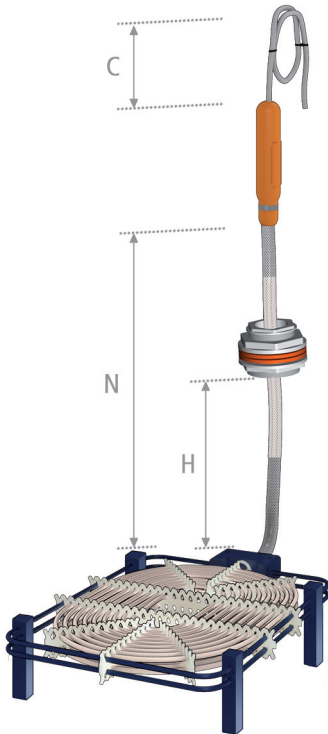


Flat heaters type A, for frost protection

Galvatherm®

Particularly recommended up to 6 kW

With options Feet & Cable-gland these models are specifically adapted to keep liquid storage tanks from freezing, all sizes with or without double wall. Installation through the inspection trap (ø 500 mm minimum).



Can be installed in a tank filled when support feet are ordered on each side of the heating part.

Can be passed through the inspection trap without interfering with the tank.

For a complete efficiency we recommend a cable-gland installed on the non heating part N - positioning hole ø 75 mm to be planned on the dome - and a FEP Teflon® coated PT100 probe mounted on heater.

Length H corresponds to the installation height of the cable-gland on the N part.

To ensure a proper positioning and avoid any mechanical damage of the cable, please allow an extra 300 mm on the H length.

The cable is rolled up according dimensions & shapes proposed and held with PVDF, PP or FEP strips which ensure the right distance between the rolls. To secure completely the heating part it is then mounted on a metallic frame coated with PVDF or PP or on a stainless steel frame.

Electric safety : the Galvatherm heater complies with protection class 1 of EN 60519-1/2. The cable is screened throughout the entire length by a copper earthing strip. The earthing must be connected to the earth. In order to provide maximum safety, a fault-current (FI) protection device (30mA) should be used..

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) or H07 RN-F (Neopren)

Non heating cable N
to go out of the tank

Removable guard



Perforated plastic guard
PP ou PVDF

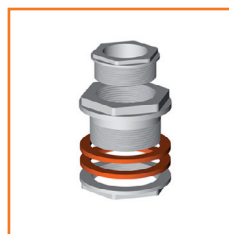
Ref in PP : PRPPP
Ref in PVDF : PRPPF

Feet



Feet (standard 50 mm)
PP, PVDF or stainless steel for installation at the bottom
Ref in PP : PIPP
Ref in PVDF : PIPF
Ref in stainless steel : PIIN
(additional ballast possible)

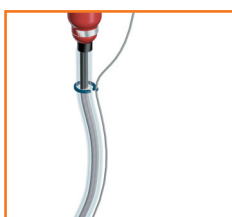
Cable-gland Ø75 mm



Allow between 200 to 300 mm extra on the H length (H=installation height on N)

Ref in PP : PEPP
Ref in PVDF : PEPF

Probe mounted on heater



Teflon® coated PT100 probe
2,3 or 4 wires, installed at the factory. Closed tank : the probe goes through the same cable-gland as the one of the heater. Fixed by PP or Tefzel clamps
Ref : contact us



Flat heaters, reference numbers

Galvatherm®

The table below informs on the dimensions of the heating part and its references.
The reference number begins by P30, P40 or P90. These codes indicate the thickness 's device.
P30 = thickness 30 mm / P40 = 40 mm / P90 = 100 mm
All dimensions are given with a tolerance of ± 10 mm.
Standard cable coating : FEP single layer. For other coatings please contact us.

