Leaky Feeder Cables

Thermax Leaky Feeder cable works like an antenna, enabling reliable transmission of data to and from places where radio wave cannot reach.

These cables are ideal for communications or data-transmission applications in such demanding environments as:

- Steel-frame buildings;
- Underground mines;
- Transportation tunnels;
- Railway lines;
- Highway and rail bridges;
- Cargo ships.

The cables shown below are typical constructions; please contact your Thermax representative with your specific requirements.

75-Ohm Double-Jacketed Leaky Feeder Coaxial Cable

**Construction Details**
- **Conductor:** Solid annealed BC, .092 (2.33) diameter.
- **Dielectric:** Semi-air-spaced polyolefin, .396 (10.06) diameter.
- **Shield:** Spirally-wrapped solid annealed BC wires, each .6 mm diameter.
- **Binder:** Adhesive polyester tape wrap.
- **Inner Jacket:** Black polyolefin, .533 (13.53) diameter.
- **Outer Jacket:** Yellow PVC, .627 (15.93) diameter.
- **Temperature rating:** 75˚ C.

**Electrical Performance**

<table>
<thead>
<tr>
<th>Impedance</th>
<th>Velocity of Propagation</th>
<th>Capacitance (pF/ft)</th>
<th>Attenuation @160 MHz</th>
<th>Attenuation @486 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>75 ±3.0 ohms</td>
<td>84%</td>
<td>16.1</td>
<td>1.31</td>
<td>3.18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.3</td>
<td>10.43</td>
</tr>
</tbody>
</table>

50-Ohm Plenum Leaky Feeder Coaxial Cable

**Construction Details**
- **Conductor:** Solid annealed BC, .092 (2.33) diameter.
- **Dielectric:** Foamed fluoropolymer, .240 (6.10) diameter.
- **Shield:** Spirally-wrapped solid annealed BC wires, each .6 mm diameter.
- **Binder:** Adhesive polyester tape wrap.
- **Jacket:** Yellow PVDF, .340 (8.64) diameter.
- **Temperature rating:** 125˚ C.

**Electrical Performance**

<table>
<thead>
<tr>
<th>Impedance</th>
<th>Velocity of Propagation</th>
<th>Capacitance (pF/ft)</th>
<th>Attenuation @160 MHz</th>
<th>Attenuation @486 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 ±3.0 ohms</td>
<td>81%</td>
<td>25.0</td>
<td>2.3</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7.5</td>
<td>16.0</td>
</tr>
</tbody>
</table>

Dimensions in inches (mm). All values are nominal unless otherwise indicated. **BC:** Bare Copper.