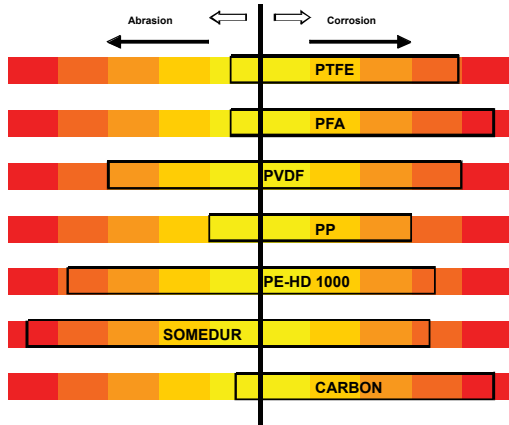


Generalities

The horizontal freeflow pumps HV type complete the range of normalized NP pumps. They are designed to pump corrosive liquids charged with suspended matters, crystals or fibers.
 HV pumps range offer flow rates up to 180 m³/h (792 US gpm) and a discharge head up to 40 mcl (131 fcl).



Construction

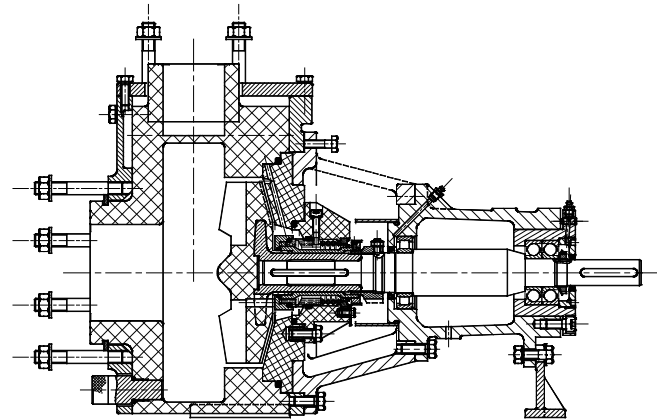
There is no metallic component in contact with the pumped liquid.
 The hydraulic part of HV pumps is entirely realized of thick walled plastics.

- > Polypropylene PP or PP-EL
- > Polyethylene PE-HD or PE-EL
- > PVDF or PVDF-EL
- > SOMEDUR for abrasive liquids

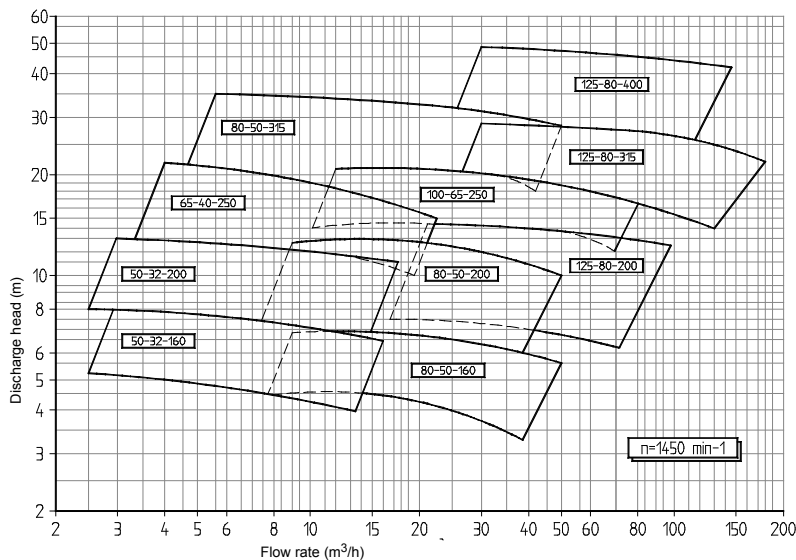
Designed for corrosive liquids, charged and abrasive up to a temperature of 90° C, SOMEFLU has developed SOMEDUR material.

Main advantages

- Open impeller with straight blades that create a VORTEX placed out of the trajectory of liquid.
- Sealing made by single or double cartridge mechanical seal.
- External stresses absorbed by metal flanges and robust cast iron bearing.
- Use of polymer parts machined in massive material.
- Rotor torque transmission via a metal hub and a key.
- Simplified maintenance due to a quick exchange unit.



