tapflo

INDUSTRIAL PUMPS

edition 2017 rev 1



>> All about your flow

www.tapflo.com

All about your flow

Tapflo is a leading pump manufacturer with the ambition to provide a wide range of premium products for various industrial applications. We focus on delivering the best fluid processing solutions and support on all stages of the process, worldwide.

Lapilo Est in Sweden 1980

About Tapflo

Tapflo is an independent, Swedish, family owned, manufacturer and global supplier of air operated diaphragm pumps, centrifugal pumps and other industrial process equipment. The company was founded in Kungälv, Sweden in 1980 and has since then been working with design and manufacture of thermoplastic, metal and sanitary series diaphragm pumps and also with complete range of centrifugal pumps and industrial equipment. After years of dynamic development the company evolved into Tapflo Group with worldwide operations. Tapflo Group is represented by own companies and independent distributors all over the world on 6 continents.

Quality certified

At Tapflo we believe that quality is one of the highest values, both for our customers as well as our employees. As a result, we comply with various globally recognised certification and quality control institutions. Many of our products comply with EC ATEX directives for equipment intended for use in explosion hazardous environments.

The aseptic series is EHEDG certified (European Hygienic Engineering & Design Group), the pharmaceutical series has USP VI and EC 1935/2004 approval.

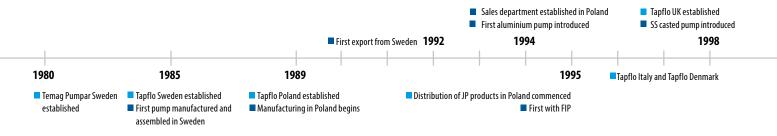
All our products are obviously CE marked and followed by our comprehensive instruction manuals. Tapflo manufacturing process is certified according to ISO 9001:2015.

EHEDG EH

REACH



Tapflo expansion in the world



Our values

Long term engagement is our core

Our aim is to continuously provide premium products according to evolving needs of our customers. That is why we see each customer relationship as a long term commitment.

Local means on your terms

Tapflo is your global partner providing local support. No matter where your plant is located you can expect us to support you locally.

Flexibility - the foundation of a good service

We are prepared to deal with reality, knowing that in practice this means answering questions, offering solutions and supplying spare parts with a minimal loss of time.

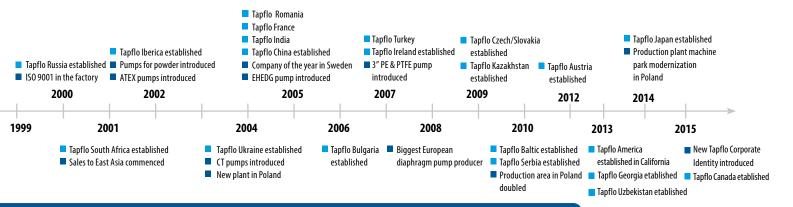
Customizing - to bring the product to the needs

Our intention is always to help our clients find the most cost effective solutions to increase their company's efficiency. If this means changing the design of the pump we see it as a challenge - not a problem.

To produce is to develop

When you are actively involved in the manufacturing of a product, it is almost impossible not to discover ways to improve it. This allows us to frequently offer solutions that are even more sustainable and efficient.





Diaphragm pumps

Tapflo diaphragm pumps are some of the most versatile pumps on the market today.

They can be used in a variety of installations in numerous applications. Thanks to the simple operating principle, with a compact and reliable design, Tapflo diaphragm pumps meet the demands of heavy industrial duties.

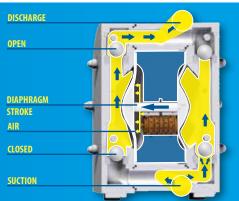
Working principle

Tapflo diaphragm pump is driven by compressed air. Two diaphragms are working simultaneously to prime and push the liquid through the pump system. Valve balls work as check valves to let the liquid

through in the right direction.

