

# PFA Rod Heaters GALMAFORM®

The PFA rod heaters GALMAFORM are electric heaters for direct heat transfer designed for the use in plants and tanks with a minimum physical size. They have excellent resistance to aggressive process liquids. The very high chemical resistance is achieved by a special coating with PFA (perfluoralkoxy-polymer).

The fluoropolymer coating comprises a two-layered structure.

The inner black PFA compound layer of the rod heaters GALMAFORM increases the thermal conductivity by enhancing the heat transfer.

The surface layer made of transparent fluoropolymer prevents encrustation and fouling for effortless cleaning and easy maintenance.

The rod heaters GALMAFORM can be used to heat autocatalytic (electroless) electrolytes, since they are electrically non-conductive and therefore metal reduction is prevented.

The individual shape of the rods allows for a variety of installation options. As the contact box and the cable can also be immersed in the process liquid, you can adjust the maximum immersion depth to your specific requirements. The use of high-quality materials guarantees a long operating life-time with optimum reliability and failure-free operation.



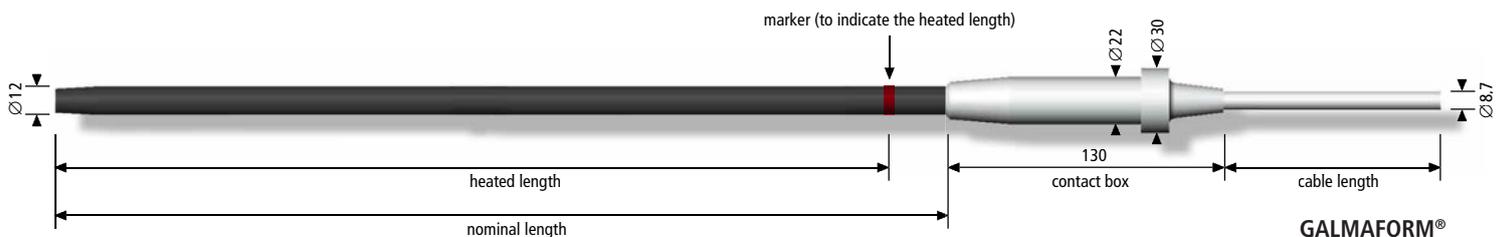
## Construction

The rod heaters are based on a PFA-coated stainless steel tubular heater with an electrical connection at one end. The contact box and the PTFE cable are welded together with a gas-tight seam to allow for complete immersion.

The heated length of the rod (minimum immersion depth) is indicated by a permanent ring-shaped marker. The rod is not heated above this mark.

Even in applications where the liquid level is subject to abrupt or drastic rise or fall the heated length of the rod must always be immersed!

The distance pieces AW 12 set the necessary distance between the rod heater and the wall of the tank. The support UH is designed for secure mounting of the rod heater on the edge of the tank.



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Due to the individual shape of the rod heaters different types of installation are possible. The various bending shapes of the rods are individually planned and implemented for you. Alternatively, you can bend the rods to the desired shape yourself, matching them to the installation conditions.

The available space can be optimally used by means of the various installation possibilities:

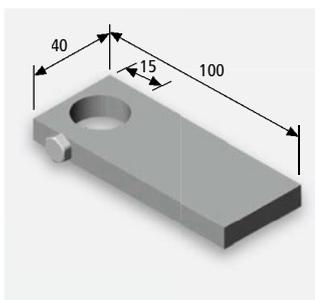
- on the tank wall
- on the floor of the tank
- hanging freely in the tank

## Electrical safety

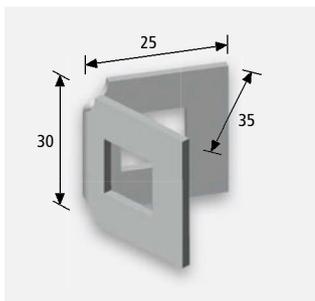
In accordance with EN 60519-1/2, the heaters are classified as devices of protection class I. All metal parts are connected to the neutral conductor. The connection cable of the rod heaters GALMAFORM additionally contains a bare earth cable. If used together with an earth leakage circuit breaker (ELCB), the maximum possible electrical safety is ensured.



PFA rod heaters GALMAFORM bear the VDE test mark



Support UH, material PVDF



Distance piece AW12, material PTFE, pure white

## Technical data

	U-FG25200	U-FG 25200/9	U-FG 14090
<b>Rod coating</b>	PFA-Compound	PFA-Compound	PFA-Compound
<b>Electrical conductivity of coating</b>	no	no	no
<b>Rated power</b>	2.000W	2.000W	900W
<b>Surface loading</b>	2,4W/cm <sup>2</sup>	2,4W/cm <sup>2</sup>	2,2W/cm <sup>2</sup>
<b>Rated voltage</b>	230V~	230V~	230V~
<b>Nominal length</b>	2.500 mm	2.500 mm	1.350 mm
<b>Heated length</b>	2.350 mm	2.350 mm	1.200 mm
<b>Cable length</b>	2 m	6 m	2 m
<b>Rod diameter</b>	Ø12 mm	Ø12 mm	Ø12 mm
<b>Minimum bending radius</b>	30 mm	30 mm	30 mm
<b>Accessories</b>			
<b>Support</b>	UH	UH	UH
<b>Distance piece</b>	AW12	AW12	AW12