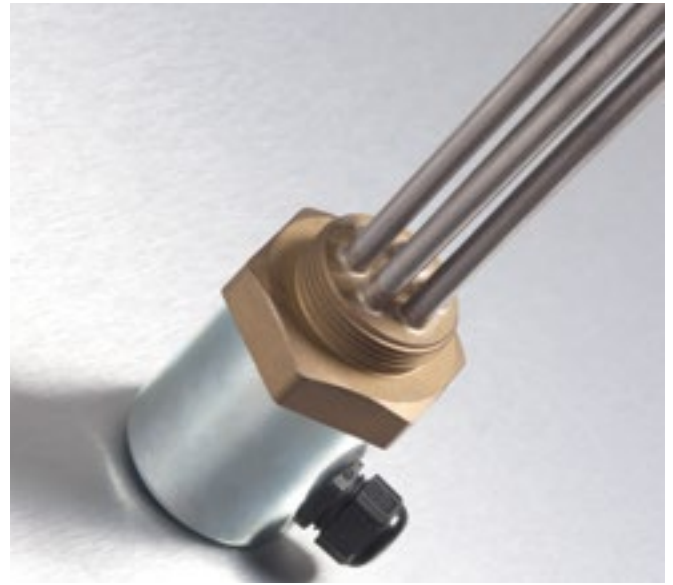
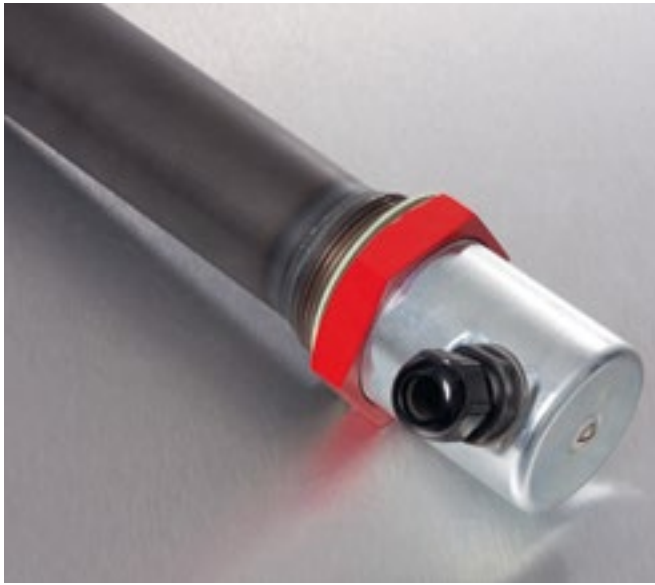


# Tank heaters

## Tank heaters



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## VR immersion heaters with magnetic clamp

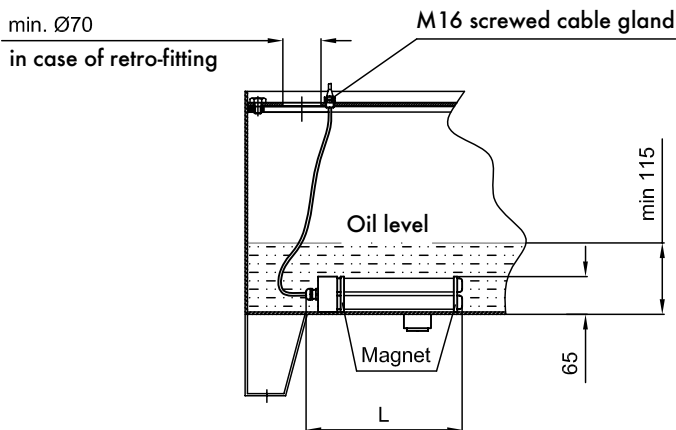
### Product description

- Pre-heating of the medium by direct heating
- Stable welded version
- Easy installation
- No lateral tank machining
- Low minimum oil level in horizontal position
- Pick up of iron particles with integrated magnetic clamps
- Protection class IP 68
- Integrated thermostat with switch-off temperature +40°C (other temperatures on request)
- Intergrated temperature limiter, wired for direct switching
- 3 pole, 4 m long cable with screwed cable gland M16
- Temperature resistant up to -20°C
- Medium touched pieces made of stainless steel 1.4571 (protection tubes), brass (cable gland) and plastics (cable)
- Resistant against HLP and HFA fluids, diesel, heating and vegetable oil (for other fluids, e.g. HFC, please contact HBE)



Order code				
Art. No.	Type	Power		Surface charge
1962	VR	1,000 W	/	1.2-M

### Dimensions



### Assembly information

- Fixing of the heater by magnetic clamps horizontally at the tank bottom
- Do not hang up the heater at the cable
- Lead the cable outside above oil level and fix it at the lid or tank with screwed cable gland M16
- Tank heater must be covered by at least 50 mm of the medium
- A retro-fitting requires an opening in the tank lid of  $\varnothing 70$  mm

Art. No.	Type	Power [W]	L [mm]	Voltage [V]	Surface charge [W/cm <sup>2</sup> ]
1955	VR 125 W/0,6-M	125	200	230 V/AC	0.6 HFA /HFD-R
1956	VR 250 W/0,6-M	250	300		0.6 HFA /HFD-R
1957	VR 500 W/0,6-M	500	500		0.6 HFA /HFD-R
1960	VR 250 W/1,2-M	250	200		1.2 HLP*
1961	VR 500 W/1,2-M	500	300		1.2 HLP*
1962	VR 1000 W/1,2-M	1000	500		1.2 HLP*
1963	VR 250 W/1,2-M	250	300	24 V/DC	1.2 HLP*

\*short delivery times due to stock availability

## Screwed-in heaters

### Product description

- Heater for pre-heating of hydraulic oil on mineral oil base
- For horizontal mounting under oil level
- Surface charge approx. 1.5 W/cm<sup>2</sup> for hydraulic oils
- Bright galvanised steel cap
- Material: steel (further materials on request)
- Wiring schemes for various supply voltages on request

### Series PTHK 90

- Exchangeable ceramic heating insert (mounting / dismounting possible without oil drain)
- Protection class IP 65
- UL/CSA approval up to max. 600 mm / 690V available at an additional cost.