SINGLE-PHASE IMMERSION HEATERS					
KW	J x K	230V sg-ph	KW	J x K	230V sg-ph
0.5 kW	150 x 375	P30 03 05 2	4 kW	225 x 880	P30 07 40 2
	170 x 265	P30 04 05 2		260 x 700	P30 09 40 2
	185 x 210	P30 05 05 2		315 x 545	P30 12 40 2
	165 x 230	P40 03 05 2		330 x 515	P30 13 40 2
1 kW	150 x 605	P30 03 10 2		350 x 475	P30 14 40 2
	170 x 520	P30 04 10 2		385 x 435	P30 16 40 2
	185 x 365	P30 05 10 2		405 x 420	P30 17 40 2
	205 x 335	P30 06 10 2		205 x 810	P40 05 40 2
	220 x 290	P30 07 10 2		225 x 685	P40 06 40 2
	240 x 250	P30 08 10 2		245 x 595	P40 07 40 2
	165 x 395	P40 03 10 2		285 x 475	P40 09 40 2
	185 x 305	P40 04 10 2		310 x 435	P40 10 40 2
	205 x 255	P40 05 10 2		325 x 400	P40 11 40 2
	225 x 230	P40 06 10 2		345 x 375	P40 12 40 2
1.5 kW	165 x 680	P30 04 15 2	6 kW	275 x 990	P30 10 60 2
	205 x 425	P30 06 15 2		295 x 855	P30 11 60 2
	220 x 355	P30 07 15 2		310 x 825	P30 12 60 2
	240 x 315	P30 08 15 2		350 x 720	P30 14 60 2
	260 x 285	P30 10 15 2		365 x 645	P30 15 60 2
	185 x 375	P40 04 15 2		385 x 635	P30 16 60 2
	205 x 345	P40 05 15 2		405 x 625	P30 17 60 2
	225 x 275	P40 06 15 2		420 x 570	P30 18 60 2
	245 x 245	P40 07 15 2		440 x 550	P30 19 60 2
	245 x 245	P40 08 15 2		455 x 545	P30 20 60 2
2 kW	170 x 765	P30 04 20 2		475 x 540	P30 21 60 2
	185 x 635	P30 05 20 2		265 x 785	P40 08 60 2
	205 x 565	P30 06 20 2		305 x 635	P40 10 60 2
	220 x 475	P30 07 20 2		325 x 585	P40 11 60 2
	240 x 420	P30 08 20 2		350 x 550	P40 12 60 2
	260 x 380	P30 09 20 2		365 x 505	P40 13 60 2
	275 x 340	P30 10 20 2		390 x 470	P40 14 60 2
	295 x 315	P30 11 20 2		405 x 455	P40 15 60 2
	185 x 515	P40 04 20 2		425 x 425	P40 16 60 2
	210 x 420	P40 05 20 2		300 x 300	P90 10 60 2
	225 x 350	P40 06 20 2			
	245 x 305	P40 07 20 2			
	265 x 275	P40 08 20 2			
3 kW	205 x 925	P30 06 30 2	List of other single-phase voltages available		
	225 x 790	P30 07 30 2			
	240 x 690	P30 08 30 2			
	260 x 620	P30 09 30 2			
	275 x 555	P30 10 30 2			
	295 x 510	P30 11 30 2			
	315 x 460	P30 12 30 2			
	330 x 440	P30 13 30 2			
	345 x 410	P30 14 30 2			
	365 x 390	P30 15 30 2			
	370 x 385	P30 16 30 2			
	205 x 685	P40 05 30 2			
	225 x 575	P40 06 30 2			
	245 x 500	P40 07 30 2			
	265 x 445	P40 08 30 2			
	285 x 400	P40 09 30 2			
	325 x 340	P40 11 30 2			
	340 x 340	P40 12 30 2			

- 110V single-phase : 0.5 kW, 1 kW, 1.5 kW, 2 kW
- 460V single-phase : 1 kW, 1.5 kW, 2 kW, 3 kW, 4 kW, 6 kW



