



## AQ6L

### AlfaQ™ AHRI-certified plate heat exchanger

#### Applications

General heating and cooling duties.

#### Standard design

The plate heat exchanger consists of a pack of corrugated metal plates with portholes for the passage of the two fluids between which heat transfer will take place.

The plate pack is assembled between a fix frame plate and a movable pressure plate and compressed by tightening bolts. The plates are fitted with a gasket which seals the interplate channel and directs the fluids into alternate channels. The number of plates is determined by the flow rate, physical properties of the fluids, pressure drop and temperature program. The plate corrugations promote fluid turbulence and support the plates against differential pressure.

The plate and the pressure plate are suspended from an upper carrying bar and located by a lower guiding bar, both of which are fixed to a support column.

Connections are located in the frame plate or, if either or both fluids make more than a single pass within the unit, in the frame and pressure plates.

#### Typical capacities

##### Liquid flow rate

Up to 120 kg/s (1900 gpm), depending on media, permitted pressure drop and temperature program.

##### Plate types

AQ6L

##### Frame types

FM, FG, FD and FS

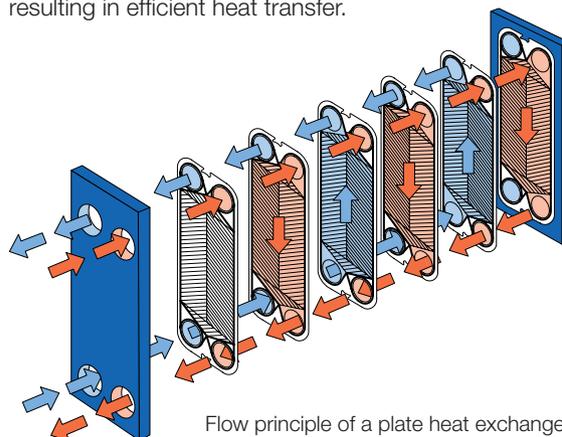
#### Working principle

Channels are formed between the plates and the corner ports are arranged so that the two media flow through alternate channels. The heat is transferred through the plate between the channels, and complete counter-current flow is created for highest possible efficiency. The corrugation of the plates



AQ6L-FG

provides the passage between the plates, supports each plate against the adjacent one and enhances the turbulence, resulting in efficient heat transfer.



Flow principle of a plate heat exchanger

## STANDARD MATERIALS

### Frame plate

Mild steel, painted

### Nozzles

Carbon steel

Metal lined: Stainless steel, Titanium

Rubber lined: Nitrile, EPDM

### Plates

Stainless steel: Alloy 304, Alloy 316, Titanium

### Gaskets

Nitrile, EPDM

## TECHNICAL DATA

### Pressure vessel codes, PED, ASME, pvcALS™

### Mechanical design pressure (g) / temperature\*

FM	pvcALS™	1.03 MPa / 180°C
FG	pvcALS™	2.0 MPa / 180°C
FG	PED	2.0 MPa / 180°C
FG	ASME	150 psig / 482°F
FD	ASME	300 psig / 482°F
FS	pvcALS™	3.5 MPa / 180°C
FS	PED	3.5 MPa / 180°C
FS	ASME	460 psig / 482°F

\* All PED and ALS units, except FM, are optimised for a design temperature of 50°C (122°F).

All PED and ALS units are also available for of multi range temperatures 50, 100, 150, 180 and 200°C with corresponding lower design pressure.

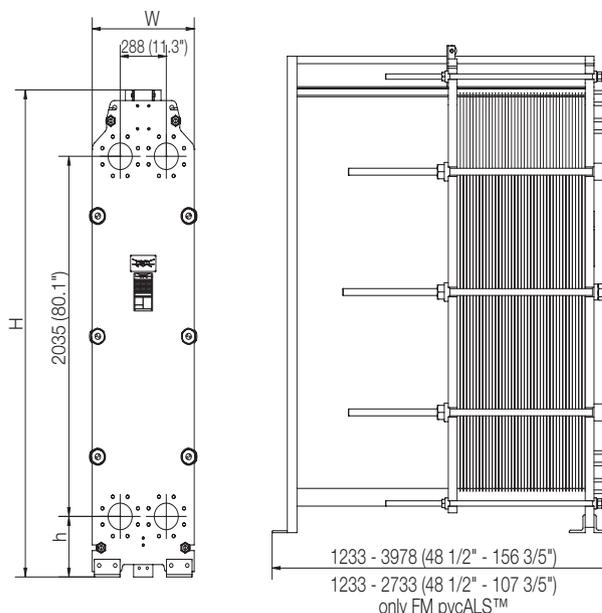
## CONNECTIONS

### Maximum heat transfer surface

990 (1,1 x 900) m<sup>2</sup> (10660 sq.ft)

FM	pvcALS™	Size 150 mm	DIN/GB/GOST PN10, ASME Ci. 150, JIS 10K
FG	pvcALS™	Size 150 mm	DIN/GB/GOST PN16, PN25, ASME Ci. 150, JIS 10K, JIS 16K
FG	PED	Size 150 mm	DIN PN16, PN25 ASME Ci. 150
FG	ASME	Size 6"	ASME Ci. 150
FD	ASME	Size 6"	ASME Ci. 300
FS	pvcALS™	Size 150 mm	DIN/GB/GOST PN25, PN40/ASME Ci.300/ JIS 20K
FS	PED	Size 150 mm	DIN PN25, PN40 ASME Ci. 300
FS	ASME	Size 6"	ASME Ci. 300

## DIMENSIONS



### Measurements mm (inch)

Type	H	W	h
AQ6L -FM/pvcALS™	2752 (108 1/3")	610 (24")	342 (13 1/2")
AQ6L -FG/PED/pvcALS™	2752 (108 1/3")	637 (25")	342 (13 1/2")
AQ6L -FG/ASME	2752 (108 1/3")	646 (25 3/7")	342 (13 1/2")
AQ6L -FD/ASME	2752 (108 1/3")	646 (25 3/7")	342 (10 1/3")
AQ6L -FS/PED/pvcALS™	2752 (108 1/3")	646 (25 3/7")	342 (13 1/2")
AQ6L -FS/ASME	2752 (108 1/3")	646 (25 3/7")	342 (13 1/2")

The number of tightening bolts may vary depending on pressure rating and Pressure Vessel Code (PVC) requirements.

### Particulars required for quotation

- Flow rates or heat load
- Temperature program
- Desired working pressure
- Maximum permitted pressure drop



### How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at [www.alfalaval.com](http://www.alfalaval.com)