Series PTHK 90

### Series PTHK 92

- Exchangeable ceramic heating insert (mounting / dismounting possible without oil drain)
- Temperature control for internal (THI) or external (THA) regulation, single pole 0 – 85°C, 16 ampere
- Protection class IP 54 for THA resp. IP 65 for THI



Series PTHK 92

### Series RHK - G1 1/2"

- Protection class IP 65



Series RHK - G 1 1/2"

### Series RHK - G1 1/2" THA / THI

- Temperature control for internal (THI) or external (THA) regulation, single pole 0 - 85°C, 16 ampere
- Protection class IP 54 for THA resp. IP 65 for THI



Series RHK - G 1 1/2" THA / THI

### Series WHK G 1 1/2"

- Mounting via tank lid
- Protection class IP 65
- Optional with temperature control for internal regulation (THI)



Order code				
Art. No.		Type		Voltage*
1808	-	PTHK 92 - G 2" THA	-	2 x 400 V
		PTHK 90 - G 1 1/2"		1 x 230V
		PTHK 90 - G 2"		2 x 380V
		PTHK 92 - G 2" THA		3 x 380V
		PTHK 92 - G 2" THI		2 x 400V
		RHK - G 1 1/2"		3 x 400V
		RHK - G 1 1/2" THA		
		RHK - G 1 1/2" THI		
		WHK - G 1 1/2"		
		WHK - G 1 1/2" THI		

\*available at extra charge:

3 phases  
> 400 V

### Required details for quotation

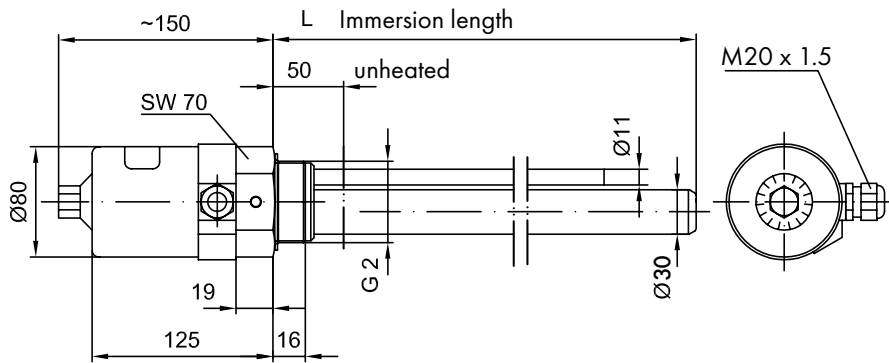
In order to provide you a specific quotation, we need the following information:

- Power
- Max. immersion length
- Voltage
- Surface load
- Thermostat yes / no

For the calculation of the tank heater, you will find a questionnaire and selection programme in the down-load section of our website [hbe-hydraulics.com](http://hbe-hydraulics.com).

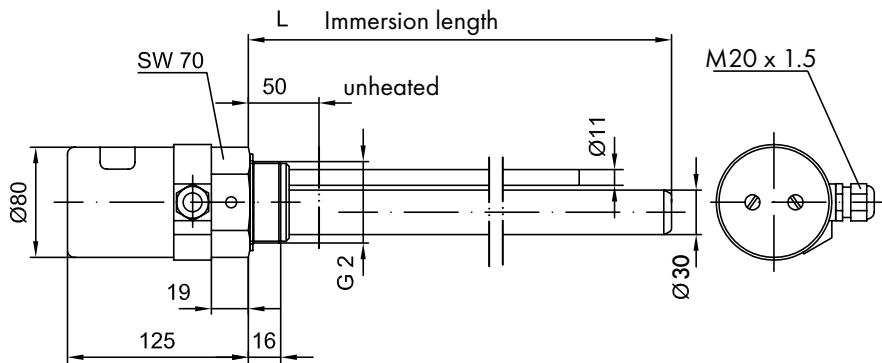


**PTHK 92 - G 2" THA**



Art. No.	Power [W]	L= Immersion depth [mm]
<b>1800*</b>	450	300
<b>1802*</b>	600	400
<b>1804*</b>	750	500
<b>1806*</b>	900	600
<b>1808*</b>	1050	700
<b>1810</b>	1200	800
<b>1812</b>	1350	900
<b>1814</b>	1500	1000
<b>1816</b>	1580	1100
<b>1818</b>	1730	1200
<b>1820</b>	1880	1300
<b>1822</b>	2030	1400
<b>1824</b>	2180	1500
<b>1826</b>	2330	1600

**PTHK 92 - G 2" THI**

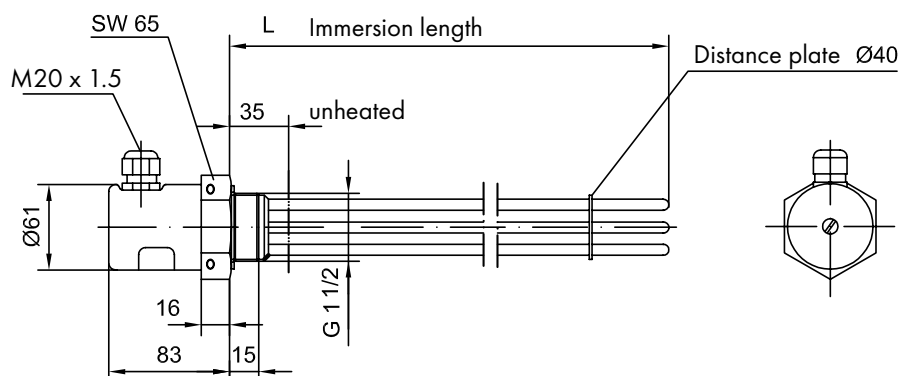


Art. No.	Power [W]	L= Immersion depth [mm]
<b>1801*</b>	450	300
<b>1803*</b>	600	400
<b>1805*</b>	750	500
<b>1807*</b>	900	600
<b>1809*</b>	1050	700
<b>1811*</b>	1200	800
<b>1813</b>	1350	900
<b>1815</b>	1500	1000
<b>1817</b>	1580	1100
<b>1819</b>	1730	1200
<b>1821</b>	1880	1300
<b>1823</b>	2030	1400
<b>1825</b>	2180	1500
<b>1827</b>	2330	1600

\*Voltage two-phase max.

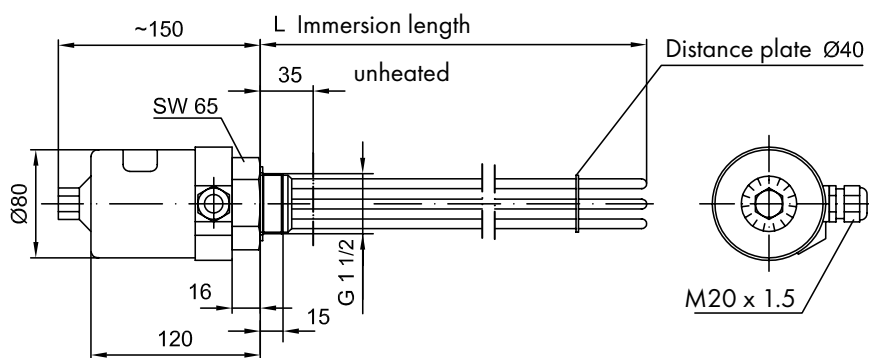
## Tube screwed-in heaters

### RHK - G 1 1/2"



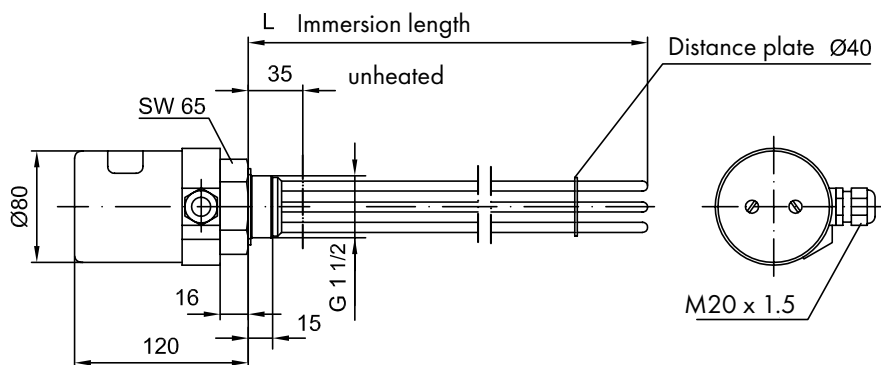
Art. No.	Power [W]	L= Immersion depth [mm]
<b>1830*</b>	380	200
<b>1832*</b>	500	250
<b>1834</b>	750	350
<b>1836</b>	990	450
<b>1838</b>	1450	650
<b>1840</b>	1825	800
<b>1842</b>	2300	1000

