



The Pump for any application!

Alfa Laval i-CP2000 Centrifugal Pump

Applications

The Alfa Laval i-CP2000 pump is a highly efficient and economical centrifugal pump, which meets the requirements of sanitary and gentle product treatment and chemical resistance. The pump is available in six sizes, Alfa Laval i-CP2010, -20, -25, -35, -40, -50.

Standard design

The Alfa Laval i-CP2000 pump consists of a standard motor, stub shaft, mechanical compression coupling, adaptor, back plate, impeller, pump casing and shaft seal. The pump is designed for CIP with emphasis on large internal radii and easily cleanable seals. The pump has a stainless steel shroud for protection of the motor, and the complete unit is supported on four adjustable legs.

Shaft seals

The Alfa Laval i-CP2000 pump is equipped with an external single or double mechanical shaft seal. All have stationary seal rings in acid resistant steel AISI 316L with sealing surfaces in silicon carbide and rotating seal rings in carbon (optional silicon carbide). Double mechanical seal is equipped with a secondary mechanical seal.

Materials

Product wetted steel parts: AISI 316L.
 Other steel parts: AISI 304, surface treated carbon steel.
 Finish: Semi bright.
 Product wetted seals: EPDM elastomer (FDA).

Technical data

Max. inlet pressure: 500kPa (5 bar).
 Temperature range: -10°C to +140°C (EPDM).

Double mechanical shaft seal:

Water pressure inlet: Max. 500 kPa (5 bar).
 Water consumption: 0.25 -0.5 l/min.
 Temperature range 0°C to +140°C

Connections for DMSS:

R 1/8" (BSP) external thread.



The Alfa Laval i-CP2000 pump is designed, tested and approved according to EHEDG guidelines



Motor

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

Voltage and frequency

3 ~, 50 Hz, 220-240V Δ/380-420VY	≤ 4 kW
3 ~, 60 Hz, 250-280V Δ/440-480VY	≤ 4.6 kW
3 ~, 50 Hz, 380-420V Δ/660-690VY	≥ 5.5 kW
3 ~, 60 Hz, 440-480V Δ	≥ 6.4 kW

Motor sizes

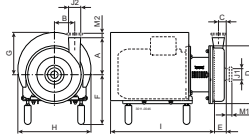
50 Hz: 1.5 - 2.2 - 3 - 4 - 5.5 - 7.5 - 11 - 15 - 18.5 - 22 kW.

60 Hz: 1.75 - 2.5 - 3.5 - 4.6 - 6.4 - 8.6 - 12.5 - 17 - 21 - 25 kW.

Warranty

Extended 3-years warranty on Alfa Laval i-CP2000 pumps. The warranty covers all non wear parts on the condition that genuine Alfa Laval Spare Parts are used.

Dimensions (mm)



Pump specific measures

Pump Model	ICP-10	ICP-20	ICP-25	ICP-35	ICP-40	ICP-50
A	142	180	193	193	212	205
B	87	88	106	119	186	118
C	23	27	32	23	28	35
D	247	253	303	303	329	329
E	69	54	77	64	63	51

Moter specific measures

Motor IEC	IEC90	IEC100	IEC112	IEC132	IEC160	IEC180
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	167	177	219	222	288	296
H	288	323	359	383	485	520
I	436	502	502	611	765	840

*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.

Moter overview

Pump Model	ICP-10	ICP-20	ICP-25	ICP-35	ICP-40	ICP-50
Motor range (IEC)	IEC90-IEC112	IEC90-IEC132	IEC132-IEC160	IEC112-IEC160	IEC132-IEC180	IEC132-IEC180

Dimensional data are based on 2 pole, TechTop motors.

