



Aqua MEX

Fully equipped heat exchanger 40kW and 70kW with circulation pump and electronics for economical heating of your pool. Just connect to your actual heating system e.g. boiler, solar panel or heat pump.

- Digital control
- Easy to install
- Straight flow
- Flow switch
- Check valve
- Pool temperature sensor
- Three-step single-phase built-in circulation pump
- Housing and cabinet made of glass-fibre reinforced polypropylene
- Coil made of titanium or stainless steel
- Certified to meet electric safety standards



High-effective heat exchanger in new unique design

Pahlén introduces a new line of high capacity heat exchangers made of high quality materials, glass-fibre reinforced polypropylene and a new developed high effective coil made of titanium. Our new line gives the best possible heating capacity and resistance against aggressive water. Compact, fully equipped, easy to install and use.

Aqua MEX is the most economical and easy option when it comes to installation and heating of your pool as it is connected directly to your hot water system.

The heat exchanger has a straight flow with a low pressure drop and with slip connections for 63 mm pipes. Minimum flow on the secondary side (pool water) 90 l/min.

The heat exchanger is equipped with digital control, where the desired pool temperature can easily be set and the current pool temperature is shown in the LED display.



Aqua MEX fully equipped has a three-step single-phase built-in circulation pump for the primary (hot) water as well as built-in temperature sensor, flow switch and check valve. It is also equipped with two drain plugs on the secondary circuit (pool water) for easy drainage of the heat exchanger.

If you choose our top model Aqua MEX fully equipped, you get a complete unit ready and simple to install.

As an alternative to our fully equipped Aqua MEX we do also offer a standard version of this heat exchanger with stainless steel or titanium coil.

Electronic digital control panel

- Built-in safety device turns off the heater at 45°C
- Optimized for low electrical consumption
- Easy setting of the desired pool temperature
- Clear figures show the pool water as well as the set temperature
- Display of heating in operation

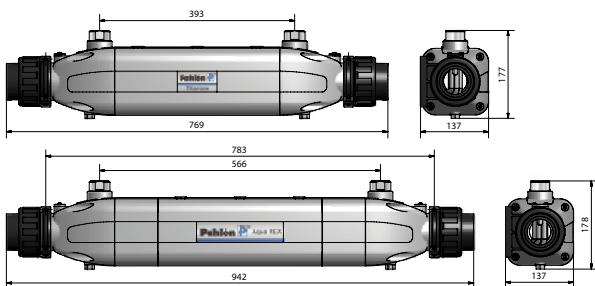
Actual temperature in pool/
Set temperature



Heating in operation

Temperature settings

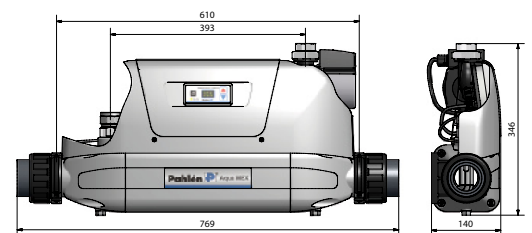
Standard version



40 and 70kW

100kW

Fully equipped version 40 and 70kW



Technical data Aqua MEX fully equipped

Item no.	Model	*Capacity			Primary, hot water		Secondary, pool water	
		kW	kcal/h	kBtu/h	l/min	press. drop H(m)	l/min	press. drop H(m)
113951	AM-FE 40	40	34 400	135	20	0,6	250	0,4
113952	AM-FE 40T	40	34 400	135	20	0,4	250	0,4
113953	AM-FE 70	70	60 200	240	30	1,6	300	0,6
113954	AM-FE 70T	70	60 200	240	30	1,4	300	0,6

Technical data Aqua MEX standard

11316	AM 40	40	34 400	135	20	0,6	250	0,4
11326	AM 40T	40	34 400	135	20	0,4	250	0,4
11317	AM 70	70	60 200	240	30	1,6	300	0,6
11327	AM 70T	70	60 200	240	30	1,4	300	0,6
11318	AM 100	100	86 000	340	40	2,6	333	0,8
11328	AM 100T	100	86 000	340	40	2,3	333	0,8

*Capacity at 60° temperature difference between primary (hot water) and secondary (pool water) temperature.

