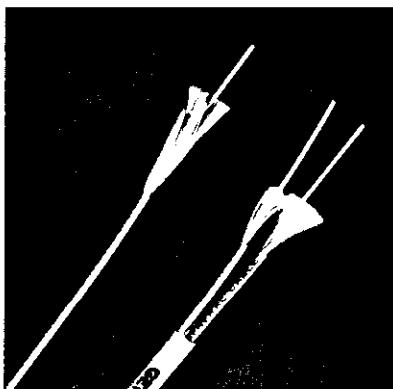


# **GENGUIDE™ Fiber Optic Cables**



## **Riser Cables**

**Cable Types:** Simplex, duplex

**Application:** Vertical runs in building shafts

**Features:** Meet current and future NEC codes, flexible, easy to handle

General Cable riser cables perform in accordance with both the current and planned NEC code on flame propagation. Cables can be safely installed in vertical trays or as vertical riser between building floors. These PVC jacketed cables also meet all requirements of the revised NEC code for OFNR (Optical Fiber Non-Metallic Riser) which will take effect in July, 1988. Lightweight, flexible and easy to handle, riser cables are available in both simplex and duplex versions. Jackets are color coded green for multimode and yellow for single mode.



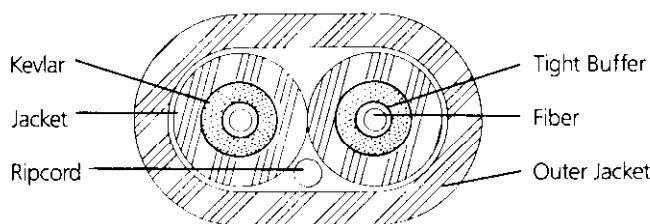
## Cable Specifications

|  | <b>Simplex</b> | <b>Duplex</b>   |
|--|----------------|-----------------|
| <b>Physical</b>  |                |                 |
| Cable Diameter   | 3 mm           | 4.5 mm x 7.5 mm |
| Cable Weight (nominal)                                   | 17 lbs/km      | 46 lbs/km       |
| <b>Installation</b>                                      |                |                 |
| Maximum Pulling Load (FOTP 33)                           | 400 N          | 600 N           |
| Maximum Operating Load                                   | 100 N          | 200 N           |
| Minimum Bend Radius<br>at Maximum Pulling Load (FOTP 33) | 6 cm           | 6 cm            |
| Minimum Bend Radius, Unloaded                            | 3 cm           | 3 cm            |
| Temperature Range  |                |                 |
| Storage (non-flexing)                                    | –40° to +70 °C |                 |
| Installation   | –20° to +70 °C |                 |
| Operating  | –20° to +70 °C |                 |
| Maximum Vertical Rise                                    | 90 ft.         |                 |

## Mechanical

|                             |             |
|-----------------------------|-------------|
| Crush Resistance (FOTP 41)  | 400 N/cm    |
| Impact Resistance (FOTP 25) | 50 impacts  |
| Flexing FOTP 104)           | 1000 cycles |
| Cable Knot Test (FOTP 87)   | Passed      |

**NOTE:** All mechanical and installation specs are calculated based on the performance of 50/125 fiber.



## Standard Optical Performance

| <b>Multimode Fiber</b>                              | <u>50/125</u> | <u>62.5/125</u> | <u>85/125</u> | <u>100/140</u> |
|---|---------------|-----------------|---------------|----------------|
| Fiber Core Diameter ( $\mu\text{m}$ ) . . . . .     | 50 $\pm$ 3    | 62.5 $\pm$ 3    | 85 $\pm$ 3    | 100 $\pm$ 4    |
| Fiber Cladding Diameter ( $\mu\text{m}$ ) . . . . . | 125 $\pm$ 3   | 125 $\pm$ 3     | 125 $\pm$ 3   | 140 $\pm$ 6    |
| Fiber Coating Diameter ( $\mu\text{m}$ ) . . . . .  | 500 $\pm$ 25  | 500 $\pm$ 25    | 500 $\pm$ 25  | 500 $\pm$ 25   |