### RHK - G 1 1/2" THA



Art. No.	Power [W]	L= Immersion depth [mm]
<b>1860*</b>	380	200
<b>1862*</b>	500	250
<b>1864</b>	750	350
<b>1866</b>	990	450
<b>1868</b>	1460	650
<b>1870</b>	1825	800
<b>1872</b>	2300	1000

### RHK - G 1 1/2" THI



Art. No.	Power [W]	L= Immersion depth [mm]
<b>1861*</b>	380	200
<b>1863*</b>	500	250
<b>1865</b>	750	350
<b>1867</b>	990	450
<b>1869</b>	1460	650
<b>1871</b>	1825	800
<b>1873</b>	2300	1000

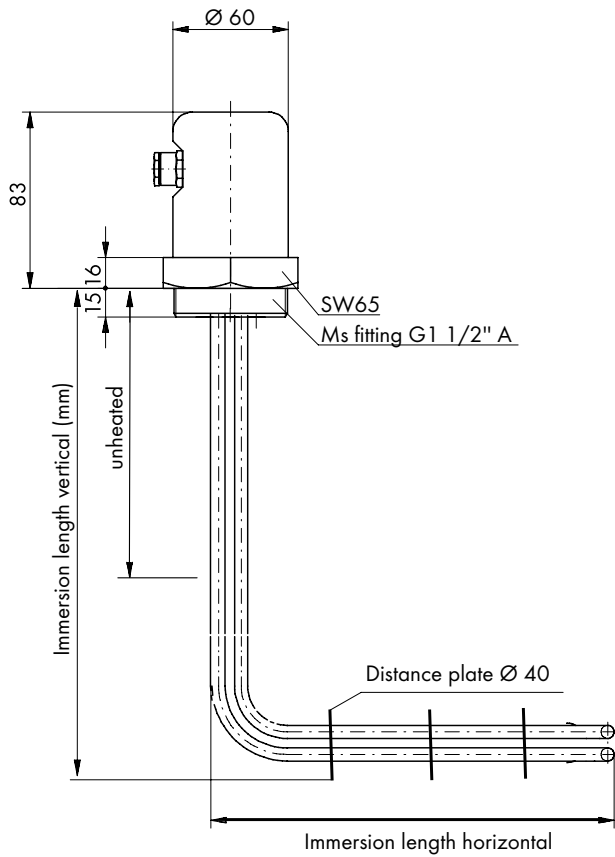
\*Voltage two-phase max.



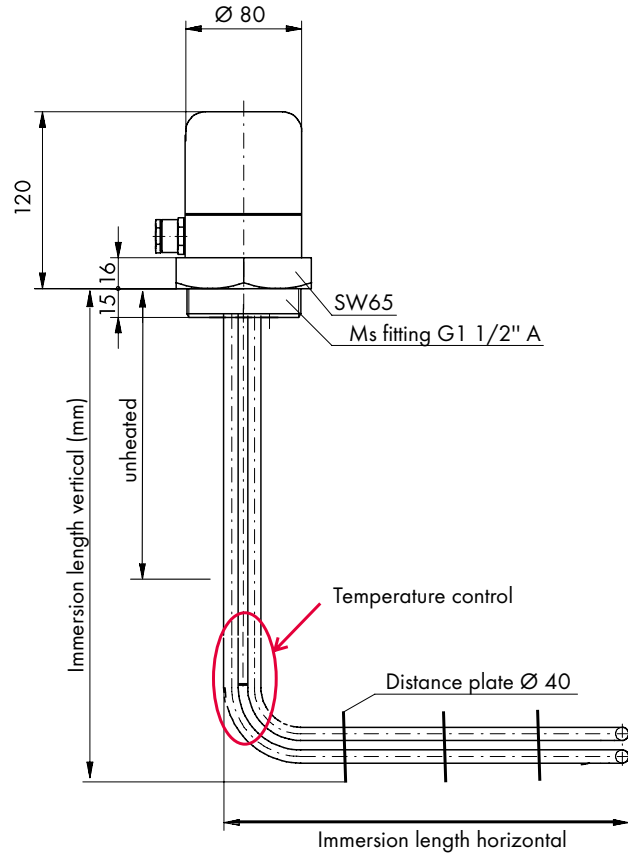
# Tube screwed-in heaters – shaped

## Dimensions

### Standard version



### Version with temperature control (THI)



Art. No.		Power [W]	Length [mm]			No. of RHK
Standard	THI		vertical	horizontal	unheated	
1633*	1643*	260	265	300	250	1
1634*	1644*	370	320	430	300	1
1635*	1645*	800	365	490	350	2
1636*	1646*	1000	425	600	410	2
1637*	1647*	1200	480	740	460	2

\*Voltage two-phase max.

## Oil pre-heater EDH

### Product description

- For the pre-heating of hydraulic oil, heating oil or other hard-inflammation agents
- The fluid to be heated is lead through a heating element bundle with the aid of baffles
- With pre-determined minimum flow rate a sufficient flow velocity is reached
- Thus, the carbonisation temperature is avoided

### Product features

- The mounting position is either vertically or horizontally. Vertically: Provide electrical connection on top.
- Heating capacity 0 - 90 kW
- Thermostat: 0 – 90°C (without EDH-500)
- Temperature limiter at 100°C (without EDH-500)

### Recommendations

- Installation of a flow control
- Avoid after-heating effect / Make sure that baffles are cooled down (let the medium flow further for app. 15 min after device is turned off)

### Technical data

**Caution:** Incorrect installation can lead to damage to the oil pre-heater.



### Option

- Surface charge: 1 W/cm<sup>2</sup>
- Water and water mixtures
- Temperature regulation (without EDH-500)

**Maximum operating pressure = 16 bar**  
Higher operating pressures on request

**Operating temperature = 0 – 95°C**

Size	Heating capacity [kW]	Surface charge [W/cm <sup>2</sup> ]	Minimum oil flow [l/min]	Recommended oil flow [l/min]	Thermostat [°C]	Differential [K]
EDH - 500	0.5 – 3	0.8 – 2	1	5	–	–
EDH - 700	2.5 – 5	1 – 2	20	30	0 – 90	2
EDH - 1000	5 – 10	1 – 2	40	50	0 – 90	2
EDH - 1200	7.5 – 30	1 – 2	60	75	0 – 90	2
EDH - 1700	22.5 – 90	1 – 2	80	100	0 – 90	2