THREE-PHASES IMMERSION HEATERS

KW	J x K	230V 3-ph	400V 3-ph	KW	J x K	230V 3-ph	400V 3-ph	
1.5 kW	170 x 680	P30 04 15 4	P30 04 15 5	9 kW	400 x 975	*	P30 17 90 4	P30 17 90 5
	205 x 475	P30 06 15 4	P30 06 15 5		435 x 870		P30 19 90 4	P30 19 90 5
	225 x 440	P30 07 15 4	P30 07 15 5		475 x 800		P30 21 90 4	P30 21 90 5
	240 x 360	P30 08 15 4	P30 08 15 5		490 x 790		P30 22 90 4	P30 22 90 5
	280 x 340	P30 10 15 4	P30 10 15 5		525 x 720		P30 24 90 4	P30 24 90 5
	185 x 380	P40 04 15 4	P40 04 15 5		545 x 705		P30 25 90 4	P30 25 90 5
	205 x 375	P40 05 15 4	P40 05 15 5		565 x 695		P30 26 90 4	P30 26 90 5
	225 x 325	P40 06 15 4	P40 06 15 5		600 x 675	P30 28 90 4	P30 28 90 5	
	245 x 275	P40 07 15 4	P40 07 15 5		345 x 890	P40 12 90 4	P40 12 90 5	
	270 x 270	P40 08 15 4	P40 08 15 5		385 x 775	P40 14 90 4	P40 14 90 5	
	195 x 195	P90 05 15 4	P90 05 15 5		405 x 730	P40 15 90 4	P40 15 90 5	
3 kW	205 x 905	P30 06 30 4	P30 06 30 5	12 kW	425 x 685		P40 16 90 4	P40 16 90 5
	225 x 910	P30 07 30 4	P30 07 30 5		445 x 655		P40 17 90 4	P40 17 90 5
	240 x 700	P30 08 30 4	P30 08 30 5		465 x 625		P40 18 90 4	P40 18 90 5
	260 x 705	P30 09 30 4	P30 09 30 5		505 x 575		P40 20 90 4	P40 20 90 5
	275 x 580	P30 10 30 4	P30 10 30 5		525 x 565		P40 21 90 4	P40 21 90 5
	295 x 575	P30 11 30 4	P30 11 30 5		375 x 375	P90 15 90 4	P90 15 90 5	
	315 x 490	P30 12 30 4	P30 12 30 5		430 x 1075	*	P30 18 12 4	P30 18 12 5
	330 x 465	P30 13 30 4	P30 13 30 5		440 x 1070	*	P30 19 12 4	P30 19 12 5
	350 x 450	P30 14 30 4	P30 14 30 5		510 x 885		P30 23 12 4	P30 23 12 5
	370 x 410	P30 15 30 4	P30 15 30 5		585 x 785	P30 27 12 4	P30 27 12 5	
	380 x 395	P30 16 30 4	P30 16 30 5		385 x 915		P40 14 12 4	P40 14 12 5
	205 x 735	P40 05 30 4	P40 05 30 5		405 x 860		P40 15 12 4	P40 15 12 5
	230 x 615	P40 06 30 4	P40 06 30 5		425 x 800		P40 16 12 4	P40 16 12 5
	250 x 545	P40 07 30 4	P40 07 30 5		465 x 740		P40 18 12 4	P40 18 12 5
	265 x 470	P40 08 30 4	P40 08 30 5		485 x 705		P40 19 12 4	P40 19 12 5
	285 x 420	P40 09 30 4	P40 09 30 5		505 x 680		P40 20 12 4	P40 20 12 5
	325 x 360	P40 11 30 4	P40 11 30 5		545 x 625		P40 22 12 4	P40 22 12 5
	340 x 340	P40 12 30 4	P40 12 30 5		585 x 595		P40 24 12 4	P40 24 12 5
	250 x 250	P90 07 30 4	P90 07 30 5		410 x 410	P90 16 12 4	P90 16 12 5	
4.5 kW	240 x 905	P30 08 45 4	P30 08 45 5	15 kW	430 x 1245	*		P30 18 13 5
	275 x 750	P30 10 45 4	P30 10 45 5		445 x 1235	*		P30 19 13 5
	295 x 730	P30 11 45 4	P30 11 45 5		465 x 1140	*		P30 20 13 5
	315 x 625	P30 12 45 4	P30 12 45 5		485 x 1125	*		P30 21 13 5
	350 x 535	P30 14 45 4	P30 14 45 5		500 x 1045	*		P30 22 13 5
	370 x 520	P30 15 45 4	P30 15 45 5		520 x 1030	*		P30 23 13 5
	385 x 505	P30 16 45 4	P30 16 45 5		540 x 1035	*		P30 24 13 5
	405 x 460	P30 17 45 4	P30 17 45 5		555 x 950	*		P30 25 13 5
	420 x 440	P30 18 45 4	P30 18 45 5		575 x 940	*		P30 26 13 5
	265 x 595	P40 08 45 4	P40 08 45 5		595 x 925	*		P30 27 13 5
	285 x 535	P40 09 45 4	P40 09 45 5		375 x 1125	*		P40 13 13 5
	305 x 480	P40 10 45 4	P40 10 45 5		395 x 1055	*		P40 14 13 5
	325 x 445	P40 11 45 4	P40 11 45 5		415 x 1000	*		P40 15 13 5
	345 x 425	P40 12 45 4	P40 12 45 5		435 x 940			P40 16 13 5
	365 x 395	P40 13 45 4	P40 13 45 5		455 x 890			P40 17 13 5
	380 x 380	P40 14 45 4	P40 14 45 5		475 x 850			P40 18 13 5
	265 x 265	P90 09 45 4	P90 09 45 5		495 x 810			P40 19 13 5
6 kW	275 x 990	P30 10 60 4	P30 10 60 5		515 x 780			P40 20 13 5
	295 x 855	P30 11 60 4	P30 11 60 5		535 x 750			P40 21 13 5
	310 x 825	P30 12 60 4	P30 12 60 5		555 x 725			P40 22 13 5
	350 x 720	P30 14 60 4	P30 14 60 5		575 x 700			P40 23 13 5
	365 x 645	P30 15 60 4	P30 15 60 5		595 x 690			P40 24 13 5
	385 x 635	P30 16 60 4	P30 16 60 5		615 x 660			P40 25 13 5
	405 x 625	P30 17 60 4	P30 17 60 5		635 x 640			P40 26 13 5
	420 x 570	P30 18 60 4	P30 18 60 5		450 x 450			P90 17 13 5
	440 x 550	P30 19 60 4	P30 19 60 5		For the construction of the reference, see following page. * If feet option : 6 feet required instead of 4 Other voltage available : 460V three-phases : 3 kW, 4.5 kW, 6 kW, 9 kW, 12 kW, 15 kW			
	455 x 545	P30 20 60 4	P30 20 60 5					
	475 x 540	P30 21 60 4	P30 21 60 5					
	265 x 785	P40 08 60 4	P40 08 60 5					
	305 x 635	P40 10 60 4	P40 10 60 5					
	325 x 585	P40 11 60 4	P40 11 60 5					
	350 x 550	P40 12 60 4	P40 12 60 5					
	365 x 505	P40 13 60 4	P40 13 60 5					
	390 x 470	P40 14 60 4	P40 14 60 5					
	405 x 455	P40 15 60 4	P40 15 60 5					
	425 x 425	P40 16 60 4	P40 16 60 5					
	300 x 300	P90 10 60 4	P90 10 60 5					

