

ViscoLine™ CIP unit

Tubular heat exchanger for low viscosity food and cleaning-in-place

Introduction

The Viscoline™ CIP unit is the Alfa Laval tubular heat exchanger specially designed for the heating of water or CIP (NaOH, HNO₃,...) solutions using steam or hot water as heating media.

Applications

The Viscoline™ CIP unit is ideal for:

- Heating of water or CIP solutions by means of steam.
- Processing low viscosity products, containing fibers and small particulates
- General heating and cooling applications.

Benefits

- Low maintenance and operating costs
- High working pressures
- High working temperatures
- Easy to be inspected and cleaned
- Easy to be assembled/disassembled.

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.

OBS! Vertical installation is recommended for steam to water heating in order to drain the condensate

Standard design

ViscoLine CIP and water heater is available in 3 sizes.

Technical data

Max. operating pressure

Tube side	15 bar (217 PSI)
Shell side	10 bar (145 PSI)
Complies with the European Pressure Equipment Directive (PED).	
Design temperature	-20/190°C (-4/374°F)

Connections

Product side (tubes)	ISO 2037 SMS
Service side (shell)	Flange EN 1092-1

-Counter flanges included in the scope of supply.

The ViscoLine™ CIP unit complies with the European Pressure Equipment Directive (PED 97/23/CE), and is entitled to bear the CE mark.

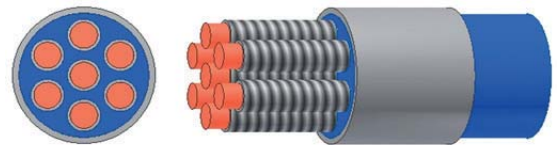
Options

- Thermal insulation.



Standard materials

Product side (tubes)	1.4404 (316L)
Service side (shell)	1.4301 (304)



The three ViscoLine™ CIP standard sizes are available on stock providing a fast delivery time. If requested, Alfa Laval can design and build a customized CIP solution to meet customer's requirements.

Designation

VLC 20x16/104-2.0-316L/304-C

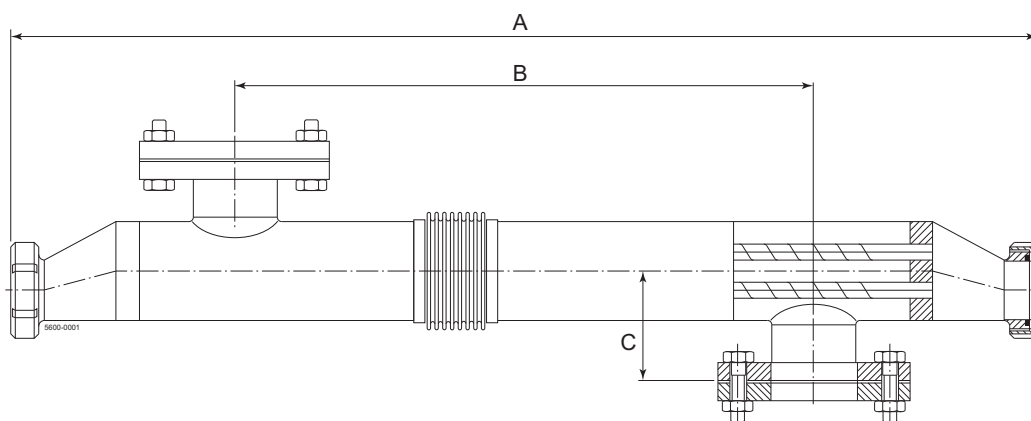
VLC	ViscoLine CIP
20	Number of product tubes
16	Outer diameter of product tubes (mm)
104	Outer diameter of service shell (mm)
2.0	Module length (mm)
316L	Material tube side
304	Material shell side
C	Corrugated product tubes



Dimensions

VLC Type	Model	Dimensions (mm)			Connections		Volume in litre	
		A	B	C	Shell Side	Tube Side	Shell Side	Tube Side
1	VLC 20x16/104-2	2.234	1.776	115	OD 76.1	SMS 63.5	7.33	6.03
2	VLC 31x16/129-2	2.239	1.76	138	OD 101.6	SMS 76.1	8.14	8.14
3	VLC 37x16/154-3	3.265	2.76	150	OD 101.6	SMS101.6	19.77	16.85

VLC Type	Model	Dimensions (inches)			Connections		Volume in US gallons	
		A	B	C	Shell Side	Tube Side	Shell Side	Tube Side
1	VLC 20x16/104-2	88.0	69.9	4.6	OD 3"	SMS 2.5"	1.9	1.6
2	VLC 31x16/129-2	88.1	69.3	5.5	OD 4"	SMS 3"	2.2	2.2
4	VLC 37x16/154-3	128.5	108.7	5.9	OD 4"	SMS 4"	5.2	4.5



Type	Article nr.
VLC20x16/104-2	9680168330
VLC31x16/129-2	9680168331
VLC37x16/154-3	9680168334

How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information direct.

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



Pour toutes informations techniques ou commande contactez-nous : contact@rheosys.fr ou 06.03.01.68.48 - rheosys.fr

