Varies by part number
Subunit Diameter	3.0 mm/ 96, 144 Strand Subunit = 2.0 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)	Varies by part number
Max Tensile Load Long Term	500 N (112 lbf)
Min. Bend Radius, Unloaded	10 x O.D.
Cable Outside Diameter, Nominal	Varies by part number
Subunit Bend Radius, Unloaded	1 x O.D.
Cable Package	1000 ft Reel or customer request, spooled
Rating	FT4 - Riser / FT6-Plenum / 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 <sub>d</sub> ) 23°C, 41% R.H.	≥ 31.72	
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
Length	1.0 - 8.8 Km	

OPTICAL CHARACTERISTICS (SSF™ FIBER)		
Attenuation Coefficient	850 nm	≤ 4.0 dB/km
	1300 nm	≤ 1.5 dB/km
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 (SSF™ FIBER)		
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	
UL Listed Type OFNR, CSA FT4, IECA S-83-596 & OFNP, CSA FT6 / IECA S-104-696. LSZH Listed CPR Rating TBD. DoP Available on Request. RoHS Compliant Directive 2011/65/EU SSF™ conforms to the requirement of IEC 60793-2-10 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.	