

Alfa Laval SolidC Centrifugal Pump

The Standard Duty Pump

Applications

The SolidC pump is designed for standard duty applications, like pumping CIP (Cleaning In Place) solutions, utilities, water (processing, heating, cooling), washing machines, simple transport duty within working range. SolidC is suited for use in the food, dairy, beverage, personal care, pharmaceutical, light chemical and water industries.

Standard design

The SolidC pump is designed for CIP with emphasis on large internal radii and cleanable seals.

The complete SolidC unit is supported on four adjustable legs.

Shaft seals

The SolidC 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 carbon. The secondary seal of the flushed seal is a long lasting lip seal.



TECHNICAL DATA

Materials

Product wetted steel parts: AISI 316L and AISI 329L.

Other steel parts: Stainless steel AISI 304.

Finish: 3A polish Ra 32 µin.

Product wetted seals: EPDM.

Connections for FSS:

R 1/8" (BSP) external thread.

Motor

Standard C-faced, foot mounted motor according to NEMA standard. 3500 RPM or 1750 RPM. Premium efficiency, Class F. Note frame size per horsepower.

Voltage and frequency

(3 phase, 60 Hz 230/460V Standard)

Other voltages and frequencies available upon request.

Motor sizes

60 Hz: 1, 1½, 2, 3, 5, 7.5, 10, 15,
20, 25, 30 Hp.

OPERATING DATA

Pressure

Max. inlet pressure: 58 psi (4 bar).

Temperature

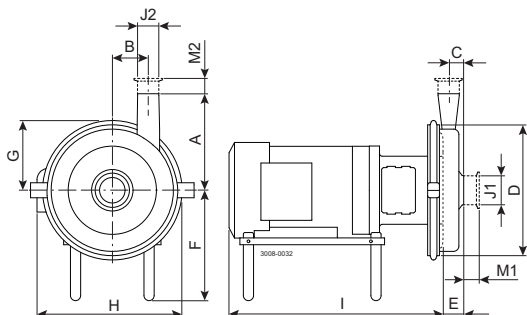
Temperature range 14°F to 250°F (EPDM).

Flushed shaft seal (FSS):

Water pressure inlet: 14.5 PSI.

Water consumption: 4-8 usgph.

Dimensions



Pump specific measures

Pump Model	SolidC-1	SolidC-2	SolidC-3	SolidC-4
A	7.087	7.874	8.268	9.055
B	2.638	3.701	4.764	4.724
C	1.102	1.378	1.220	1.063
D	9.370	8.937	12.244	13.110
E	1.575	1.850	1.732	1.732

Motor specific measures

Motor TC/TSC	143TC	145TC	182TC	184TC	213TC	215TC	254TC	256TC	284TSC	286TSC
Motor HP	1.5	2.0	3.0	5.0	7.5	10.0	15.0	20.0	25.0	295
F(max)*	8.110	8.110	9.094	9.094	9.843	9.843	10.866	10.866	11.614	11.614
G	3.504	3.504	4.370	4.488	5.394	5.394	6.772	6.772	7.677	7.677
H	9.094	9.094	11.102	11.102	13.071	13.071	452725.400	17.795	20.945	20.945
I	15.669	16.220	18.543	18.701	22.480	22.480	26.417	28.189	29.055	30.512

*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	SolidC-2	SolidC-3	SolidC-4
Motor range (TC/TSC)	143TC-215TC	182TC-256TC	184TC-286TSC	215TC-286TSC

Dimensional data are based on 2 pole, Sterling motors.

Connections

Pump Model		SolidC-1	SolidC-2	SolidC-3	SolidC-4
Tri-Clamp	M1	0.50	0.50	0.50	1.13
	M2	0.50	0.50	0.50	0.50
J1*		2.00"	2.50"	3.00"	3.00"
J2*		1.50"	1.50"	1.50"	2.00"

* Other dimensions available on request.

Options

- A. Impeller with reduced diameter.
- B. Motor for other voltage and/or frequency.
- C. Flushed shaft seal.
- D. Product wetted seals of Buna (NBR), Fluoroelastomer (FPM) or FEP.
- E. Rotating seal ring material in Silicon Carbide.

Ordering

Please state the following when ordering:

- Pump size.
- Connections. (Tri-Clamp®)
- Impeller diameter.
- Motor size.
- Seal and Elastomer Type
- Voltage and frequency.
- Flow, pressure and temperature.
- Density and viscosity of the product.
- Options.

Note!

For further details, see also ESE00797.