



ARBO
THERMOPLASTIC
PUMPS
FILTERS

LLER half open impeller **SILENT** spacer coupling ATEX **BORN TO RESIST CORROSION** compact
O 2858 BACK PULL-OUT bare shaft **HiEff 3D impeller** solid liquid end materials SE
netic drive **Viton** PEEK flexible diaphragm HMPE **labyrinth** DRY RUN PROTE
NPSH STRAINER PTC CORROSION RESISTANT IEC **close-coupled** BASEPLATE in-line MACHINED TENS
ded suction pipe independent of direction of rotation **PP** FOOT VALVE **DIN-EN 22585** diaphragm ga



SEALLESS

PG 3.0 IMMERSIBLE CENTRIFUGAL PUMPS

PRODUCT RANGE



SEALLESS IMMERSIBLE PUMPS

- For all applications where metal pumps suffer from corrosion
- Machined completely from solid blocks of plastic
- No injection molding or welding involved
 - no chemical cracking!
- No metal parts in the liquid
 - extremely corrosion resistant
- With liquid seal
 - no mechanical parts in the liquid
- Can be run dry without damage
- Several configurations and immersible lengths
- Special executions for abrasive liquids
- For plastic pumps unique new hydraulics:
 - very smooth operation and low noise level
 - increased efficiency - lower energy consumption
 - improved NPSH (suction capabilities)
 - reduced clogging
 - direction independent impeller fixation
 - particles in the liquid up to \varnothing 4mm without damage
 - flow rates (Q.) up to 300 m³/h
 - delivery heads (H.) up to 80 M
- Maximum security against air capture or leakage
- ATEX zone 2 available



COMPACT SERIES UP TO 300 M³/H

This series is close-coupled; the motor is mounted directly to the pump flange by means of a plastic bracket. The pump shaft is an extended motor shaft for perfect alignment and the highest stability. The maintenance requirement is extremely low, thanks to the reduced number of parts if compared to conventional pumps with cantilever.



LONG COUPLED CANTILEVER SERIES L UP TO 40 M³/H

A number of types is available with a bearing housing between pump and motor. Thanks to this construction, it is possible to mount extended pump shafts for lower startup levels without the need of a foot bearing. Since standard motors are suited to fit these pumps, it gives more flexibility to install any motor brand with different protection classes, even explosion proof (ATEX) executions.



OUT OF TANK MODEL BB

This pump offers the same advantages as the previous models but is designed for 'out of tank' use. Main advantage is that it can be used if there is insufficient space inside the tank. The suction pipe can be connected to the bottom of the process tank or it can suck over the tank wall. Additional advantage is that it can suck from a second circuit by tapping the suction pipe, for example, for pre-coating or flushing operations.

PRINCIPLE OF OPERATION

ARBO immersible pumps are single stage centrifugal pumps for open tank installation or in sumps. The pump part is immersed in the liquid and the motor remains above the liquid surface. They are perfect for circulation or transfer purposes with fixed or fluctuating level. The pumps operate by means of a “liquid seal” without any mechanical seal what so ever.

SELF PRIMING CAPABILITIES

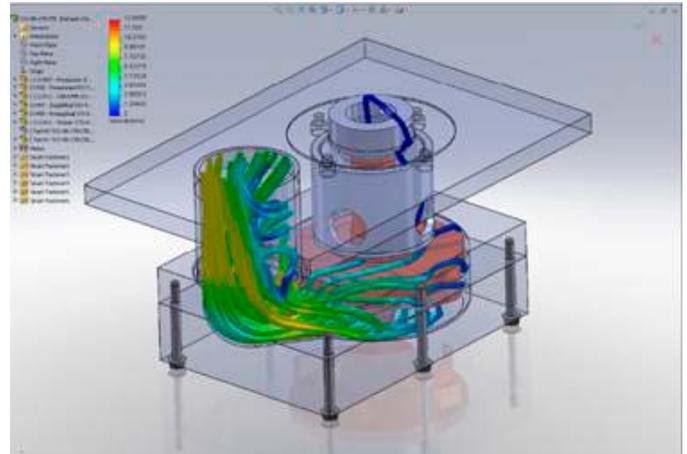
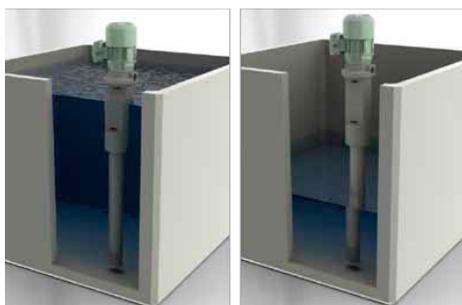
Centrifugal pumps are “normal priming”. This means that the installation needs to ensure that during starting, the impeller is fully submersed. The pump can be made suitable for emptying deeper tanks by means of a suction pipe extension. Once the level of the liquid reaches the strainer or end of suction pipe, the liquid seal is broken. The level needs to rise until above the impeller again in order to restart.

