

COMPONENT SPECIFICATIONS

2-12 SSF™ Multimode OM2, 3.0mm Distribution Riser / Plenum / LSZH Cables



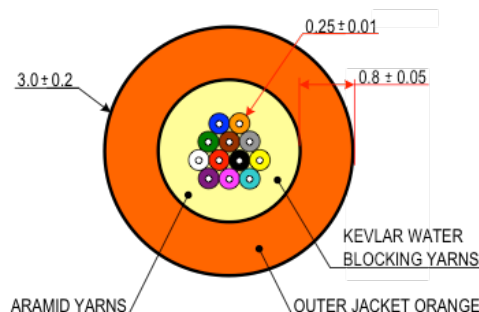
Type OM2, OFNR, CSA FT4 / OFNP, CSA FT6 / OFN-LS, LSZH

Cleerline SSF™ advanced optical glass fibers are much stronger, safer, and faster terminating than typical fibers. This distribution style cable provides the ultimate in durability and bend in a very compact size. SSF™ fibers are always protected at the glass level as a result of their integral polymeric coating, increasing both bend and tensile strength to unprecedented levels. Cleerline SSF™ fibers are compatible with all common connector systems on the market for standard 50/125 multimode and 9/125 Singlemode fibers.

Features And Benefits:

- * High mechanical strength and superior fatigue & durability
- * Integral coating eliminates stripping, provides glass protection
- * Bend longevity for 10,000X longer life time than normal fibers
- * Increased safety factor due to the incredible bend insensitivity
- * Glass fiber remains protected at all times from the elements
- * Simplified termination process designed for ease of use
- * Ultra low Attenuation loss on tight bend radius

2-12 Strand Riser/Plenum Typical Cross Sections



CONSTRUCTION

FIBER

Fiber Count = 2-12
50/125 Multimode OM2
250um "Soft Peel" S-Type coating
Color Coding per TIA/EIA 568C

JACKET

Riser Rated PVC / Plenum Rated PVC / LSZH
3.0 mm unit diameter
Orange jacket = Multimode fiber OM2
Sequential footage markings
Kevlar (Plenum + water blocking yarns)

PHYSICAL DATA

Storage Temperature Range	= -40°C to +85 °C
Operating Temperature Range	= -20°C to +75 °C
Max Tensile Load for Installation	= 1000(225) N (lbf)
Max Tensile Load Long term	= 500(112) N (lbf)
Min. Bend Radius, Unloaded	= 10 x OD (10 x 3mm)
Cable Outside Diameter, Nominal	= 3.0mm
Cable Package	= 1000ft Reel in a box

*Or customer request, spooled

Rating = FT4-Riser / FT6-Plenum / OFN-LS / LSZH

Crush Resistance (TIA/EIA 455-41A)	= 100 kgf/mm
Impact Resistance (TIA/EIA 455-25B)	= 1500 Impact cycles
Flexing @ 90 degree (TIA/EIA 455-104A)	= 2000 flexing cycles

APPLICATIONS

Interbuilding and intrabuilding voice or data communication backbones requiring 3.0mm jacket diameter. Install in ducts, underground conduits or aerial/lashed UL Listed OFNP for installation in plenum airways and general horizontal applications when installed in accordance with the NEC article 770-51 (a) and 770-53 (a). UL listed Type OFNP for installation in ducts, plenums and other spaces used as environmental air returns when installed in accordance with NEC article 770-51 (a) and 770-53(a)

ENVIRONMENTAL CHARACTERISTICS

Temperature Dependence at 850 nm and 1300 nm	≤ 0.05 (dB/km)
Induced Attenuation - 60°C to +85°C	
Watersoak Dependence at 850 nm and 1300 nm	≤ 0.05 (dB/km)
Induced Attenuation at 20°C for 30 days	
Damp Heat Dependence at 850 nm and 1300 nm	≤ 0.05 (dB/km)
Induced Attenuation at 85°C, 85%R.H., 30 days	
Dry Heat Dependence at 850 nm and 1300 nm	≤ 0.05 (dB/km)
Induced Attenuation at 85°C, 30 days	

PRODUCT DETAIL

Cleerline SSF™ 2-12 strand fiber Micro Distribution cable is composed of a distribution style cable with an overall 3.0mm jacket. Utilizing SSF™ fiber allows for incredible strength and durability in such a small cable package. Flex tested to 2000 cycles, Impact to 1500 cycles and crush to 100 kgf/mm. SSF™ allows for ease of installation, safety, and reliability in all installation applications for the ultimate in connectivity.

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 & above applications

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	≥ 700 (MHz · km)
	1300 nm	≥ 500 (MHz · km)
High Performance EMB*	850nm	≥ 950 (MHz · km)

BACKSCATTER CHARACTERISTICS

Attenuation Directional Uniformity	≤ 0.05 (dB/km)	
Attenuation Uniformity	≤ 0.05 (dB)	
Group Index of Refraction	850 nm	1.481
	1300 nm	1.476

PHYSICAL CHARACTERISTICS

Core / Hybrid Cladding Concentricity Error	≤ 0.5 (μm)
Hybrid Cladding Diameter	125 ± 0.7 (μm)
Hybrid Cladding Non-Circularity Error	≤ 1.0 (%)
Soft Peel Jacket Identifier Diameter	250 ± 0.7 (μm)
Coating Strip Force	≤ 100 (g)
Fiber Curl	≥ 2 (m)
Proof Test	100 (kpsi)
Bend Induced Attenuation at 850 nm	
(2 turns around a mandrel of 15 mm diameter)	≤ 0.2 (dB)
(2 turns around a mandrel of 7.55 mm diameter)	≤ 0.5 (dB)
Fiber Length (Typical)	1.1 - 8.8 (Km)

COMPLIANCE

UL Listed OFNR C(UL)US CSA FT4, OFNP C(UL)USCSA FT6, OFN-LSZH and CSA FT4-STI OFN-LS. RoHS Compliant Directive 2011/65/EU
*Ensured via minEMBc per TIA/EIA 455-220A and IEC 60793-1-49



CABLE CHARACTERISTICS	
Fiber Count	2-12
Outer Jacket Material	Riser / Plenum / LSZH
Sub Units	None
Stress Member	Kevlar
Fiber colors	1-12 per TIA/EIA
Jacket Color	Orange = OM2

PHYSICAL CHARACTERISTICS	VALUE
Nominal Outer Diameter (mm) 2-12	3.0
Weight strand count 2 / 4 / 6 / 8 / 12	2.8 / 3.0 / 3.0 / 4.0 / 5.0 kg/kft
Minimum Bend Radius, Unloaded	10 x OD (10 x 3mm)
Minimum Bend Radius, Operation (cm)	2.95

PART NUMBERS			
Fiber Count	Riser	Plenum	LSZH
2	2D50125MOM2R	2D50125MOM2P	2D50125MOM2L
4	4D50125MOM2R	4D50125MOM2P	4D50125MOM2L
6	6D50125MOM2R	6D50125MOM2P	6D50125MOM2L
8	8D50125MOM2R	8D50125MOM2P	8D50125MOM2L
12	12D50125MOM2R	12D50125MOM2P	12D50125MOM2L