General diagram



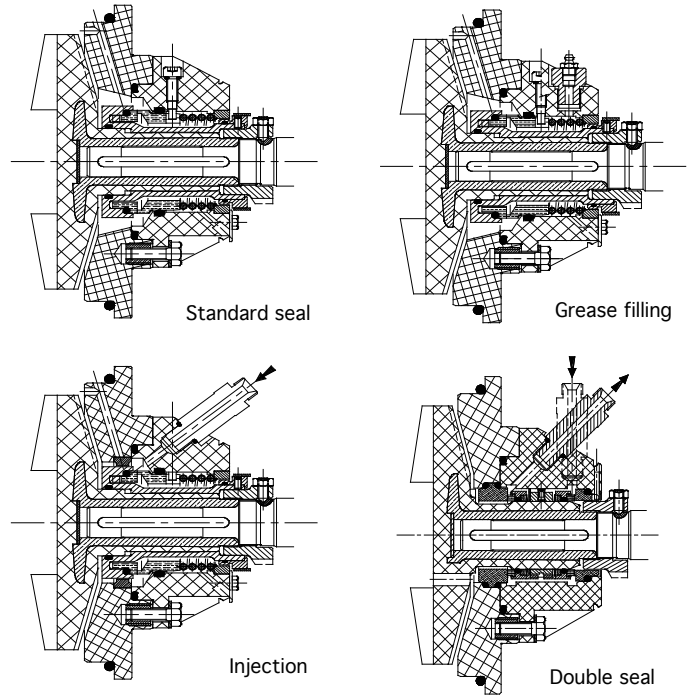
Cartridge mechanical seal

The shaft sealing is made by a cartridge mechanical seal designed by SOMEFLU.

This mechanical seal is pre-adjusted in factory, and facilitate mounting and maintenance operation.

Depending of fluid and the type of process, the mechanical seal can be built with the following alternatives:

- Standard mounting with the lubrication made by liquid pumped.
- Rinsing after standstill of the pump for crystallizing or charged liquids.
- Injection of clear liquid with a throttle bush in order to ensure the lubrication by a clear fluid if the process allows.
- Grease filling in the seal chamber to limit crystallization effects.
- Double mechanical seal with external lubrication for dangerous or charged liquids.



ATEX conformity



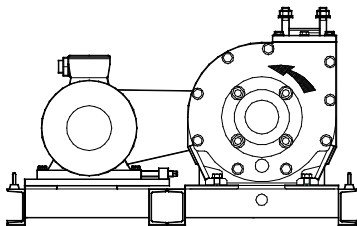
For the EC zone, all HV pumps are available certified as per ATEX 94/9/CEE.

- Groupe II Category 2 G
- Groupe II Category 1 G II 2/3 GcT4

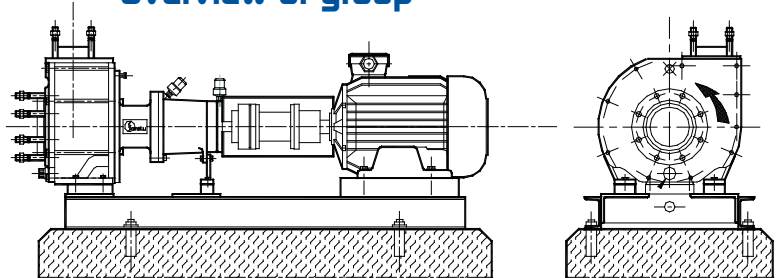
Voluntary certification INERIS 04 ATEX 3008 X

Belt drive

For intermediate rotating speeds the pump can be driven by means of a compact belt drive device.



Overview of group



Connections

Suction and discharge flanges are in accordance with NFE 29-203, DIN 2533, ISO PN16.
Other standards on demand.



Application fields

- Pumping of used industrial acid and basic liquids.
- Pumping of corrosive and abrasive sludges.
- Production units of sulphate and copper chloride.
- Organic waste valorization plants.
- Industrial waste treatment plants.

FP 17.01 EN