

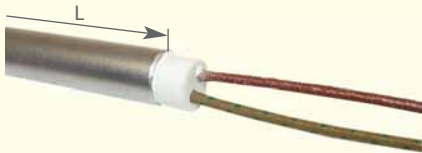
CONNECTION TYPES FOR STANDARD CARTRIDGE HEATERS

- Stock standard cartridge heaters can be fitted with the following connection types and are available within 72 hours.
- The sealing connection of the cartridges listed below are made of a thermal cement (except for CCT.4).
- For a silicone sealing (Tmax : 260°C), protecting against moisture, please write down the kind of output chosen and specify CCT.15 (T°C max 180°C except if heating area is in front of the connection : 250°C).
Sealing is not suitable for connection type CCT.1 and CCT.2. Contact us for connection - sealing compatibility

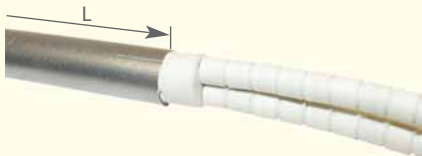
STRAIGHT CONNECTIONS

- Flexible wires, nickel conductor, fiberglass insulated, designed to support a maximum operating temperature of 350°C. (except for CCT.4)
- Caption : L = total length of cartridge

Wires - CCT.0 (fitted on a standard cartridge heater)

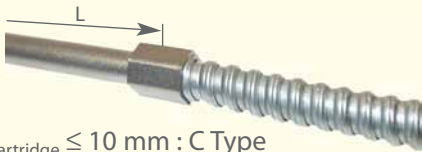


Ceramic beads insulations - CCT.1

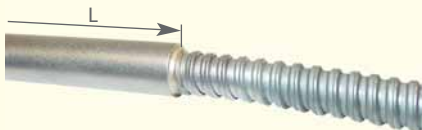


Ceramic beads protect the leads and are suitable for high working temperatures in excess of 350°.

Flexible metal conduit - CCT.2 (GMF)



$6.35 \leq \varnothing_{\text{cartridge}} \leq 10 \text{ mm} : \text{C Type}$



$12.5 \leq \varnothing_{\text{cartridge}} \leq 16 \text{ mm} : \text{B Type}$



$19.05 \leq \varnothing_{\text{cartridge}} \leq 20 \text{ mm} : \text{Sample D}$

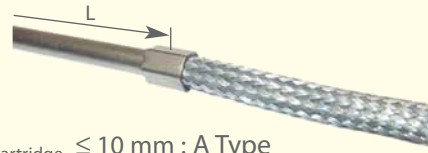
Steel galvanized flexible metal conduit, crimped or silver brazed, depending on the diameter of the cartridge heater.

Without ceramic head rigid connection - CCT.29



Wiring which combines both high intensity and low profile. Lead wires connected to the rigid connection rod and insulated with a high temperature protection sleeve.

Braid - CCT.3



$6.35 \leq \varnothing_{\text{cartridge}} \leq 10 \text{ mm} : \text{A Type}$



$12.5 \leq \varnothing_{\text{cartridge}} \leq 20 \text{ mm} : \text{B Type}$

Galvanized steel braid. They are suitable for a good mechanical protection of lead wires.

Connection with a multiconductor cable - CCT.4



$6.35 \leq \varnothing_{\text{cartridge}} \leq 10 \text{ mm}$



$12.5 \leq \varnothing_{\text{cartridge}} \leq 20 \text{ mm}$

Copper cable silicone insulated, 2 wires + earth, T° max.: 180°C. Brazed watertight assembly. Silicone seal.

Reinforced connection - CCT.25



$6.35 \leq \varnothing_{\text{cartridge}} \leq 10 \text{ mm}$



$12.5 \leq \varnothing_{\text{cartridge}} \leq 20 \text{ mm}$

Recommended when both the cartridge heater and the wiring are in motion. These cables should be very flexible.

Wirings length varies according to the diameter of the cartridge heater.

In case of space restrictions, please consult us.

Possibility of combining a thermocouple or an earth wire, fitted with some of the above connections. Please contact us.

CONNECTION TYPES FOR STANDARD CARTRIDGE HEATERS

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Sealing is not suitable for connection type CCT.10. Contact us for connection - sealing compatibility

90° BENT CONNECTIONS

- Flexible wires, nickel core, fiberglass insulated, designed to support a maximum operating temperature of 350°C.
- Copper elbow brazed with silver.
- Flexible metal conduit made of galvanized steel.

Caption : L = total length of cartridge

Wires - CCT.5



$$6.35 \text{ (1/4")} \leq \varnothing_{\text{cartridge}} \leq 16 \text{ mm}$$



$$19.05 \text{ (3/4")} \leq \varnothing_{\text{cartridge}} \leq 20 \text{ mm}$$

Flexible metallic conduit- CCT.6



$$6.35 \text{ (1/4")} \leq \varnothing_{\text{cartridge}} \leq 16 \text{ mm}$$



$$19.05 \text{ (3/4")} \leq \varnothing_{\text{cartridge}} \leq 20 \text{ mm}$$

90° SQUARE BLOCK CONNECTIONS

- Flexible wires, nickel conductor, fiberglass insulated, designed to support a maximum operating temperature of 350°C. (exp. for CCT.10)
- Sealed square block, made of welded stainless steel .
- Flexible metal conduit and braid : galvanized steel.

