

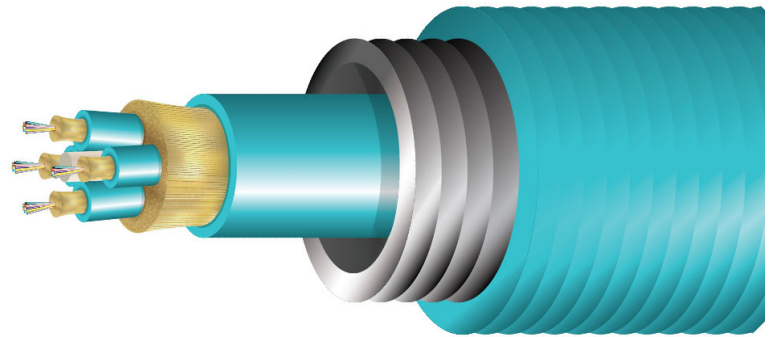
48-144 Strand BendSafe® Interlocking Armored Micro-Distribution LT, Plenum, 50/125, OM3



Cleerline BendSafe® Interlocking Armored Micro-Distribution cable consists of plenum overall jacket with 48-144 fibers and water blocking yarns. All Interlocking Armored is indoor rated.

BendSafe® Interlocking Armored includes a spirally wrapped internal aluminum strip which provides high crush resistance and protection from rugged environments.

Cleerline BendSafe® multimode is fully compatible with all common connector systems for standard 50/125 multimode fiber.



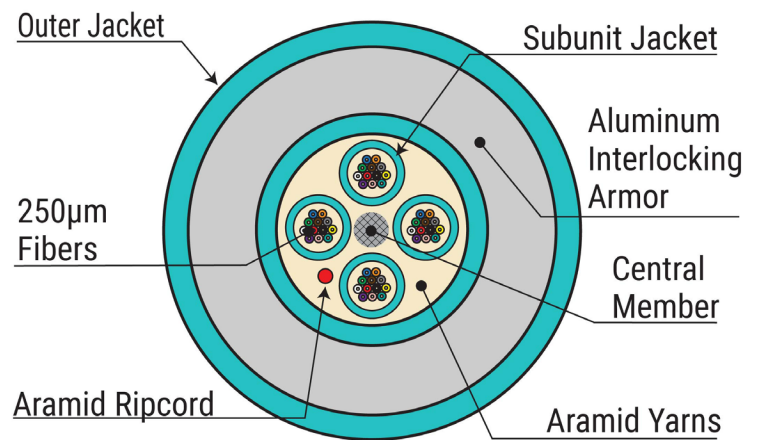
3D VIEW

FEATURES AND BENEFITS

- BendSafe® Dynamic Fatigue rating Nd = 27
- High mechanical strength
- Compatible with common connector systems for 50/125 multimode.
- Manufactured to exact tolerances and specifications
- Ultra low attenuation on tight bend radius

APPLICATIONS

- Rugged environments- spirally-wrapped aluminum strip also prevents rodent incursion
- Installation without additional inner duct/conduit
- Indoor installations



TYPICAL CROSS SECTION

PART NUMBER	FIBERS	DESCRIPTION	TYPE	OUTER DIAMETER	WEIGHT (LB / 1000 FT)
TA048M3M3AP	48 Fibers	48 Strand BendSafe® - 1000 ft Spool	Plenum	17.5 mm	195
TA048M3M3AP-B	48 Fibers	48 Strand BendSafe® - Cut to Order	Plenum	17.5 mm	195
TA072M3M3AP	72 Fibers	72 Strand BendSafe® -1000 ft Spool	Plenum	19.3 mm	254
TA072M3M3AP-B	72 Fibers	72 Strand BendSafe® - Cut to Order	Plenum	19.3 mm	254
TA096M3M2AP	96 Fibers	96 Strand BendSafe®-1000 ft Spool	Plenum	17.3 mm	221
TA096M3M2AP-B	96 Fibers	96 Strand BendSafe®- Cut to Order	Plenum	17.3 mm	221
TA144M3M2AP	144 Fibers	144 Strand BendSafe® - 1000 ft Spool	Plenum	19.3 mm	240
TA144M3M2AP-B	144 Fibers	144 Strand BendSafe® - Cut to Order	Plenum	19.3 mm	240

