9/125 SSF™ Single Mode OS2 Micro Distribution Tactical Outdoor Cable with 3.0 mm Subunit

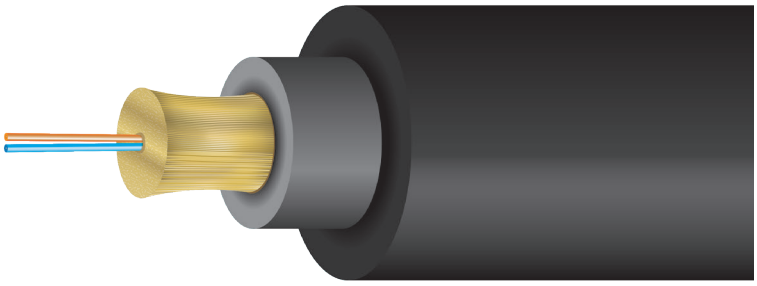
Type: OS2, PU Jacket

CLEERLINE SSF™

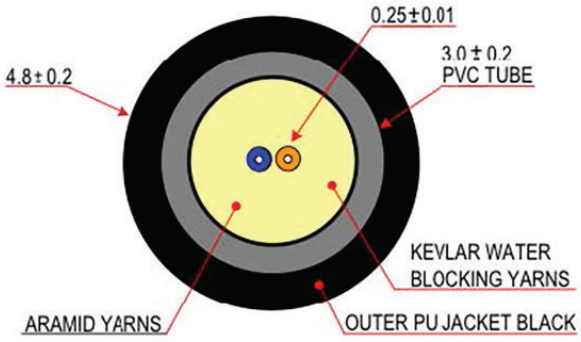
Cleerline SSF™ Tactical Micro Distribution cable is composed of an overall jacket with a 3.0 mm subunit containing the fiber strands.

SSF™ Tactical cable is designed for installations where cable may need to be removed or changed, such as rental or staging applications. Tactical PU jacketing provides increased durability, UV and chemical resistance, and extreme flexibility. This cable is outdoor rated.

The included SSF™ fibers feature patented SSF™ polymer coating for extreme durability and ease of installation. Flex tested to 2000 cycles, impact to 1500 cycles, and crush resistance to 100 kgf / mm.



3D VIEW



TYPICAL CROSS SECTION

FEATURES AND BENEFITS

- All dielectric construction - no grounding / bonding required
- High mechanical strength, superior fatigue (nD = 30)
- Compatible with common connector systems for 9/125 single mode fibers
- 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

- Installations requiring portability - cable can be retracted onto a reel
- Harsh environments: temporary or permanent industrial, broadcast, or abrasive/chemical environments
- High crush environments

PART NUMBER	FIBERS	DESCRIPTION	TYPE	O.D.	WEIGHT (LB / 1000 FT)
2TMD9125OS2PU	2 Fibers	2 Strand Tactical - 1000 ft Spool	PU	4.8 mm	36.9
2TMD9125OS2PU-B	2 Fibers	2 Strand Tactical - Cut to Order	PU	4.8 mm	36.9
6TMD9125OS2PU	6 Fibers	6 Strand Tactical - 1000 ft Spool	PU	4.8 mm	36.9
6TMD9125OS2PU-B	6 Fibers	6 Strand Tactical - Cut to Order	PU	4.8 mm	36.9
12TMD9125OS2PU	12 Fibers	12 Strand Tactical - 1000 ft Spool	PU	4.8 mm	36.9
12TMD9125OS2PU-B	12 Fibers	12 Strand Tactical - Cut to Order	PU	4.8 mm	36.9

CLEERLINE TECHNOLOGY GROUP, LLC
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Date: 2/13/2022 Rev. 2.0
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CONSTRUCTION

FIBER	
Fibers	2, 6, 12
Type	9/125 Single Mode
Coating	250 µm “Soft Peel” S-Type Coating
Color Coding	Per TIA/EIA 598C

JACKET	
Type	Tactical Polyurethane (PU), Outdoor
Color	Black
Outer Diameter	4.8 mm
Subunit Jacket	3.0 mm Flame Retardant PVC
Markings	Sequential Foot Markings
Strength Member	Kevlar + 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)
Cable Outside Diameter, Nominal	4.8 mm
Min. Bend Radius, Installation	11.5 cm
Min. Bend Radius, Operation	5.0 cm
Subunit Min. Bend Radius, Unloaded	3.0 mm
Cable Package	1000 ft Reel or customer request, spooled
Rating	Outdoor
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, 1310 nm and 1550 nm Induced Attenuation -60°C to + 85°C	≤ 0.5 dB / km
Watersoak Dependence, 1310 nm and 1550 nm Induced Attenuation at 20°C for 30 days	≤ 0.5 dB / km
Damp Heat Dependence, 1310 nm and 1550 nm Induced Attenuation at 85°C, 85% R.H., 30 days	≤ 0.5 dB / km

PHYSICAL CHARACTERISTICS (SSF™ FIBER)		
Core / Hybrid Cladding Concentricity Error	≤0.5 µm	
Hybrid Cladding Diameter	125 ± 0.7 µm	
Hybrid Cladding Non-Circularity	≤ 1.0%	
Soft Peel Jacket Identifier	245 ± 10 µm	
Coating Strip Force	≤ 100 g	
Fiber Curl	≥ 2 m	
Proof Test	0.69 Gpa (100 kpsi)	
Dynamic Fatigue (n_d) 23°C, 41% R.H.	≥ 31.72	
Bend Induced Attenuation, 1550 nm	1 turn around 7.5 mm radius mandrel	≤ 0.5 dB
	10 turns around 15 mm radius mandrel	≤ 0.03 dB
Bend Induced Attenuation, 1625 nm	1 turn around 7.5 mm radius mandrel	≤ 1.0 dB
	10 turns around 15 mm radius mandrel	≤ 0.1 dB

OPTICAL CHARACTERISTICS (SSF™ FIBER)		
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	1300 nm - 1324 nm	
Zero Dispersion Slope	0.092 ps / ($nm^2 \cdot km$)	

BACKSCATTER CHARACTERISTICS (SSF™ FIBER)		
Attenuation Directional Uniformity	≤ 0.03 dB/km	
Attenuation Uniformity	≤ 0.05 dB	
Group Index of Refraction	1310 nm	1.467
	1550 nm	1.468

COMPLIANCE
IECA S-104-696. RoHS Compliant Directive 2011/65/EU SSF™ complies to or exceeds the ITU-T recommendations G.657 A2, G.657 B2, and G.652 D, the IEC International Standard 60793-2-50 type B.1.3 and B.6.A&B Optical Fiber Specification.

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