



Cetetube

Shell and tube heat exchanger

The Cetetube range of liquid/liquid heat exchangers comprises a number of sizes, with ratings of up to around 5 MW. The Cetetube is manufactured in three different basic thermal lengths. So it is easy to find a heat exchanger that will offer optimum properties for most operating conditions.

Thermally optimized

A Cetetube coil consists of finned copper tubes. The finned tube is designed to provide flow areas to suit modern operating conditions in heat exchange technology. Due to the fins, the outside heat transfer area of the tube is many times larger and they also serve as distinct spacers between the tube rows to ensure stability of the coil. Due to the stability and thus the repeatability in production, every Cetetube heat exchanger maintains the specified output.

The heat exchanger is designed to ensure turbulent flow both inside and outside the tubes. The turbulent flow is favourable from the heat exchange viewpoint and makes the heat exchangers self-cleaning, with little risk of fouling of the heat transfer surfaces.

For a variety of operating conditions

The Cetetube is designed for the same pressures and temperatures on both sides. The same heat exchanger type can be used for different operating conditions, and all of them can be used in heating, ventilation and hot water systems. In order to put the heat transfer capacity of the heat exchanger to maximum use, the higher flow rate is routed through the shell. However, for domestic hot water, the tap water flow must always be connected to the coil side.



Shell

The shell is made of pressure vessel steel and conforms to the relevant pressure vessel standards.

Coil

The coil is made of spiral-round, seamless copper tube with area-extending fins.

Maximum operating pressure

The maximum operating pressure is 1.6 MPa (gauge) on shell side and 2.5 MPa (gauge) on tube side.

Maximum operating temperature

The corresponding maximum operating temperature is 150 °C on shell side and 160 °C on tube side

Insulation

The insulation consists of 50 mm mineral wool clad with tough Aluminium structural plate. The insulation is easy to remove and refit.

Connections

The tube coil and the shell are equipped with flange connections PN40 on tube side and PN16 on shell side.

Installation

The Cetetube heat exchangers are provided with tubular legs with adjustable feet.

Connection

See the flow diagram for the relevant heat exchanger type. As a general rule, the liquid at the lower flow rate should be routed through the coil. N.B. However, domestic hot water must always flow through the coil.

Quality standard/ approval

All sizes are designed and rated according to PED, approved by German TÜV.

The Cetetube is manufactured in 7 sizes, with size designations ranging between 460 and 3500. Every size is manufactured in three different thermal lengths, to suit most operating conditions. In addition, also non-standard units are available on request. For further information, see the data sheet for each size and thermal length.



The tube coil inside the shell.



The finned copper tube.

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Alfa Laval reserves the right to change specifications without prior notification.

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