

## SSFHK-SERIES



### **FLANGE HEATER**

for the efficient heating of water  
in the power range of 10 to 320kW

Uncompromising quality  
High power density  
Retrievable data set design

# SSFHK SERIES ELECTRIC FLANGE HEATERS

The SSFHK series was developed by Siekerkotte to offer industrial customers a robust electric heating solution with the right levels of power to heat water. In addition to its classic custom design, Siekerkotte is setting a standard that incorporates the last 30 years' process experience. Together with the right Siekerkotte SSTR control, it provides the customer with stable heating processes and – as is always true of electric heaters – with almost 100 % efficiency!

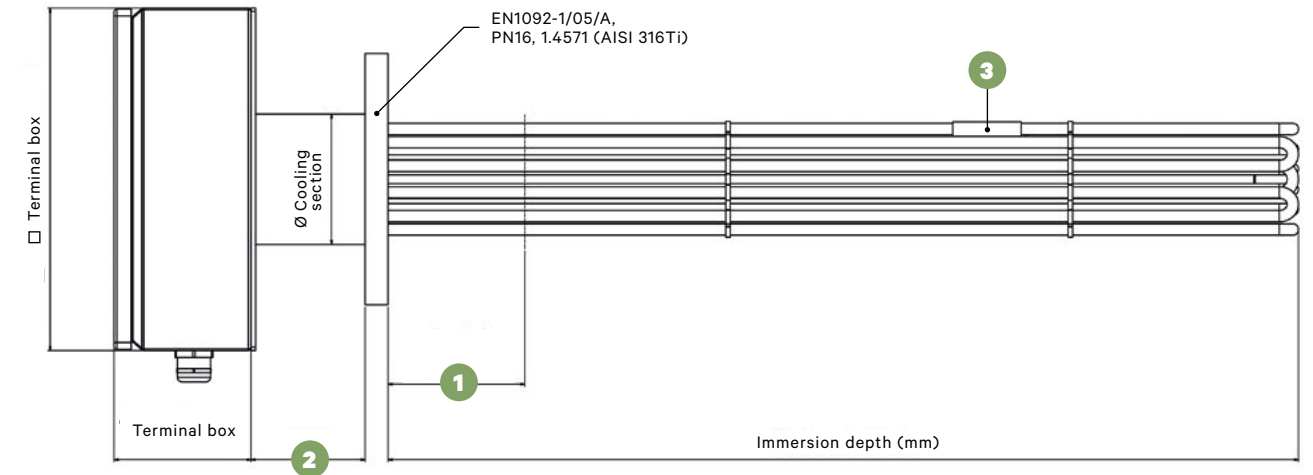
The modularly designed heaters with an output of 10 – 320 kW can be flanged either directly into an existing tank or into a separate flow pipe. On request, Siekerkotte can also supply the right solution with a vertical or horizontal design. Central to these heaters are the 10 mm stainless steel tubular heating elements 1.4404 (AISI 316L). Given the added 10mm diameter and 0.7mm wall thickness compared to standard commercial heaters, they are particularly suitable for use in industrial processes.

The heaters are monitored by a safety temperature limiter and switch off accordingly if they overheat. The PT100 temperature sensor provided is used to control the heaters. This allows the operator to provide his or her own higher-level PLC; alternatively, Siekerkotte offers a suitable semiconductor and thyristor control system (see the "Siekerkotte SSTR Series" data sheet).

Data set design, such as connection and circuit diagrams, CAD files (step-file) or technical drawings are available immediately on request and support the user already in the design phase.

## SSFHK SERIES PRODUCT CHARACTERISTICS

<b>Medium</b>	Water, water-glycol mixture (alternatives: after consultation)		
<b>Min./max. perm. temperature (°C)</b>	+5°C/ +110°C	<b>Heating element</b>	Tubular heater RHK Ø 10 mm
<b>Supply voltage (V)</b>	400 3~	<b>Surface load (watt/cm2)</b>	max. 7.89
<b>Circuit</b>	Triangle	<b>Heating element material</b>	1.4404 – AISI 316 L
<b>Power tolerance (%)</b>	+5/-10	<b>Unheated length (mm)</b>	120 <b>1</b>
<b>Design pressure max. (bar)</b>	10	<b>Tolerance imm. depth (mm)</b>	max. +5/-20
<b>Test pressure (bar)</b>	14,3	<b>Heating element closure</b>	Araldite
<b>Installation position</b>	horizontal	<b>Cooling distance (mm)</b>	100 <b>2</b>
<b>Flange material</b>	1.4571 – AISI 316 Ti	<b>Temperature limiter</b>	STB DR 20–150 °C (1-pol.)
<b>Flange standard</b>	EN1092-1/05/A	<b>Temperature sensor</b>	PT100 3-Leiter „B” <b>3</b>
<b>Connection box material</b>	Painted steel (RAL 7035)	<b>Design and manufacture acc. to</b>	DGRL 2014 / 68/ RU, AD2000
<b>Protection class</b>	IP55	<b>Customs tariff no.</b>	8516 1080
<b>Connection terminals</b>	WDU/PVB		



