

Air operated
Diaphragm pumps
Product overview 2010



Tapflo - your reliable pumpchoice

With experience from industrial fluid handling and pump manufacture since 1970, we know what you as a customer require from an industrial pump. Ever since we started our manufacture of air operated diaphragm pumps, we have always had our winning concept in mind: to create compact diaphragm pumps for reliable duty and with a minimal number of components enabling easy maintenance. We are always keenly aware of new requirements and ideas from our customers. The products are therefore always in continuous progress with improved detail solutions, new materials and further accessories.

ISO 9001 certified

The Tapflo manufacture process is now certified according to ISO 9001:2001. All pumps are also CE-marked and fulfill the demands of the EC machinery directives.

The history of Tapflo

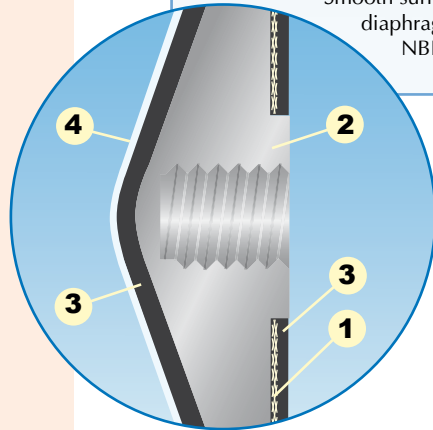
Tapflo was founded in Kungälv (north of Gothenburg), Sweden 1985 and has since then been working with design and manufacture of air operated diaphragm pumps. The product range has grown from a few models, to complete ranges of diaphragm pumps and centrifugal pumps in various materials and sizes. Tapflo has now established offices in 20 countries and independent distributors in another 30 countries – spare parts and pumps are available worldwide.

Key components...

Diaphragms



Smooth surface sandwich compound diaphragm. Available in PTFE, EPDM, NBR, foodgrade EPDM and PTFE.



- ◀ Cutaway PTFE diaphragm
- 1) Reinforcement webbing
 - 2) Light metal core
 - 3) EPDM layer
 - 4) PTFE layer

Air valve



No lube and pollution free air valve made from brass, PET or stainless steel.

Ball check valves

Reliable valve design ensures a safe fluid transfer through the pump. Available in various materials.



Few
I

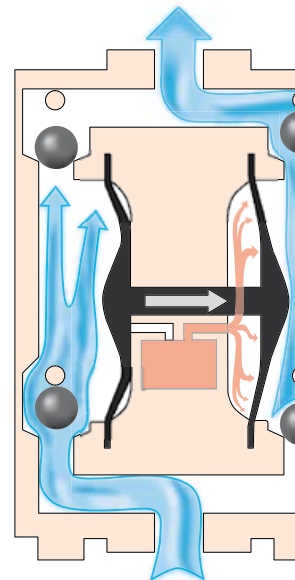


4

1. Flexible installation

The connections may be rotated 180°. Simply turn connections to fit your piping system (PE & PTFE and Me series pumps)

First cycle...



The ingenious Tapflo design

Its few components and a simple but ingenious design is peculiar for all Tapflo pumps. It is a compact pump, easy and quick to maintain, keeping your service costs and process down time to a minimum.



2. Solid and strong

The PE & PTFE series pumps are machined from solid blocks for superior mechanical strength.

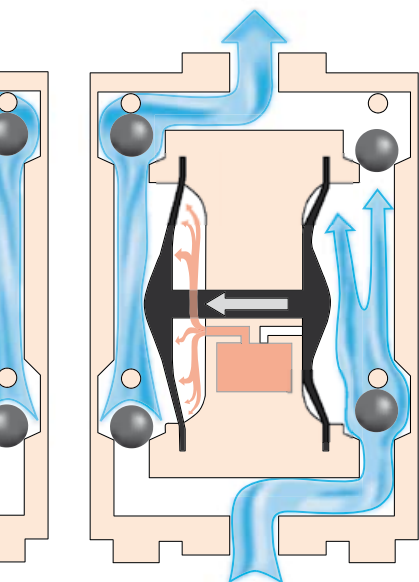
3. Chemical design

The compound diaphragm has a completely smooth liquid side surface and with no metal in contact with the liquid.

4. Low air consumption

The air distribution system is designed to eliminate "dead spaces". This results in high efficiency and low air consumption.

Second cycle...



■ Pumped liquid ■ Compressed air

How Tapflo pumps work

The Tapflo diaphragm pump is driven by compressed air. The two diaphragms, connected by a diaphragm shaft, are pushed back and forth by alternately pressurising the air chambers behind the diaphragms using an automatically cycling air valve system.

Suction (1)

One diaphragm creates a suction action when being pulled back from the housing.

Discharge (2)

The other diaphragm simultaneously transmits the air pressure to the liquid in the housing, pushing it towards the discharge port.

Benefits with Tapflo...

- ▶ Run dry without damage
- ▶ Infinitely variable flow control
- ▶ Few components – low down-time and maintenance costs
- ▶ Self priming up to 5 m from dry suction pipe
- ▶ Solid, strong and long life design
- ▶ No lube and pollution free air distribution system
- ▶ No electricity needed – explosion proof versions available
- ▶ Can run dry against closed pipe or valve without damage

Various liquids...

Tapflo pumps are compatible with a very wide range of chemicals:

- ▶ Corrosive and chemical aggressive
- ▶ High and low viscous
- ▶ Abrasive
- ▶ Solid laden
- ▶ Shear sensitive
- ▶ Flammable

Industries...

Tapflo pumps are used in a variety of installations in most industries: Chemical, surface conditioning, water treatment, pulp & paper, food, pharmaceutical, paint, print and varnish industries to mention only a few.

