# **Pump series GFP**



### **Characteristics**

The multi-phase pump is a combination of a standard centrifugal pump and a liquid ring pump both mounted together on 1 motor and 1 shaft. The centrifugal pump is used for pumping the liquid and brings the main performance of the pump. When a gas-bubble starts to build up in the eye of the centrifugal impeller, it is evacuated by the liquid ring impeller. The pump has 1 suction and 2 discharges: a main discharge of the centrifugal pump and a smaller discharge of the liquid ring pump that functions as an air and foam vent. The air/foam vent is typically connected back to the suction vessel.





#### GFP

- 1 Monobloc execution with std IEC motors
- 2 Air vent
- **3** Liquid ring impeller
- 4 Centrifugal impeller
- 5 Clean water inlet
- 6 Standardized mechanical seals to EN 12756 FDA approved bellow mechanical seals or sterile O-ring seals (spring not in contact with the liquid)

GFP multi-phase pump connected to a suction vessel



#### Your benefits

- Electropolished stainless steel AISI316 and better: highly corrosion resistant
- High pump efficiency resulting in lower energy consumption
- Low NPSH values: less risk on cavitation
- Monobloc construction: less floor space, easy installation and maintenance (no aligning)
- Self-adjusting vacuum, no snifting valve required

Pump series	GFP
Performance	
max. flow rate	400 m³/h
max. differential head	30 m
max. inlet pressure	10 bar
max. liquid viscosity	1000 cP
max. temperature	140°C
impeller type	open or closed
max. gas content	30%
max. motor power	45 kW
max. speed	1800 rpm
available frequency	50/60 Hz
echnical specifications	
materials wetted parts	stainless steel 316L or similar
mechanical seal configuration	single bellow, sterile
available material O-ring	EPDM, FKM, FFKM
pump connections	EN1092-1 & ANSI flanges, DIN11851, SMS, RJT, Tri-Clamp
surface finish	electropolished
certificates & legislation	

#### Performance curves at 1500 rpm

GFP





## Application areas

The GFP multi-phase pump is typically used for foamig liquids and (viscous) liquids containing gas in the food-industry.

Offering a solution to liquids that are difficult to pump with standard centrifugal pumps. E.g. starch slurries, proteins,...