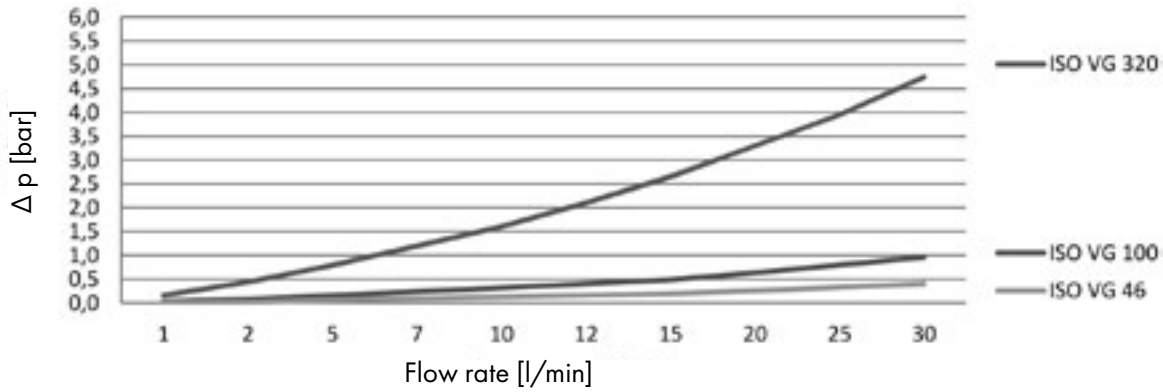
For media with a viscosity of more than 1000 cSt., a surface charge of 1 W/cm<sup>2</sup> is recommended.

Order code						
Type		Size		Power		Voltage*
EDH	-	1036	-	10 kW	-	3 x 400 V

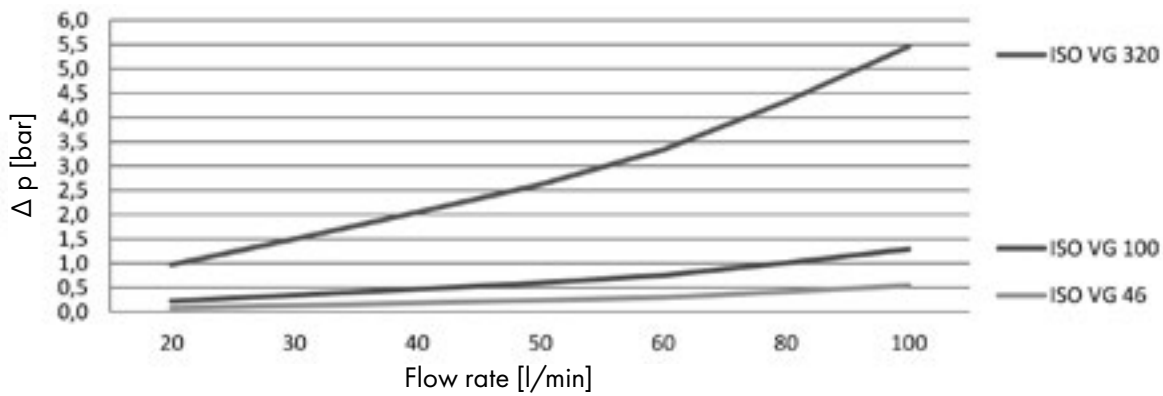
\*Other voltages on request

**Performance data\***

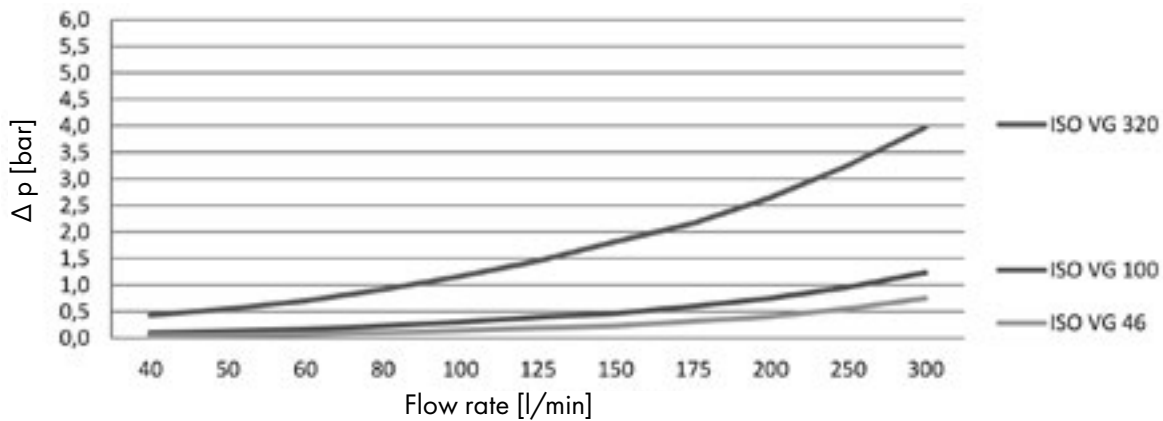
**EDH 524-24-1,5kW**



**EDH 724-3-5kW**



**EDH 1036-5-10kW**

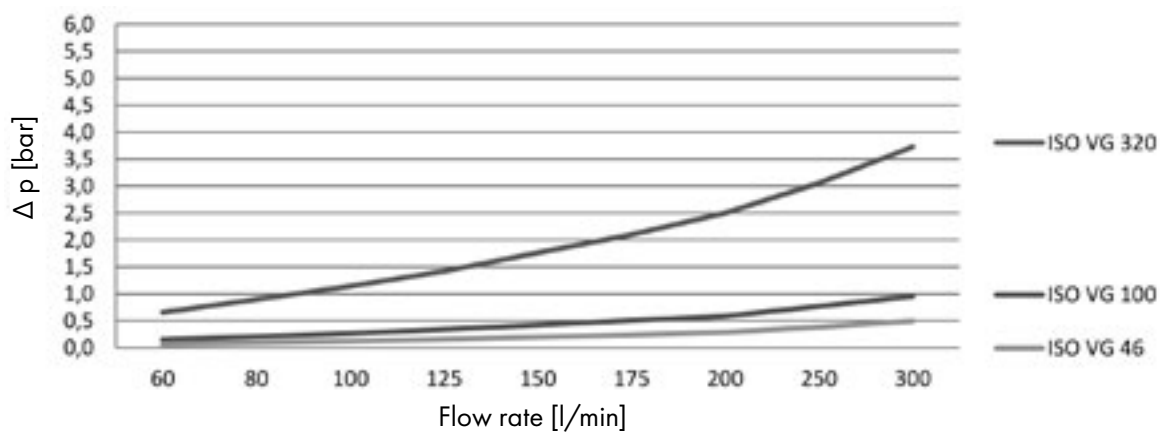


\*The performance data are based on a medium intake temperature of 5°C and are theoretically determined with the VDI heat atlas.

