

NFE 44121 - DIN 24 256 - ISO 2858 - ISO 5199

Generalities

The horizontal, single stage centrifugal pumps of the NP range are intended for pumping of clear or lightly charged corrosive liquids in the most various fields of industry. The NP range offer flow rates up to 1000 m³/h (4400 US gpm) and a differential head up to 90 mcl (295 ft).

Normalized

The dimensions and characteristics of NP pumps correspond to standards NFE 44121- DIN 24256 - ISO 2858 et 5199.

Suction and discharge flanges correspond to standards NFE 29-203, DIN 2533, ISO PN16.
Others standards on demand.



ATEX conformity

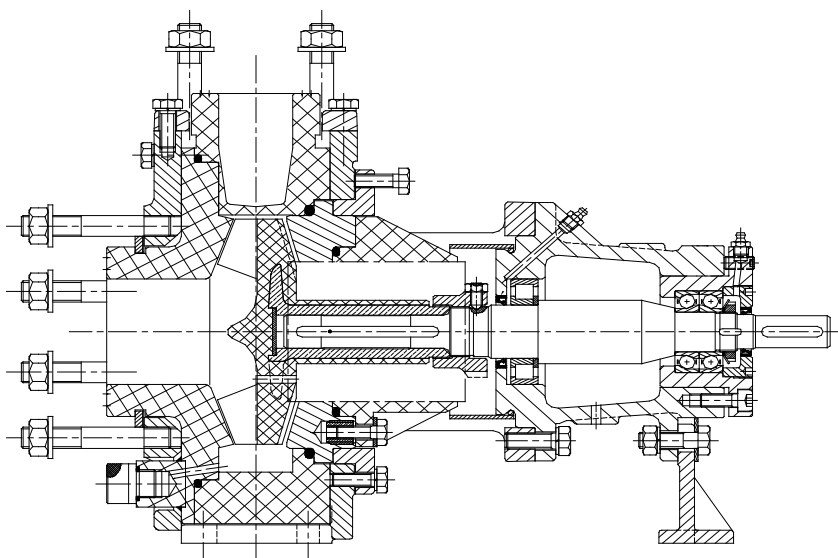
For the EC zone all normalized pumps and their construction alternates are available certified as per ATEX 94/9/CE.

Group II Category 2G

Group II Category 3G

II 2/3 G cT4. (Others on demand)

