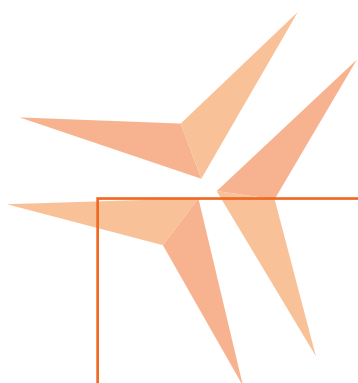


BADVARMERE



**GALVATHERM
CONTROL**

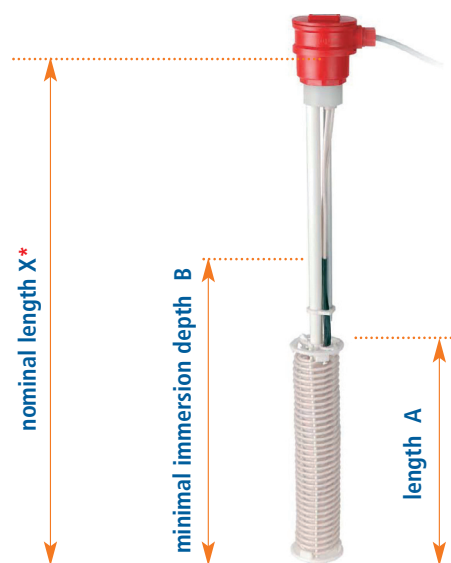
TYPE T

THIS HEATER WITH BUILT-IN REGULATION HAS BEEN ESPECIALLY DEVELOPED FOR USE IN TANKS WHEN LOW POWER IS NEEDED IN A REDUCED SPACE.

It is also a complete and cost-efficient device combining heating and temperature control. The heater, the temperature sensor and the switching circuit are integrated in one single unit.

THERMOSTAT TECHNICAL DATA

- Control range : 0 to 90°C
- Contact : 1 changeover
- Switched power : 16A/250V~
- Minimum temperature variation : 1K/2min
- Minimum immersion tube length : 200 mm
- Maximum immersion tube length : 1500 mm



*** Nominal length X can also be manufactured differently.**

Choose PVDF casing whenever temperature is above 80°C or with oxydising chemicals

Power	Nominal length X (mm)	Length A (mm)	mimi. immersion depth B (mm)	Heaters reference materials : all PP	Heaters reference materials all PVDF	Heaters ref. erence PVDF with PP casing
0,5 kW	450	165	220	C850520F02T2	C850520F02T1	C850520F02T9
1,0 kW	500	260	335	C851020F02T2	C851020F02T1	C851020F02T9
1,5 kW	630	310	390	C851520F02T2	C851520F02T1	C851520F02T9
2,0 kW	800	390	470	C852020F02T2	C852020F02T1	C852020F02T9
3,0 kW	1000	620	700	C853020F02T2	C853020F02T1	C853020F02T9

Options and Accessories

The Galvatherm heater is only planned to heat liquids.

Extra length of cables



Electrical connecting cable C
of type H05 VV-F (PVC)
Section 3 x 1,5m²
standard length 2 metres
Maximum possible X length :
0,5 kW : 1600 mm / 1 kW : 1700 mm
1,5 kW : 1750 mm / 2 kW : 1850 mm
3 kW : 2050 mm

Wrench (supplied)



Universal wrench
to open the terminal casing
and get access to temperature
settings

Ref : SB

Removable guard



Perforated plastic guard
in PP only

Ref : PRCPP

HWB support (supplied)



Dimensions :
total height 43 mm
total length 130 mm
fixing height 15 mm

Ref in PP : PEPP

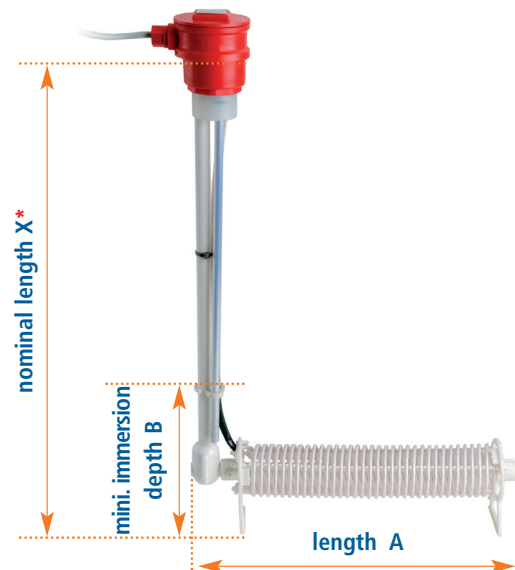
TYPE U

AS CONTROL-THERM TYPE T THIS DEVICE INTEGRATES ALSO IN ONE SINGLE UNIT THE HEATER, THE TEMPERATURE SENSOR AND THE SWITCHING CIRCUIT.

