

TEMPERATURE CONTROL 14/12

PLATE HEAT EXCHANGER

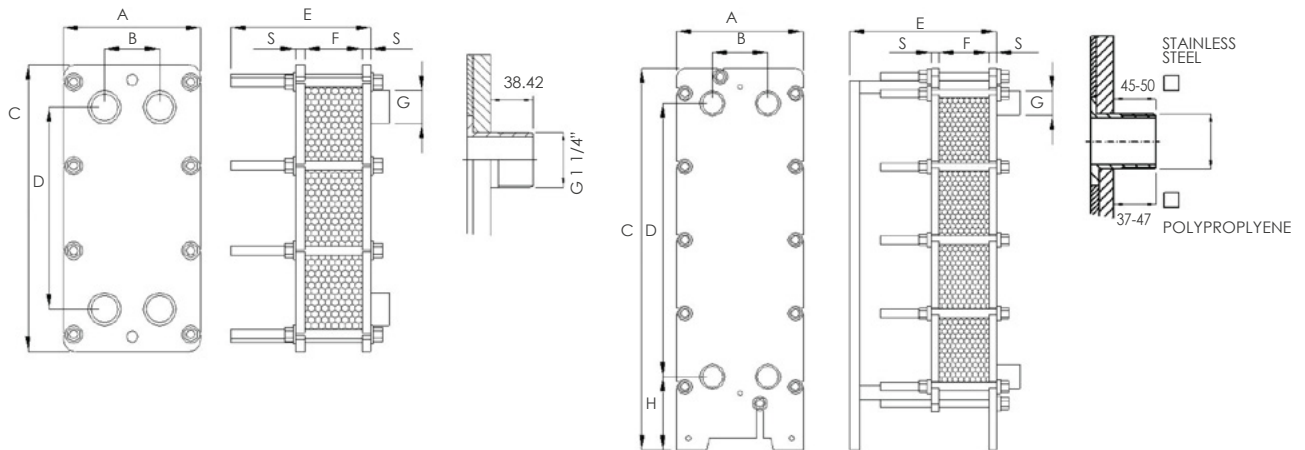
Cost effective heat management solution. Whether it is for heating or cooling their efficient operation saves energy, reducing costs and minimising environmental impact.



✓ Technical features

- High overall heat transfer coefficient
- Compact design gives maximum surface area to material volume without compromising mechanical robustness
- High performance with low hold-up volume
- Versatile, modular design
- Plate and gasket materials available to suit most fluid types
- Easy dismantling for rapid cleaning

📏 Dimensions



DIMENSION mm	A	B	C	D	E	F	G	H	S
PHE100-TI	204	86	490	381	116	39.75	DN32	0	14/12
PHE140-TI	204	86	490	381	116	50.35	DN32	0	14/12
PHE180-TI	204	86	490	381	141	66.25	DN32	0	14/12
PHE240-TI	204	86	490	381	191	92.75	DN32	0	14/12
PHE290-TI	204	86	490	381	191	103.35	DN32	0	14/12
PHE330-TI	204	86	490	381	241	129.85	DN32	0	14/12
PHE370-TI	204	86	490	381	291	140.45	DN32	0	14/12
PHE410-TI	204	86	490	381	291	151.05	DN32	0	14/12
PHE450-TI	312	140	963	690	447	66.5	DN65	185	20/20
PHE500-TI	312	140	963	690	447	87.5	DN65	185	20/20
PHE550-TI	312	140	963	690	447	94.5	DN65	185	20/20
PHE610-TI	312	140	963	690	447	101.5	DN65	185	20/20
PHE670-TI	312	140	963	690	447	115.5	DN65	185	20/20
PHE730-TI	312	140	963	690	447	122.5	DN65	185	20/20
PHE780-TI	312	140	963	690	447	129.5	DN65	185	20/20
PHE820-TI	312	140	963	690	447	136.5	DN65	185	20/20