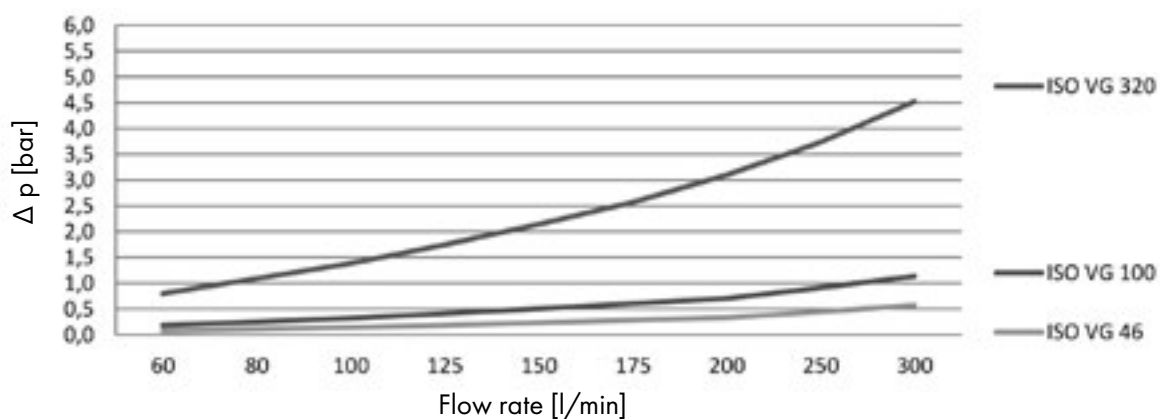
## Oil pre-heater EDH

### Performance data\*

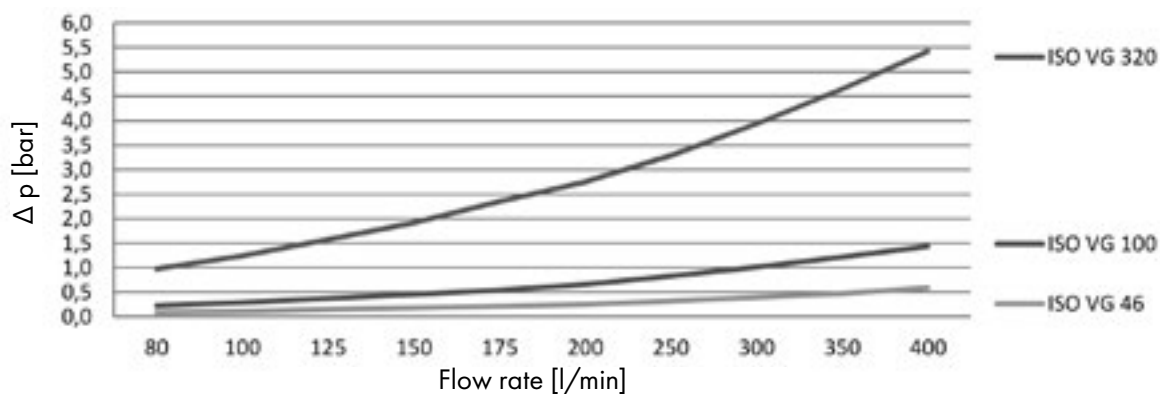
#### EDH 1236-5-15kW



#### EDH 1248-5-20kW



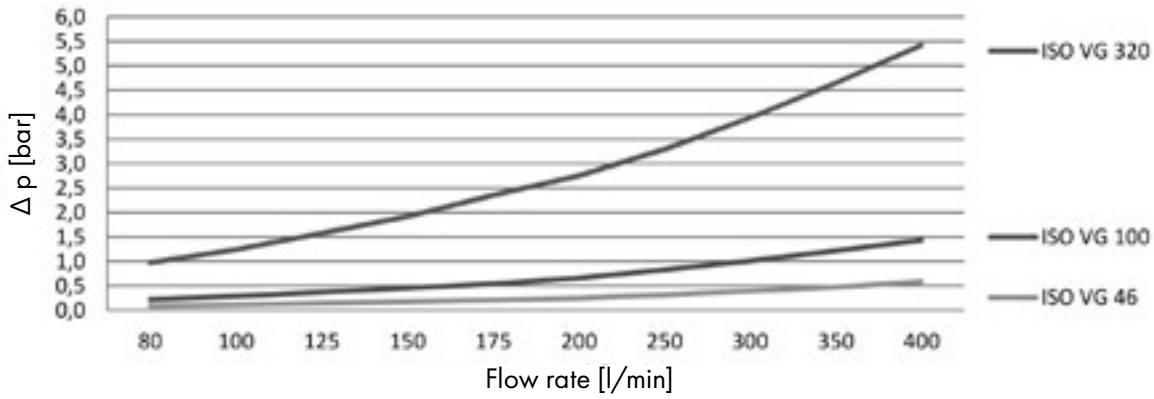
#### EDH 1260-5-30kW



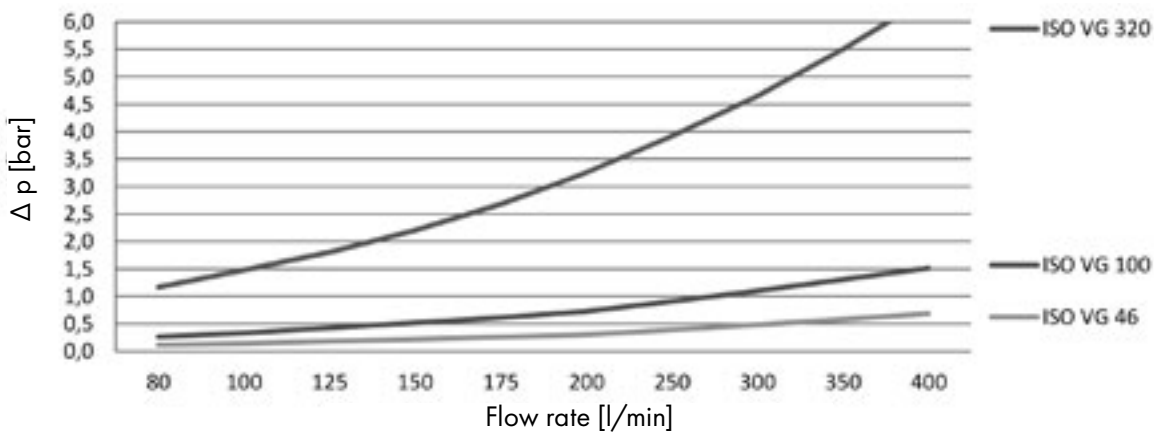
\*The performance data are based on a medium intake temperature of 5°C and are theoretically determined with the VDI heat atlas.

