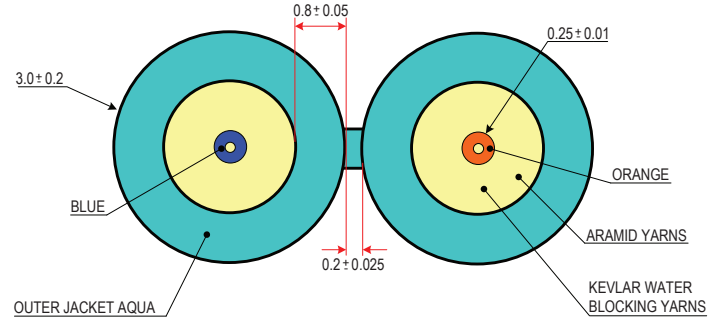


## Technical Specifications

### M3-50125DR/M3-50125DP SSF™ Duplex Fiber

#### Features at a Glance

- High mechanical strength and superior fatigue & durability
- Integral coating eliminates stripping, provides glass protection
- Up to 10,000x the bend longevity of traditional fibers
- Increased safety factor due to the incredible bend insensitivity
- Glass fiber remains protected at all times from the elements
- Ultra low Attenuation loss on tight bend radius
- Exclusive 250um Soft peel jacket identifier



**Typical Cross Section**

**Note: Riser does not have additional water blocking yarns**

SSF™ Duplex cable provides extreme durability and bend, along with increased tensile strength. The glass is protected by the patented SSF™ polymeric coating, creating a lightweight and ultra flexible design. Duplex SSF™ cable is compatible with common connector systems for standard 50/125 multimode and 9/125 single mode fibers.

SSF™ fiber Duplex cable is composed of two strands of OM3 cable in zipcord style with an overall 3.0mm Riser or Plenum jacket.

<b>Part Numbers</b>		
Part Number	Description	Reel
M3-50125DP	Duplex 3mm Plenum-rated OM3 - 50/125 SSF™	1000ft
M3-50125DR	Duplex 3mm Riser-rated OM3 - 50/125 SSF™	1000ft
<b>Fiber</b>		
Fiber Count	2	
Fiber Type	50/125 Multimode OM3	
Coating	250µm "Soft Peel" Coating (1 = Blue, 2 = Orange)	
Color	Color Coding per TIA/EIA 568 C	
<b>Jacket</b>		
Type	Riser rated PVC / Plenum rated PVC	
Diameter	3.0mm unit	
Jacket Color	Aqua = Multimode fiber OM3	
Markings	Sequential footage markings	
Strength Member	Kevlar (Plenum + water blocking yarns)	
<b>Physical Data</b>		
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	1 x OD (1 x 3.0mm)	
Cable Outside Diameter, Nominal	3.0mm x2 (6.2mm)	
Cable Package	1000ft/304.8m Reel	

<b>Physical Data</b>		
Rating	FT4-Riser / FT6-Plenum	
Crush Resistance (TIA/EIA 455-41A)	100 kgf/mm	
Impact Resistance (TIA/EIA 455-25B)	1500 Impact Cycle	
Flexing @ 90 degree (TIA/EIA 455-104A)	2000 flexing cycles	
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 ± 0.7 μm	
Coating Strip Force	100 g	
Fiber Curl	≤ 2 m	
Dynamic Fatigue Constant (nD)	>30	
Proof Test	100 kpsi	
Bend Induced Attenuation (1300nm) (100 turns around mandrel of 75mm diameter)	≤ 1.0 dB	
Dynamic fatigue 23C, 41% RH	>30 nD	
Length	1.0 - 8.8 Km	
<b>Optical Characteristics</b>		
Attenuation Coefficient	850nm	≤ 3.0 dB/km
	1300nm	≤ 1.0 dB/km
Numerical Aperture	0.200 ± 0.015	
Overfilled Modal Bandwidth	850nm	≥ 1500 MHz • km
	1300nm	≥ 500 MHz • km
High Performance EMB	850nm	≥ 2000 MHz • km
<b>Backscatter Characteristics</b>		
Attenuation Directional Uniformity	≤ 0.05 dB/km	
Attenuation Uniformity	≤ 0.05 dB/km	
Group Index of Refraction	850nm	1.481
	1300nm	1.476
<b>Environmental Characteristics</b>		
Temperature Dependence, 850/1300nm	≤ 0.5 dB/km	
Induced Attenuation	-40°C to +85°C	
Watersoak Dependence, 850/1300nm	≤ 0.5 dB/km	
Induced Attenuation	23°C for 30 days	
Damp Heat Dependence, 850/1300nm	≤ 0.5 dB/km	
Induced Attenuation	85°C, 85% R.H., 30 Days	
Dry Heat Dependence, 850/1300nm	≤ 0.5 dB/km	
Induced Attenuation	85°C, 30 Days	
<b>Compliance</b>		
ETL Listed Type OFNR, CSA FT4, IECA S-83-596 & OFNP, CSA FT6   RoHS Compliant Directive 2011/65/EU SSF™ conforms to 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		