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PROCESS DATA (HOT SIDE)	PHE100-TI	PHE140-TI	PHE180-TI	PHE240-TI	PHE290-TI	PHE330-TI	PHE370-TI	PHE410-TI
TEMP(IN)°C	90	90	90	90	90	90	90	90
TEMP(OUT)°C	70	70	70	70	70	70	70	70
FLOW RATE (M/H)	4.52	6.20	7.88	10.71	12.70	14.70	16.38	18.33
PRESSURE DROP (KPA)	22.11	25.54	24.50	25.04	26.62	25.55	27.18	29.57

PROCESS DATA (COLD SIDE)	PHE100-TI	PHE140-TI	PHE180-TI	PHE240-TI	PHE290-TI	PHE330-TI	PHE370-TI	PHE410-TI
TEMP(IN)°C	20	20	20	20	20	20	20	20
TEMP(OUT)°C	35	35	35	35	35	35	35	35
FLOW RATE (M/H)	5.88	8.07	10.26	13.94	16.54	19.13	21.32	23.86
PRESSURE DROP (KPA)	42.19	48.65	46.48	47.13	49.91	47.51	50.36	54.59
DELTA T LOG MEAN (C)	52.46	52.46	52.46	52.46	52.46	52.46	52.46	52.46
HEAT EXCHANGES (KW)	102	140	178	242	287	332	370	414

CONSTRUCTION DATA	PHE100-TI	PHE140-TI	PHE180-TI	PHE240-TI	PHE290-TI	PHE330-TI	PHE370-TI	PHE410-TI
HEAT TRANSFER AREA (M)	0.624	0.816	1.104	1.584	1.776	2.256	2.448	2.640
OVER SURFACING (%)	121.48	118.57	126.71	133.98	128.42	139.15	136.47	132.69
OVERALL K SERVICE(W/MC)	3114.33	3268.79	3071.85	2910.78	3078.84	2803.80	2879.64	2987.76
FOULING F (MC/KW)	0	0	0	0	0	0	0	0
PLATES THICKNESS (MM)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
OVERALL K CLEAN(W/MC)	6897.51	7144.68	6964.29	6813.72	7032.83	6705.26	6809.54	6952.19
WEIGHT EMPTY (KG)	29	30	32	35	36	39	40	41
WEIGHT FULL (KG)	30.778	32.346	34.698	38.618	40.186	44.106	45.674	47.242
VOLUME HOT SIDE (L)	0.714	0.918	1.224	1.734	1.938	2.448	2.652	2.856
VOLUME COLD SIDE (L)	0.714	0.918	1.224	1.734	1.938	2.448	2.62	2.856
NO. SERIES PASS HOT SIDE	1	1	1	1	1	1	1	1
NO. SERIES PASS COLD SIDE	1	1	1	1	1	1	1	1
NO. PARALLEL PASSES HOT SIDE	7	9	12	17	19	24	26	28
NO. PARALLEL PASSES COLD SIDE	7	9	12	17	19	24	26	28

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PROCESS DATA (HOT SIDE)	PHE450-TI	PHE500-TI	PHE550-TI	PHE610-TI	PHE670-TI	PHE730-TI	PHE780-TI	PHE820-TI
TEMP(IN)°C	90	90	90	90	90	90	90	90
TEMP(OUT)°C	70	70	70	70	70	70	70	70
FLOW RATE (M/H)	19.74	22.31	24.17	26.96	29.75	32.54	34.40	36.25
PRESSURE DROP (KPA)	23.28	21.45	21.85	22.51	23.26	22.72	23.21	23.73

PROCESS DATA (COLD SIDE)	PHE450-TI	PHE500-TI	PHE550-TI	PHE610-TI	PHE670-TI	PHE730-TI	PHE780-TI	PHE820-TI
TEMP(IN)°C	20	20	20	20	20	20	20	20
TEMP(OUT)°C	35	35	35	35	35	35	35	35
FLOW RATE (M/H)	25.70	29.04	31.46	35.06	38.72	42.35	44.77	47.19
PRESSURE DROP (KPA)	50.06	45.73	46.43	47.64	48.88	47.53	48.36	49.24
DELTA T LOG MEAN (C)	52.46	52.46	52.46	52.46	52.46	52.46	52.46	52.46
HEAT EXCHANGES (KW)	446	504	546	609	672	735	777	819