5

6



Fast facts

capacity

Pressure

0-820 l/min 0 - 217 US gal/min 0 - 8 bar (max 14 bar for TF series) 0 - 116 PSI (max 200 PSI for TF series) 1/4" up to 3" (DN8 - DN80)

3

4

Pump materials

PE, PTFE, aluminium, cast iron, stainless steel AISI 316L and PTFE coated aluminium

Connection sizes

Product range





1 PE & PFTE pumps

Pumps made of polyethylene (PE) or virgin PTFE plastics are suitable for handling almost any kind of liquid whether it is viscous, chemically aggressive, with solids or abrasive.

2 Metal pumps

Available in aluminium, cast iron, stainless steel and PTFE-coated aluminium. All metal pumps are available in explosion proof ATEX-marked version.



Pumps designed to meet the requirements of the food, beverage, pharmaceutical and cosmetic industries. Lubrication free air distribution system and total visual inspection of the wetted parts are some of the major features for this pump series.



Powder pumps design is based on the PTFE coated aluminium series. This technology enables an efficient and economic transfer of light weight process powders.



5 EHEDG aseptic pumps

Our aseptic series for sterile applications pharmaceutical, bio technology and food industries. This is the first Tapflo series to be approved according to EHEDG regulations.

6 Pharmaceutical pumps

This series is produced to serve the biotech and pharmaceutical industries in numerous applications. All materials used to build the pump are USP IV certified.

7 TF Filter press pump

Tapflo pump for filter press feeding is a very compact unit that can be mounted directly on the filter press. The design and functionality allows the user a straightforward pressing of slurries. A pressure regulator is already mounted on the unit. The pumps are based on standard plastic and metal Tapflo pumps. An external pressure booster doubles the delivery pressure.

All about your flow

Ingenious design

Long life diaphragms

Tapflo diaphragms of are sandwich compound construction, superior for continuous heavy duty service, with a completely smooth surface in contact with the liquid. This results in no leak through and a diaphragm which is easy to keep clean. The diaphragm is available in various materials and colors to suit any requirements, it is made from PTFE, EPDM, NBR or FKM.



The PTFE film of the diaphragm forms a closed surface to the liquid. The integrated light metal supporting core and the fabric reinforcement fulfill high strength requirements.

Pollution free air valve

The valve is designed for maintenance free operation with unlubricated air, thanks to the ingenious sealing system and operation principle.

It will not only save your money for lubrication, it will also save your environment from pollution.



Short air distribution ways and low friction sealing solutions grant for reliable duty, an energy saving and pollution free drive.

News



Sanitary flap valves & heavy duty ball cup valves

Flap valves are ideal in applications with bigger size and gentle solids, high viscosity liquids or when solids can be damaged by valve balls (e.g. fruits). Flap valves are made in AISI 316. Cup valves are a perfect solution when pumping abrasive liquids causing risk of damage to the valve seats from the product. There is no need to replace the whole manifolds or housings, just the valve cup what drastically reduces the spare parts cost. The ball valve cup is made in one piece with the valve seat. It is mounted on the pump with clamps therefore ensuring easy maintenance and cleaning. Flap valves available in pump sizes T225, T425 and T825

Cup valves available in pump sizes T225 and T425

Magnetic ball lifter



New magnetic ball lifters are implemented to enable pump emptying when no other draining option is available. Rotating the pump is no longer needed. The balls are lifted by simply attaching the magnets to the pumps manifold. Emptying the pump could not have been easier Available for T125, T225, TX144 and TX244







TK Built-on dampener

This is an excellent way to achieve a pulsation free diaphragm pump Tapflo pump with a built-on dampener combines the advantages of standard pumps with active pulsation dampener in a compact manner. This is an ideal solution for effective elimination of pressure variations on the pump discharge where space in your installation is limited.

Available in pump sizes TR20, T50, T100 and T200 and all material executions.

