



# Heating Element

Single core with coiled core

**Minimum bending  
radius: 3 x OD**

- Nickel-chromium core: NWN type
- Nickel core: NWN type
- Balco® wire: NWBaN type

These heating elements are intended for applications requiring low power within a small space.

As an example, these THERMOCOAX elements are used in the manufacture of miniature heating collars intended for injection moulding nozzles.

## Materials

### Core:

Hot part: nickel-chromium or when the power has to be self-limited, nickel or Balco®  
Cold part: nickel

**Insulant:** highly compacted mineral powder.

**Sheath:** stainless steel (Ac)

### Characteristics:

**Power:** in hundreds of watts

**Voltage:** 110 / 220 V

**Hot part:** maximum 1 m (length)

**Temperature:** 500°C maximum

For any information concerning these products, please consult us. They can be supplied subject to availability or within economic batch quantities.

## Standard types

O.D. in mm	NWN		NWBaN		NWN	
	Line resistance in ohms/m at 20°C*					
	mini	maxi	mini	maxi	mini	maxi
1.5	70	700	20	160	6	50
2.2	30	1 000	5	180	2	65
3.2	30	1 250	5	230	2	80

The characteristics are also identical to the 1NC type except for the line resistance which varies with temperature.

As for the nickel-chromium heating elements, the thermal dissipation can be diminished at the ends and particularly at the connectors by means of a median swaging or on the tip with earth return.

These elements can be manufactured on request subject to minimum economic batch quantities.



## Heating elements

Single core with coiled core

### Connection to supply cable

The THERMOCOAX heating elements are designed to work in very diverse and severe conditions.

Our connection range covers this diversity and the specific requirements of any applications.

The most common used connectors are issued from the plastic range where the maximum working temperature is 200°C and the metal/ceramic range where temperature can reach 600°C and operate in vacuum down to 10<sup>-9</sup> bars.

More details are given in data sheet **E186**.



### Seal glands and bushings

Any form of brazing or welding of a heating element through a wall requires some skill, and to facilitate the mounting, a range of small seal glands have been developed and adopted for the standard THERMOCOAX dimensions.



THERMOLOK seal gland



Bushing

## Your Contact

### *Sales Dept*

THERMOCOAX SAS  
40 Bd Henri Sellier  
F 92156 SURESNES Cedex  
Tel.: +33 1 41 38 80 50  
Fax: +33 1 41 38 80 70  
info@thermocoax.com

### *German Sales Office*

THERMOCOAX GmbH  
Brookstiege 1  
D 22145 STAPELFELD  
Tel.: +49 40 66857 180  
Fax: +49 40 66857 133  
info@thermocoax.de

### *USA Sales Office*

THERMOCOAX Inc.  
6825 Shiloh Road East, Ste B-7  
Alpharetta, GA 30005  
Tel.: 800 298 3345  
Fax: 678 947 4450  
info-usa@thermocoax.com

### *UK Sales Office*

THERMOCOAX UK Ltd.  
Second Floor Offices  
The Estate Office  
Aubourn,  
Lincolnshire LN5 9DX  
Tel.: +44 (1522) 789 900  
Fax: +44 (1522) 789 902  
info-uk@thermocoax.com

### *The Netherlands Sales Office*

THERMOCOAX BV  
Luchthavenweg 81  
European Business Centre  
Unit 2.23  
5657 EA EINDHOVEN  
Tel.: +31 (40) 295 95 58  
Fax: +31 (40) 255 54 78  
info-nl@thermocoax.com

### *Head office*

Planquignon  
F61434 ATHIS DE L'ORNE

More information in the brochure  
« How to choose your heating element »