DRY RUNNING

Thanks to the liquid seal, there is no need for a mechanical seal. The pump shaft bearings are outside the liquid zone. The shaft is self centering and therefore no foot bearing is required. Therefore this pump is insensitive to dry running and solids in the liquid can be pumped without any damage.

IMPELLER

This series of pumps is equipped with half a open impeller that is secured onto the shaft independently from the direction of rotation. Solid particles may pass through the pump without damage. Even for circulation at a fixed low level in the tank the special impeller shape prevents air capture that can cause foam in the process liquid.



CONSTRUCTION

All parts that come in contact with the liquid are machined from solid blocks of plastic. Thanks to a special production method and a minimum of welds, the risk for chemical cracking is limited, a major advantage compared to injection molded pumps. PPH is the standard material and covers a wide range of duties.

For highly abrasive liquids (high percentage of solids), on request impellers or housing parts of HMPE (High Molecular PolyEthylene) can be supplied. For extremely corrosive mixtures at higher temperatures even a fully

PVDF pump is possible. The SS pump shaft it is fully protected by a plastic shaft sleeve. The shaft sleeve is one part with the impeller in order to ensure absolute sealing against liquid or air and moreover to achieve the best dielectric value. The gaskets are standard made of EPDM but may be ordered in Viton or Viton/PTFE-covered.

STANDARD MATERIALS OF CONSTRUCTION

- Polypropylene (PP)
- High Modulus Polyethylene (HMPE)
- Polyvinylidenfluoride (PVDF)
- Polytetrafluorethene (PTFE)
- PP/PVDF/PE-EL = conductive plastics for ATEX-applications

CHARACTERISTICS

OPTIONS

- Flange or hose adaptor
- Mounting plate according to customer specification
- Extended suction pipes with or without foot valve
- Gas seal for specific types
- With or without filter housing
- Assembled together on mounting plate or separately

MOTORS

All motors are according NEN-EN-IEC 10072-1 DIN 42673 NEN 3321 standard, 2-, 4- or 6-pole for 230/400 V or 400/690 V/ 50 or 60 Hz, IP55, ISO class F. Other protection classes against dust and or humidity on request.

PAINT SYSTEM

These pumps are often used in corrosive environments. Therefore all metallic parts are coated according NEN-EN- ISO 12944-5 category C3 suitable for outdoor installation. Other painting categories and colours on request.

SHORT LEAD TIMES

The ARBO pumps feature a high degree of standardization. Thanks to the modular construction and an extensive stock of parts, your specific pump may be assembled relatively fast.

MAINTENANCE

Thanks to the lack of mechanical wear parts in the liquid zone, the maintenance is limited to cleaning regularly and the replacement of bearings. At normal use, the life time of 30000 operating hours is no exception. Thanks to this, the pump is practically maintenance free !

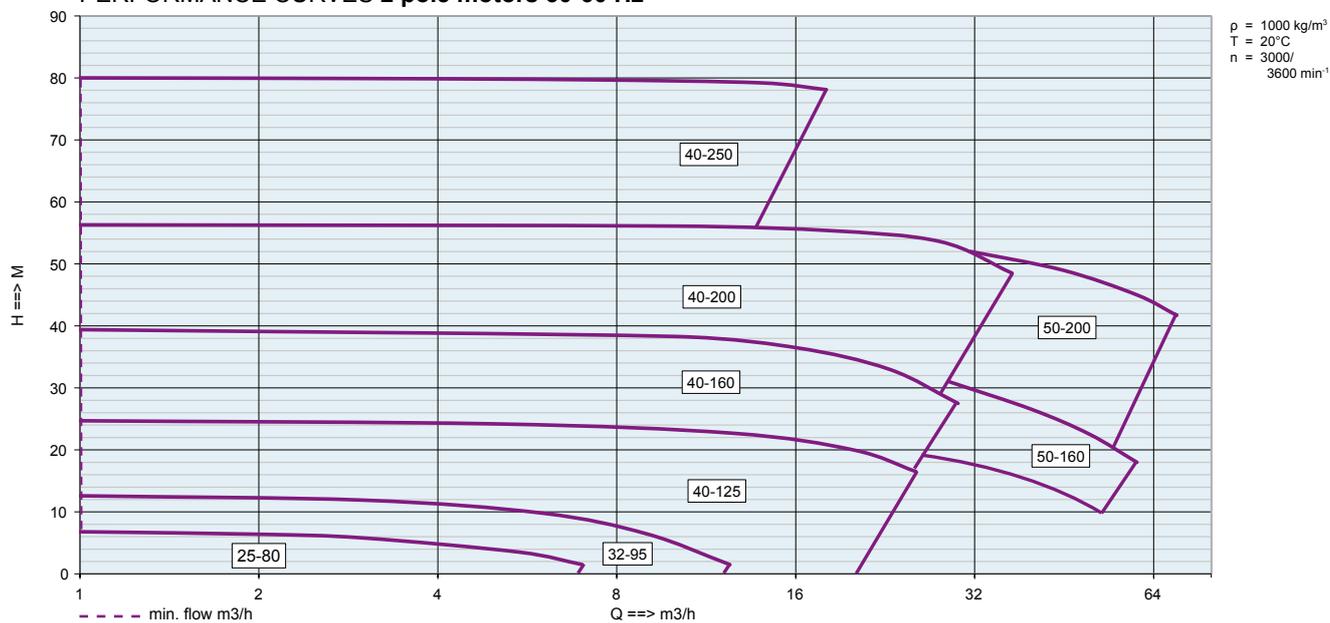
All around, a multipurpose pump that, together with the variety of options, offers a solution for many applications up to 140 °C.