This model is the best adapted solution for use into tanks with a variable or low liquid level.

THERMOSTAT TECHNICAL DATA

- Control range : 0 to 90°C
- Contact : 1 changeover
- Switched power : 16A/250V~
- Minimum temperature variation : 1K/2min
- Minimum immersion tube length : 200 mm
- Maximum immersion tube length : 1500 mm



* Nominal length X can also be manufactured differently.

Power	Nominal length X (mm)	Length A (mm)	mimi. immersion depth B (mm)	Heaters reference materials : all PP	Heaters reference materials all PVDF	Heaters ref. erence PVDF with PP casing
0,5 kW	450	225	220	C850520F02U2	C850520F02U1	C850520F02U9
1,0 kW	500	320	220	C851020F02U2	C851020F02U1	C851020F02U9
1,5 kW	630	370	220	C851520F02U2	C851520F02U1	C851520F02U9
2,0 kW	800	450	220	C852020F02U2	C852020F02U1	C852020F02U9
3,0 kW	1000	680	220	C853020F02U2	C853020F02U1	C853020F02U9

Choose PVDF casing whenever temperature is above 80°C or with oxydising chemicals

Options and Accessories

The Galvatherm heater is only planned to heat liquids.

Extra length of cables



Electrical connecting cable C of type H05 VV-F (PVC)
Section 3 x 1,5m²
standard length 2 metres
Maximum possible X length :
1500 mm for all Control-Therm type U models

Wrench (supplied)



Universal wrench
to open the terminal casing and get access to temperature settings

Ref : SB

Removable guard



Perforated plastic guard
in PP only

Ref : PRCPP

HWB support (supplied)



Dimensions :
total height 43 mm
total length 130 mm
fixing height 15 mm

Ref in PP : PEPP

SCREENED RESISTANCE HEATER

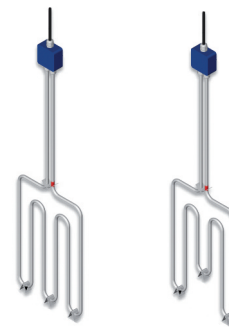
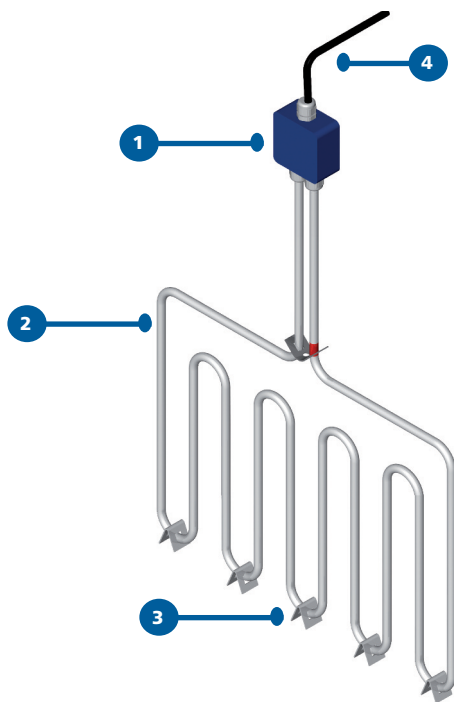
THE GALVAFLON HEATER CONSISTS OF A STAINLESS-STEEL HEATING TUBE WHICH IS COATED OR NOT WITH TEFLON® FEP.

The Teflon® FEP coating ensures the chemical resistance to oxydizing agents as well as anti-adhesive properties facilitating the cleaning of the element.

Its low thermic charge (below 2 W/cm²) reduces considerably the time of the encrustation process thus giving the device a longer life-time.

The physio-chemical properties of the liquid heated are also longer maintained, thus decreasing the need for filtration and renewal.

At last its small overall dimensions and its bending possibilities permit to match most tank configurations.