**Performance data\***

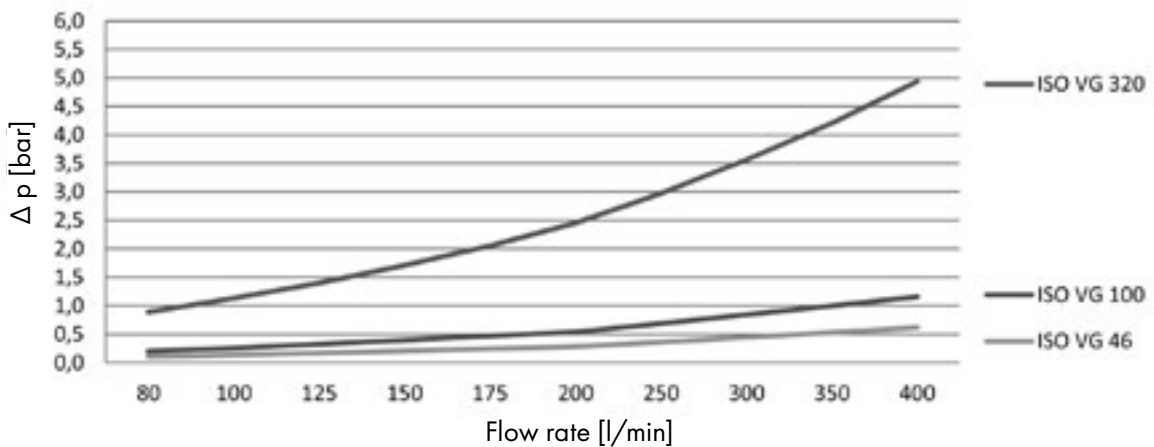
**EDH 1748-5-45kW**



**EDH 1760-5-60kW**



**EDH 1772-8-75kW**

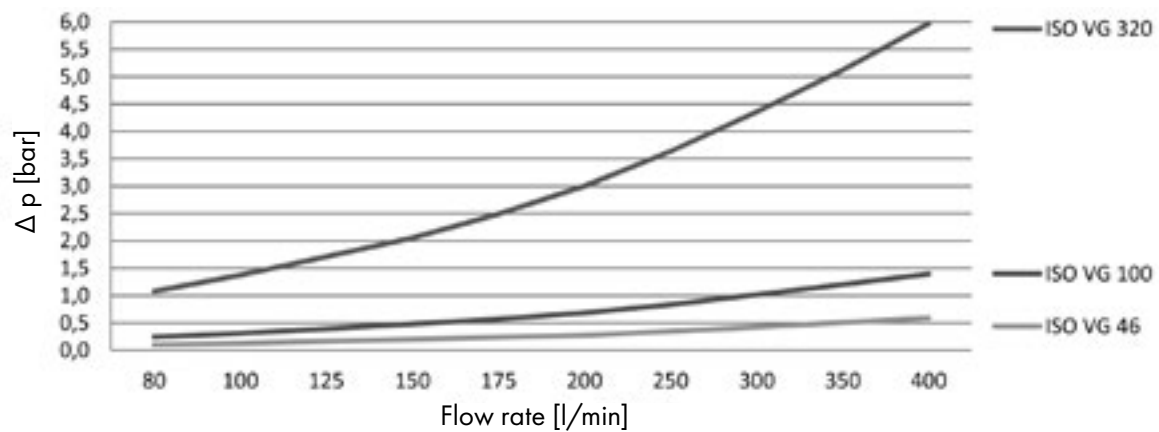


\*The performance data are based on a medium intake temperature of 5°C and are theoretically determined with the VDI heat atlas.

## Oil pre-heater EDH

### Performance data\*

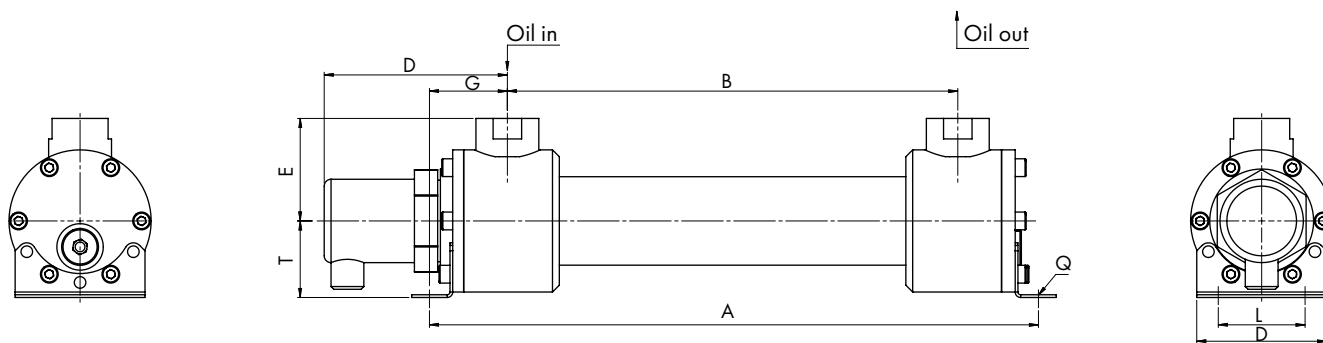
#### EDH 1784-7-90kW



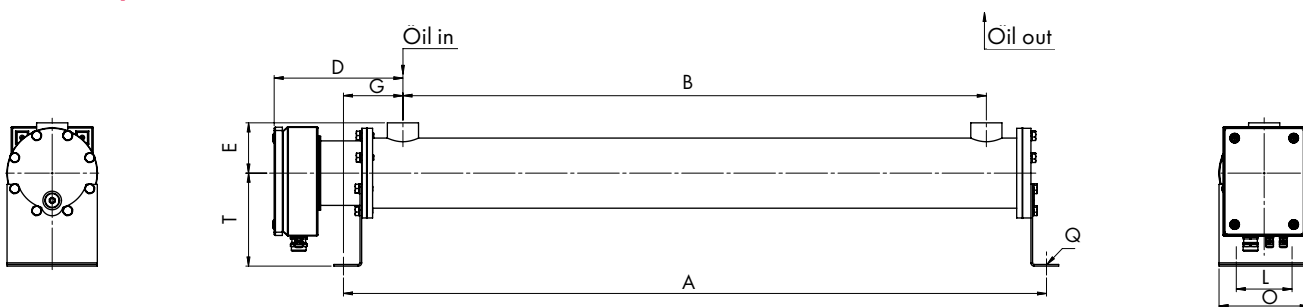
\*The performance data are based on a medium intake temperature of 5°C and are theoretically determined with the VDI heat atlas.

### Dimensions

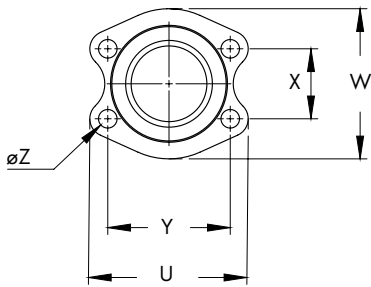
#### EDH 500



#### EDH 700/1000



Dimensions EDH [mm/BSPP]													Weight [kg]
	A	B	D	E	F	G	L	O	T	Q	X	Y	
EDH-514	446	329.5	134	75	G 1"	57	63.5	95	100	∅ 8.5 x 16	-	-	7
EDH-524	700	583.5	134	75	G 1"	57	63.5	95	100	∅ 8.5 x 16	-	-	8.5
EDH-536	1005	888.5	134	75	G 1"	57	63.5	95	100	∅ 8.5 x 16	-	-	10.5
EDH-724	670	483	225	73	G 1 1/2"	93	76	127	147	∅ 11 x 19	-	-	8
EDH-1036	990	766	235	92	G 1 1/2"	110	102	165	155	∅ 11 x 25	-	-	18
EDH-1236	970	707	260	145	SAE 1 1/2"	132	142	190	160	∅ 13 x 28	50.8	88.9	31
EDH-1248	1275	1012	260	145	SAE 1 1/2"	132	142	190	160	∅ 13 x 28	50.8	88.9	37
EDH-1260	1580	1317	260	145	SAE 1 1/2"	132	142	190	160	∅ 13 x 28	50.8	88.9	44
EDH-1748	1291	978	320	188	SAE 3"	157	178	210	226	∅ 16 x 38	62	106.4	76
EDH-1760	1596	1283	320	188	SAE 3"	157	178	210	226	∅ 16 x 38	62	106.4	90
EDH-1772	1900	1587	320	188	SAE 3"	157	178	210	226	∅ 16 x 38	62	106.4	104
EDH-1784	2205	1892	320	188	SAE 3"	157	178	210	226	∅ 16 x 38	62	106.4	118



