

HTR series HEATERS

Compact,
Rapid Heating
for Heavy Fuel Oil,
Lubrication Oil
and Water



FARAD
HEAT EXCHANGERS

...we work on quality

FARAD HTR series heat exchangers are designed to address the very basic needs of marine and industrial heating applications. Having proved their long-term reliability and robustness, these tubular type heat exchangers are now being offered by FARAD in a wide range of pre-engineered type series. Optimal fit is guaranteed while customer specific requirements can be met thanks

to FARAD's fitness-for-purpose manufacturing approach.

HTR series include 5 types; namely HTR150, HTR200, HTR250, HTR300 and HTR400, while heating length ranges from 600mm up to 2800 mm. These lead to a number of combinations where the heating surface varies as shown in the table below.

HEATING SURFACE (m ²)					
TYPE/ L*	HTR150	HTR200	HTR250	HTR300	HTR400
600	1.6	3.2	5.7	8.7	15.8
800	2.0	4.1	7.4	11.2	20.1
1000	2.5	5.1	9.0	13.7	24.4
1200	3.0	6.0	10.7	16.2	28.7
1400	3.5	6.9	12.4	18.6	33.0
1600	4.0	7.9	14.0	21.1	37.4
1800	4.4	8.8	15.7	23.6	41.7
2000	4.9	9.8	17.3	26.1	46.0
2200	5.4	10.7	19.0	28.5	50.3
2400	5.9	11.7	20.6	31.0	54.6
2600	6.3	12.6	22.3	33.5	58.9
2800	6.8	13.5	24.0	-	-

*where L = tube bundle straight length

TABLE 1

Heating medium: steam, water, thermal oil

Heated medium: (heavy) fuel oil, lubrication oil, fresh or treated water, etc.



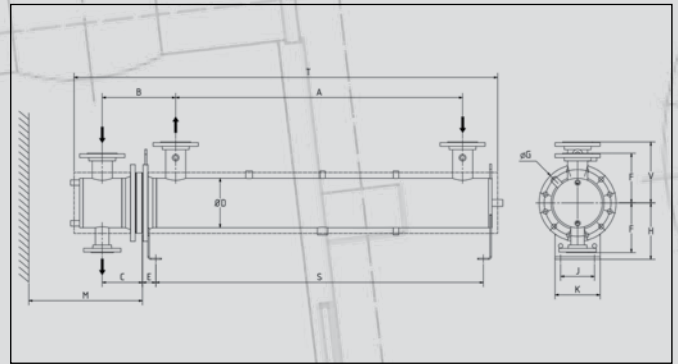
- Shell & tube design (reliability, easy maintenance).
- Marine type components.
- Flexible design.
- Marine & industrial applications.
- Available in various heat load ranges.
- Delivery within 2-4 weeks from order placement.
- 2 years warranty.

Advantages:

- Shell & tube design with U-tubes $\varnothing 10 \times 1,50 \text{ mm}$ or $\varnothing 12 \times 1,50 \text{ mm}$.
- Removable tube bundle for easy cleaning and inspection of both tube side and shell side.
- Channel cover can be dismantled without disturbing the tubeside piping.
- Low pressure drops thanks to design optimization.
- Wide temperature differentials are handled without expansion joints.
- Cost effectiveness that comes with having a highly standardized design.
- Type approved by ABS (alternatively approved by LR, BV, DNV-GL etc. upon request)
- Flexible design, adaptable to all applications.
- Warranty 24 months after delivery.
- Delivery within 2-4 weeks from order placement.
- Custom designs are also available upon request.
- Availability of spare parts and special tools at any time.
- Lifetime technical support & guidance.

Standard Features:

- Connection flanges according to customer's requirements (selection among: EN 1092-1, DIN 86030 or JIS B2220)
- Design /Test pressure: up to 16.0 / 24.0 bar(g).
- Design temperature: up to 200°C



STANDARD HEATER DIMENSIONS (mm)

TYPE/ DIMENSION	HTR150	HTR200	HTR250	HTR300	HTR400
A	L-145	L-130	L-140	L-155	L-155
B	295	325	355	400	450
C	155	178	183	211	241
D	168.3	219.1	273.1	323.9	406.4
E	57	59	76	78	82
F	190	220	270	300	340
G	285	340	405	460	580
H	220	250	300	330	380
J	120	150	200	220	280
K	160	200	250	280	340
M	L+170	L+190	L+220	L+240	L+280
S	L+35	L+50	L+35	L+65	L+100
V	250	270	300	330	360
T	L+429	L+475	L+501	L+568	L+647

* (L) from table 1

All dimensions are for guidance only.
Dimension drawing available upon request.

Standard Accessories

- ✓ Safety valve (x1)
- ✓ Drain valve (x1)
- ✓ Air-vent valve (x1)
- ✓ Thermometer L-type with thermowell (x2)

Optional Accessories

- Temperature sensor (PT-100)
- Pressure gauge
- Pressure sensor/ transmitter
- Steam control valve



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