Powers

1kW - 2 kW - 2,5kW - 3 kW

Voltage

230 V 1ph, 50 hz

Outside diametre stainless steel shield : 10 mm

Outside diametre with FEP coating : 12 mm

Coating fitness : 1 mm

CONSTITUTION

1 - The PVDF-terminal casing complies to protection IP 65 (splashproof to EN 60529) and resists also the chemical attacks of the vapors produced by the bath. The PVC electrical cable has a standard length of 1,5m..

2 - Heating part

The top of the heating part is indicated by a red mark placed on the resistance (minimum immersion depth). Above this mark, the element is not heated. It is imperative that the heating section be constantly covered with liquid even in the case of a fluctuating level.

All precautions (such as regulation and/or monitoring systems) must thus be taken by the end-user to ensure of a sufficient liquid level..

Moreover and in compliance with european norm EN60519-1/2 the end-user must prevent by all means an overheating of the device.

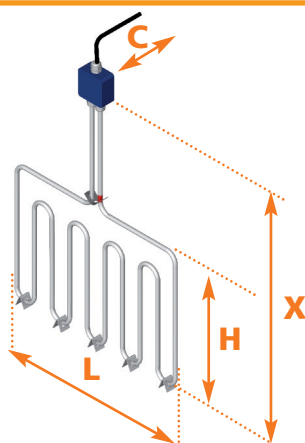
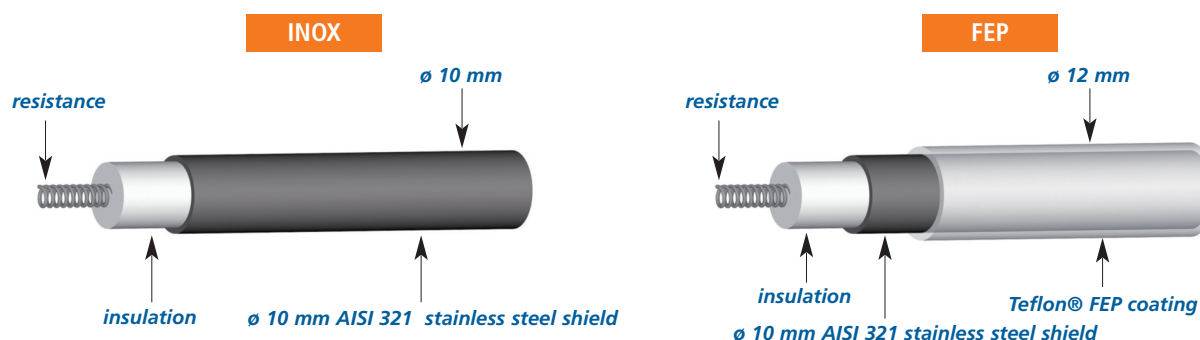
3 - Teflon® FEP spacers

The Teflon® FEP spacers ensure a good spacing between the heater and the tank. Installation on the side of the tank will be eased with a support (available on request) in which one has just to encase the heater's connection thus making easier maintenance and monitoring.

4 - Electrical cable (in PVC)

of type HO5VVF, standard length 1500 mm

Types of screened resistance heater



Security

According to the European standard EN 60519-1/2, the end user is responsible for ensuring that the operating conditions of the device are complied with. In particular, the user must ensure that the liquid level and temperature within the tank or any other container used for heating are monitored and regulated. Indeed, any untimely variation of one of these parameters can have serious consequences for the safety of the installation in question. We have the right products at your disposal for this purpose and will be happy to advise you. These devices fall into protection class I with all metal parts connected to the protective conductor.

In order to guarantee this level of protection, the green-yellow conductor must be earthed. Moreover, it is imperative that these devices be connected to a 30 mA type differential circuit breaker in order to detect any possible current leakage.

