



## Cetecoil®

### Shell and tube heat exchanger Stainless steel / Carbon steel

Cetecoil® is the collective name for a range of heat exchangers with tubes made of acid proof stainless steel and suitable for many different media, such as steam, domestic hot water, heating water and hot oil. When operating with steam, the Cetecoil is a very efficient condensate cooler. The Cetecoil heat exchanger is also very well-suited for use in systems in which continuous operation at high water velocities is required.

#### High pressures and temperatures

Cetecoil heat exchangers have no gaskets and can operate at high pressures and high temperatures, even when handling media that are subject to sudden and big temperature variations, such as in steam and refrigeration systems. In their standard design, Cetecoil heat exchangers are rated for pressures up to 25 bar and temperatures up to 300°C.

#### Flexible range

Cetecoil heat exchangers are manufactured in three different basic versions as regards materials and pressures, and these are designated R, S and E. All versions have stainless steel tubes.

Every basic version is manufactured in a number of sizes and different thermal lengths. This wide range makes it simple to order a suitable Cetecoil heat exchanger for virtually any operating conditions. For higher capacities, several heat exchangers can be connected in parallel or in series.

#### Unique design with patented tubes

The stainless steel tubes are cross-ribbed. This improves the thermal properties of the tube, both on the inside and on the outside, which contributes towards a very high heat transfer rate. The performance of the heat exchanger is determined by the number of tubes and the tube length. The tubes are wound into a spiral around a central core. Each end is then secured into the tube plate. The tubes form together with the collecting chambers the 'coil' which is welded to the surrounding shell. In this design, the strength of an all-welded design is combined with high elasticity for absorbing thermal expansion. The upright position also means that Cetecoil needs a minimum of space.



All dimensions in mm. Design subject to changes without prior notice.

Cetecoil S/R/E Type	A mm	B mm	C mm	D mm	F mm	K mm	I mm	Connections		Volume		Dry Weight kg
								1,2 PN 40*	3,4 PN 16	Coil Litres	Shell Litres	
480 - L	980	680	440	280	425	300	200	50	50	1.3	11.2	33
850 - L	1070	771	531	280	425	300	200	50	50	2.5	11.8	36
1450 - L	1145	870	585	280	415	275	200	50	65	3.9	16.0	47
2150 - L	1170	920	580	340	420	250	235	50	80	9.8	26.0	65
3300 - L	1255	985	420	430	560	270	270	65	100	14.0	43.0	102
4100 - L	1255	985	420	430	560	270	270	65	125 <sup>1)</sup>	16.0	42.0	110
480 - M	1160	860	620	280	425	300	200	50	50	2.4	15.0	38
850 - M	1360	1060	826	280	425	300	200	50	50	4.2	18.1	46
1450 - M	1505	1230	935	280	415	275	200	50	65	7.1	23.0	60
2150 - M	1500	1250	900	340	420	250	235	50	80	14.5	35.0	86
3300 - M	1455	1185	620	430	560	270	270	65	100	21.0	49.0	134
4100 - M	1455	1185	620	430	560	270	270	65	125 <sup>1)</sup>	25.0	45.0	146
480 - H	1360	1060	826	280	425	300	200	50	50	3.7	19.3	48
850 - H	1670	1370	1130	280	425	300	200	50	50	6.0	24.7	58
1450 - H	1900	1625	1335	280	415	275	200	50	65	10.1	30.0	75
2150 - H	1800	1550	1200	340	420	250	235	50	80	18.2	42.0	105
3300 - H	1695	1425	860	430	560	270	270	65	100	28.0	59.0	153
4100 - H	1695	1425	860	430	560	270	270	65	125 <sup>1)</sup>	33.0	53.0	168

\* PN16 for type E.

<sup>1)</sup> For type E the connection is DN 100.

