**Fiber Optic Cables**

**TIGHT BUFFER PVC/LSZH JACKETED SIMPLEX / DUPLEX CORD**

**Application**
This cable is mainly used for interconnecting cable for jumpers, patch cords or pigtails.

**Description**

**Simplex**
Simplex cable consists of single tight buffered fiber with aramid yarns as tensile strength members with jacket of either Flame Retardant PVC or LSZH compound. The cable is unconnectorized.

**Duplex Flat**
Duplex Flat Cable consists of two simplex units. Two simplex cords are placed side by side and jacketed with either Flame Retardant PVC or LSZH compound. The cable is unconnectorized.

**Duplex Round**
Duplex Round Cable consists of two single fibers, each with a color-coded PVC tight buffer. They are reinforced with aramid yarn to provide physical and tensile strength. The fibers are jacketed with either Flame Retardant PVC or LSZH compound. The cable is unconnectorized.

**Duplex Zip**
Duplex Zipcord Cable consists of two single fibers, each with a color-coded PVC tight buffer. They are reinforced with aramid yarn to provide physical and tensile strength. The fibers have either Flame Retardant PVC or LSZH compound jackets connected by a web to form a “zipcord” construction. The cable is unconnectorized.

**Construction**

Simplex – PVC/LSZH Cable

![Simplex Cable Diagram]

Duplex Flat – PVC/LSZH Cable

![Duplex Flat Cable Diagram]
## Physical Properties

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Cable Type</th>
<th>Nominal Weight (kg/km)</th>
<th>Nominal Weight (lb/kft)</th>
<th>Nominal Outer Diameter (mm)</th>
<th>Nominal Outer Diameter (in)</th>
<th>Maximum Pulling Load Installation (N/lb)</th>
<th>Maximum Pulling Load In Service (N/lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Simplex 2.0mm</td>
<td>7.6</td>
<td>5.10</td>
<td>2.0</td>
<td>0.079</td>
<td>490/110</td>
<td>290/65</td>
</tr>
<tr>
<td>1</td>
<td>Simplex 2.5mm</td>
<td>7.8</td>
<td>5.23</td>
<td>2.5</td>
<td>0.098</td>
<td>490/110</td>
<td>290/65</td>
</tr>
<tr>
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<td>Simplex 2.8mm</td>
<td>8.0</td>
<td>5.37</td>
<td>2.8</td>
<td>0.110</td>
<td>490/110</td>
<td>290/65</td>
</tr>
<tr>
<td>1</td>
<td>Simplex 3.0 mm</td>
<td>8.2</td>
<td>5.50</td>
<td>3.0</td>
<td>0.118</td>
<td>490/110</td>
<td>290/65</td>
</tr>
<tr>
<td>2</td>
<td>Duplex Flat</td>
<td>28.0</td>
<td>18.79</td>
<td>4.0×6.8</td>
<td>0.157×0.267</td>
<td>980/220</td>
<td>580/130</td>
</tr>
<tr>
<td>2</td>
<td>Duplex Round</td>
<td>18.4</td>
<td>12.35</td>
<td>4.2</td>
<td>0.165</td>
<td>980/220</td>
<td>580/130</td>
</tr>
<tr>
<td>2</td>
<td>Duplex Zip</td>
<td>15.0</td>
<td>10.07</td>
<td>2.4×4.8</td>
<td>0.094×0.188</td>
<td>980/220</td>
<td>580/130</td>
</tr>
</tbody>
</table>
TIGHT BUFFER PVC/LSZH JACKETED SIMPLEX / DUPLEX CORD

**Mechanical Properties**

**Minimum Bending Radius:**
- Under installation: 20 × OD
- During operation: 10 × OD

**Temperature Range:**
- Operating Temperature Range: -40°C (-40°F) to +70°C (+158°F)
- Storage Temperature Range: -50°C (-58°F) to +70°C (+158°F)

**Maximum Compressive Load:** 2000N

**Repeated Impact:** 2.9 N.m (J) × 2 impacts

**Twist (Torsion):** 180 × 10 times, 125 × OD

**Cyclic Flexing:**
- 25 cycles for armoured cables.
- 100 cycles for unarmoured cables.

**Crush Resistance:** 875N/cm (500lb/in)

**Fiber Compliance**

**Temperature Cycling**
- IEC60794-1-2-F2

**Repeated Bending**
- IEC60794-1-2-E6

**Tensile Strength**
- IEC60794-1-2-E1A

**Torsion**
- IEC60794-1-2-E7

**Crush**
- IEC60794-1-2-E3

**Kink**
- IEC60794-1-2-E10

**Impact**
- IEC60794-1-2-E4

**Cable Bend**
- IEC60794-1-2-E11

**Cool Bend**
- IEC60794-1-2-E11

**Safety Compliance**

**General Purpose Grade**
- Flammability Test: OFN (UL1581)

**Riser Grade**
- Flammability Test: OFNR/FT4 (UL1666)

**Plenum Grade**
- Flammability Test: OFNP/FT6 (UL 910)

**FRPVC Grade**
- Flammability Test: IEC60332-1

**LSZH Grade**
- Halogen Content Test: IEC 60754-1
- Acidity Test: IEC 60754; Smoke Emission Test: IEC61034-1/2

**LSFROH Grade**
- Halogen Content Test: IEC 60754-1
- Acidity Test: IEC 60754; Smoke Emission Test: IEC61034-1/2

**FR Grade**
- Fire Resistance Test: IEC 60331 / BS 6387 CWZ

**Standard Compliance**

**GR409-CORE**
- TIA/EIA 568B.3
- ICEA-S-83-596

**Features**

- Suitable for indoor use, such as routing connections in patching systems
- Short "patch cord" cables ideal for links between electronic equipment and fiber panels
- Compatible with wide variety of fiber optic connectors
- High quality tight-buffer coating on fiber for environmental and mechanical protection
- Customized jacket colors available for matching connectors.
- Private labeling on the cable outer jacket is also available.