Connections

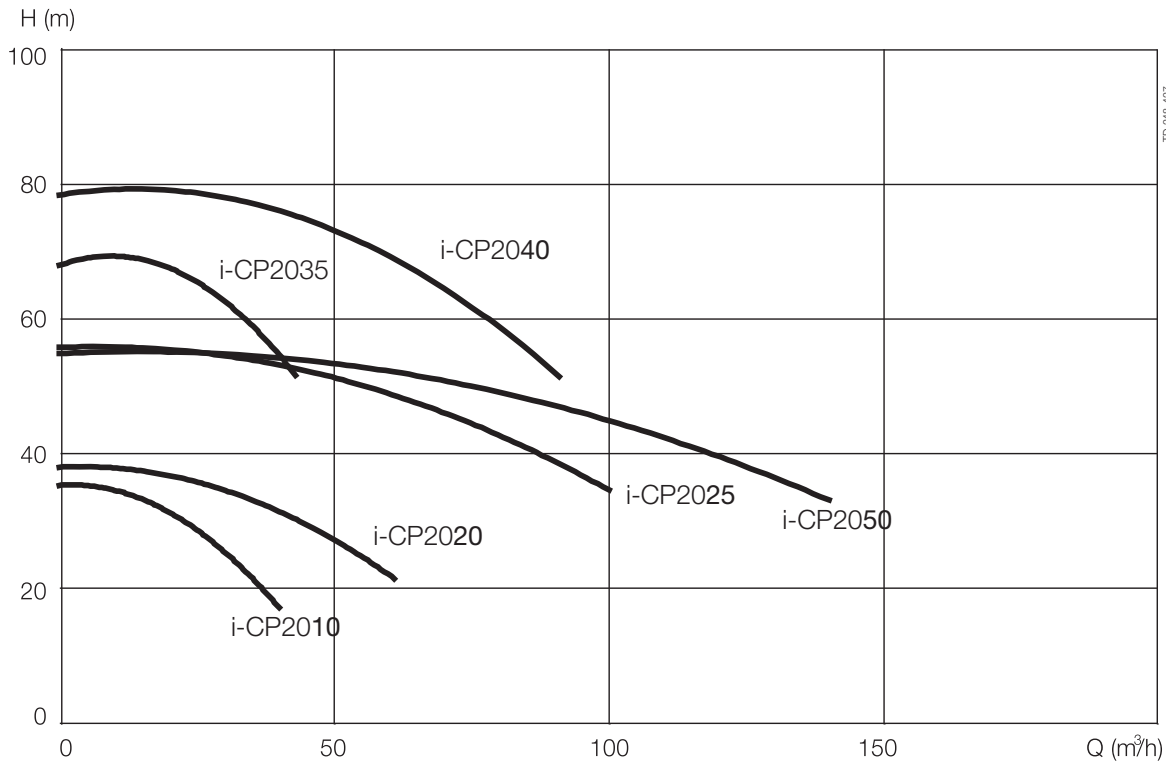
Pump Model		ICP-10 ICP-20 ICP-35	ICP-25	ICP-40	ICP-50
Clamp ISO 2037	M1	21	21	21	21
	M2	21	21	12	21
Union ISO(IDF)	M1	21	21	21	21
	M2	21	21	21	21
Union DIN/ISO	M1	25	30	30	30
	M2	22	25	27	30
Union SMS	M1	24	24	24	35
	M2	20	24	24	24
J1*		63,5 / 2,5"	76,1 / 3"	76,1 / 3"	101,6 / 4"
J2*		51 / 2"	63,5 / 2,5"	63,5 / 2,5"	76,1 / 3"

* Other dimensions available on request.

ESE00886/3

Flow chart

Frequency: 50 Hz Speed (synchr): 3000 rpm



Options

- A. Impeller with reduced diameter.
- B. 1500 rpm. motor.
- C. Double mechanical shaft seal.
- D. Surface roughness, product wetted parts: $R_a \leq 0.8 \mu\text{m}$.
- E. Product wetted seals of Nitrile (NBR) or Fluorinated rubber (FPM).
- F. Rotating seal ring of Silicon Carbide.

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 ESE00887.

This product has EHEDG certification

Alfa Laval reserves the right to change specifications without prior notification. ALFA LAVAL is a trademark registered and owned by Alfa Laval Corporate AB.

ESE00886EN 1009

© Alfa Laval

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.