Caption : L = total length of cartridge

Wire - CCT.7



Braid - CCT.9



Flexible metal conduit - CCT.8



$$\varnothing_{\text{cartouche}} \geq 9.52 \text{ mm (3/8")}$$

Flexible metal conduit + reinforced tube - CCT.28



Connection with a multicore cable - CCT.10



$$\varnothing_{\text{cartridge}} \geq 9.52 \text{ mm (3/8")}$$

Copper cable silicone insulated , 2 wires + earth, T°max :180°C
Brazed waterproof assembly. Silicone seal.

Square block with silicone sleeves- CCT.22



Wires protected with a silicone sleeve.
Good resistance to vibrations and movements.
Maximum operating temperature for cables : 200°C.

CONNECTION TYPES FOR SPECIAL CARTRIDGE HEATERS

Stock standard cartridge heaters can be fitted with the following connection types and are available within 72 hours.

- The sealing connection of the cartridges listed below are made of a thermal cement (except for CCT.4).
- For a silicone sealing (Tmax : 260°C), protecting against moisture, please write down the kind of output chosen and specify CCT.15 (T°C max 180°C except if heating area is in front of the connection : 250°C). Sealing is not suitable for connection type CCT.10A. Contact us for connection - sealing compatibility

STRAIGHT CONNECTIONS

Caption : L = total length of cartridge

Earth return - CCT.16



Single wire termination + earth return.

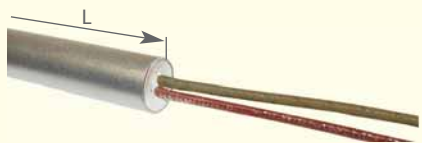
Pins and receptacle socket- CCT.18



$9.45 \leq \varnothing_{\text{cartridge}} \leq 18 \text{ mm}$

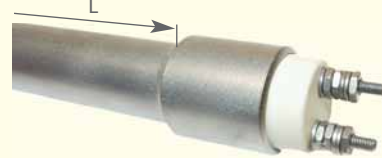
Supplied with 2 x $\varnothing 6 \text{ mm}$ pins, 19 mm CTC, nickel plated steel, specially designed for a quick connection.

Flexible connection without ceramic cap - CCT.30

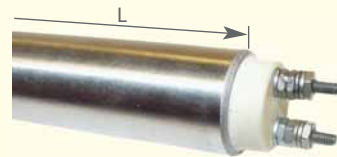


Inside lead connection without head.

Stud terminals - CCT.17



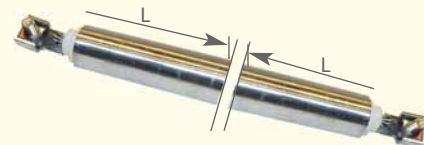
$9.45 \leq \varnothing_{\text{cartridge}} \leq 16 \text{ mm}$: A type
 $18 \leq \varnothing_{\text{cartridge}} \leq 21 \text{ mm}$: A type



$22 \leq \varnothing_{\text{cartridge}} \leq 32 \text{ mm}$: B type

M3 stud terminals, supplied with 2 nuts and 2 washers.

Both ends rigid connection



This type of connection is particularly used for replacing a tubular heating element.

SQUARE CONNECTIONS

- Flexible wires, nickel conductor, fiberglass insulated, designed to support a maximum operating temperature of 350°C.

Caption : L = total length of cartridge

90° square connection coming of the tube - CCT.21



This product requires a non heating length of 12 mm on the connection side.

"L" shape side connection at 90° - CCT.23



Stainless steel tube welded at 90° from the heater.

$\varnothing_{\text{cartridge}} \geq 9.52 \text{ mm}$ (3/8")

Flexible metal conduit - CCT.8 A



$\varnothing_{\text{cartridge}} : 11 \text{ à } 12, 13 \text{ à } 15, 16.5 \text{ à } 18, 21 \text{ à } 32 \text{ mm}$

Wirings sleeved in a galvanized steel flexible metal conduit.

Connection with a multiconductor cable - CCT.10 A



$\varnothing_{\text{cartridge}} : 11 \text{ à } 12, 13 \text{ à } 15, 16.5 \text{ à } 18 ; 21 \text{ à } 32 \text{ mm}$

Copper cable silicone insulated, 2 wires + earth, Tmax : 180°C. Brazed waterproof assembly.

Productions of cartridge heaters are subject to our approval, depending on power rating, current, sizes, connections and accessories. See p.14. How to define a cartridge heater.

Our products specifications are subject to change without notice. We reserve the right to modify them according to the technical evolution.