

Heating Elements

Pneu-Therm is well established as one of the premier heating element manufacturers in the UK, having a large catalogue of standard products, but also having the skills and expertise to offer customers the heating element they need suited to their application.

Over many years we have been adapting standard heater designs for use in many differing customer applications, cutting down on costly development and lead-time.

This brochure shows the standard elements we produce, detailing the main specification details and various options available.

If you have a requirement for something you don't see within this product brochure, or an adaptation of something that is in here, please get in touch with our sales office.

0044 1636 679415

sales@pneutherm.com



Mica Band Heater

Technical Information

Mica Band Heaters are used to heat cylindrical surfaces/pipes in a range of applications.

Minimum diameter:	25mm
Minimum width:	25mm
Maximum temperature:	482°C
Maximum watt density:	Dependant on application and size
Nominal watt density:	3 – 7 w/cm ²
Maximum voltage:	415v
Resistance tolerance:	+10%/-5%
Wattage tolerance:	+5%/-10%
Terminations available:	Threaded stud or leadwire
Notes:	We can add a range of different holes and cut outs to suit your application. Also we can include thermocouple bridges and a range of clamping methods.



Need a quote?

To enable us to quote your Mica band heater we require the following information;

- Inside diameter and width
- Supply voltage and required wattage
- Type and length of termination (leads/studs)
- Position of termination (in relation to clamp)
- Clamping method (built in strap/external strap)
- Required operating temperature
- Any control mechanisms being used
- Any application information

The more application information we have, the easier it will be to quote the correct product for what you need.

Mica Strip/Platen Heater

Technical Information

Mica strip and platen heaters are used for heating flat surfaces/platens.

Minimum width:	15mm
Minimum length:	50mm
Maximum length:	1200mm
Maximum watt density:	Dependant on application and size
Nominal watt density:	1 – 7 w/cm ²
Maximum voltage:	240v
Resistance tolerance:	+10%/-5%
Wattage tolerance:	+5%/-10%
Terminations available:	Threaded stud or leadwire
Notes:	We can add a range of different holes and cut outs to suit your application. We can also offer mounting slots to help you secure the element to your process.



Need a quote?

To enable us to quote your Mica strip or platen heater we require the following information;

- Width and length
- Supply voltage and required wattage
- Type and length of termination (leads/studs)
- Position of termination
- Mounting tabs or holes require
- Required operating temperature
- Any control mechanisms being used
- Any application information

The more application information we have, the easier it will be to quote the correct product to suit your requirements.

Tubular Heater

Technical Information

Tubular heaters are used in a very wide range of applications, they are probably the most popular element on the market.

Diameters available:	8mm (5/16"), 9.5mm (3/8"), 0.260", 0.430", 0.475" and 0.625
Minimum length:	150mm
Maximum length:	5000mm
Maximum temperature:	Dependant on sheath material and application
Maximum watt density:	Dependant on application and size
Maximum voltage:	600v
Resistance tolerance:	+10%/-5%
Wattage tolerance:	+5%/-10%
Materials available:	Incoloy 800, 825 and 840. 304, 316 and 321 stainless steel. Inconel 600, Monel, Copper, Titanium and Low Carbon Steel
Terminations available:	Threaded stud, receptacle or leadwire. (We offer a range of moisture resistant terminations).
Mounting methods:	Bulkhead fitting or bracket
Notes:	Tubular elements are available formed to any shape your application requires. We can also supply the elements either finned or un-finned, finned elements are usually used in forced air application.



Need a quote?

To enable us to quote your tubular heater we require the following information;

- Sheath diameter, length and formation
- Supply voltage and required wattage
- Type and length of termination (leads/studs)
- Cold length each end of element
- Required operating temperature
- Any control mechanisms being used
- Any application information

The more application information we have, the easier it will be to quote the correct product to suit your requirements.

Tubular Immersion Heater

Technical Information

Tubular heaters are used in a very wide range of applications, they are probably the most popular element on the market. Immersion heaters are made with a terminal head for mounting into your application.

Diameters available:	8mm (5/16"), 9.5mm (3/8"), 0.260", 0.430", 0.475" and 0.625
Minimum length:	150mm
Maximum length:	5000mm
Maximum temperature:	Dependant on sheath material and application
Maximum watt density :	Dependant on application and size
Maximum voltage:	600v
Resistance tolerance:	+10%/-5%
Wattage tolerance:	+5%/-10%
Materials available:	Incoloy 800, 825 and 840. 304, 316 and 321 stainless steel. Inconel 600, Monel, Copper, Titanium and Low Carbon Steel
Notes:	Tubular elements are available formed to any shape your application requires. We can also offer a vast range of threaded terminal heads and terminal caps to different IP ratings.



Need a quote?

