

Alfa Laval CIP 200L and CIP 400L

Stainless steel Cleaning in Place units for heat exchangers



A problem frequently encountered in almost all applications is the build-up of deposits on heat transfer surfaces. Alfa Laval supplies a wide range of cleaning agents suitable for removing most of these troublesome deposits and restoring performance to optimal levels. The time-consuming work of opening plate heat exchangers can thus often be avoided by using an Alfa Laval Cleaning in Place (CIP) unit. These are available in a wide range of standard sizes that include reversible flow capability. Alfa Laval CIP units can be used for all types of heat exchangers, including spiral heat exchangers, shell-and-tube heat exchangers and gasketed, welded and brazed plate heat exchangers.

Concept

Alfa Laval CIP units are simplicity itself:

- Connect the Alfa Laval CIP unit to the heat exchanger
- Mix the cleaning agent with water in the tank and heat it up
- Circulate the cleaning solution a few of hours
- Drain and rinse
- Disconnect the CIP unit
- The heat exchanger is back to full performance capacity

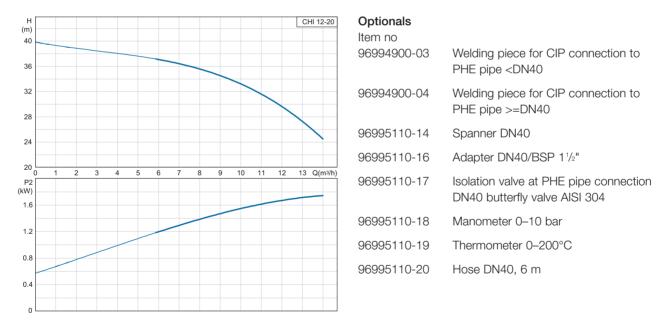
Alfa Laval CIP units are a cost-effective way to achieve better performance, and the cleaning agents used are, of course, environmentally friendly. In addition to boosting the performance of all kinds of heat exchangers, Alfa Laval cleaning agents extend the operating time between cleaning cycles as well as prolonging the overall lifetime of the heat exchangers, without damaging the plates or gaskets.

Features and benefits

- Connected directly to inlet and outlet. This avoids any need to open the heat exchanger, which in turn minimizes downtime and prolongs the working life of the gasket.
- Wetted parts in the operating unit, as well as the pump and valves, are made of AISI 304 or AISI 316 stainless steel to ensure maximum working life.
- Rapid cleaning at optimal temperatures, due to built-in electric heater.
- Valve arrangement for reversible flow direction. This
 makes it possible to remove the solid particles rapidly,
 and is easy to operate without the need to rearrange the
 connection hoses.

Technical specifications

	Alfa Laval CIP 200L	Alfa Laval CIP 400L
Circulation pump	Centrifugal stainless steel	Centrifugal stainless steel
Pump capacity max. at 3.2 bar head	10 m³/h	10 m³/h
Voltage	380-440V/3-phase/50 Hz	380-420V/3-phase/50 Hz
	440-480V/3-phase/60 Hz	440-480V/3-phase/60 Hz
Pump motor size (50/60Hz)	2.3/4.2 kW	2.3/4.2 kW
Total heating power	6 alt. 12 kW	12 kW
Heating time in tank, approx.	6 kW/2 h alt. 12 kW/1 h	12 kW/2.5 h
Max. operating temperature	85°C	85°C
	(185°F)	(185°F)
Volume	200 litres	400 litres
	(53 US gallons)	(106 US gallons)
Modules	1 pump + 1 tank	1 pump + 2 tanks
Weight empty module, pump + tank(s)	55+90 kg = 145 kg	55+90+90 kg = 235 kg
Size pump module (H x W x L)	1345 x 475 x 775 mm	1345 x 475 x 775 mm
Size per each tank module (H x W x L)	1345 x 475 x 1035 mm	1345 x 475 x 1035 mm
Number of hoses	4	6
Hose length	4 m	4 m
Hose material inside/outside	UPE/EPDM	UPE/EPDM
Connection standard	DIN 11851/DN 40	DIN 11851/ DN 40
Material for wetted parts	Stainless steel AISI 304/316	Stainless steel AISI 304/316
Pump gaskets	EPDM	EPDM
Pump seal	C/SiC	C/SiC
Hose connection gaskets	EPDM	EPDM
Eexd (explosion-proof)	On request	On request



Pump graph (50 Hz).

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