

4.2 Flange heating element

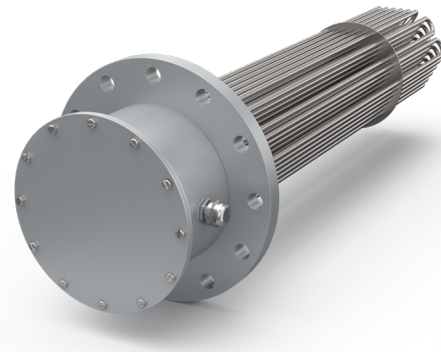
Model flange heating element

APPLICATION

- heating up:
 - hydraulic oil, gearbox oil, heat transfer oil, quenching oil
 - low-lime water, circulation water, water in double jacket, heat exchanger

AUFBAU

- U-shaped tubular heating elements \varnothing 8,4 mm
- a. made of steel
- b. made of special material mat.-no. 2.4858 (alloy 825)
- flange made of steel, DIN 2527 / EN 1092-1, PN 16
- thermostat 0 to 120 °C, switching difference 3 K, switching capacity see catalogue page 12.5
- steel-cap, protection type IP 30



ELECTRICAL CONNECTION

- up to 3.000 W at 230 V single-phase current, single-pole thermostat switches directly
- from 3.000 Watt at 230/400 V three-phase current, contactor necessary
- 48 to 72 kW 2 switching groups, 108 kW 3 switching groups
- up to 144 kW 4 switching groups

POWER DESIGN

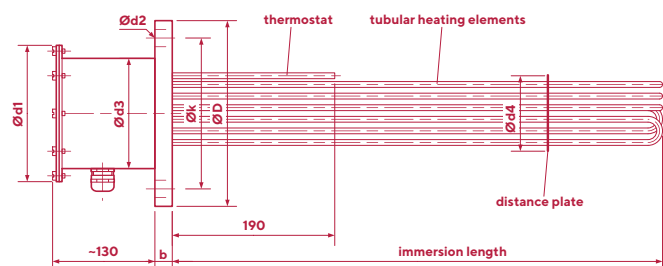
- the specific surface load is based on the listed guidelines

GUIDELINE

	SPECIFIC SURFACE LOAD (WATT/CM ²)
hydraulic oil, thin oil	1,5
quenching oi, heat transfer oil, glycerine	2,3
water	6,0
low-lime water, water in double jacket or circulation water	10,0

ALTERNATIVE DESIGN

- other immersion length or unheated zones
- other voltage or power
- vertical installation
- other material for flange or heating elements
- other nominal pressure for the flange
- cap with protection type IP 65
- completely flow heaters also available, see catalogue page 14.1



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TECHNICAL DATA			ARTICLE NO.		ARTICLE NO.	
FLANGE DN	IMMERSION LENGTH (MM)	POWER (WATT)	SPECIFIC SURFACE LOAD 1,5 W/CM ²	IMMERSION LENGTH (MM)	POWER (WATT)	SPECIFIC SURFACE LOAD 2,3 W/CM ²
65	670	3.000	04020031	670	4.500	04021031
125	450	4.000	04020041	450	6.000	04021041
100	670	4.500	04020061	670	6.750	04021061
100	870	6.000	04020091	870	9.000	04021091
150	670	9.000	04020111	670	13.500	04021111
150	870	12.000	04020131	870	18.000	04021131
200	870	24.000	04020151	870	36.000	04021151
250	870	36.000	04020181	870	54.000	04021181

TECHNICAL DATA			ARTICLE NO.		ARTICLE NO.	
FLANGE DN	IMMERSION LENGTH (MM)	POWER (WATT)	SPECIFIC SURFACE LOAD 6 W/CM ²	IMMERSION LENGTH (MM)	POWER (WATT)	SPECIFIC SURFACE LOAD 10 W/CM ²
65	540	9.000	04026031	610	18.000	04027031
125	355	12.000	04026041	400	24.000	04027041
100	540	13.500	04026061	610	27.000	04027061
100	640	18.000	04026091	770	36.000	04027091
150	540	27.000	04026111	610	54.000	04027111
150	540	36.000	04026131	770	72.000	04027131
200	540	54.000	04026141	610	108.000	04027141
250	640	72.000	04026151	770	144.000	04027151

DIMENSIONS

nominal size	DN	65	100	125	150	200	250	mm
heating tubes:		6	9	12	18	36	54	pcs.
outer diameter Ø	D	185	220	250	285	340	405	mm
thickness:	d	18	20	22	22	24	26	mm
bolt circle Ø	k	145	180	210	240	295	355	mm
bolt circle:		4	8	8	8	12	12	pcs.
bolt circle Ø	d1	18	18	18	22	22	26	mm
cover Ø	d2	120	160	200	200	260	310	mm
hood Ø	d3	100	130	163	163	220	270	mm
distance plate:	d4	64	98	123	148	198	245	mm