

COMPONENT SPECIFICATIONS

9/125 SSF™ Singlemode OS2, 3.0mm Jacketed Duplex Riser and Plenum Cables



Type OS2, OFNP, OFNR, Product Type G.657.A2, G657.B2, and G.652 .D

Cleeerline 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. Cleeerline 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

CONSTRUCTION

FIBER

Number of Fibers; Duplex = 2
9/125 Singlemode Dry w/super-absorbent polymer
250um "Soft Peel" coating (1 = Blue, 2 = Orange)
Color Coding per TIA/EIA 568C

JACKET

Riser Rated PVC / Plenum Rated PVC + UV
3.0mm x 2 unit diameter w/strip peel
Yellow jacket - 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 Long Load term	= 500(112) N (lbf)
Min. Bend Radius, Unloaded	= 10 x OD (10 x 3.0mm)
Min. Bend Radius Loaded	= 20 x OD (20 x 3.0mm)
Cable Outside Diameter, Nominal	= 3.0mm x2 (6.2mm)
Cable Package	= Cut to customer request, reel/spool, 1,000ft/340m minimum
Rating	= OFNP/FT6/Plenum
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

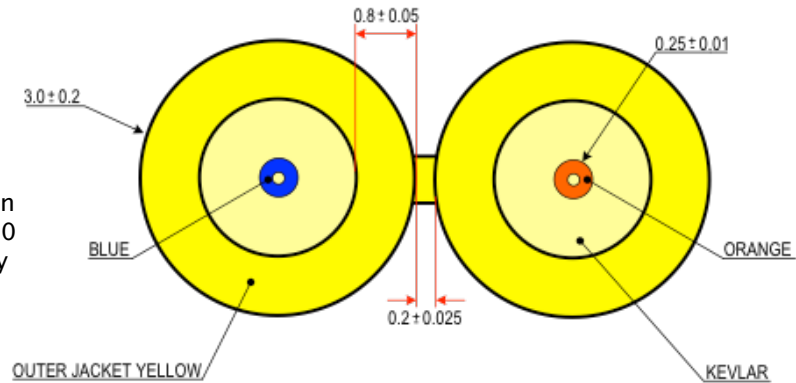
APPLICATIONS

Intra building voice or data communication backbones, Light weight ultra flexible design simplifies installation.
Fiber- to- the-Desk (FTTD). Fiber-to-the-Home (FTTH)
ETL 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)
ETL Listed Type OFNP, CSA FT6, ANSI/TIA/EIA 568 B.3

ENVIRONMENTAL CHARACTERISTICS

Temperature Dependence at 1310 nm and 1550 nm ≤ 0.05 (db/km)
Induced Attenuation - 40°C to +85°C
Watersoak Dependence at 1310 nm and 1550 nm ≤ 0.05 (db/km)
Induced Attenuation at 20°C for 30 days
Damp Heat Dependence at 1310 nm and 1550 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

Duplex Riser / Plenum Typical Cross Sections



PART NUMBER

PART NUMBER	PART DESCRIPTION	FIBER COUNT	NOMINAL DIAMETER	CABLE WEIGHT	TOTAL WEIGHT
D29125SMOSR	Duplex Riser	2 Fiber/s	3.0mmx2	9.0 kg/km 13.2 lbs/1000	6.99 kg 15.43 lbs
D29125SMOSP	Duplex Plenum	2 Fiber/s	3.0mmx2	9.0 kg/km 13.2 lbs/1000	6.99 kg 15.43 lbs

SSF™ complies or exceeds the ITU-T recommendations G.657 A2, G657 B2 and G.652 D, the IEC International Standard 60793-2-50 type B.1.3 and B.6.A&B Optical Fiber

OPTICAL CHARACTERISTICS*

Attenuation Coefficient	1310 nm	≤ 0.35 (dB/km)
	1550 nm	≤ 0.21 (dB/km)
Mode Field Diameter	1310 nm	$8.6 \pm 0.4 \mu\text{m}$
	1550 nm	$9.7 \pm 0.5 \mu\text{m}$
Cable Cut-off Wavelength		$\leq 1260 \text{ nm}$
Zero Dispersion Wavelength		$1310 \text{ nm} - 1324 \text{ nm}$
Zero Dispersion Slope		$0.092 \text{ ps} / (\text{nm}^2 \cdot \text{km})$

BACKSCATTER CHARACTERISTICS

Attenuation Directional Uniformity		≤ 0.03 (dB/km)
Attenuation Uniformity		≤ 0.05 (dB)
Group Index of Refraction	1310 nm	1.467
	1550 nm	1.468

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)
Dynamic Fatigue Constant (Nd)	>30
Proof Test	100 (kpsi)
Bend Induced Attenuation	
1550nm 1 turn 10mm radius	≤ 0.3 (dB)
10 turns around a mandrel of 15 mm radius	≤ 0.03 (dB)
1625nm 1 turn 10mm radius	≤ 1.0 (dB)
10 turns around a mandrel of 15 mm radius	≤ 0.2 (dB)

COMPLIANCE

ETL Listed OFNR - CSA FT4 and ONFP - CSA FT6

RoHS Compliant Directive 2011/65/EU

*Ensured via mini EMBC per TIA/EIA 455-220A and ICEA S-104-696