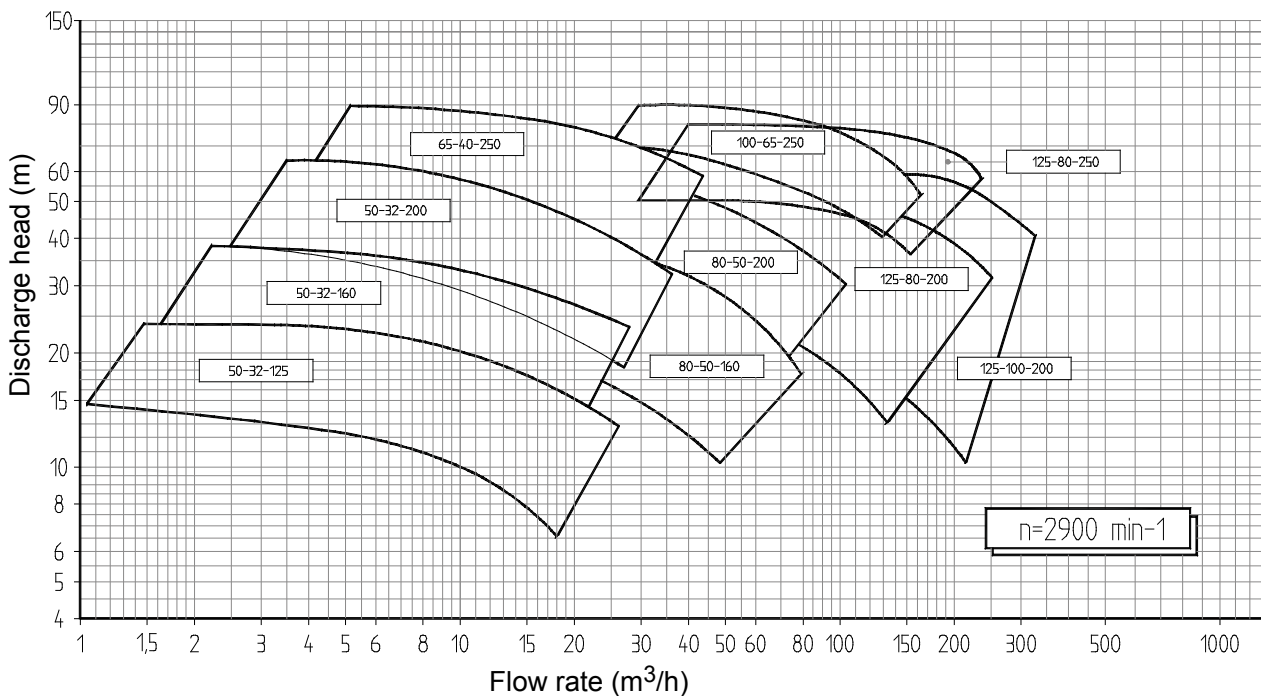
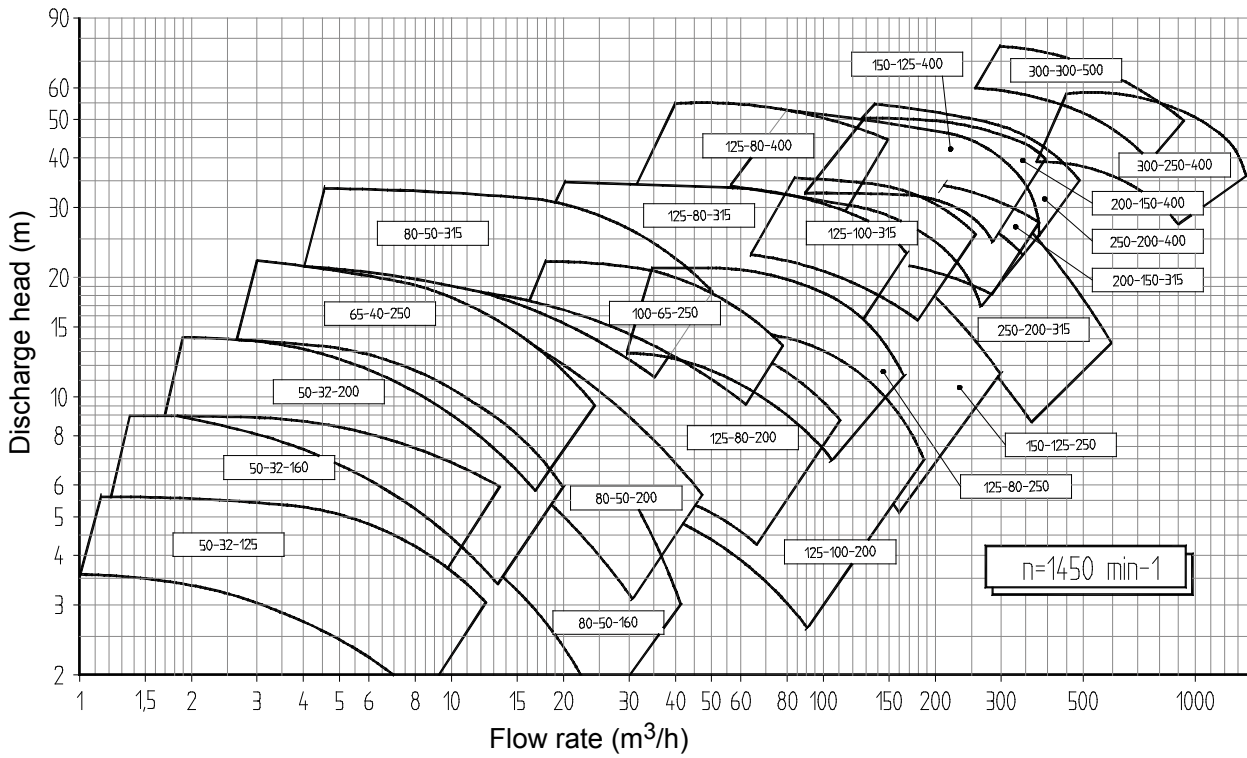
Voluntary certification INERIS 04 ATEX 3008X



Main advantages

- External efforts absorbed by metal flanges.
- Use of polymer parts manufactured in block.
- Rotor torque transmission via a pressed-in metal hub and a key.
- Maintenance simplified by means of a quick change unit.
- Sealing realized by a cartridge mechanical seal.
- Axial clearance adjustment of the impeller without dismantling.

GENERAL DIAGRAM

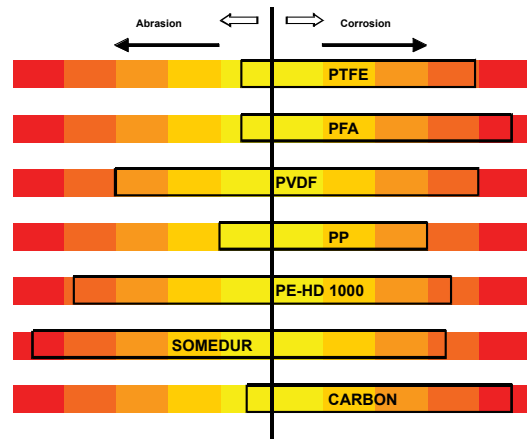


Construction

The hydraulic part is entirely realized of thick walled plastic materials.

