

# TECHNICAL SPECIFICATION

## CLR-DM3-3P-XXX

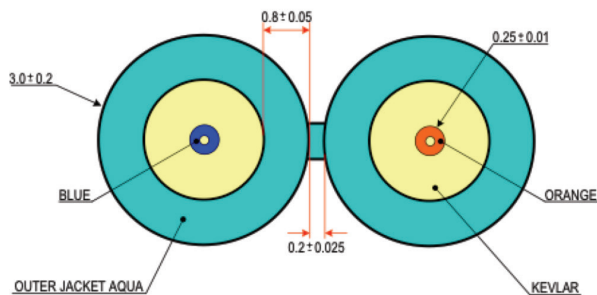


### 50/125 Multimode OM3, 3.0mm Jacketed Duplex Riser / Plenum I/O / LSZH Cables

Type OM3, OFNR, CSA FT4 / OFNP, CSA FT6 / LSZH

Covid CLR 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. CLR 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. Covid CLR fibers are compatible with all common connector systems on the market for standard 50/125 multi-mode and 9/125 Single mode fibers.

### Duplex Typical Cross Section



### Features & 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

### APPLICATIONS

Inter-building and intra-building voice or data communication backbones requiring 3.0mm jacket diameter. Install in ducts, underground conduits or aerial/lashed. 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)

### PART NUMBERS

| PART #   | PART DESC.    | FIBER COUNT | NOMINAL DIA. | CABLE WEIGHT                   | TOTAL WEIGHT         |
|--|---------------|-------------|--------------|--------------------------------|----------------------|
| CLR-DM3-3P-XXX   | Duplex Plenum | 2 Fiber /s  | 3.0mm x 2    | 13.2 lbs / 1000<br>9.0 kg / km | 15.43 lbs<br>6.99 kg |
| XXX= Length   Available in 500' Box and 1,000' Box<br>500' Box = CLR-DM3-3P-500B   1,000' Box = CLR-DM3-3P-1KB |               |             |              |                                |                      |

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## CLR-D50125MOM-XX



### CONSTRUCTION

#### FIBER

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

#### 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          |

#### JACKET

Riser Rated PVC / Plenum Rated PVC + UV I/O / LSZH  
3.0mm x 2 unit diameter w/strip peel  
Aqua jacket = OM3, Sequential footage markings  
Kevlar (Plenum/LSZH + water blocking yarns Indoor/Outdoor)

#### 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

#### 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        | = 1 x OD (1 x 3.0mm)  |
| Cable Outside Diameter, Nominal   | = 3.0mm x2 (6.2mm)    |
| Cable Package                     | = 1000ft/304.8m Reel* |

\*Or customer request, spooled

|  |                            |
|--|----------------------------|
| Rating                                 | = FT4-Riser / FT6-Plenum / |
| 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      |

#### 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<br>(100 turns around a mandrel of 75 mm) | < 1.0 (dB)                |
| Dynamic fatigue 23C, 41%RH<br>Length   | >30(nd)<br>1.0 - 8.8 (Km) |

#### 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) |

### COMPLIANCE

ETL Listed Type OFNR, CSA FT4, IECA S-83-596 & OFNP, CSA FT6, or LSZH-non ETL/ IECA S-104-696. GR-409  
RoHS Compliant Directive 2011/65/EU

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