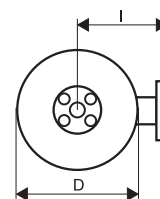
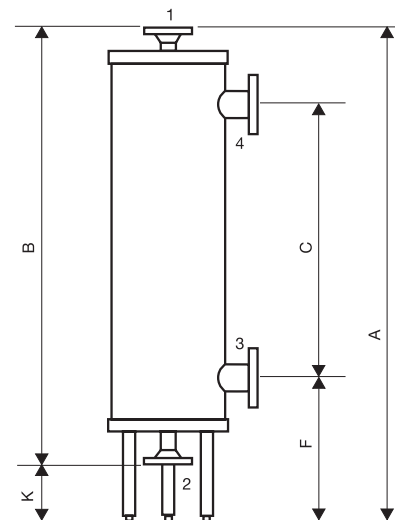


The tube coil inside the shell

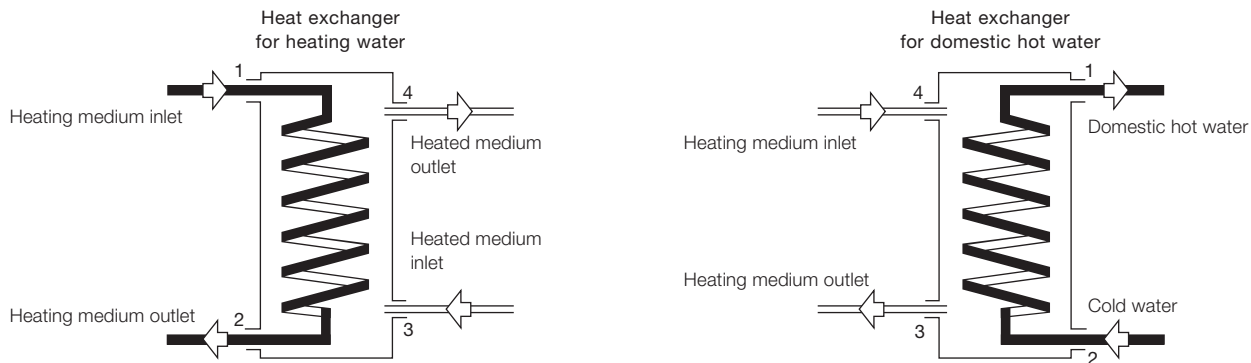


The cross-ribbed tube

Cetecoil 480-4100



## Connection examples (flow diagrams)



(The heat exchanger must always be connected with the media in counterflow and, if the materials allow, at the larger flow rate on the shell side.)

## Operating pressure/operating temperature

Cetecoil Type	Max. operating pressure bar (gauge) at operating temperature					
	200°C		250°C		300°C	
	Coil	Shell	Coil	Shell	Coil	Shell
R	16	16	15	14	14	12
S	25	16	23	14	19	12
E	16	16	15	15	14	14

## Materials

Cetecoil type	Coil		Shell
	Tubes	Collecting chambers	
R	Stainless steel	Stainless steel	Carbon steel
S	Stainless steel	Carbon steel	Carbon steel
E	Stainless steel	Stainless steel	Stainless steel

## Insulation

The insulation consists of 50 mm thick mineral wool clad with tough Aluminium structural plate.

## Quality standard/approval

Designed and rated according to PED and AD2000. Approved by German TÜV. Stainless steel type AISI 316

## Examples of suitable media in the coil and shell

Cetecoil type	Coil (connections 1 and 2)	Shell (connections 3 and 4)
R	Steam, domestic hot water, oils	Steam, hot oil, heating water
S	Steam, heating water	Hot oil, heating water
E	Steam, domestic hot water, oils	Same as on coil side

## Cetecoil article numbers

Typ	Cetecoil R	Cetecoil S	Cetecoil E
480 - L	724 115	724 122	724 129
480 - M	724 116	724 123	724 130
480 - H	724 117	724 124	724 131
850 - L	724 118	724 125	724 132
850 - M	724 119	724 126	724 133
850 - H	724 120	724 127	724 134
1450 - L	725 052	725 234	725 226
1450 - M	725 053	725 235	725 227
1450 - H	725 054	725 236	725 228
2150 - L	725 099	725 183	725 188
2150 - M	725 100	725 184	725 189
2150 - H	725 101	725 185	725 190
3300 - L	725 399	725 818	725 484
3300 - M	725 400	725 819	725 485
3300 - H	725 401	725 820	725 486
4100 - L	725 402	725 821	725 487
4100 - M	725 403	725 822	725 488
4100 - H	725 404	725 823	725 489

PCT00071EN 0704

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](http://www.alfalaval.com)

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