

# ViscoLine™ CIP Unit

## The tubular heat exchanger series from Alfa Laval



ViscoLine CIP with open sectional view, hard corrugated

## **Applications**

The ViscoLine™ CIP unit is ideal for heating of water or CIP solutions by means of steam, less demanding applications to process low and average viscosity products. Products can contain fibres and small particulates. Also suitable for general heating and cooling applications.

# Working principle

The heat exchanger is formed by a tube bundle (welded at both ends onto flat tube plates) inside a shell.

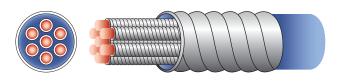
Product medium flows inside the tubes of the bundle and the service medium between and around these tubes.

This makes it compact and easy to install.

All tubes are connected in parallel and in counter-current flow to the service medium. The product tubes are corrugated. The service media shell is smooth.

#### Standard materials

Product side (tubes):	in AISI 316					
Service side (shell):	in AISI 304					
Frame:	in AISI 304					
Vertical installation is recommended for steam to water						
heating						



Graphic representation of the flow pattern in the ViscoLine CIP Unit.

#### Standard design

ViscoLine CIP and water heater is available in 4 sizes.

#### Technical data

# Mechanical design pressure

10 bar (145 PSI) on tubes and shell side. Complies with the European Pressure Equipment Directive (PED). Design temperature 150°C (302°F).

### Connections

Product side (tubes): DIN standard flanges Service side (shell): DIN standard flanges

## Designation

VLC19x18/129-2.0-316/304-H

VLC: ViscoLine CIP 19: number of tubes

18: outer diameter of product tubes (mm)129: outer diameter of service shell (mm)

2.0: module length (m)316: material tube side304: material shell side

H: tubes are hard corrugated



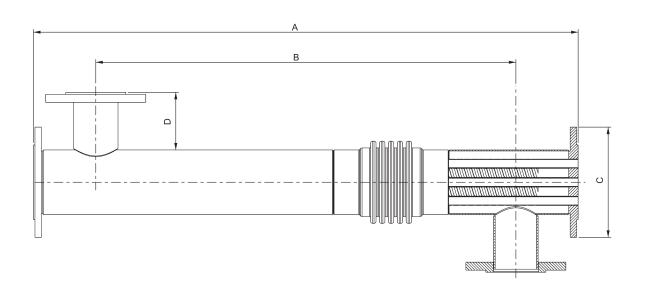
Welded flat tube plate at both ends

# Designation

Туре	Nr. of tubes	Tube Ø mm mm inches	Shell Ø mm mm inches	Module lenght m inches	Volume tubes liters US gallons	Article nr.
VLC13x18/104-2,0	13	18 0.71	104 4.09	2.0 79	5.20 1.37	10060404
VLC19x18/129-2,0	19	18 0.71	129 5.08	2.0 79	7.60 2.01	10060403
VLC37x18/168-2,0	37	18 0.71	168 6.61	2.0 79	14.9 3.93	10060406
VLC37x18/168-3,0	37	18 0.71	168 6.61	3.0 118	22.3 5.89	10060409

#### Measurement in mm

Type	Α			В		С		D	Shell side	Tube side
	mm	inches	mm	inches	mm	inches	mm	inches		
VLC13x18/104-2,0	1939	76	1690	66	200	7.8	114	4.5	DN65	DN80
VLC19x18/129-2,0	1939	76	1690	66	220	8.6	115	4.5	DN80	DN100
VLC37x18/168-2,0	1939	76	1677	65	285	11.2	115	4.5	DN80	DN150
VLC37x18/168-3,0	2939	116	2677	105	285	11.2	115	4.5	DN100	DN150



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

#### How to contact Alfa Laval