The network cables come in different lengths with connectors at both ends. The extension of the type number indicates the length of the cable. The LBB 4416/00 comes without connectors. The connectors (LBB 4417/00) are available for it separately.

### Functions

**LBB 4416/01 /02 /05 /10 /20 /50**
These are special cables with two plastic fibers for data communication and two copper cores for the power supply.

The cables all have the network connectors fitted. They connect the network controller to power amplifiers, audio expanders, call stations etc.

**LBB 4416/00**
This is a special cable with two plastic fibers for data communication and two copper cores for the power supply.

The cable is 100 meters long, and comes without network connectors. LBB 4417/00 connectors are fitted after the cable has been cut to the required length. It connects the network controller to power amplifiers, audio expanders, call stations etc.

### Certifications and approvals

<table>
<thead>
<tr>
<th>Safety</th>
<th>acc. to IEC 60065 / EN 60065</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunity</td>
<td>acc. to EN 55103-2 / EN 50130-4 / EN 50121-4</td>
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<tr>
<td>Emissions</td>
<td>acc. to EN 55103-1 / FCC-47 part 15B</td>
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<tr>
<td>Emergency</td>
<td>acc. to EN 60849 / EN 54-16 / ISO 7240-16</td>
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<tr>
<td>Maritime</td>
<td>acc. to IEC 60945</td>
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<tr>
<td>Flame retardant</td>
<td>acc. to IEC 60332-1 60s</td>
</tr>
<tr>
<td>Halogen level</td>
<td>acc. to IEC 60754-2 pH &gt;4.3, conductivity &lt;10 uS/mm</td>
</tr>
<tr>
<td>Smoke level</td>
<td>acc. to IEC 61034-2 light transmission &gt;60%</td>
</tr>
</tbody>
</table>

### Installation/configuration notes

The cables have the following lengths
### LBB 4416/xx Network Cables

<table>
<thead>
<tr>
<th>Model</th>
<th>Length (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBB4416/00</td>
<td>100 (without connectors)</td>
</tr>
<tr>
<td>LBB4416/01</td>
<td>0.5</td>
</tr>
<tr>
<td>LBB4416/02</td>
<td>2</td>
</tr>
<tr>
<td>LBB4416/05</td>
<td>5</td>
</tr>
<tr>
<td>LBB4416/10</td>
<td>10</td>
</tr>
<tr>
<td>LBB4416/20</td>
<td>20</td>
</tr>
<tr>
<td>LBB4416/50</td>
<td>50</td>
</tr>
</tbody>
</table>

### Technical specifications

#### Electrical
- **Wire**: Copper, stranded 1 mm²
- **Resistance**: <0.018 ohm/m

#### Optical
- **Fiber**: PMMA, 1 mm
- **Numeric aperture**: 0.5
- **Attenuation**: <0.17 dB/m @ 650 nm
- **Bending loss**: <0.5 dB (r=20 mm, 90°) JIS C6861

#### Mechanical
- **Dimensions (diameter)**: 7 mm (0.28 in)
- **Color**: Black
- **Pull force**: 150 N (max)

#### Environmental
- **Operating temperature**: -40°C to +65°C (-40°F to 149°F)
- **Humidity**: 15% to 90%
- **Air pressure**: 600 to 1100 hPa

### Ordering information

**LBB 4416/00 Network Cable 100m**
- Praesideo hybrid network cable, 100 m without connectors for custom length cables, to be used with LBB4417/00 network connectors.
- Order number **LBB4416/00**

**LBB 4417/00 Set Network Connectors (20 pcs)**
- Praesideo network connectors, to be used with LBB4416/00 network cable for 10 custom length cables (set of 20 pieces).
- Order number **LBB4417/00**

**LBB 4418/00 Cable Connector Tool Kit**
- Case with special tools for manufacturing custom-length network cables.
- Order number **LBB4418/00**

**LBB 4416/01 Network Cable Assembly 0.5m**
- Praesideo hybrid network cable, 0.5 m length with network connectors.
- Order number **LBB4416/01**

**LBB 4416/02 Network Cable Assembly 2m**
- Praesideo hybrid network cable, 2 m length with network connectors.
- Order number **LBB4416/02**

**LBB 4416/05 Network Cable Assembly 5m**
- Praesideo hybrid network cable, 5 m length with network connectors.
- Order number **LBB4416/05**

**LBB 4416/10 Network Cable Assembly 10m**
- Praesideo hybrid network cable, 10 m length with network connectors.
- Order number **LBB4416/10**

**LBB 4416/20 Network Cable Assembly 20m**
- Praesideo hybrid network cable, 20 m length with network connectors.
- Order number **LBB4416/20**

**LBB 4416/50 Network Cable Assembly 50m**
- Praesideo hybrid network cable, 50 m length with network connectors.
- Order number **LBB4416/50**

**LBB 4419/00 Cable Couplers (10 pcs)**
- Cable couplers, each coupler is used to connect 2 Praesideo network cables in series to increase the length to 30 m maximum (set of 10 pieces).
- Order number **LBB4419/00**