EXAMPLES OF SPECIAL CARTRIDGE HEATERS

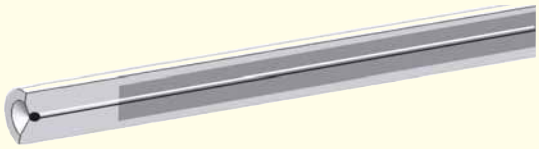
In order to accurately define your cartridge heater we kindly ask you to provide us with detailed specification sheets.

- ***CARTOUCHES AVEC THERMOCOUPLE INCORPORE***

J or K thermocouples are insulated with fiberglass, PFA, Standard length leads : 1000 mm (max)

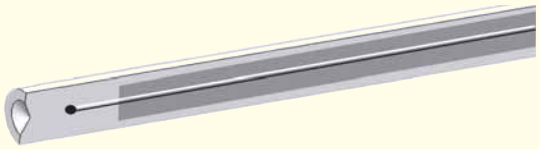
The maxi working temperature on the cartridge heater body : 800°C However, foolowing the using conditions (bore, cartridges' assembly...). Thermocouples can be subjected to upper temperatures to those given by regulation and undergo damages (notably assemblies 1 and 2). For information: T°max on the thermocouples' conductors; TcJ 750°C, TcK 1100°C.
Available with some connections. Please consult us.

Non insulted from earth / thermocouple located at the bottom of the cartridge - TCJ1 or TCK1



When inserted into a blind hole, it provides a good temperature reading with an average response time.

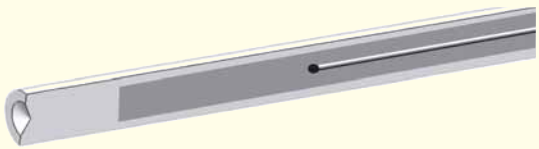
Insulated from earth / thermocouple located at the bottom of the cartridge



- *Fitted as standard on all ∅ 6.35 mm (1/4") to 8 mm, cartridge heaters with built in thermocouple unless otherwise specified.*
- Fitted on cartridges when a built in thermocouple is required at bottom of cartridge and when insulationis not precisely defined.

Earth insulation, allows a good protection of the electric elements of the control system.

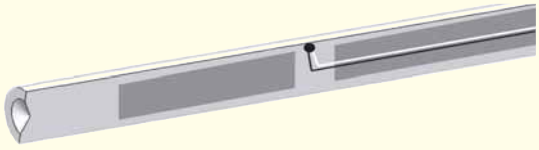
Insulated thermocouple located in the center of the heating core - TCJ3 or TCK3



- *Fitted as standard on all ∅ 9.52 mm (3/8") to 20 mm, cartridge heaters with built in thermocouple unless otherwise specified.*

Highly recommened for all kind of applications, as the thermocouple monitors the internal temperature of the cartridge with an accurate reading and a very fast time of response.

Ungrounded thermocouple located in the center, in contact with metal tube - TCJ4 or TCK4



- Assembly for : 12.5 mm ≤ $\varnothing_{cartridge}$ ≤ 20 mm

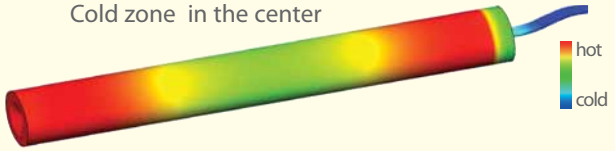
Monitoring of the outer sheet metal temperature. This system saves the adding of a sensor to the part to be heated by the cartridge.

- ***OTHER MANUFACTURES :***

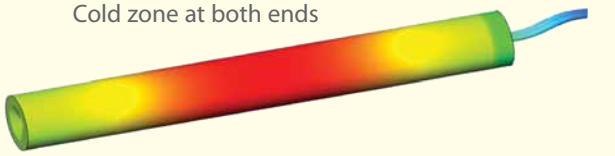
Cold zones

Examples of application :

Cold zone in the center



Cold zone at both ends



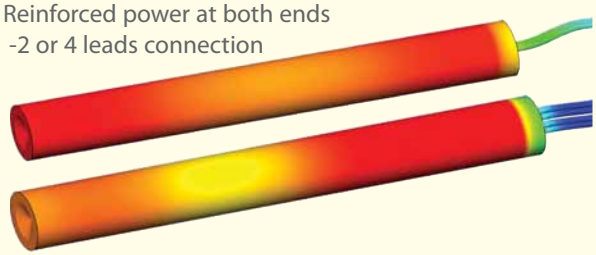
For instance : The location of the cold zone on the wiring side is particularly used when the heater emerges from the part to be heated. Thus, the cartridge heater will not overheat and it will not conk out.

Area(s) with variable wattage

Examples of application :

Reinforced power in the center- 2 leads connection

Reinforced power at both ends
-2 or 4 leads connection



Multiple-zone manufacture, to distribute the heating power.

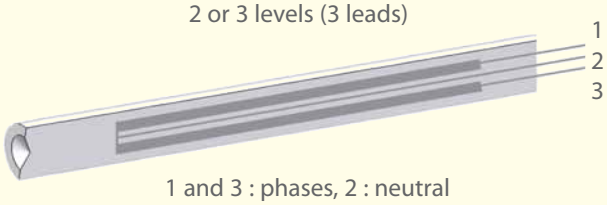
4 leads connection: different heating circuits available for $\varnothing_{cartridge\ heater}$ ≥ 14 mm

Compensated power at both ends of the cartridge allows a good compensation of the heat losses at each end of the mold or the tooling.

Multiple temperature levels

Examples of application :

2 or 3 levels (3 leads)



1 and 3 : phases, 2 : neutral

Dual voltage application.

The above example will provide quick heating of the system by only using the necessary power to achieve the required temperature.
Assembly for $\varnothing_{cartridge\ heater}$ ≥ 14 mm