50/125 SSF[™] Multimode OM3 Breakout Tactical Outdoor Cable with 2.0 mm Subunits

Type: OM3, PU Jacket



Cleerline SSF[™] Tactical Breakout cable is composed of an overall jacket with 2.0 mm subunits.

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.

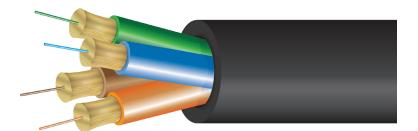
The included SSF[™] fibers feature patented SSF[™] polymer coating for extreme durability and ease of installation. Flex tested to 2000 cycles, impact to 1500 cycles, and crush resistance to 100 kgf / mm.

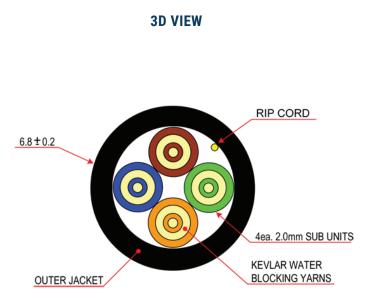
FEATURES AND BENEFITS

- All dielectric construction no grounding / bonding required
- High mechanical strength, superior fatigue (nD = 30)
- Compatible with common connector systems for 50/125 multimode
- 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	ТҮРЕ	0.D.	WEIGHT (LB / 1000 FT)	MIN. BEND RADIUS, INSTALLATION	MIN. BEND RADIUS, OPERATION
2TB501250M3PU	2 Fibers	2 Strand - 1000 ft Spool	Tactical PU	7.1 mm	49.5	11.5 cm	5.0 cm
2TB501250M3PU-B	2 Fibers	2 Strand - Cut to Order	Tactical PU	7.1 mm	49.5	11.5 cm	5.0 cm
4TB501250M3PU	4 Fibers	4 Strand - 1000 ft Spool	Tactical PU	7.1 mm	61.5	12.37 cm	6.8 cm
4TB501250M3PU-B	4 Fibers	4 Strand - Cut to Order	Tactical PU	7.1 mm	61.5	12.37 cm	6.8 cm

CLEERLINE TECHNOLOGY GROUP, LLC

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CONSTRUCTION

FIBER	
Fibers	2, 4
Туре	50/125 Multimode
Coating	250 μm "Soft Peel" S-Type Coating
Color Coding	Per TIA/EIA 598C

JACKET Type Tactical Polyurethane (PU), Outdoor Color Black **Outer Diameter** Varies by part number Subunits 2.0 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)	
Subunit Min. Bend Radius, Unloaded	1 x O.D.	
Cable Outside Diameter, Nominal	Varies by part number	
Min. Bend Radius, Installation	Varies by part number	
Min. Bend Radius, Operation	Varies by part number	
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)

PHYSICAL CHARACTER	ISTICS (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 _d) 23°C, 41% R.H.	≥ 31.72			
Bend Induced Attenuation,	2 turns around 15 mm radius mandrel	≤ 0.2 dB		
850 nm	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	
Allenuation coefficient	1300 nm	≤ 1.5 dB/km	
Numerical Aperture		0.200 ± 0.015	
Overfilled Modal	850 nm	≥ 1500 MHz · km	
Bandwidth	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	850 nm	1.481	
Refraction	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.



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Temperature Dependence, 850 nm and 1300 nm

Watersoak Dependence, 850 nm and 1300 nm

Damp Heat Dependence,

850 nm and 1300 nm

Dry Heat Dependence,

850 nm and 1300 nm

30 days

Induced Attenuation -60°C to + 85°C

Induced Attenuation at 20°C for 30 days

Induced Attenuation at 85°C, 85% R.H.,

Induced Attenuation at 85°C, 30 days

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 $\leq 0.5 \, \text{dB} / \text{km}$

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≤ 0.5 dB / km

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