### Attenuation

|                            |     |     |     |     |
|----------------------------|-----|-----|-----|-----|
| @ 850nm (dB/km) . . . . .  | 4.0 | 4.5 | 5.0 | 6.0 |
| @ 1300nm (dB/km) . . . . . | 1.5 | 1.5 | 2.0 | —   |

### Bandwidth (-3dB)

|                             |     |     |     |     |
|-----------------------------|-----|-----|-----|-----|
| @ 850nm (MHz-km) . . . . .  | 400 | 100 | 100 | 100 |
| @ 1300nm (MHz-km) . . . . . | 400 | 300 | 100 | —   |

### Single Mode Fiber

|   |                 |
|---|-----------------|
| Mode-Field Diameter ( $\mu\text{m}$ ) . . . . .     | 10 $\pm$ 1      |
| Fiber Cladding Diameter ( $\mu\text{m}$ ) . . . . . | 125 $\pm$ 2     |
| Fiber Coating Diameter ( $\mu\text{m}$ ) . . . . .  | 500 $\pm$ 25    |
| Cut-off Wavelength (nm) . . . . .                   | 1200 $\pm$ 70   |
| Zero Dispersion Wavelength (nm) . . . . .           | 1311.5 $\pm$ 10 |

### Attenuation

|                            |     |
|----------------------------|-----|
| @ 1300nm (dB/km) . . . . . | 0.5 |
|----------------------------|-----|

### Maximum Zero-Dispersion Slope ( $S_0$ ) . . . . .

**NOTE:** The standard attenuation specifications are maximum values measured at 820nm and/or 1300nm at room temperature, wound on the factory shipping spool. The stated bandwidths are values as received from the optical fiber manufacturers in 1.1 or 2.2 km lengths. Optical performance specifications other than those listed above are available.

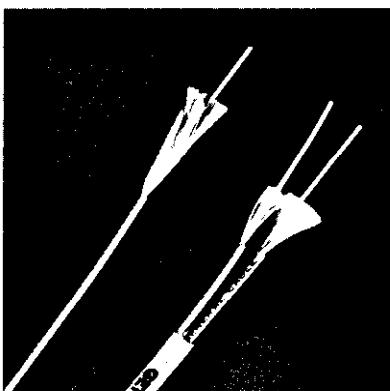
LUREKA TECHNICAL SALES, INC.  
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# **GENGUIDE™ Fiber Optic Cables**



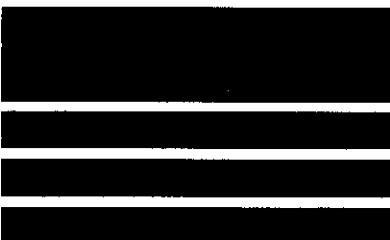
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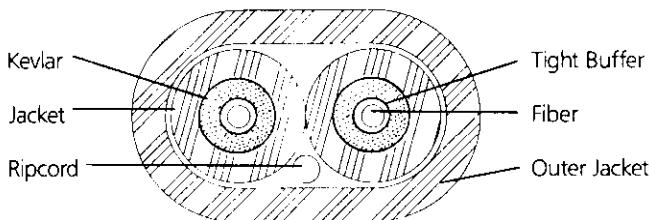
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### Attenuation

|                            |     |     |     |     |
|----------------------------|-----|-----|-----|-----|
| @ 850nm (dB/km) . . . . .  | 4.0 | 4.5 | 5.0 | 6.0 |
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### Attenuation

|                            |     |
|----------------------------|-----|
| @ 1300nm (dB/km) . . . . . | 0.5 |
|----------------------------|-----|

### Maximum Zero-Dispersion Slope ( $S_0$ ) . . . . .

$$S_0 < 0.093 \text{ ps/nm}^2 \cdot \text{km}$$

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