To enable us to quote your tubular immersion heater we require the following information;

- Diameter and inserted length
- Supply voltage and required wattage
- Type of terminal head any terminal cap
- Cold section required on element
- Any thermostat or thermocouple required
- Required operating temperature
- Any control mechanisms being used
- Any application information

The more application information we have, the easier it will be to quote the correct product to suit your requirements.

Exposed Spiral Element

Technical Information

Exposed spiral elements are often called pencil bar or fire bar elements. These have a ceramic former and exposed resistance wire outer. They are available with or without a silica glass sheath.

Diameters available:	15mm former as standard
Minimum length:	150mm
Maximum length:	290mm
Maximum temperature:	Dependant on application
Maximum watt density:	Dependant on application
Maximum voltage:	480v
Resistance tolerance:	+10%/-5%
Wattage tolerance:	+5%/-10%
Terminations available:	Leadwire or cable



Need a quote?

To enable us to quote your exposed spiral heater we require the following information;

- Diameter and length
- Supply voltage and required wattage
- Type and length of termination (leads/studs)
- Position of termination
- Mounting tabs or holes require
- Required operating temperature
- Any control mechanisms being used
- Any application information

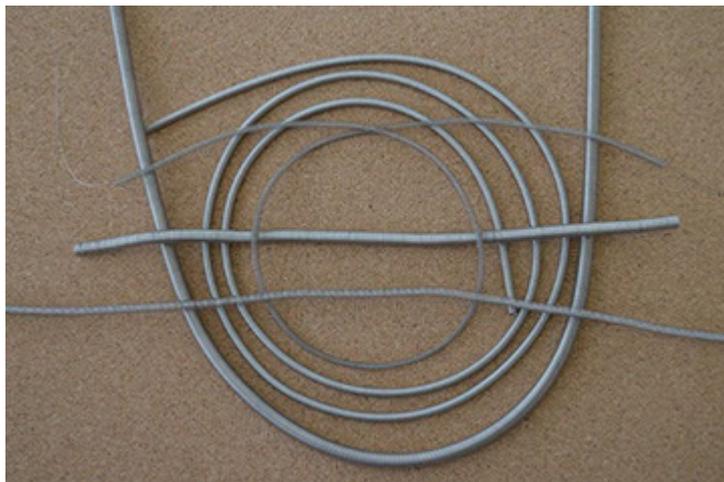
The more application information we have, the easier it will be to quote the correct product to suit your requirements.

Resistance Wire Spiral

Technical Information

Resistance wire spirals are used in a wide range of different machinery from scientific ovens to bespoke drying equipment. The spirals are generally used with air blowing across them.

Diameters available:	Consult factory
Minimum length:	50mm
Maximum length:	2000mm
Maximum temperature:	Dependant application
Maximum voltage:	480v
Resistance tolerance:	+10%/-5%
Wattage tolerance:	+5%/-10%
Terminations available:	Leadwire or single strand of resistance wire.
Notes:	Spirals using diameter wires up to 0.048" (1.2mm) can be done on our CNC winding machine, diameters above this will be done manually. 80/20 nickel chrome wire is used as standard.



Need a quote?

To enable us to quote your resistance wire spiral we require the following information;

- Diameter and length
- Supply voltage and required wattage
- Type and length of termination
- Required operating temperature
- Any control mechanisms being used
- Any application information

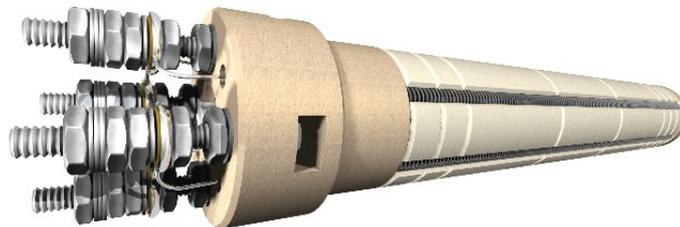
The more application information we have, the easier it will be to quote the correct product to suit your requirements.

Ceramic Core Heater

Technical Information

Ceramic core heaters are designed for use within metal sheaths, heating liquids and gasses. They are particularly recommended for use in equipment that requires element replacement without draining the tank or system.

Diameters available:	35mm, 37mm, 45mm, 57mm
Minimum length:	250mm
Maximum length:	6000mm
Maximum temperature:	Dependant application
Maximum watt density:	4.35w/cm ²
Maximum voltage:	600v
Resistance tolerance:	+10%/-5%
Wattage tolerance:	+5%/-10%
Terminations available:	Threaded stud or leadwire.
Notes:	Ceramic core elements are made with 80/20 nickel chrome resistance wire as standard, they also have a self-compensating stainless steel tie rod. The ceramic formers are rated to high temperatures.



Need a quote?

To enable us to quote your ceramic core heater we require the following information;

- Diameter and length
- Supply voltage and required wattage
- Type and length of termination (leads/studs)
- Cold or inactive length of element
- Required operating temperature
- Any control mechanisms being used
- Any application information

The more application information we have, the easier it will be to quote the correct product to suit your requirements.