## MODEL VARIANTS

Artikel-Nr.	Power kW	Switching stages	Immersion depth mm	Flange Size	RHK no.	Terminal box mm	Weight (approx.) kg	Price in €*				Article no. – control
								1 Pc.	2 Pc.	3 Pc.	5 Pc.	
180001	10	1	800	DN50	3	□ 200 x 120	9	1,322	1,148	1,091	1,044	104087
180002	12	1	950	DN50	3	□ 200 x 120	9	1,356	1,183	1,125	1,079	103581
180003	15	1	1150	DN50	3	□ 200 x 120	10	1,360	1,187	1,129	1,083	103581
180004	20	1	1500	DN50	3	□ 200 x 120	11	1,399	1,226	1,168	1,122	104088
180005	20	1	800	DN65	6	□ 200 x 120	12	1,499	1,297	1,240	1,194	104088
180006	24	1	950	DN65	6	□ 200 x 120	13	1,559	1,358	1,301	1,254	104088
180007	30	1	1150	DN65	6	□ 200 x 120	14	1,582	1,381	1,323	1,277	104069
180008	36	1	950	DN100	9	□ 200 x 120	17	1,811	1,609	1,551	1,505	104069
180009	40	1	1500	DN65	6	□ 200 x 120	16	1,652	1,451	1,393	1,347	104069
180010	40	2	800	DN100	12	□ 300 x 120	21	1,898	1,725	1,640	1,593	115482
180011	45	1	1150	DN100	9	□ 300 x 120	22	1,877	1,666	1,479	1,437	104070
180012	48	1	950	DN100	12	□ 300 x 120	22	1,981	1,808	1,722	1,676	104070
180013	60	1	1500	DN100	9	□ 300 x 120	25	1,980	1,779	1,721	1,675	104090
180014	60	2	1150	DN100	12	□ 300 x 120	25	2,036	1,863	1,777	1,731	110062
180015	60	2	800	DN125	18	□ 300 x 120	28	2,306	2,105	2,047	1,972	110062
180016	72	2	950	DN125	18	□ 300 x 120	30	2,401	2,200	2,137	2,069	110062
180017	80	2	1500	DN100	12	□ 300 x 120	29	2,159	1,986	1,899	1,853	110062
180018	80	4	800	DN150	24	□ 380 x 210	41	2,685	2,434	2,376	2,302	115484
180019	90	2	1150	DN125	18	□ 380 x 210	39	2,481	2,280	2,222	2,148	110063
180020	96	2	950	DN150	24	□ 380 x 210	43	2,793	2,542	2,484	2,410	110063
180021	100	2	800	DN150	30	□ 380 x 210	44	2,966	2,744	2,657	2,611	110063
180022	120	1	1500	DN125	18	□ 380 x 210	44	2,651	2,449	2,393	2,318	104091
180023	120	2	1150	DN150	24	□ 380 x 210	51	3,009	2,758	2,700	2,626	115485
180024	120	5	950	DN150	30	□ 380 x 210	51	3,112	2,890	2,804	2,758	115220
180025	120	4	800	DN200	36	□ 380 x 210	55	3,466	3,173	3,086	3,040	115221
180026	144	1	950	DN200	36	□ 380 x 210	56	3,615	3,321	3,235	3,189	104091
180027	150	1	1150	DN150	30	□ 380 x 210	51	3,214	2,992	2,906	2,860	104091
180028	160	1	1500	DN150	24	□ 380 x 210	53	3,103	2,852	2,794	2,720	105520
180029	160	4	800	DN200	48	□ 380 x 210	63	4,083	3,769	3,662	3,587	115222
180030	180	1	1150	DN200	36	□ 380 x 210	62	3,691	3,398	3,313	3,267	104092
180031	192	1	950	DN200	48	□ 380 x 210	65	4,252	3,937	3,831	3,758	104092
180032	200	1	1500	DN150	30	□ 380 x 210	59	3,422	3,200	3,114	3,068	104092
180033	240	6	1500	DN200	36	□ 500 x 210	90	4,125	3,832	3,747	3,700	115223
180034	240	1	1150	DN200	48	□ 500 x 210	81	4,478	4,164	4,057	3,982	106179
180035	320	8	1500	DN200	48	□ 500 x 210	111	5,014	4,699	4,592	4,517	115224

\*All prices per piece plus VAT, unpacked, EXW Herford (Incoterms 2020)  
Prices valid until 31.03.2023

Please see our SSTR series data sheet for more information

## BEYOND THE STANDARD

Add to our standard models to suit your individual needs

### OPTIONS

<b>Flow tube / pressure vessel</b>	Siekerkotte manufactures appropriate flow heaters, mounting options and/or insulation for your application.
<b>Process automation / process integration</b>	e.g. remote control via hardwire connections (coupling relays), bus connections or process integration. Control according to the other specific variables.

### BEST PRACTICES

<b>Plant construction</b>	Optionally, Siekerkotte can develop and manufacture customised complete systems. From simple valve control extensions to specific special plant construction.
<b>Power-to-Heat</b>	Simultaneous control of the plant following the process temperature and power in order to take off a predefined amount of power. On request, we offer P2H plants, starting with the hydraulic system (fittings, pumps, valves, sensors, etc.) including assembly and commissioning.

## GOT ANY QUESTIONS?

We're here to help



For more than 30 years, Siekerkotte has been offering thermal engineering solutions that are custom designed to meet the customers' process requirements and implemented in technically and economically optimised plants. Get in touch with us and we'll be happy to support you with anything related to electric heating technology!

SIEKERKOTTE GmbH & Co. KG  
Herringhauser Straße 25  
D-32051 Herford

Tel.: +49 (0)5221 930 930  
Fax: +49 (0)5221 930 9325  
Email: siekerkotte@siekerkotte.de