There is no metallic component in contact with the pumped liquid.

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



SOMEDUR is a new material developed by SOMEFLU especially for charged and abrasive liquids up to 90° C.



Manufacturing of SOMEDUR impeller

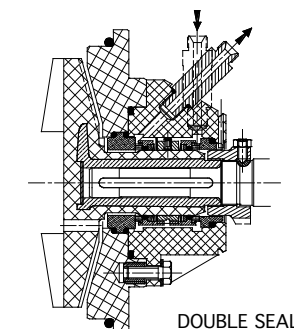
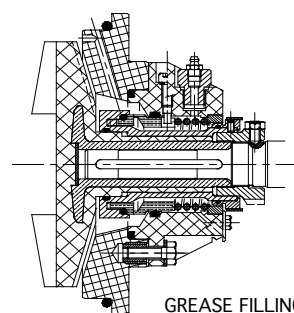
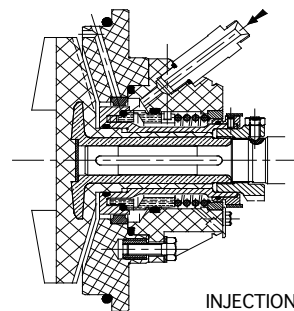
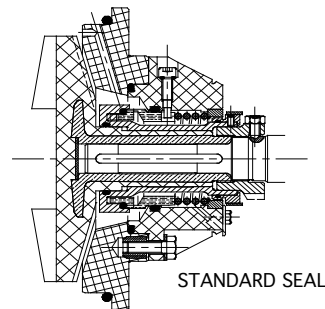
Cartridge mechanical seal

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

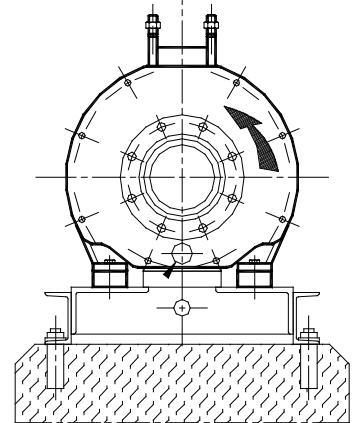
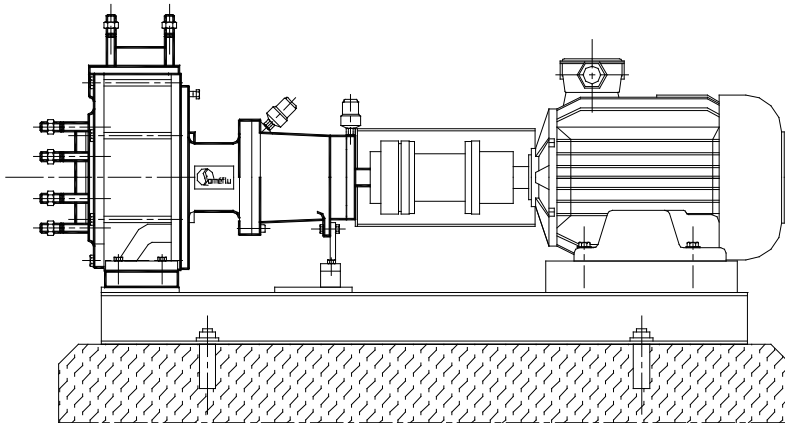
This mechanical seal is pre-adjusted in factory, and facilitate mounting and maintenance operations.

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

- Rinsing after standstill of the pump for crystallizing or charged liquids.
- Injection of clean liquid during running for liquids charged with abrasive matters. It is possible to use clear water if the process allows.
- Grease filling in the seal chamber to limit crystallization effects if process does not allow supply of water.
- Double mechanical seal with external lubrication for dangerous or charged liquids.



Overview of group



Some application examples

SOMEFLU plastic pumps have entered in the most advanced industrial fields: nuclear, chemical, petroleum, etc. SOMEFLU is also undeniable partner in Eco-industries.

- Surface treatment.
- Metallurgy (pickling – Baths stocking , etc.).
- Deodorizing units for gas issued from purification process.
- Gas scrubber for waste incinerating plants.
- Sea water (aquariums – thalassotherapies).
- Pumping of chemical liquids, effluents, etc.
- Petrochemical industry.
- Water treatment in nuclear power station.



FP 16.01 EN