HVS (High Viscosity System)

The HVS is basically a fully pneumatic drum unloading system that is able to handle high viscous liquids up to several hundred thousand centipoise like ink, concentrates, tomato paste etc. Eqquiped with T425

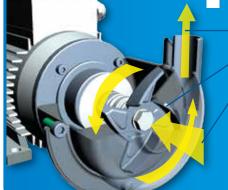
DT pulsation dampener

Works actively with compressed air and a diaphragm, setting the correct pressure to minimise the pulsations. Available for all Tapflo pump sizes and material versions.

Centrifugal pumps

Tapflo offers a wide range of mechanicaly sealed centrifugal pumps in stainless steel and sealless pumps in PP and PVDF plastics.

Thanks to the simple operating principle, with a compact and reliable design the pump series has a very wide range of applications - from transfer of water, to pumping chemicals.



Working principle

IMPELLER SUCTION

The fluid enters the pump impeller along the rotating axis and is accelerated by the impeller, flowing radially outward through the pump casing, from where it exits into the discharge piping.

Fast facts Capacity

Motor Power Head

 $1 - 60 \text{ m}^3/\text{h}$ 1 - 264 US gal/min 0,12 - 11 kW 2 - 47 m 6 - 154 ft

Connection Sizes Pump materials

3/4" - 2 1/2" (DN20 - DN65) **PP, PVDF and** stainless steel AISI 316L

Product range



The CTS series maintains all the benefits and strengths of the standard CT pump. The self-priming feature allows to use the pump in applications where standard CT pumps do not prove useful. The CTS pump is capable of creating up to 4,5 m of suction lift. By replacing only one element - the casing with a self-priming chamber - we can achieve various advantages for our pump. The pump can now suck the liquid form a lower level than it is positioned or handle liquids with high content of air.

Cartridge filters with 1, 3 or 7 cartridges are stand alone units equipped with a CTM mag drive pump or combined with CTV vertical pump. The cartridges are available in porosities of 1, 10, 20 and 50 µm providing up to 95% filtering efficiency. The FTA series is available in PP.

Reliable components

Powerful magnet couplings

The magnets of the CTM range in NdFeB (Neodymium-iron-boron) with a unique magnet cage system have a superior strength also under demanding circumstances.

The power from the drive is transmitted even at high temperatures.



Big choice of sealing solutions

The CTI & CTH pump range features top brand mechanical seals in a variety of materials to suit most type of liquids.

They are available in combinations of ceramic, graphite and SiC.

For special duties, flushed and lubricated, quenched seals are available.





Conventional pumps with ingenious design for easy maintenance





1 CTI & CTH centrifugal pumps

These pumps are open or semi open single stage centrifugal pumps, manufactured in high finish stainless steel AISI 316L. The range of applications is wide, from transfer of water to pumping of mild chemicals and low/medium viscous food products. To satisfy special needs, several options are available like flushed and/or lubricated seal, long coupled pump, draining system, heating jacket and hygienic shroud.

The industrial series CTI is manufactured with glass blasted pump casing. A variety of mechanical seal options and special executions are available to satisfy most type of industrial duties.

The hygienic series CTH is supplied with electro polished pump casing and internals. This series is specially dedicated for hygienic duties in food, beverage and pharmaceutical industries, where clean- and drain-ability are important factors.

2 CTM magdrive centrifugal pumps

CTM is a compact and seal less pump, where the power from the motor is transmitted to the impeller by means of a magnetic coupling. The wetted components are non-metallic injection moulded thermoplastics PP-GF or PVDF. The pumps handle many types of low viscous clean liquids such as chemical aggressive and toxic ones.

3 CTV vertical centrifugal pumps

CTV is a seal less and dry running safe pump specialized for transfer and circulation of various liquids from containers, sumps and tanks. It is manufactured from PP (polypropylene), PVDF or stainless steel AISI 316L.

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Tapflo products and services are available in 75 countries on 6 continents.

Tapflo is represented worldwide by own Tapflo Group Companies and carefully selected distributors assuring highest Tapflo service quality for our customers' convenience.

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