CONSTRUCTION DATA	PHE450-TI	PHE500-TI	PHE550-TI	PHE610-TI	PHE670-TI	PHE730-TI	PHE780-TI	PHE820-TI
HEAT TRANSFER AREA (M)	2.873	3.887	4.225	4.563	5.239	5.577	5.915	6.253
OVER SURFACING (%)	95.43	114.26	114.95	112.11	116.59	114.10	114.62	115.09
OVERALL K SERVICE(W/MC)	2957.66	2470.38	2462.15	2542.82	2443.82	2510.93	2502.74	2495.42
FOULING F (MC/KW)	0	0	0	0	0	0	0	0
PLATES THICKNESS (MM)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
OVERALL K CLEAN(W/MC)	5780.09	5293.03	5293.03	5393.57	5293.03	5375.97	5371.40	5367.30
WEIGHT EMPTY (KG)	150	155	156	158	161	163	164	166
WEIGHT FULL (KG)	157.85	165.20	167.65	170.10	175.00	177.45	179.90	182.35
VOLUME HOT SIDE (L)	3.825	5.100	5.525	5.950	6.800	7.225	7.650	8.075
VOLUME COLD SIDE (L)	3.825	5.100	5.525	5.950	6.800	7.225	7.650	8.075
NO. SERIES PASS HOT SIDE	1	1	1	1	1	1	1	1
NO. SERIES PASS COLD SIDE	1	1	1	1	1	1	1	1
NO. PARALLEL PASSES HOT SIDE	9	12	13	14	16	17	18	19
NO. PARALLEL PASSES COLD SIDE	9	12	13	14	16	17	18	19

Head Office

AQUA S.p.A
42018 San Martino in Rio, Reggio Emilia
Italy - Via Crotti, 1
P: +39 0522 695805/85 - F: +39 0522 646160
aqua@aqua.it | www.aqua.it

AQUA S.p.A - POOL DIVISION
46043 Castiglione d. Stiviere, Mantova - Italy
P: +39 0376 671973 - F: +39 0376 940139
infpools@aqua.it | www.aqua.it



Branches

AQUA WATER SYSTEMS LTD
Unit 135 Oak Drive Hartlebury Trading Estate,
Worcestershire, DY10 4JB
P: +44 (0)1299 251050, F: +44 (0)1299 253704
sales@askaqua.co.uk | www.askaqua.co.uk

AQUA FILTRACION S.A.
Pol. Ind. Castellbisbal Sud 08755
Castellbisbal, Barcelona
P: +34 (0)93 7711855, F: +34 (0)93 7711772
info@aqua.es | www.aqua.es

AQUA SU ARITIMI SAN. VE MUH. TIC. LTD. STI.
Ferhatpasa Mahallesi Maresal Fevzi Cakmak
Cad. No:45 Pk.34888 Atasehir / Istanbul - Turkey
P: +90 216 661 60 60, F: +90 216 661 68 50
info@aqua.com.tr | www.aqua.com.tr

AQUA MIDDLE EAST FZC
1J-07/4 and 1J-07/3 - Hamriyah Free Zone
P.O.Box 42585 Sharjah - United Arab Emirates
P: +971 6 526 0563, F: +971 6 526 0564
contact@aqua-me.ae
www.aqua-me.ae

AQUA WATER SYSTEMS INDIA PVT LTD
4A/4B/4C-,Puttappa Industrial Estate
Mahadevapura Post, White Field Road,
Bangalore 560 048
P: 0091 80 4152 1313, F: 0091 80 4152 1414
contact@aquaindia.in | sales@aquaindia.in
www.aquaindia.in

AQUA GROUP RUS
Juridical Address:
107014, Egerskaya str, 1, Moscow, Russia
Residence Address:
127081, Chermianskaya str, 3, Moscow, Russia
P: +7 495 6458078, F: +7 495 969 2413
mail@aqua-italy.ru | www.aqua-italy.ru
www.aqua.it

AQUA GROUP LLC
Office : Regus – Sarayat EL Maadi, Egypt
Management & Warehouse : Plot no 2-2nd service
axe, 2nd Industrial Zone, October, Egypt
P: +20 2 3820 2259 | info@aqua.eg