Construction of the reference number

P30	03	05	2	J	F	0	0	A	1
thickness code	J x K code	power code	voltage code	exit code	cable code	N length code	C length code	assembly code	materials code
P30	03	05 = 0.5 kW	1 = 110V M	J = small side	F	0 = 1m	0 = 1m	A	1
P40	04	10 = 1 kW	2= 230V M	K = large side	G	1 = 1,5m	1 = 1,5m		2
P90	...	15 = 1.5 kW	3= 460V M		P	2 = 2 m	2 = 2 m		3
		20 = 2 kW	4 = 230V T		D	3 = 2,5m	3 = 2,5m		4
		30 = 3 kW	5= 400V T			4 = 3m	4 = 3m		5
		40 = 4 kW	6= 460V T			5 = 3,5m	5 = 3,5m		6
		45 = 4.5 kW				6 = 4m	6 = 4m		7
		60 = 6 kW				7 = 4,5m	7 = 4,5m		8
		90 = 9 kW				8 = 5m	8 = 5m		
		12 = 12 kW				9 = sup.5m	9 = sup.5m		
		13 = 15 kW							

Cable code details

F = FEP single layer 1 W/cm²

G = FEP double layer 1 W/cm²

P = PFA single layer 1 W/cm²

D = PFA double layer 1 W/cm²

Assembly code details

A = coated frame

Support materials code

code	frame	strips	other pieces
1	PVDF	PVDF	PVDF
2	PP	PP	PP
3	FEP	FEP	-
4	FEP	FEP	PVDF
5	FEP	FEP	PP
6	PVDF	FEP	PVDF
7	PP	FEP	PP
8*	stainless steel	FEP	PP

* Please contact us

