





# **Circulation Heaters**Standard product ranges

**HEATING LIQUIDS** 

**HEATING GASES** 



Circulation heaters are designed for pre-heating circulating fluids (liquid or gas) up to 15 bar.

They are made of an immersion heater in a steel or stainless steel vessel with supports.

- Large choice of materials for the heating elements
- Power from 1250 to 35000 Watts depending on the models
- Thermostats, limiters, insulation and power panels are available



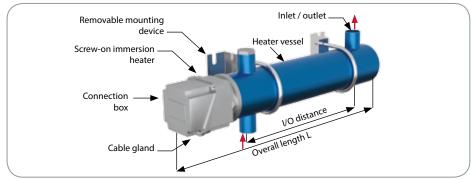
### Standard circulation heaters

#### **RPM** model



For pre-heating circulation fluids (liquids or gases) up to 15 bar.

- · Painted steel vessel with supports
- Screw-plug immersion heaters with brass plug and aluminium connection box, IP55
- Max. input temperature 110 °C (higher on request)
- Adjustable thermostat, 30/90 °C 3PH
- 3 sleeves 1" or 1" ½ gas, depending on the size



#### For water heating

Stainless steel AISI 316L heating element at 8 W/cm<sup>2</sup>, 400 V 3PH

Ref.	I/O distance (mm)	Overall length L (mm)	Inlet / outlet diameter	Power (W)
RPM-030C8	350	610	1" Gas	3000
RPM-060C8	350	610	1" Gas	6000
RPM-090C8	600	860	1" Gas	9000
RPM-135C8	1100	1500	1"1/2 Gas	13500
RPM-180C8	1100	1500	1"1/2 Gas	18000
RPM-225C8	1100	1500	1"½ Gas	22500

#### For heating water-based solutions/heat transfer fluids

Stainless steel AISI 316L heating element at 4 W/cm<sup>2</sup>, 400 V 3PH

Ref.	I/O distance (mm)	Overall length L (mm)	Inlet / outlet diameter	Power (W)
RPM-030C4	350	610	1" Gas	3000
RPM-045C4	600	860	1" Gas	4500
RPM-060C4	600	860	1" Gas	6000
RPM-075C4	1100	1500	1"1/2 Gas	7500
RPM-090C4	1100	1500	1"½ Gas	9000
RPM-120C4	1100	1500	1"1/2 Gas	12000

#### For fuel/heat transfer fluids, air

Stainless steel AISI 316L heating element at 2,5 W/cm<sup>2</sup>, 400 V 3PH

Ref.	I/O distance (mm)	Overall length L (mm)	Inlet / outlet diameter	Power (W)	
RPM-030C2	600	860	1" Gas	3000	
RPM-045C2	1100	1500	1"1/2 Gas	4500	
RPM-060C2	1100	1500	1"1/2 Gas	6000	
RPM-075C2	1100	1500	1"1/2 Gas	7500	

### On request

- Insulation
- These circulation heaters can be hydraulically connected to each other in series to achieve high heating power
- For fluid heating above 110 °C, the screw on immersion heater are equipped with a stand-off connection box
- Other thermostat or limiter
- Stainless steel model



### Standard circulation heaters



#### Model LH-AC - LH-CN - LH-II

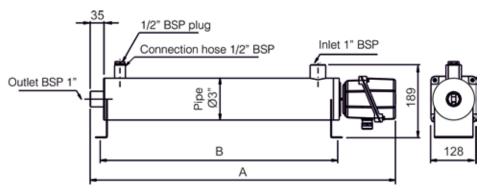
- Tubular elements in AISI 316L or AISI 321 stainless steel, nickel-plated copper depending on the model
- · Steel vessel with an outer layer of anticorrosive paint
- · Connection hoses of 1" female gas thread
- Screw-plug immersion heaters with brass plug and aluminium connection box, IP66
- All models include a sheath of the same material as the heating element pipe, and a bulb thermostat with automatic reset, regulating scales 0/90 °C; 30/85 °C or 36/125 °C depending on the model.
- Supplied with all accessories for connection, including connection of the thermostat
- All models include a ½" female gas thread hose for attaching a temperature probe (not included)
- LH circulation heaters are designed to operate at a maximum design pressure of 6 bar and maximum design temperature indicated for each model.
- Optionally, together with the LH heater unit, we can provide the switchboard with all the components and protections needed for its connection: heat-controllers, buttons, contactors, differential, magneto-thermal, etc.
- Standardized current 3~230 V Δ, 3~400 V Υ
- Equipment acc. to 4§3 of the PED 2014/68/UE

#### On request

- Tubular elements: AISI 316L, Incoloy 800, Incoloy 825 or titanium
- Stainless steel or titanium plugs

## Standard circulation heaters

LH-AC model LH-CN model LH-II model



#### For oil heating, LH-AC model

Stainless steel heating elements AISI 321 Design temperature up to 125 °C

Def.	Power	W/cm²	Thermostat range	Inlet / outlet	Dimensions (mm)	
Ref.	(W)				A	В
LH-AC0010	1250	2.5	36 / 125 °C	1" Gas	565	390
LH-AC0022	2250	2.5	36 / 125 °C	1" Gas	665	490
LH-AC0030	3000	2.6	36 / 125 °C	1" Gas	790	615
LH-AC0045	4500	2.5	36 / 125 °C	1" Gas	1100	925
LH-AC0060	6000	2.5	36 / 125 °C	1" Gas	1315	1140
LH-AC0090	9000	2.7	36 / 125 °C	1" Gas	1715	1540

#### For water heating, LH-CN model

Nickel-plated copper tube heating elements Design temperature up to 90  $^{\circ}\text{C}$ 

Ref.	Power	W/cm²	Thermostat range	Inlet / outlet	Dimensions (mm)	
nei.	(W)				A	В
LH-CN0040	4000	8.7	30 / 85 °C	1" Gas	565	390
LH-CN0060	6000	8.6	30 / 85 °C	1" Gas	565	390
LH-CN0080	8000	8.6	30 / 85 °C	1" Gas	665	490
LH-CN0100	10000	8.7	30 / 85 °C	1" Gas	665	490
LH-CN0150	15000	8.1	0 / 90 °C	1" Gas	1100	925
LH-CN0200	20000	8.2	0 / 90 °C	1" Gas	1100	925
LH-CN0240	24000	8.1	0 / 90 °C	1" Gas	1315	1140
LH-CN0350	35000	8.5	0 / 90 °C	1" Gas	1715	1540

#### For heating water and other fluids, LH-II model

Stainless steel heating elements AISI 316L

Design temperature up to 90 °C

Ref.	Power (W)	W/cm²	Thermostat	Inlet / outlet	Dimensions (mm)	
			range		A	В
LH-II0030	3000	6.6	30 / 85 °C	1" Gas	565	390
LH-II0045	4500	6.5	30 / 85 °C	1" Gas	665	490
LH-II0060	6000	6.2	30 / 85 °C	1" Gas	790	615
LH-II0090	9000	6.3	30 / 85 °C	1" Gas	1100	925
LH-II0120	12000	6.4	0 / 90 °C	1" Gas	1315	1140



# Design and manufacturing of electrical heating equipment for your industrial process

for use in ATEX/IECEx harzardous areas or in non-ATEX version

# All CETAL products can be adapted to your specifications.



# Contact us!



























