

# 50/125 SSF™ Multimode + 18-2 AWG Copper Fiber + Power - Plenum Rated

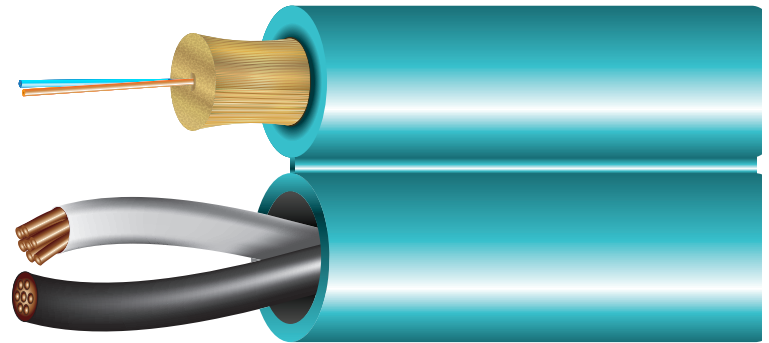
Type: OM3, OFNP FT6, CMP



Easily transmit both data and power with Cleerline SSF™ Fiber + Power cable. Featuring a two fiber micro distribution Multimode OM3 fiber optic cable in zipcord construction with one 2 conductor 18 AWG copper cable. This cable is plenum rated.

SSF™ Fiber + Power cable simplifies installation by allowing power and fiber optic cables to be installed simultaneously. Ideal for flexibility in installation, this cable is an excellent solution for high-quality data transmission and low voltage communication.

The included SSF™ fibers feature patented polymer SSF™ coating for ease of installation and increased strength. The fiber optic cable contains water-blocking aramid yarns.



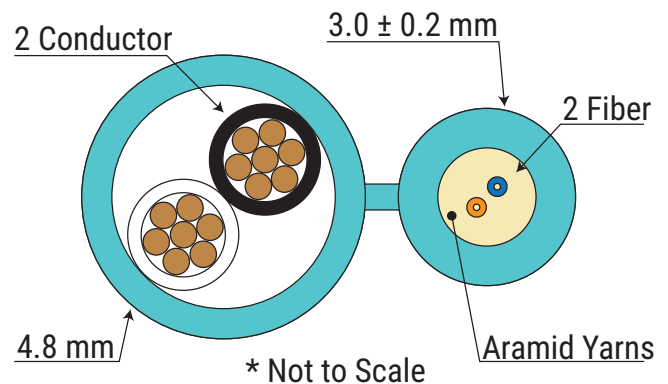
3D VIEW

## FEATURES AND BENEFITS

- High mechanical strength
- Superior fatigue and durability (nD = 30)
- Up to 10,000x the bend of traditional fiber
- Integral SSF™ coating provides glass protection
- Increased safety due to incredible bend insensitivity and durability
- Exclusive 250 µm Soft Peel acrylate

## APPLICATIONS

- Voice or data communications & video, flexibility in FTTH applications
- Low voltage communications
- Network and cameras requiring PoE



TYPICAL CROSS SECTION

PART NUMBER	FIBERS	DESCRIPTION	TYPE	O.D.	WEIGHT (LB / 1000 FT)
218AWG2OM3MDP	2 Fibers	Fiber + Power OM3 - 1000 ft Spool	Plenum	8.4 mm	28
218AWG2OM3MDP-B	2 Fibers	Fiber + Power OM3 - Cut to Order	Plenum	8.4 mm	28

## CONSTRUCTION

FIBER	
Fiber / Copper Count	Simplex Fiber = 2 18-2 AWG Stranded Bare Copper
Type	50/125 Multimode OM3
Coating	250 µm "Soft Peel" S-Type Coating (1 = Blue, 2 = Orange)
Color Coding	Per TIA/EIA 598

JACKET		
Type	Plenum Rated PVC, UV Resistant	
Color	Aqua, sequential footage markings	
Outer Diameter	8.4 mm	
Sub Diameter	Fiber	3.0 mm
	Copper	4.8 mm

### PHYSICAL DATA

Storage Temperature Range	-2°C to +60°C
Operating Temperature Range	-2°C to +60°C
Max Tensile Load (Installation)	95 N (21 lbf)
Max Tensile Load Long Term	25 N (5 lbf)
Min. Bend Radius, Unloaded	10 x O.D. (10 x 8.4 mm)
Min. Bend Radius, Loaded	20 x O.D. (20 x 8.4 mm)
Cable Outside Diameter, Nominal	8.4 mm
Cable Package	1000 ft / 304.8 m Reel *Or customer request, spooled
Rating	CMP/OFNP/FT6
OM2 Fibers, 3.0 mm O.D.	
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
18-2 AWG Copper	
Suggested Working Voltage	300 Volts, rms.
Conductor	18 AWG Stranded Bare Copper
Conductors	2 / C
Color	Black, Natural
Shield and Drain	None

### 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

NEC Article 800, C(ETL) US CMP/OFNP FT6

