Mineral insulated thermocouples, measuring elements and heaters are manufactured according to highest quality standard (IEC 584, ASTM E230-93, BS4937/4, NFC 42-321, GOST, KTA 1401). On demand of customer one or more inner leads are insulated by ceramic and covered by sheath material. Special requirements of customer concerning properties of material can be realized.

Mineral insulated heaters
Mineral insulated thermocouples
Mineral insulated cables

Mineral Insulated Cable for extreme applications

Mineral insulated thermocouples, measuring elements and heaters are suitable for various application fields. Here we give you a few examples:

- Temperature instrumentation
- Plant construction and building
- Petrochemical industry
- Avionic industries
- Car industries
- Nautical industry
- and many more

Mineral insulated cables
Mechanical stability
Low temperatures
High temperature range
up to 1300°C
Acid resistance
Malleable and flexible
MINERAL INSULATED HEATERS

Heating cables are made with an individual electrical resistance, further on with high temperature resistance and used in universal applications. Heating cables are suitable for heating applications up to a maximum sheath temperature of 600°C (stainless steel sheath) or up to 1000°C (nickel alloy sheath material). The environment temperatures has to be considered.

MINERAL INSULATED THERMOCOUPLES

Mineral insulated (MI) thermocouples according to norm are thermal cables. They are manufactured to customer requirements in different materials depending on type and use. All our thermocouple cables are manufactured according to DIN EN 60584 (type K, N, J, T, S, R, B, E), DIN 43710 (type L). The temperature range starts from -270°C temperatures up to 1300°C.

MINERAL INSULATED CABLES

Mineral insulated (MI) cables are comparable with electric wires. The difference to mineral insulated cables for thermocouples are the selected materials of leads and sheath as well as their application for resistance temperature devices. A further application is data transfer or electric supply through strongly stressed zones, such as fire rooms, road construction, vacuum or similar environments where normal cables are not sufficient. The temperature range starts from -273°C (0-Kelvin) up to 1300°C. Available diameters 0.5 mm up to 14 mm, various leads 1 to 8 are possible.

<table>
<thead>
<tr>
<th>Ø</th>
<th>Number of wires</th>
<th>Thermocouple</th>
<th>Sheath material</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,25 – 1,00 mm</td>
<td>2</td>
<td>K N</td>
<td>AISI 321 or AISI 600</td>
</tr>
<tr>
<td>1,00 – 3,00 mm</td>
<td>2 / 4</td>
<td>J K N</td>
<td>AISI 321 or AISI 600</td>
</tr>
<tr>
<td>3,00 – 6,00 mm</td>
<td>2 / 4 / 6</td>
<td>AISI 321 or AISI 600</td>
<td></td>
</tr>
<tr>
<td>6,00 – 12,00 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information please do not hesitate to contact us:

ThermCable GmbH
Am Bahnhof 6a
63505 Langenselbold
Tel. +49(0)6184 93284-0
Fax +49(0)6184 93284-11
Email: info@thermcable.de
www.thermcable.de