Matière	1 kW	2 kW	2,5 kW	3 kW
FEP STAINLESS STEEL	L=205 H=365 X=970 R 04 102 F 970 1R1 R 04 102 I 970 1R1	L=205 H=785 X=1305 R 04 202 F 1305 1R1 R 04 202 I 1305 1R1	L=205 H=990 X=1360 R 04 252 F 1360 1R1 R 04 252 I 1360 1R1	L=205 H=990 X=1360 R 04 302 F 1360 1R1 R 04 302 I 1360 1R1
FEP STAINLESS STEEL	L=340 H=250 X=810 R 06 102 F 810 1R1 R 06 102 I 810 1R1	L=340 H=525 X=1005 R 06 202 F 1005 1R1 R 06 202 I 1005 1R1	L=340 H=660 X=985 R 06 252 F 985 1R1 R 06 252 I 985 1R1	L=340 H=660 X=985 R 06 302 F 985 1R1 R 06 302 I 985 1R1
FEP STAINLESS STEEL	L=465 H=195 X=705 R 08 102 F 705 1R1 R 08 102 I 705 1R1	L=465 H=400 X=805 R 08 202 F 805 1R1 R 08 202 I 805 1R1	L=340 H=660 X=1100 R 06 252 F 1100 1R1 R 06 252 I 1100 1R1	L=340 H=660 X=1100 R 06 302 F 1100 1R1 R 06 302 I 1100 1R1
FEP STAINLESS STEEL		L=600 H=320 X=665 R 10 202 F 665 1R1 R 10 202 I 665 1R1	L=465 H=500 X=750 R 08 252 F 750 1R1 R 08 252 I 750 1R1	L=465 H=500 X=750 R 08 302 F 750 1R1 R 08 302 I 750 1R1
FEP STAINLESS STEEL			L=465 H=500 X=970 R 08 252 F 970 1R1 R 08 252 I 970 1R1	L=465 H=500 X=970 R 08 302 F 970 1R1 R 08 302 I 970 1R1
FEP STAINLESS STEEL			L=600 H=405 X=605 R 10 252 F 605 1R1 R 10 252 I 605 1R1	L=600 H=405 X=605 R 10 302 F 605 1R1 R 10 302 I 605 1R1
FEP STAINLESS STEEL			L=600 H=405 X=820 R 10 252 F 820 1R1 R 10 252 I 820 1R1	L=600 H=405 X=820 R 10 302 F 820 1R1 R 10 302 I 820 1R1

All dimensions are given with a tolerance of +/- 10 mm

OPTIONAL: the connection and/or the heating part can be delivered bent to 90°

TEMPERATURE CONTROL

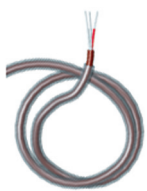
Platinum resistance probe

Waterproof probe with a PT100 sensor (100 ohms, 0°C class B). Connection to the sensor by 2 or 3 insulated wires in a special Teflon® insulated cable.

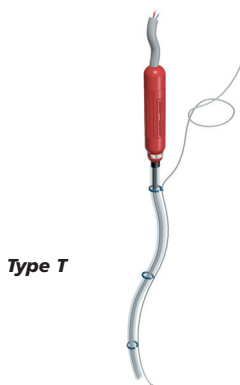
Thermocouple probe

type J thermocouple wire insulated with a Teflon® sleeve. The hot junction tip is protected by a Teflon® shrink tube.

Flexible probe & probe mounted on heater



Type S



Type T

Type S

Flexible probe coated with Teflon®

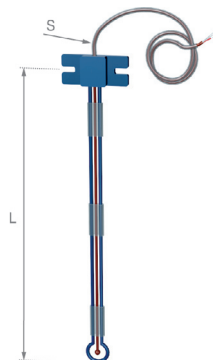
To install on a rigid support
Standard length 1,5m

Type T

Flexible probe mounted on heater

The flexible Teflon® coated probe can go through the same cable-gland as the one of the heater.
Standard length 1,5m

Bendable rigid probe



Type B

Type B

Bendable rigid probe

Teflon® coated probe mounted on a PP or PVDF rigid bendable frame.
Maximum L length 2m.
S=1000 mm L=500 mm

Codification (construction of the reference number)

S O P T 2	F	1 5	0 0	S	0
probe type	materials	code for flexible length	code for rigid length	assembly type	support materials
SOPT2 = PT 100 2 leads	F = FEP	10 = 1 m	00 = pas de rigide	S = flexible	0 = without assembly
SOPT3 = PT 100 3 leads		15 = 1,5 m	05 = 0,5 m	T = flexible on heater	1 = PVDF
SOTCJ = Thermocouple J		20 = 2 m	06 = 0,6 m	B = stainless steel rigid	2 = PP
		25 = 2,5 m	07 = 0,7 m		
		99 = > 9 m	08 = 0,8 m		

