Chalcogenide Fiber cable

Chalcogenide fiber cable is assembled with Mid Infra-red transmitting arsenic sulphide glass fibers. Standard cable consists of SMA connectors and PEEK protective tubing which protects the fibers outside the connectors.

### Specification of CIR cable materials

<table>
<thead>
<tr>
<th>Material of fiber</th>
<th>Arsenic sulphide glass</th>
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</thead>
<tbody>
<tr>
<td>Inner protective tubing for the fibers</td>
<td>PEEK</td>
</tr>
<tr>
<td>Outer protective tubing for the fibers</td>
<td>PEEK</td>
</tr>
<tr>
<td>SMA connectors</td>
<td>Brass</td>
</tr>
<tr>
<td>FC/PC connectors</td>
<td>Brass</td>
</tr>
</tbody>
</table>

**Caution!** The chalcogenide fiber can withstand not more than 80°C.

Please take care against overheating of the cable.

1. **Handling Instruction**

Handle CIR cable with care.

The cable contains chalcogenide fiber which is flexible but can be damaged at the shock of the connector or fiber protective sleeve. Also the bending radius of these fibers is limited, i.e., not less than

- 20cm diameter for CIR 500/550 fiber cable
- 15cm diameter for CIR340/400 fiber cable
- 10cm diameter for CIR 250/300 fiber cable.
Caution! The bending of the cable to less diameter can result in fiber break.

- Do not bend the cable less than specified diameter
- Put protective caps onto both ends of the cable when not in use
- Plug/unplug the cable by gripping the connector, not the cable jacket.
- Hold the cable at both ends when transporting
- Prevent the drop of the cable when laying on the surface
- Prevent the springing the connectors onto the hard surface.
- Avoid any scratches and notches of PEEK protective tubing
- Return the cable in to original box when not in use

2. Cleaning of CIR cable

The dust can be cleaned with a soft painting brush.
The fiber ends in SMA connectors can be cleaned using lint-free tissue with Isopropanol. After cleaning wipe off fiber end carefully.
Wipe also the side surface of the connectors as the dust from side surface can reach fiber end face.
Do not touch fiber ends with hard tool even through the napkin.

3. Storage.

When the work using CIR cable is finished carefully remove the cable from adaptors. Do not strike the connectors because the shock can damage the fiber.

- Put protective caps onto connectors.
- Place the cable into the storage box when not in use or place it in a suitable location for a safe storage.