



I Applications

The Prolac SA pump is a centrifugal pump specially designed to pump fluids containing air or gas without losing its pumping power. It can be used in the food-processing, pharmaceutical, and chemical industries.

It can be used with wine, oil, syrups, volatile products such as alcohol, acetone and other solvents, or with products at temperatures close to boiling point. However, the main use of this pump is for CIP return.

I Operating principles

The Prolac SA pump is a self-priming pump which does not require the use of a vacuum pump or other devices such as a foot valve or additional piping.

The pump must be primed with fluid only once before starting-up. When it is operated, the pump suctions the air or gas present inside the suction pipe and mixes it with the fluid inside the pump casing. The centrifugal force drives the liquid-gas mixture to the higher part of the casing. Because of the ample dimensions of the casing, here the fluid loses velocity and the air is expelled through the drive pipe.

Thus, the air is eliminated along the suction pipe before the fluid reaches the pump casing and then the pump begins to operate as normal centrifugal pump.

It is very important that the suctioned air can escape when running along the discharge pipe without being subject to any kind of counter-pressure.

Users are strongly advised not to reduce the hydraulic power of the pump by reducing the size of the impeller or reducing the speed of the motor by means of a frequency converter, since this would effect the suction power of the pump.



Open impeller



I Design and features

Casing manufactured with welded cold-formed plate.

DIN connections (standard).

Open impeller manufactured with stainless steel investment casting technology.

Sanitary mechanical seal.

Very robust stainless steel lantern.

Check valve in the suction nozzle to avoid siphoning when the pump stops.

Pump certified according to the 3A sanitary normative.



I Materials

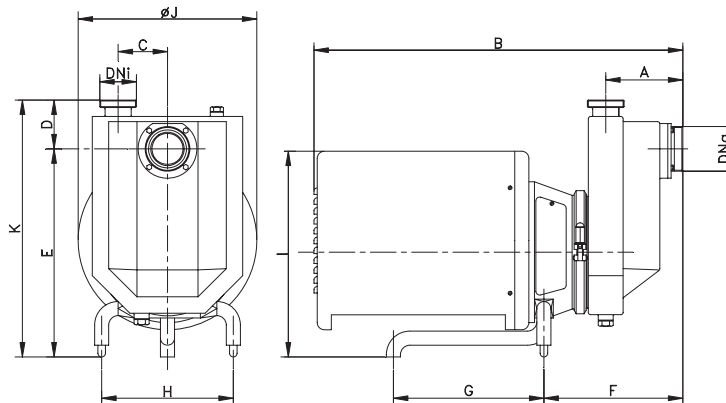
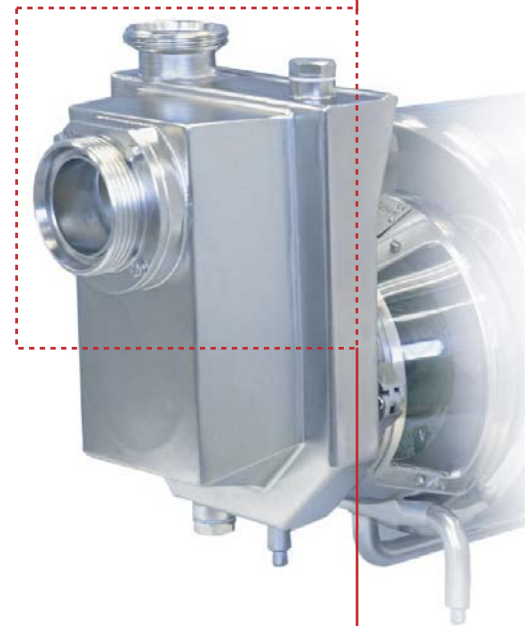
Parts in contact with pumped media:	AISI 316L
Other parts	AISI 304
Gaskets (standard)	EPDM (FDA)
Mechanical seal (standard)	St.St/C/EPDM
Inside surface finishing	Ra ≤ 0.8 µm
Outside surface finishing	Mirror polished

I Options

- Bare-shaft construction for models SA-35 and SA-38
- Mechanical seals: SiC/C or SiC/SiC - Cooled seal or double mechanical seal
- Gaskets: FPM (Viton®) and PTFE
- Connections: Clamp, SMS, RJT...
- Motors with additional protection
- Trolley and/or electric panel

I Technical specifications

Max. flow	120 m ³ /h / 528 GPM
Max. head	60 mcl / 197 ft
Max. suction pressure	40 mcl / 58 PSI
Max. working temp.	120 °C / 248° F
Max. speed	3500 min - 1



PUMP PROLAC	Motor Size	DNa	DNi	A	B	C	D	E	F	G	H	I	J	K	
SA-15	A	71	40 1½"	40 1½"	123	482	65	83	275	204	175	155	260	220	358
SA-20	B	80	65 2½"	50 2"	157	587	75	100	320	254	235	205	325	270	420
	C	90													
SA-26	B	80	65 2½"	50 2"	157	595	75	100	320	262	235	205	325	270	420
	E	100/112				675			345	272	275		375	330	445
SA-28	B	80	40 1½"	40 1½"	121	550	92	73	345	217	235	205	325	270	418
	C	90				635			370	227	275		375	330	443
	E	100/112													
SA-35	C	90	600 2½"	50 2"	164	600	105	106	385	270	235	205	325	270	491
	F	132				785			450	293	320	280	445	380	556
SA-38	C	90				632			395	302	235	205	325	270	525
	E	110/112				717			420	312	275		375	330	550
	G	160	100 4"	80 3"	218		120	130							
	H	180				1000			510	368		320	555	465	640
J	200				1143				630	513	550	335	725	650	760