FIBER	
Fibers	48, 72, 96 & 144
Type	50/125 multimode OM3
Color Coding	Per TIA/EIA 598C

JACKET	
Type	Plenum Rated PVC (Indoor)
Color	Aqua
Outer Diameter	Varies by part number
Subunit Diameter	3.0 mm 48 - 72 strands 2.0 mm 96 - 144 strands
Markings	Sequential Foot Markings
Strength Member	Aramid Yarns

PHYSICAL DATA		
Storage Temperature Range	-40 °C to +70 °C	
Operating Temperature Range	0 °C to +70 °C	
Minimum Bend Radius	48 Fiber	34.9 cm
	72 Fiber	38.5 cm
	96 Fiber	34.5 cm
	144 Fiber	38.6 cm
Cable Package	Length varies by customer request, spooled	
Rating	FT6 - Plenum	
Fatigue Resistance Parameter @23 °C, 41% RH	= 27 Nd	

ENVIRONMENTAL CHARACTERISTICS		
Temperature Cycling Test @ 850 nm and 1300 nm -60 °C to +85 °C	≤ 0.1 dB/km	
Temperature and Humidity Cycling Test @ 850 nm and 1300 nm -10 °C to +85 °C, 4% - 90% RH	≤ 0.1 dB/km	
Damp Heat Dependence Test @ 850 nm and 1300 nm +85 °C, 85% RH for 30 days	≤ 0.1 dB/km	
Dry Heat Dependence Test @ 850 nm and 1300 nm +85 °C for 30 days	≤ 0.1 dB/km	
Watersoak Dependence Test @ 850 nm and 1300 nm +20 °C for 30 days	≤ 0.1 dB/km	

BACKSCATTER CHARACTERISTICS		
Attenuation Uniformity	≤ 0.08 dB/km	
Group Index of Refraction	850 nm	1.482
	1300 nm	1.477

PHYSICAL CHARACTERISTICS		
Core / Cladding Concentricity Error	≤ 1.0 μm	
Core Diameter	50.0 ± 2.5 μm	
Core Non-Circularity	≤ 5%	
Cladding Diameter	125 ± 1 μm	
Cladding Non-Circularity	≤ 1.0%	
UV Acrylate Coating Diameter	245 ± 7 μm	
Coating Strip Force	Average	1.5 N
	Peak	≥ 1.3, ≤ 8.9 N
Fiber Curl	≥ 4 m	
Proof Test	100 kpsi	
Bend Induced Attenuation	2 turns around a mandrel of 15 mm @ 850 nm / 1300 nm	≤ 0.1 / 0.3 dB
	2 turns around a mandrel of 7.5 mm @ 850 nm / 1300 nm	≤ 0.2 / 0.5 dB
Length (typical)	1.1 ~ 8.8 km	

OPTICAL CHARACTERISTICS		
Attenuation Coefficient	850 nm	≤ 2.4 dB/km
	1300 nm	≤ 1.0 dB/km
Numerical Aperture	0.200 ± 0.015	
Overfilled Launch Bandwidth (OFL BW)	850 nm	≥ 1500 MHz · km
	1300 nm	≥ 500 MHz · km
High Performance EMB	850 nm	≥ 2000 MHz · km

COMPLIANCE	
<p>UL Listed Type ICEA S-83-596 & OFCP, CSA FT6, GR-409</p> <p>BendSafe® conforms to the requirement of IEC 60793 A1a, ISO/IEC 11801 & ITU-T G.651.1 850 nm Laser-Optimized 50 μm core multimode fiber for 10 Gb/s and above applications.</p>	