



When Higher Purity is the Issue

Alfa Laval SolidC UltraPure Centrifugal Pump

Applications

The SolidC UltraPure pump is an efficient and economical centrifugal pump, which meets the requirements of the pharmaceutical industries. It provides gentle product treatment and is chemically resistant. SolidC UltraPure is available in four sizes, SolidC-1 UltraPure, SolidC-2 UltraPure, SolidC-3 UltraPure and SolidC-4 UltraPure.

Standard design

As standard the SolidC UltraPure is delivered with a 45° outlet (counterclockwise).

The SolidC UltraPure pump is designed for CIP and SIP with emphasis on large internal radii and cleanable seals. SolidC UltraPure is supported on four adjustable legs.

Shaft seals

The SolidC UltraPure pump is equipped with either an external single or a flushed shaft seal. Both have stationary seal rings in acid-resistant steel AISI 329 with sealing surface in silicon carbide and rotating seal rings in silicon carbide. The secondary seal of the flushed seal is a long lasting lip seal.



TECHNICAL DATA

Materials

Product wetted steel parts: . . . W. 1.4404 (316L) with material traceability EN.10204.3.1

Other steel parts: Stainless steel.

Product wetted seals: EPDM USP class 6.

Finish: Bright (Ra 0.5 µm).

Connections for FSS:

6mm tube/Rp 1/8".

Motor

Foot-flanged motor according to the IEC metric standard (EFF II), 2 poles = 3000/3600 rpm. at 50/60 Hz, IP 55 (with drain hole with labyrinth plug), insulation class F.

Motor sizes

50 Hz: 1.1 - 22 kW

60 Hz: 1.3 - 25 kW.

NOTE!

When used with frequency converter the 22 kW motor only has 20 kW effect.

Warranty

Extended 3-years warranty on the SolidC UltraPure Centrifugal Pump range. The warranty covers all non wear parts on the condition that genuine Alfa Laval Spare Parts are used.

OPERATING DATA

Pressure

Max. inlet pressure: 400 kPa (4 bar).

Temperature

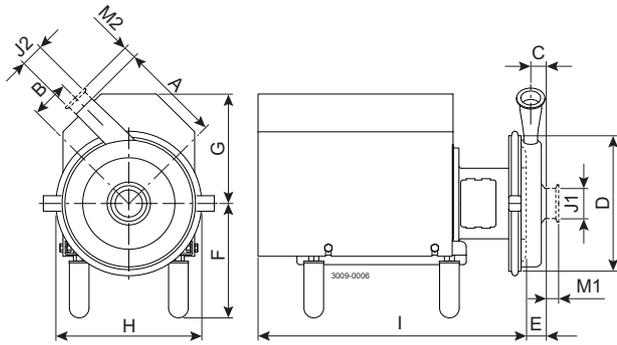
Temperature range: -10°C to +120°C (EPDM).

Flushed shaft seal (FSS):

Water pressure inlet: max. 100 kpa (1 bar).

Water consumption: 0.25 -0.5 l/min.

Dimensions (mm)



Pump specific measures

Pump Model	SolidC-1 UltraPure	SolidC-2 UltraPure	SolidC-3 UltraPure	SolidC-4 UltraPure
A	180	200	210	230
B	67	94	121	120
C	28	35	31	27
D	238	227	311	333
E	40	47	44	44
P	130	150	164	175
M	21	27	23	21

Motor specific measures

Motor IEC	IEC90	IEC100	IEC112	IEC132	IEC160
Motor kW	1.5/2.2	3.0	4.0	5.5/7.5	11/15/18.5/22
F(max)*	246	256	259	279	307
G	126	137	136	164	208
H	227	278	277	327	377
I	405	469	468	543	651

*Possible to reduce dimension F by min. XX mm for all pump models. For smaller models it will be possible to reduce dimension F even further.

Motor overview

Pump Model	SolidC-1 UltraPure	SolidC-2 UltraPure	SolidC-3 UltraPure	SolidC-4 UltraPure
Motor range (IEC)	IEC90-IEC112	IEC100-IEC160	IEC132-IEC160	IEC132-IEC160

Dimensional data are based on 2 pole, WEGmotors.

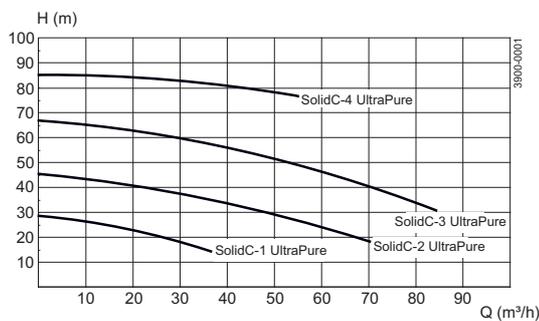
Connections

Pump Model		SolidC-1 UltraPure	SolidC-2 UltraPure	SolidC-3 UltraPure	SolidC-4 UltraPure
Clamp ISO 2037	M1	13	13	13	29
	M2	13	13	13	13
Clamp ASME BPE	M1	13	13	13	29
	M2	13	13	13	13
J1*		51 / 2"	63,5 / 2,5"	76,1 / 3"	76,1 / 3"
J2*		38 / 1,5"	38 / 1,5"	38 / 1,5"	51 / 2"

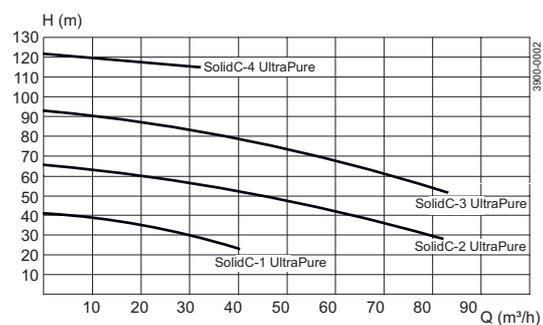
* Other dimensions available on request.

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Flow chart



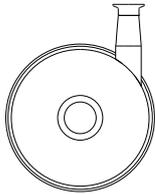
Frequency: 50 Hz
Speed /synchr.): 3000 rpm



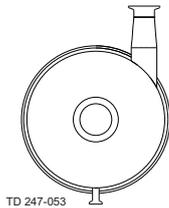
Frequency: 60 Hz
Speed /synchr.): 3600 rpm

Options

- A. Impeller with reduced diameter.
- B. Motor for other voltage and/or frequency.
- C. 1500 rpm. motor.
- D. Flushed shaft seal.
- E. Product wetted seals of Fluorinated rubber (FPM) or FEP.
- F. Pump with shroud.
- G. Pump without legs.
- H. 0° outlet, see drawing below.
- I. No Drain.
- J. Finish product wetted surface Ra 0.8 μm .
- K. Finish product wetted surface Ra 0.5 μm (electropolished).
 - The final surface value will change after electropolishing.
- L. Surface finish certificate.
- M. SIP to 140°C.



No Drain



TD 247-053

0°outlet

Standard documentation package:

- 3.1 certificate according to EN10204
- FDA certificate of conformity for product wetted elastomers.
- USP class 6 certificate of conformity - EPDM only
- Pump performance test certificate

Ordering

Please state the following when ordering:

- Pump size.
- Connections.
- Impeller diameter.
- Motor size.
- Voltage and frequency.
- Flow, pressure and temperature.
- Density and viscosity of the product.
- Options.

Note!

For further details, see also ESE00797.



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