Dimensions flange [mm]					
	U	Y	W	X	Z
SAE 1"	70	52.4	55	26.2	M10
SAE 1 1/4"	79	58.7	68	30.2	M10
SAE 1 1/2"	93	69.9	78	35.7	M12
SAE 2"	102	77.8	90	42.9	M12
SAE 2 1/2"	114	88.9	105	50.8	M12
SAE 3"	135	106.4	130.6	62	M16

## Oil pre-heater EDH

### Heating time of a defined oil quantity

The specified values are only for rough orientation. Depending on the flow rate of the pump and the installation of the system small tolerances are possible.

Desired temperature increase ( $\Delta T$ ) = 10K								
Electrical heating power	Tank 50 l	Tank 100 l	Tank 250 l	Tank 500 l	Tank 750 l	Tank 1000 l	Tank 2000 l	Tank 5000 l
EDH-724 - 5 kW	< 10 min	10 min	20 min	35 min	1 h	1 h 15 min	2 h 30 min	6 h
EDH-1036 - 10 kW	< 5 min	< 10 min	10 min	20 min	30 min	35 min	1 h 15 min	3 h
EDH-1236 - 15 kW	< 5 min	< 5 min	< 10 min	15 min	20 min	25 min	45 min	2 h
EDH-1248 - 20 kW	< 5 min	< 5 min	< 10 min	10 min	15 min	20 min	35 min	1 h 30 min
EDH-1260 - 30 kW	< 5 min	< 5 min	< 5 min	< 10 min	10 min	15 min	25 min	1 h
EDH-1748 - 45 kW	< 5 min	< 5 min	< 5 min	< 10 min	< 10 min	10 min	20 min	45 min
EDH-1760 - 60 kW	< 5 min	< 5 min	< 5 min	< 10 min	< 10 min	< 10 min	15 min	30 min
EDH-1772 - 75 kW	< 5 min	< 5 min	< 5 min	< 10 min	< 10 min	< 10 min	10 min	25 min
EDH-1784 - 90 kW	< 5 min	< 5 min	< 5 min	< 10 min	< 10 min	< 10 min	< 10 min	20 min

Desired temperature increase ( $\Delta T$ ) = 20K								
Electrical heating power	Tank 50 l	Tank 100 l	Tank 250 l	Tank 500 l	Tank 750 l	Tank 1000 l	Tank 2000 l	Tank 5000 l
EDH-724 - 5 kW	10 min	20 min	40 min	1 h 10 min	2 h	2 h 30 min	5 h	12 h
EDH-1036 - 10 kW	< 10 min	10 min	20 min	40 min	1 h	1 h 10 min	2 h 30 min	6 h
EDH-1236 - 15 kW	< 10 min	< 10 min	15 min	30 min	40 min	50 min	1 h 30 min	4 h
EDH-1248 - 20 kW	< 5 min	< 10 min	10 min	20 min	30 min	40 min	1 h 10 min	3 h
EDH-1260 - 30 kW	< 5 min	< 10 min	< 10 min	15 min	20 min	30 min	50 min	2 h
EDH-1748 - 45 kW	< 5 min	< 5 min	< 10 min	10 min	15 min	20 min	40 min	1 h 30 min
EDH-1760 - 60 kW	< 5 min	< 5 min	< 10 min	< 10 min	10 min	15 min	30 min	1 h
EDH-1772 - 75 kW	< 5 min	< 5 min	< 10 min	< 10 min	< 10 min	10 min	20 min	50 min
EDH-1784 - 90 kW	< 5 min	< 5 min	< 10 min	< 10 min	< 10 min	< 10 min	15 min	40 min



Desired temperature increase ( $\Delta T$ ) = 30K

Electrical heating power	Tank 50 l	Tank 100 l	Tank 250 l	Tank 500 l	Tank 750 l	Tank 1000 l	Tank 2000 l	Tank 5000 l
EDH-724 - 5 kW	15 min	30 min	1 h	1 h 45 min	3 h	3 h 45 min	7 h 30 min	18 h
EDH-1036 - 10 kW	< 10 min	15 min	30 min	1 h	1 h 30 min	1 h 45 min	3 h 45 min	9 h
EDH-1236 - 15 kW	< 10 min	< 15 min	20 min	45 min	1 h	1 h 15 min	2 h 15 min	6 h
EDH-1248 - 20 kW	< 5 min	< 10 min	15 min	30 min	45 min	1 h	1 h 45 min	4 h 30 min
EDH-1260 - 30 kW	< 5 min	< 10 min	< 15 min	20 min	30 min	45 min	1 h 15 min	3 h
EDH-1748 - 45 kW	< 5 min	< 10 min	< 10 min	15 min	20 min	30 min	1 h	2 h 15 min
EDH-1760 - 60 kW	< 5 min	< 5 min	< 10 min	< 15 min	15 min	20 min	45 min	1 h 30 min
EDH-1772 - 75 kW	< 5 min	< 5 min	< 10 min	< 15 min	< 15 min	15 min	30 min	1 h 15 min
EDH-1784 - 90 kW	< 5 min	< 5 min	< 10 min	< 10 min	< 15 min	< 15 min	25 min	1 h

Desired temperature increase ( $\Delta T$ ) = 40K

Electrical heating power	Tank 50 l	Tank 100 l	Tank 250 l	Tank 500 l	Tank 750 l	Tank 1000 l	Tank 2000 l	Tank 5000 l
EDH-724 - 5 kW	20 min	40 min	1 h 20 min	2 h 20 min	4 h	5 h	10 h	24 h
EDH-1036 - 10 kW	10 min	20 min	40 min	1 h 20 min	2 h	2 h 20 min	5 h	12 h
EDH-1236 - 15 kW	< 10 min	< 20 min	30 min	1 h	1 h 20 min	1 h 40 min	3 h	8 h
EDH-1248 - 20 kW	< 10 min	10 min	20 min	40 min	1 h	1 h 20 min	2 h 20 min	6 h
EDH-1260 - 30 kW	< 10 min	< 10 min	15 min	30 min	40 min	1 h	1 h 40 min	4 h
EDH-1748 - 45 kW	< 5 min	< 10 min	10 min	20 min	30 min	40 min	1 h 20 min	3 h
EDH-1760 - 60 kW	< 5 min	< 10 min	< 10 min	15 min	20 min	30 min	1 h	2 h
EDH-1772 - 75 kW	< 5 min	< 10 min	< 10 min	< 15 min	< 20 min	20 min	40 min	1 h 40 min
EDH-1784 - 90 kW	< 5 min	< 10 min	< 10 min	< 15 min	< 20 min	< 20 min	30 min	1 h 20 min

## Oil pre-heater EDH

### Heating power (kW) in relation of flow rate and desired temperature increase

Depending on the type of oil, small tolerances are possible.

