

## I Application

Prolac HP is a sanitary centrifugal pump that meets the highest hygienic requirements and it can be used in the applications of the food processing and pharmaceutical industries. It is designed to operate under high pressures at the suction side of the pump, for example, in systems of filtration or reverse osmosis. Due to the design, the working pressure can reach 40 bars.

## I Operating principle

The impeller consists of a definite number of vanes according to the model of the pump, housed inside the pump casing it rotates together with the shaft of the pump.

Due to this assembly, the impeller transfers energy to the medium in form of cinetic and pressure energy.

The pump is not reversible by a simple reversal of the direction of rotation. The direction of rotation is clockwise when the pump is viewed from the rear part of the motor.

# I Design and features

One-piece machined pump casing.

Pump casing fixed with screws.

DIN connections (standard).

Impeller: open or semi-open according to the size.

Special hygienic balanced mechanical seal designed to work under high pressures.

Robust stainless steel lantern.

Motors IEC B35 with heavy-duty bearings, IP55, F-class insulation.



#### I Materials

Parts in contact with the media: AISI 316L
Other parts: AISI 304

Gaskets (standard): EPDM in compliance with FDA

Mechanical seal (standard): SiC/C/EPDM
Internal surface finish: Ra < 0,8µm
External surface finish: mirror polished





## **I Options**

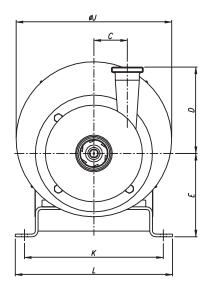
Motor with/without shroud. Connections: Clamp, SMS, RJT. Other motor protections. Gaskets: FPM or PTFE.

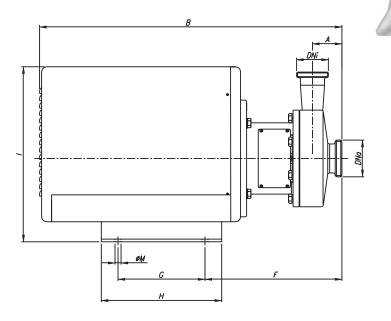
Quench.

## I Technical specifications (50Hz)

Max.flow160 m³/h704 US GPMMax. differential head55 m197 ftMax.working pressure40 bar580 PSIMax.working temperature\*120 °C248 °FMax.speed3000 rpm

\* EPDM gaskets (standard).





3-20 HP =	100 112	65	50	76												
				76	600	79	239	170	290 297	140	185	355	330	265	295	13
S-35 HP F	132	65	50	84	740	101	284	192	358	170	220	410	380	310	350	13
S-37 HP G	160	80	65	88	905	100	259	250	410	260	360	525	465	415	470	18
S-38 HP H	160 180 200	100	80	115	930 1105	107	365	250 340	433 458 460	260 305	360 400	505 525 690	465 650	415 545	470 600	18 23







