

9/125 SSF™ Single Mode + 18-2 AWG Copper Fiber + Power - Plenum Rated

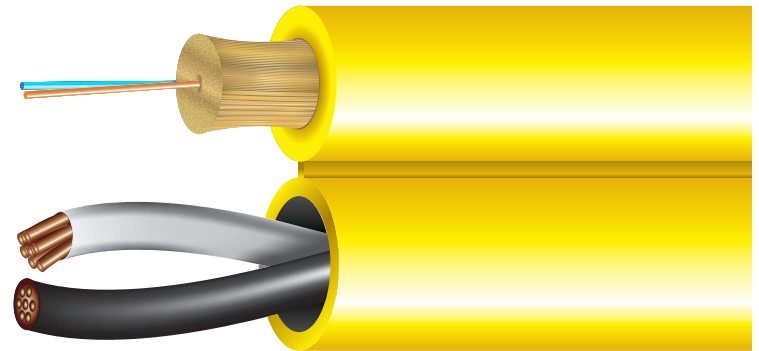
Type: OS2, OFNP FT6, CMP



Easily transmit both data and power with Cleerline SSF™ Fiber + Power cable. Featuring a two fiber micro distribution single mode OS2 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.



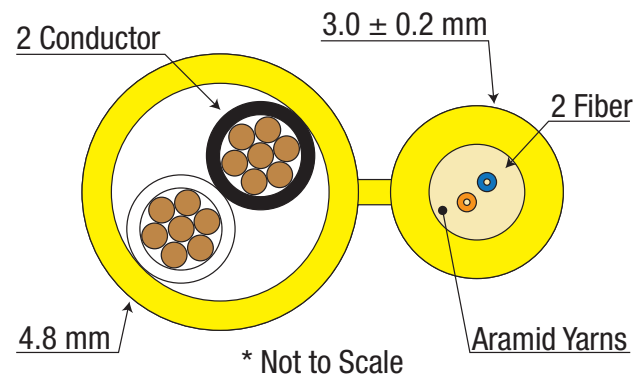
3D VIEW

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)
218AWG20S2MDP	2 Fibers	Fiber + Power OS2 - 1000 ft Spool	Plenum	8.4 mm	28
218AWG20S2MDP-B	2 Fibers	Fiber + Power OS2 - Cut to Order	Plenum	8.4 mm	28

CONSTRUCTION

FIBER	
Fiber / Copper Count	Simplex Fiber = 2 18-2 AWG Stranded Bare Copper
Type	9/125 Single Mode OS2
Coating	250 µm "Soft Peel" S-Type Coating (1 = Blue, 2 = Orange)
Color Coding	Per TIA/EIA 568

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

CLEERLINE TECHNOLOGY GROUP, LLC

8404 El Way Drive #2B, Missoula, MT 59808 USA & CAN: 866-469-2487 Fax 406.532.0060
Web: www.cleerlinefiber.com Copyright 2012 Cleerline Technology Group, LLC.

Date: 8/22/2018 Rev. 1.6

Int'l +1.406.541.9830 Int'l Fax 1.406.532.0060
All rights reserved. Subject to change without notice.

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	Cut to order
Rating	CMP/OFNP/FT6
OS2 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

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	

COMPLIANCE

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


PHYSICAL CHARACTERISTICS

Core Diameter	9.0 ± 2.5 μm	
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 Diameter	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 15mm radius mandrel	≤ 0.03 dB
Bend Induced Attenuation, 1625 nm	1 turn around 10 mm radius	≤ 1.0 dB
	10 turns around 15mm 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 ² · 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