Immersible pumps on scrubbers

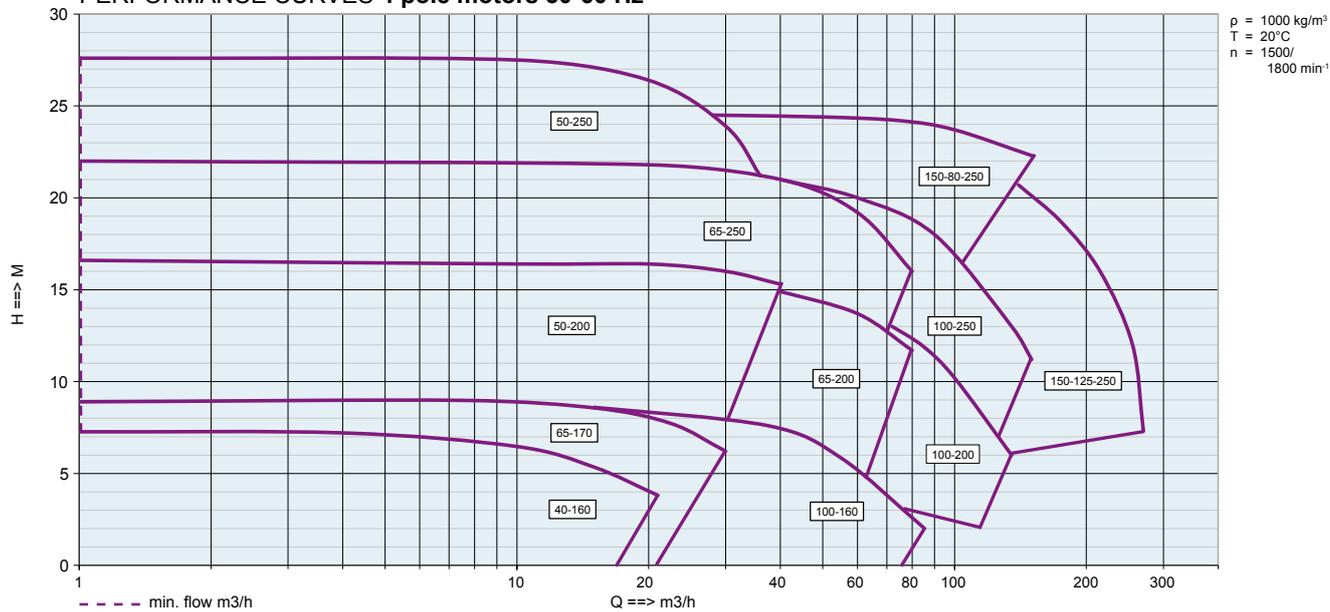


PERFORMANCE CURVES

PERFORMANCE CURVES 2 pole motors 50-60 Hz



PERFORMANCE CURVES 4 pole motors 50-60 Hz

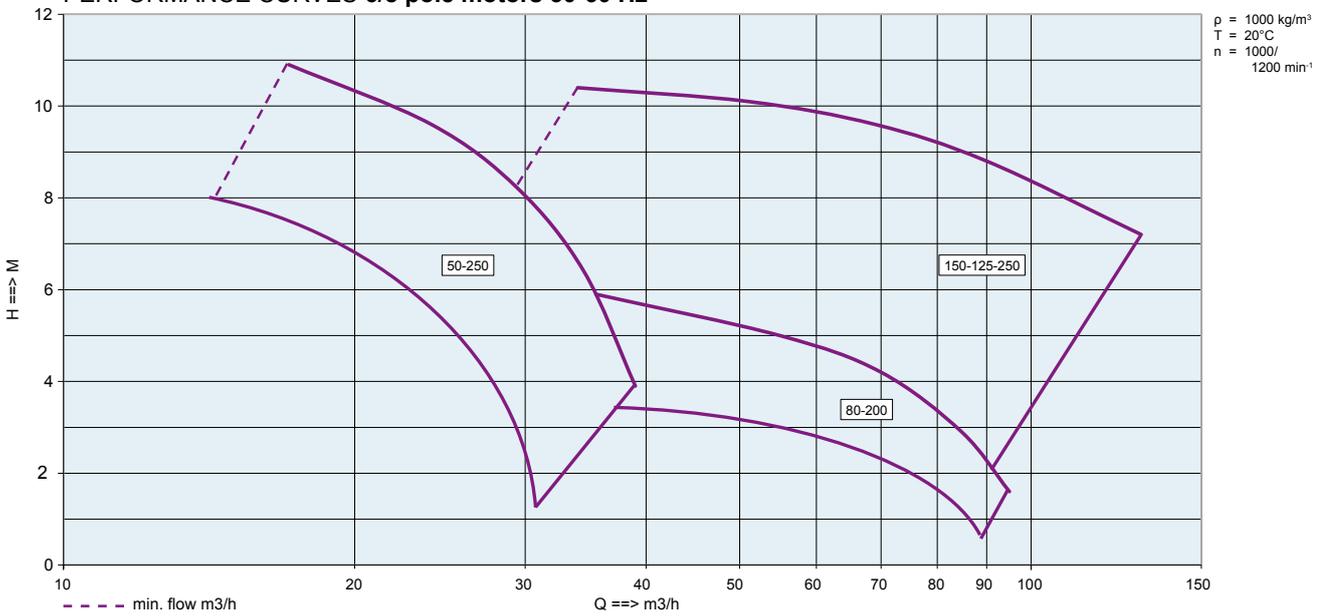


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PERFORMANCE CURVES

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PERFORMANCE CURVES 6/8 pole motors 50-60 Hz



DO- Immersible pumps in galvanic process





**CENTRIFUGAL PUMPS
WITH MECHANICAL SEAL**
SealPro and HD series
KR (Close) and TK (Long) coupled versions
Single, double and bellows seals
Max. 600 m³/h, max. 90 m



**MAGNETIC DRIVE
CENTRIFUGAL PUMPS**
MagPro series
Max. 60 m³/h, max. 90 m.



**SEALLESS IMMERSIBLE
CENTRIFUGAL PUMPS**
SumPro and HD series
Max. 300 m³/h, max. 90 m



**PUMP PROTECTION
DRY RUNNING PROTECTOR**
Pressure gauges
Priming units
Suction strainers



FILTER CHAMBERS
For cartridges, discs or bag filters.
Capacity to 40 m³/h
Can be combined with any ARBO pump
Filter rates of 0,2 to 1200 micron



OIL SKIMMERS
Capacity 0 - 4 l/h
Length 400 - 3000 mm
Max. 70°C



ARBO PUMPS | FILTERS

Since the foundation in 1954, **ARBO** Pumps | Filters specialized on the design and production of sustainable, highly reliable and corrosion resistant thermoplastic pumps and filters.

ARBO Pumps offer a remarkably longer life span and lower maintenance cost thanks to its ridged construction and solid material design.

With a team of experienced engineers, production- and sales staff, **ARBO** Pumps | Filters services a wide customer base and a wide range of duties through a worldwide distribution network of pump specialists.

We also deliver products corresponding to ATEX regulations.



ARBO

THERMOPLASTIC
PUMPS
FILTERS



WHY ARBO PUMPS | FILTERS?

ARBO Pumps | Filters can be characterized by reliability, flexibility, quality and sustainability. Thanks to the smart design, the lower energy consumption and maintenance costs, your investment turn back time is very short time!



MARKETS

- Hot tub galvanising
- Anodising
- Plating
- Production of micro-electronic and semi-conductors
- Waste water treatment
- Fish farms
- Sea water aquaria
- Desalination plants
- Industrial and agricultural scrubbers
- etc.



VDF TURBINE IMPEL
ALLESS mechanical seal IS
ellow seal PTFE magn
ty point priming unit
TARY SEAL RING exten

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POMPEN EN FILTERS B.V.**

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