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

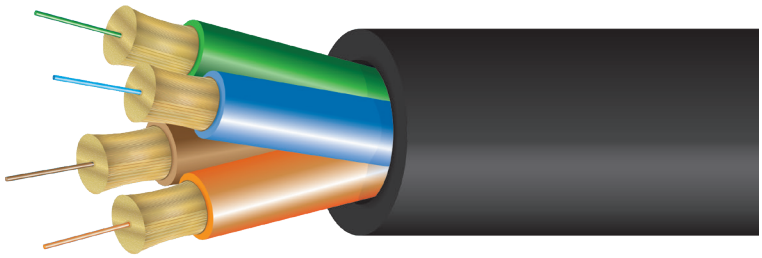
Type: OM3, PU Jacket

CLEERLINE SSF™

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.



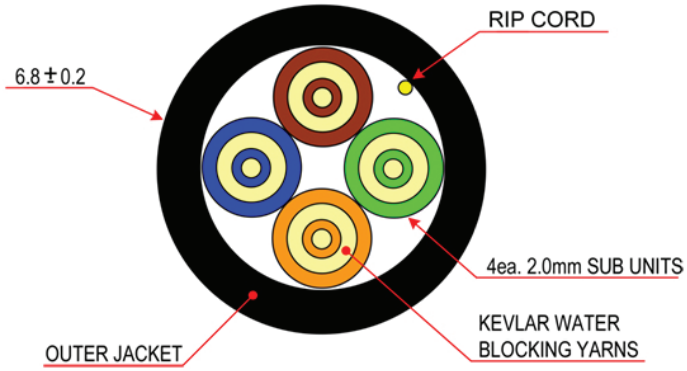
3D VIEW

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
- 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)	MIN. BEND RADIUS, INSTALLATION	MIN. BEND RADIUS, OPERATION
2TB501250M3PU	2 Fibers	2 Strand - 1000 ft Spool	Tactical PU	5.0 mm	49.5	11.5 cm	5.0 cm
2TB501250M3PU-B	2 Fibers	2 Strand - Cut to Order	Tactical PU	5.0 mm	49.5	11.5 cm	5.0 cm
4TB501250M3PU	4 Fibers	4 Strand - 1000 ft Spool	Tactical PU	6.8 mm	61.5	12.37 cm	6.8 cm
4TB501250M3PU-B	4 Fibers	4 Strand - Cut to Order	Tactical PU	6.8 mm	61.5	12.37 cm	6.8 cm

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Date: 10/11/2019 Rev. 1.8

CLEERLINE SSF™

CONSTRUCTION

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

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	
Temperature Dependence, 850 nm and 1300 nm	≤ 0.5 dB / km
Induced Attenuation	-60°C to + 85°C
Watersoak Dependence, 850 nm and 1300 nm	≤ 0.5 dB / km
Induced Attenuation at 20°C for 30 days	
Damp Heat Dependence, 850 nm and 1300 nm	≤ 0.5 dB / km
Induced Attenuation at 85°C, 85% R.H., 30 days	
Dry Heat Dependence, 850 nm and 1300 nm	≤ 0.5 dB / km
Induced Attenuation at 85°C, 30 days	

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.

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 CHARACTERISTICS		
Core Diameter	50.0 ± 2.5 µm	
Core Non-circularity	≤ 6%	
Core / Hybrid Cladding Concentricity Error	≤ 3.0 µm	
Hybrid Cladding Diameter	125 ± 0.7 µm	
Hybrid Cladding Non-Circularity Error	≤ 3.0%	
Soft Peel Jacket Identifier	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, 1300 nm	100 turns around 75 mm diameter mandrel	≤ 1.0 dB
Length	1.0 - 8.8 Km	

OPTICAL CHARACTERISTICS		
Attenuation Coefficient	850 nm	≤ 3.0 dB/km
	1300 nm	≤ 1.0 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		
Attenuation Directional Uniformity	≤ 0.05 dB/km	
Attenuation Uniformity	≤ 0.05 dB/km	
Group Index of Refraction	850 nm	1.481
	1300 nm	1.476

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