

Ceramic Withdrawable Heaters

for Liquids and Gases

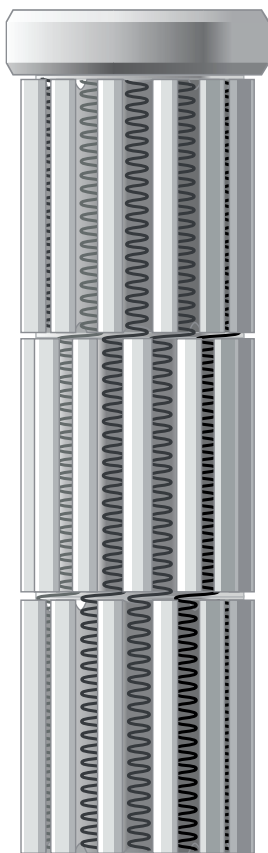


Ceramic withdrawable heaters are used for heating of gas or liquid and also for melting of solids such as wax and lead.

The ceramic element is inserted into a pipe which is mounted into the container to be heated. The advantage of this heating method is that elements can be removed from the pipe without having to drain the container. This is of particular relevance when substances are frozen in the unheated state (e.g. wax).

By carefully selecting a suitable pipe material and thickness, a very durable heating system is obtained.

Notes

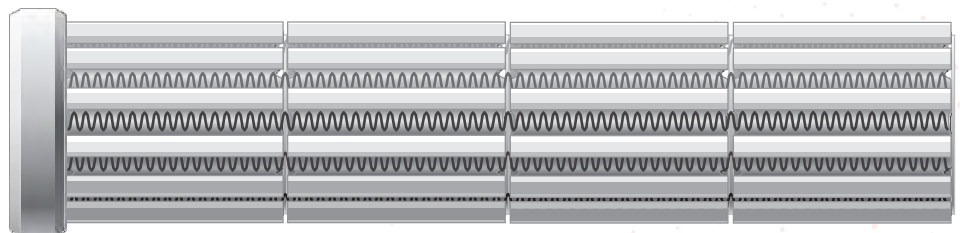


vertically mounted element (segments offset)

The dimensions of the pipe must be such that there is a 1-1.5mm tolerance between pipe inner diameter and ceramic element outer diameter, allowing easy removal. An excessive tolerance will hinder heat transfer. The pipe material is preferably a heat resistant stainless steel.

Elements are usually mounted horizontally. For vertical mounting, elements must be specially constructed to prevent sagging of the heating spiral inside the element grooves.

It is good practice to allow access to the pipe from both ends, facilitating removal of debris when elements are replaced.

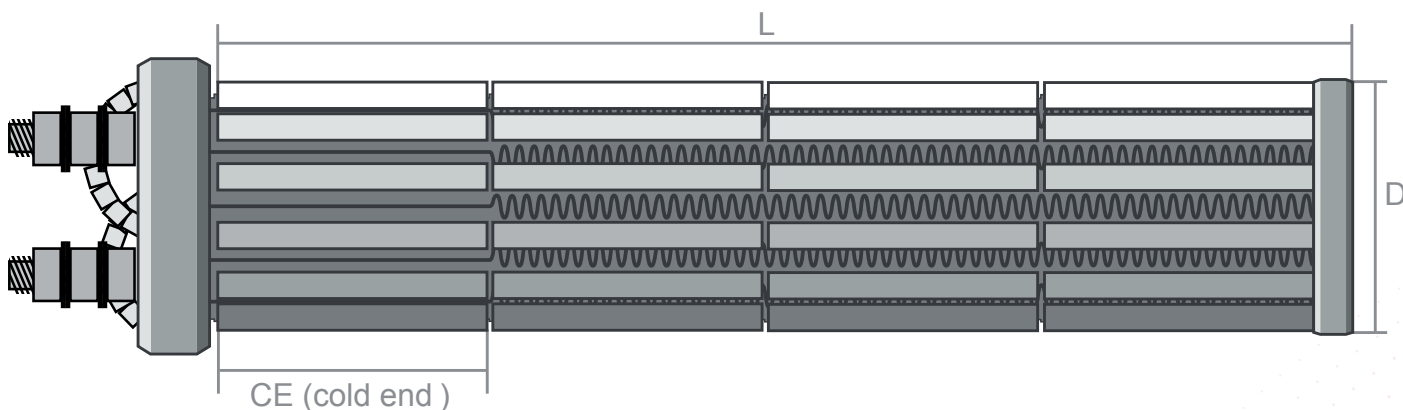


NB: Specify mounting method when ordering elements designed for horizontal mounting may not be installed vertically

Standard Diameters

Standard stock items

Diameter (mm)	Mounting	Recommended Pipe (Stainless Steel)	Comments
17.3	horizontal	NW20 (ID=20)	closed former
19.5	horizontal	NB20 Sched40 (ID=20.93)	closed former
22.5	horizontal	-	closed former
29.0	horizontal	NW32 (ID=32)	open former
33.0	horizontal	NB32 Sched40 (ID=35.04)	open former
36.0	horizontal and vertical	NW40 (ID=37.00)	open former
37.5	horizontal	-	open former
45.0	horizontal	-	open former
46.0	horizontal	-	open former
47.5	horizontal	NB50 Sched80 (ID=49.25)	open former
48.0	horizontal	-	open former
53.0	horizontal and vertical	NB50 Sched10 (ID=54.79)	open former
57.0	horizontal	NB65 Sched80 (ID=59.01)	open former



Specify when ordering:

- Diameter (D)
- Total Length (L)
- Length of cold end (CE)
- Power
- Supply voltage
- Single or three phase
- Horizontal or vertical mounting