

50/125 SSF™ Multimode OM3 Micro Distribution Tactical Outdoor Cable with 3.0 mm Subunit

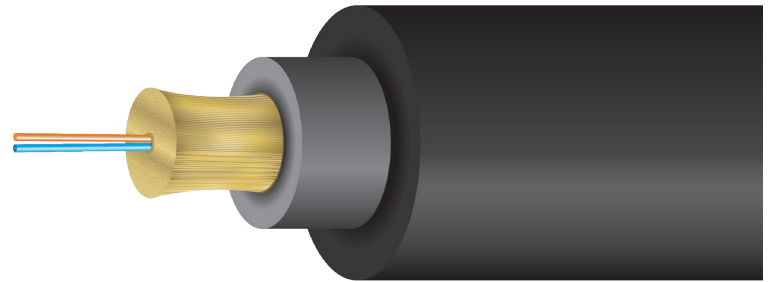
Type: OM3, PU Jacket



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.



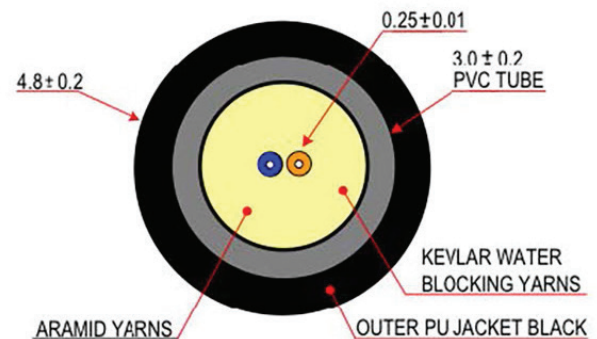
3D VIEW

FEATURES AND BENEFITS

- All dielectric construction - no grounding / bonding required
- High mechanical strength, superior fatigue (nD = 30)
- Compatible with common connector systems for 50/125 multimode 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



TYPICAL CROSS SECTION

PART NUMBER	FIBERS	DESCRIPTION	TYPE	O.D.	WEIGHT (LB / 1000 FT)
2TMD501250M3PU	2 Fibers	2 Strand Tactical - 1000 ft Spool	PU	4.8 mm	36.9
2TMD501250M3PU-B	2 Fibers	2 Strand Tactical - Cut to Order	PU	4.8 mm	36.9
6TMD501250M3PU	6 Fibers	6 Strand Tactical - 1000 ft Spool	PU	4.8 mm	36.9
6TMD501250M3PU-B	6 Fibers	6 Strand Tactical - Cut to Order	PU	4.8 mm	36.9
12TMD501250M3PU	12 Fibers	12 Strand Tactical - 1000 ft Spool	PU	4.8 mm	36.9
12TMD501250M3PU-B	12 Fibers	12 Strand Tactical - Cut to Order	PU	4.8 mm	36.9

CONSTRUCTION

FIBER	
Fibers	2, 6, 12
Type	50/125 Multimode OM3
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, 850 nm and 1300 nm Induced Attenuation -60°C to + 85°C	$\leq 0.5 \text{ dB / km}$
Watersoak Dependence, 850 nm and 1300 nm Induced Attenuation at 20°C for 30 days	$\leq 0.5 \text{ dB / km}$
Damp Heat Dependence, 850 nm and 1300 nm Induced Attenuation at 85°C, 85% R.H., 30 days	$\leq 0.5 \text{ dB / km}$
Dry Heat Dependence, 850 nm and 1300 nm Induced Attenuation at 85°C, 30 days	$\leq 0.5 \text{ dB / km}$

PHYSICAL CHARACTERISTICS (SSF™ FIBER)		
Core Diameter	50.0 \pm 2.5 μm	
Core Non-circularity	$\leq 6\%$	
Core / Hybrid Cladding Concentricity Error	$\leq 3.0 \mu\text{m}$	
Hybrid Cladding Diameter	125 \pm 2 μm	
Hybrid Cladding Non-Circularity	$\leq 2.0\%$	
Soft Peel Jacket Identifier	245 \pm 10 μm	
Coating Strip Force	100 g	
Fiber Curl	$\geq 2 \text{ m}$	
Proof Test	100 kpsi	
Dynamic Fatigue (n_d) 23°C, 41% R.H.	≥ 31.72	
Bend Induced Attenuation, 850 nm	2 turns around 15 mm radius mandrel	$\leq 0.2 \text{ dB}$
	2 turns around 7.5 mm radius mandrel	$\leq 0.5 \text{ dB}$
Length	1.0 - 8.8 Km	

OPTICAL CHARACTERISTICS (SSF™ FIBER)		
Attenuation Coefficient	850 nm	$\leq 4.0 \text{ dB/km}$
	1300 nm	$\leq 1.5 \text{ dB/km}$
Numerical Aperture	0.200 \pm 0.015	
Overfilled Modal Bandwidth	850 nm	$\geq 1500 \text{ MHz} \cdot \text{km}$
	1300 nm	$\geq 500 \text{ MHz} \cdot \text{km}$
High Performance EMB	850 nm	$\geq 2000 \text{ MHz} \cdot \text{km}$

BACKSCATTER CHARACTERISTICS (SSF™ FIBER)		
Attenuation Directional Uniformity	$\leq 0.05 \text{ dB/km}$	
Attenuation Uniformity	$\leq 0.05 \text{ dB}$	
Group Index of Refraction	850 nm	1.481
	1300 nm	1.476

COMPLIANCE	
IECA S-104-696. RoHS Compliant Directive 2011/65/EU SSF™ conforms to the requirement of IEC 60793-2-10 A1a.3, ISO/IEC 11801 & ITU-T G.651.1 850 nm Laser-Optimized 50 μm core multimode fiber for 10 Gb/s and above applications.	