HEATING GROUP International
WHEN RELIABILITY MATTERS!

Heating Group International
Bijsterhuizen 5118
6604 LX Wijchen

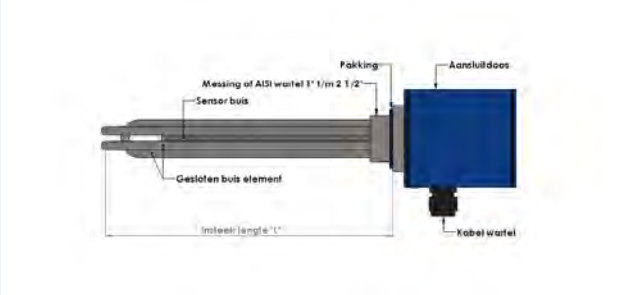
Immersion heaters

Functional description

Heating Group International's screw-in elements are used for heating water, oil, air and a variety of other liquid and gaseous substances. The elements can be supplied with or without temperature control and protection in the connection housing. These thermostats (both control thermostat and maximum thermostat) can be 1-pole and 3-pole. Some applications include: boilers, industrial dishwashers, cleaning baths, steam generators, circulation pump heaters, air conditioning systems, humidifiers, oil and gas preheaters, solar water heaters, etc. Screw-in elements can be supplied in any power and voltage required. However, we have a range of standard screw-in elements for the most common applications.

Construction

A screw-in element consists of three parts; the heating elements (closed tube elements), the screw-in gland and the connection housing. The closed tube elements are attached to the screw-in gland by brazing or TIG-welding. This construction creates a very compact heating element with optimal heat transfer to the medium to be heated.



Closed tubular elements

A screw-in element consists of three parts; the heating elements (closed tube elements), the screw-in gland and the connection housing. The closed tube elements are attached to the screw-in gland by brazing or TIG-welding. This construction creates a very compact heating element with optimal heat transfer to the medium to be heated.

Screw-in gland

Our standard range of elements is available in various element materials, such as copper, stainless steel (304,309, 316,321), SMO 254, Inconel 600, Incoloy 800 and Incoloy 825. For our standard range, we use element diameters 6.25mm or 8.5mm. Of course, other diameters are equally available. We are happy to engineer these for you.

Connector housing

Heating Group International screw-in elements can be delivered with or without a connector housing. The universal casing of Heating Group International is used. Square aluminum, powder coated in RAL 5003. For the possibilities in terminal boxes with or without built-in regulators and/or maximum thermostats see the table below.

Below a selection from our standard range

In screw elements for water. Elements copper nickel plated 08,5mm. Brass gland.

Glond ("G)	Power (kW)	Voltoge (Volt)	Wott lood (W/cm²)	Insertion length (mm)
1½"G	2,25	3x400	10	215
1½"G	3	3x400	8	300
1½"G	4,5	3x400	8	405
1½"G	6	3x400	8	535
1½"G	7,5	3x400	8	655
1½"G	9	3x400	8	733
1½"G	10	3x400	8	895
2"G	6	3x400	11	315
2"G	9	3x400	11	420
2"G	2,25	3x400	10	215
2"G	3	3x400	8	300
2"G	4,5	3x400	8	405
2"G	6	3x400	8	535
2"G	7,5	3x400	8	655
2"G	9	3x400	8	775
2"G	10	3x400	8	832

Screw-in elements for contaminated water. Elements ø8.5mm Incoloy 825. ørass gland. Cold zone 55mm.

Glond ("G)	Power (kW)	Voltoge (Volt)	Wott lood (W/cm²)	Insertion length (mm)
1½"G	2,25	3x400	12	175
1½"G	3	3x400	11	235
1½"G	4,5	3x400	10	335
1½"G	6	3x400	10	435
1½"G	7,5	3x400	10	525
1½"G	9	3x400	11	600
2"G	2,25	3x400	12	175
2"G	3	3x400	11	235
2"G	4,5	3x400	10	335
2"G	6	3x400	10	435
2"G	7,5	3x400	10	525
2"G	9	3x400	11	600
2"G	12	3x400	12	730

Screw-in elements for aggressive liquids. Elements incoloy 825. AISI 316 gland. Cold zone 55mm.

Glond ("G)	Power (kW)	Voltoge (Volt)	Wott lood (W/cm²)	Insertion length (mm)
1½"G	3	3x400	11	235
1½"G	4,5	3x400	10	335
1½"G	6	3x400	10	435
1½"G	7,5	3x400	10	525
1½"G	9	3x400	11	600
2"G	3	3x400	11	235
2"G	4,5	3x400	10	335
2"G	6	3x400	10	435
2"G	7,5	3x400	10	525
2"G	9	3x400	11	600
2"G	12	3x400	12	730

Screw-in elements for oil. Elements e8.5 mm AISi 304. Brass gland.

Glond ("G)	Power (kW)	Voltoge (Volt)	Wott lood (W/cm²)	Insertion length (mm)
2"G	0,5	3x400	1	335
2"G	0,75	3x400	1	485
2"G	1	3x400	1	660
2"G	1,5	3x400	1	700
2"G	2	3x400	1	1025
2"G	0,7	3x400	1	360
2"G	1	3x400	1	460
2"G	1,5	3x400	1	660
2"G	2	3x400	1	660
2"G	2,5	3x400	1	825
2"G	3	3x400	1	1025
2"G	4	3x400	1	1450
2"G	1	3x400	2	335
2"G	1,5	3x400	2	485
2"G	2	3x400	2	660
2"G	3	3x400	2	700
2"G	4	3x400	2	1025

Screw-in elements for oil. Elements e8.5mm AISI 304. Brass gland

Glond ("G)	Power (kW)	Voltoge (Volt)	Wott lood (W/cm²)	Insertion length (mm)
2"G	1,5	3x400	3	335
2"G	2,25	3x400	3	485
2"G	3	3x400	3	660
2"G	4,5	3x400	3	700
2"G	6	3x400	3	1025
2"G	2,1	3x400	4	360
2"G	3	3x400	4	460
2"G	4,5	3x400	4	660
2"G	6	3x400	4	660
2"G	7,5	3x400	4	825
2"G	9	3x400	4	1025
2"G	12	3x400	4	1450

Screw-in elements for oil. Elements e8.5mm AISI 304. Brass gland Powder-coated in RAL5003 grain structure. Housing including gasket.

- Connection housing for screw-in elements l½" no thermostat
- Connection housing for screw-in elements 2", no thermostat
- Connection housing for screw-in elements l½" with control thermostat
- Connection housing for screw-in elements 2" with control thermostat
- Connection housing for screw-in elements l½" with maximum thermostat
- Connection housing for screw-in elements 2" with maximum thermostat
- Connection housing for screw-in elements l½" with combination thermostat
- Connection housing for screw-in elements 2" with combination thermostat

Quicknovation
The custom built standard