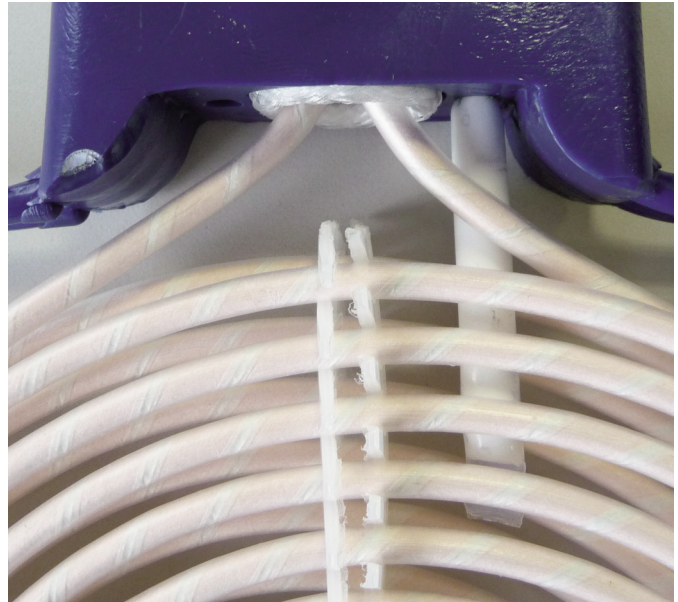
FUSE ELEMENT PROBE

THE FUSE ELEMENT PROBE IS COMPOSED WITH A FLEXIBLE WIRE AND TWO CONDUCTORS COVERED WITH TEFLON®.

The fuse element is at the bottom of the probe. It destroys itself as soon as the maximum temperature is reached (94 °C or 121 °C according model chosen).

FUSE ELEMENT, CHARACTERISTICS

Maximum current	10 A
Voltage range	up to 250V AC 1ph
Operating temperature	94° or 121°C according model
Tolerance for 94°C model	± 5° C
Tolerance for 121°C	± 2° C



The probe is secured on the heater with PP (polypropylene) clips or Tefzel clips according specific needs. The fuse element is inserted at the top between the first heating coils..

OPERATING PRINCIPLE

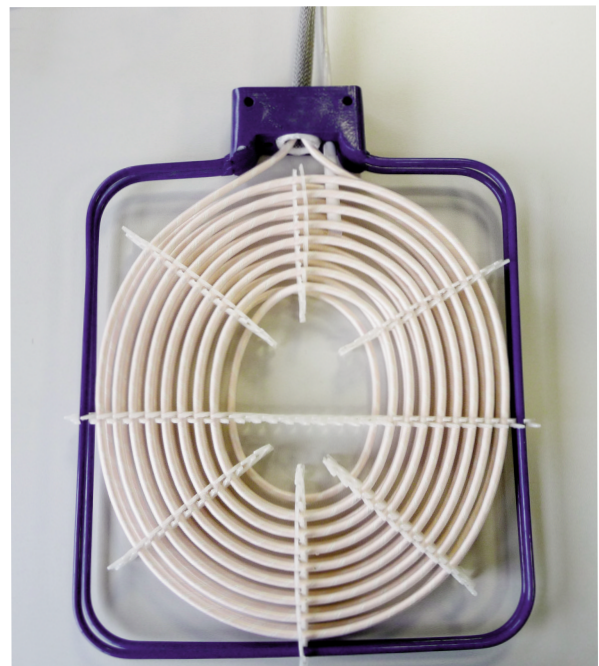
The control current goes through the fuse element (low current of type 12 or 24 volts).

The contact opens itself when the heating zone, where is located the sensitive element, is overheating. The opening of the contact cuts the control current circuit to which the probe is connected stopping the power supply of the immersion heater.

For immersion heaters already in service : it is possible to add a fuse element probe.

Reference for probe 94 °c : SF094FxxxxT0

Reference for probe 121 °c : SF121FxxxxT0





ELVARME

VORES PRODUKTSORTIMENT INKLUDERER:



GALVATHERM



BADVARMERE



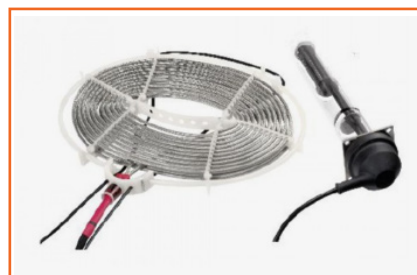
ELPATRONER



AFFUGTNINGSARMELEGEMER



FLANGEVARMELEGEME STANDARD



BADVARMERE GENERELT

VI FØRER PRODUKTER INDENFOR KATEGORIERNE:



AUTOMATIK



**HVAC & BYGNINGS-
AUTOMATIK**



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