(Please consider the minimum flow rates of the selected device.)

$\Delta T$ [K]	10 l/min	20 l/min	30 l/min	40 l/min	50 l/min	75 l/min	100 l/min	125 l/min	150 l/min	175 l/min	200 l/min	300 l/min
1	0.39	0.77	1.16	1.54	1.93	2.89	3.85	4.81	5.78	6.74	7.70	11.55
2	0.77	1.54	2.31	3.08	3.85	5.78	7.70	9.63	11.55	13.48	15.40	23.10
3	1.16	2.31	3.47	4.62	5.78	8.66	11.55	14.44	17.33	20.21	23.10	34.65
4	1.54	3.08	4.62	6.16	7.70	11.55	15.40	19.25	23.10	26.95	30.80	46.20
5	1.93	3.85	5.78	7.70	9.63	14.44	19.25	24.06	28.88	33.69	38.50	57.75
6	2.31	4.62	6.93	9.24	11.55	17.33	23.10	28.88	34.65	40.43	46.20	69.30
7	2.70	5.39	8.09	10.78	13.48	20.21	26.95	33.69	40.43	47.16	53.90	80.85
8	3.08	6.16	9.24	12.32	15.40	23.10	30.80	38.50	46.20	53.90	61.60	92.40
9	3.47	6.93	10.40	13.86	17.33	25.99	34.65	43.31	51.98	60.64	69.30	103.95
10	3.85	7.70	11.55	15.40	19.25	28.88	38.50	48.13	57.75	67.38	77.00	115.50
11	4.24	8.47	12.71	16.94	21.18	31.76	42.35	52.94	63.53	74.11	84.70	127.05
12	4.62	9.24	13.86	18.48	23.10	34.65	46.20	57.75	69.30	80.85	92.40	138.60
13	5.01	10.01	15.02	20.02	25.03	37.54	50.05	62.56	75.08	87.59	100.10	150.15
14	5.39	10.78	16.17	21.56	26.95	40.43	53.90	67.38	80.85	94.33	107.80	161.70
15	5.78	11.55	17.33	23.10	28.88	43.31	57.75	72.19	86.63	101.06	115.50	173.25
16	6.16	12.32	18.48	24.64	30.80	46.20	61.60	77.00	92.40	107.80	123.20	184.80
17	6.55	13.09	19.64	26.18	32.73	49.09	65.45	81.81	98.18	114.54	130.90	196.35
18	6.93	13.86	20.79	27.72	34.65	51.98	69.30	86.63	103.95	121.28	138.60	207.90
19	7.32	14.63	21.95	29.26	36.58	54.86	73.15	91.44	109.73	128.01	146.30	219.45
20	7.70	15.40	23.10	30.80	38.50	57.75	77.00	96.25	115.50	134.75	154.00	231.00
21	8.09	16.17	24.26	32.34	40.43	60.64	80.85	101.06	121.28	141.49	161.70	242.55
22	8.47	16.94	25.41	33.88	42.35	63.53	84.70	105.88	127.05	148.23	169.40	254.10
23	8.86	17.71	26.57	35.42	44.28	66.41	88.55	110.69	132.83	154.96	177.10	265.65
24	9.24	18.48	27.72	36.96	46.20	69.30	92.40	115.50	138.60	161.70	184.80	277.20
25	9.63	19.25	28.88	38.50	48.13	72.19	96.25	120.31	144.38	168.44	192.50	288.75

$\Delta T$ [K]	10 l/min	20 l/min	30 l/min	40 l/min	50 l/min	75 l/min	100 l/min	125 l/min	150 l/min	175 l/min	200 l/min	300 l/min
26	10.01	20.02	30.03	40.04	50.05	75.08	100.10	125.13	150.15	175.18	200.20	> 300
27	10.04	20.79	31.19	41.58	51.98	77.96	103.95	129.94	155.93	181.91	207.90	> 300
28	10.78	21.56	32.34	43.12	53.90	80.85	107.80	134.75	161.70	188.65	215.60	> 300
29	11.17	22.33	33.50	44.66	55.83	83.74	111.65	139.56	167.48	195.39	223.30	> 300
30	11.55	23.10	34.65	46.20	57.75	86.63	115.50	144.38	173.25	202.13	231.00	> 300
31	11.94	23.87	35.81	47.74	59.68	89.51	119.35	149.19	179.03	208.86	238.70	> 300
32	12.32	24.64	36.96	49.28	61.60	92.40	123.20	154.00	184.80	215.60	246.40	> 300
33	12.71	25.41	38.12	50.82	63.53	95.29	127.05	158.81	190.58	222.34	254.10	> 300
34	13.09	26.18	39.27	52.36	65.45	98.18	130.90	163.63	196.35	229.08	261.80	> 300
35	13.48	26.95	40.43	53.90	67.38	101.06	134.75	168.44	202.13	235.81	269.50	> 300
36	13.86	27.72	41.58	55.44	69.30	103.95	138.60	173.25	207.90	242.55	277.20	> 300
37	14.25	28.49	42.74	56.98	71.23	106.84	142.45	178.06	213.68	249.29	284.90	> 300
38	14.63	29.26	43.89	58.52	73.15	109.73	146.30	182.88	219.45	256.03	292.60	> 300
39	15.02	30.03	45.05	60.06	75.08	112.61	150.15	187.69	225.23	262.76	> 300	> 300
40	15.40	30.80	46.20	61.60	77.00	115.50	154.00	192.50	231.00	269.50	> 300	> 300
41	15.79	31.57	47.36	63.14	78.93	118.39	157.85	197.31	236.78	276.24	> 300	> 300
42	16.17	32.34	48.51	64.68	80.85	121.28	161.70	202.13	242.55	282.98	> 300	> 300
43	16.56	33.11	49.67	66.22	82.78	124.16	165.55	206.94	248.33	289.71	> 300	> 300
44	16.94	33.88	50.82	67.76	84.70	127.05	169.40	211.75	254.10	296.45	> 300	> 300
45	17.33	34.65	51.98	69.30	86.63	129.94	173.25	216.56	259.88	> 300	> 300	> 300
46	17.71	35.42	53.13	70.84	88.55	132.83	177.10	221.38	265.65	> 300	> 300	> 300
47	18.10	36.19	54.29	72.38	90.48	135.71	180.95	226.19	271.43	> 300	> 300	> 300
48	18.48	36.96	55.44	73.92	92.40	138.60	184.80	231.00	277.20	> 300	> 300	> 300
49	18.87	37.73	56.60	75.46	94.33	141.49	188.65	235.81	282.98	> 300	> 300	> 300
50	19.25	38.50	57.75	77.00	96.25	144.38	192.50	240.63	288.75	> 300	> 300	> 300

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