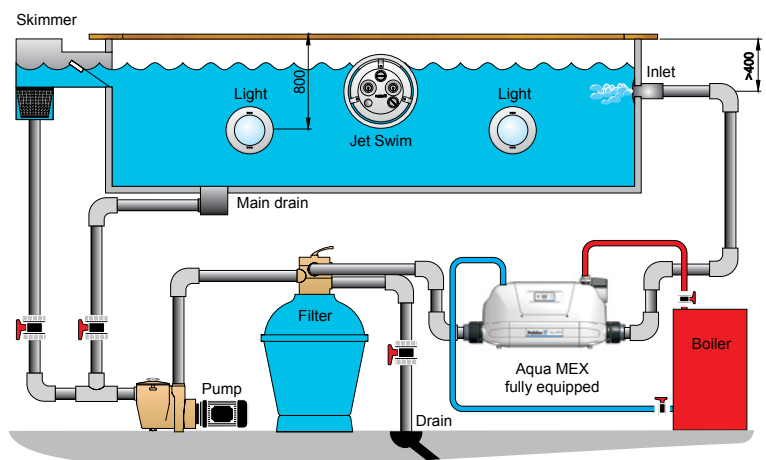
- **Aqua MEX fully equipped comes complete with flow switch, check valve, temperature sensor, circulation pump and electronics** - Easy to install, plug and play.
- **Three step single phase circulation pump** - Optimized for maximum heat capacity.
- **Economic** - Lower installation and operation cost compared to traditional heating systems.
- **Rapid heating** - Just connect directly to your hot water system.
- **Capacity range 40, 70 and 100kW** - Fast, reliable, safe and flexible heating for pools up to 400 m³.
- **Digital control and display** - Easy to set and operate.
- **New modern design and material. The housing and cabinet are made of glass-fibre reinforced polypropylene** - Strong, stable and corrosion resistant.
- **Electronic flow switch** - Shuts off the heat if the water flow is too low.
- **Straight flow 63 mm (2") pipe** - Lower pressure drop, higher flow, low energy consumption.
- **New coil made of titanium** - Best possible heating capacity and resistance against aggressive water.
- **Coil in stainless steel AISI 316L** - Excellent heat transference capabilities.
- **Installation together with any boilers, heat pumps, solar panels or other heat sources** - Suites all installations.
- **IP44 (International Protection Rating)** - Protected against contact and penetration of objects minimum 1 mm in diameter and protected against splashing water.

Example of power requirement

The amount of kW required to heat up your pool from 10°C to 28°C based on pool water volume and time.

$\Delta T=18$ (10°C - 28°C)				
Volume	25 m ³	45 m ³	70 m ³	100 m ³
Hours				
24	22kW	39kW	61kW	87kW
48	11kW	20kW	31kW	44kW
72	7kW	13kW	20kW	29kW
96	5kW	10kW	15kW	22kW
110	5kW	9kW	13kW	19kW

Volume= length x width x depth of your pool e.g.
3 x 6 x 1,4m = 25m³



Examples of different kW outputs with 45, 60, 90°C temperature from boiler.

Model	*Temperature secondary side	Temperature primary side		
		45°C	60°C	90°C
AM-FE 40T	20°C	20kW	31kW	54kW
AM-FE 40T	28°C	13kW	25kW	49kW
AM-FE 40	20°C	18kW	29kW	50kW
AM-FE 40	28°C	12kW	23kW	45kW
AM-FE 70T	20°C	23kW	36kW	64kW
AM-FE 70T	28°C	15kW	29kW	56kW
AM-FE 70	20°C	22kW	35kW	61kW
AM-FE 70	28°C	15kW	28kW	53kW

* Pool water temperature shown as temperature secondary side.

These calculations are based on 25 l/min on the primary side (from boiler) and 200 l/min on the secondary side (from pool).

Water from boiler 25 l/min
primary side 45, 60, 90°C



Water from pool 200 l/min secondary side 20, 28°C



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