

COMPONENT SPECIFICATIONS

Fiber & Category - 50/125 SSF™ Multimode OM3 & CAT6 UTP Jacketed Riser Cable



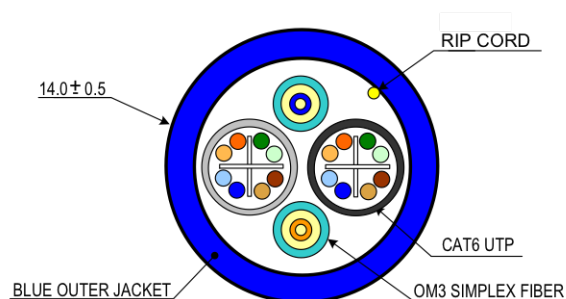
Type OM3, OFNR, CSA FT4

Cleerline SSF™ advanced optical glass fibers are much stronger, safer, and faster terminating than typical fibers. This duplex style cable provides the ultimate in durability and bend with ease of termination. 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
- * 10,000x the bend of standard fiber, Fatigue constant (Nd) >30
- * 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
- * Exclusive 250um Soft peel jacket identifier

Typical Cross Section



CONSTRUCTION

FIBER

Fibers; Simplex = 2 / UTP, CAT6 = 2
50/125 Multimode OM3
250um "Soft Peel" coating (1 = Blue, 2 = Orange)
Color Coding per TIA/EIA 568C

JACKET

Riser Rated PVC
14.0mm unit diameter
Blue overall jacket, Aqua Subs = OM3, Sequential footage markings

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 Long Load term = 500(112) N (lbf)
Min. Bend Radius, Unloaded = 10x OD (10x 14mm)
Min. Bend Radius, Loaded = 20 x OD (20 x 14mm)
Cable Outside Diameter, Nominal = 14.0mm
Cable Package = 500ft / 152.4m
Rating = OFNR/FT4/Riser

OM3 Fibers 3.0mmx2

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

CAT6 Cables 6.1mmx2

Conductor = Solid plain annealed bare copper 23 AWG
Outer Diameter = 6.1 +/- 0.3mm
Ripcord = Tetoron wire
Twisting = 4 twisted pair, 2 single conductors paired, twisted pair color code 1:white-blue / blue, 2: white-orange / orange, 3" white-green / green, 4: white-brown / brown.
Cable lay up = Non-metallic cross separator (spine) or FRPE cross separator (spine). Riser, CMR

ENVIRONMENTAL CHARACTERISTICS

Temperature Dependence at 850 nm and 1300 nm ≤ 0.5 (dB/km)
Induced Attenuation - 40°C to +85°C
Water soaks Dependence at 850nm and 1300 nm ≤ 0.5 (dB/km)
Induced Attenuation at 23°C for 30 days
Damp Heat Dependence at 850 nm and 1300 nm ≤ 0.5 (dB/km)
Induced Attenuation at 85°C, 85%R.H., 30 days
Dry Heat Dependence at 850 nm and 1300 nm ≤ 0.5 (dB/km)
Induced Attenuation at 85°C, 30 days

PART NUMBERS

PART NUMBER	PART DESCRIPTION	FIBER COUNT	NOMINAL DIAMETER	CABLE WEIGHT	TOTAL WEIGHT
2C6250125OM3R	Riser	2 Fiber/s	14mm Fiber = 3mmx2	Lbs/km 252	65.5 lbs 29.7 kg

SSF™ 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 & 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	≥ 1500 (MHz · km)
	1300 nm	≥ 500 (MHz · km)
High Performance EMB	850nm	≥ 2000 (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 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 Diameter	250 ± 0.7 (µm)
Coating Strip Force	100 (g)
Fiber Curl	≤ 2 (m)
Dynamic Fatigue Constant (Nd)	> 30
Proof Test	100 (kpsi)
Bend Induced Attenuation at 1300 nm (100 turns around a mandrel of 75 mm diameter)	≤ 1.0 (dB)
Dynamic fatigue 23C, 41%RH	> 30(nd)
Length	1.0 - 8.8 (Km)

COMPLIANCE

UL Listed OFNR C(UL)US - CSA FT4 - CMR
RoHS Compliant Directive 2011/65/EU
*Ensured via mini EMBC per TIA/EIA 455-220A and ICEA S-104-696