▼ PE & PTFE series pumps



PE & PTFE series pumps

Tapflo pumps made from polyethylene (PE) or PTFE are suitable for handling almost any kind of liquid whether it is viscous, chemically aggressive or with solids.

Polyethylene pumps

Polyethylene (PE HD) has a superior wear resistance which is 6 – 7 times better than for polypropylene (PP). This fact makes the pump suitable for handling abrasive slurries etc. PE is resistant to most kind of aggressive chemicals such as concentrated acids and alkalis. Maximum liquid temperature is 70°C.

PTFE pumps

PTFE (virgin polytetrafluorethylene) is a thermoplastic polymer with superior chemical resistance. The PTFE pump will handle even the most aggressive acids, for instance concentrated nitric acid. Maximum liquid temperature is up to 100°C.

Model	TR9	TR20	T50	T100	T200	T400	T800
In/outlet ports	1/4"	3/8"	1/2"	1"	1 1/2"	2"	3"
Max flow (l/min) (US gpm)	11 2.9	24 6.3	60 15.8	125 33	330 87	570 150	820 216
Max press. (bar) (psi)	8 116	8 116	8 116	8 116	8 116	8 116	8 116
Length (mm) (inch)	70 2.8	105 4.1	150 5.9	200 7.9	270 10.6	350 13.8	460 18.1
Width (mm) (inch)	94 3.7	112 4.4	160 6.3	214 8.4	310 12.2	380 15.0	589 23.2
Height (mm) (inch)	123 4.8	168 6.6	243 9.6	320 12.6	450 17.7	563 22.2	830 32.7
Weight PE (kg/lb)	1/2.2	1.5/3.3	5/11	10/22	24/53	44/97	140/-
Weight PTFE (kg/lb)	1.5/3.3	2.5/5.5	7/15	17/38	44/97	90/199	286/-

◀ Tapflo PE & PTFE series with its famous smooth and solid design for heavy duty industrial applications

▼ Special versions...



Drum pumps

You will easily move your Tapflo drum pump between drums and containers. 0-100 l/min.



Explosion proof pumps

Explosion proof models available according to the ATEX directive, group II, cat 2.



Twin pumps

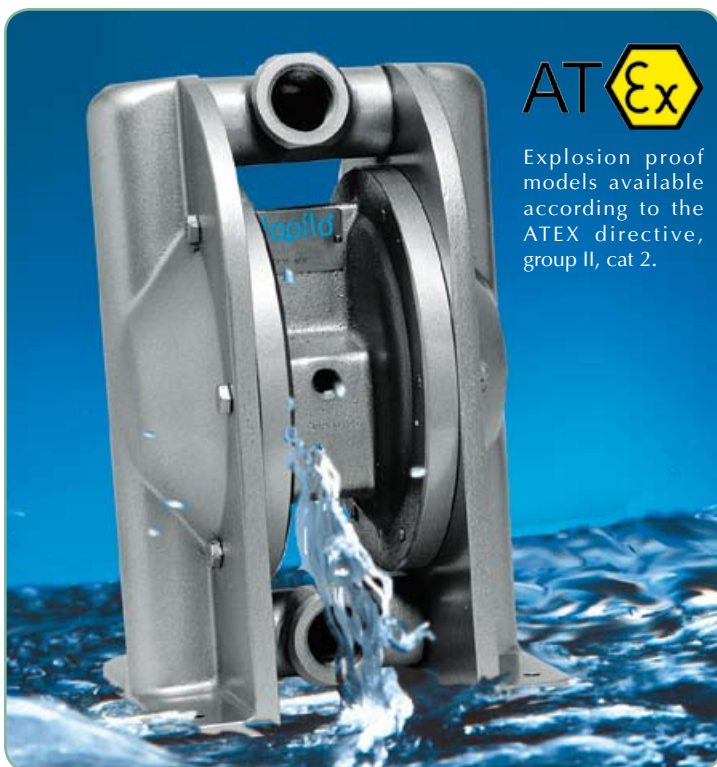
Pumps with double in/outlet to achieve "two pumps in one" for blending, mixing or recirculation.



Filter press pump stations

High pressure version (max 16 bar) for filterpress feeding.

▼ Metal series pumps



AT Ex
Explosion proof models available according to the ATEX directive, group II, cat 2.

The compact, smooth and simple design is common for this series.

Aluminium and cast iron pumps

For transfer of pH-neutral fluids, both thin, thick, solid laden or abrasive. The aluminium and cast iron pumps are found in most fields; work shop and paint industries, purifying plants etc., to mention only a few.

AISI 316 stainless steel pumps

Made in lost wax cast method, ensuring great accuracy and finish. The stainless steel pumps combine great mechanical strength with good chemical features. AISI 316 is resistant to aggressive liquids like nitric acid and sodium hydroxide. The centre unit, which is not in contact with liquid, is made from corrosive resistant polypropylene (PP) as standard (other materials upon request).

Model		T25	T70	T120	T220	T420	T820
In/outlet ports		1/2"	3/4"	1"	1 1/2"	2"	3"
Max flow	(l/min)	26	78	158	330	570	820
	(US gpm)	6.8	20	41	87	150	216
Max pressure	(bar)	8	8	8	8	8	8
	(psi)	116	116	116	116	116	116
Length	(mm)	105	150	200	270	350	470
	(inch)	4.1	5.9	7.9	10.6	13.8	18.5
Width	(mm)	116	168	195	265	342	530
	(inch)	4.6	6.6	7.7	10.4	13.5	20.8
Height	(mm)	160	229	302	412	537	833
	(inch)	6.3	9.0	11.9	16.2	21.1	32.8
Weight alu	(kg/lb)	2/4.4	5/11	8/18	19/42	34/75	97/213
Weight c. iron	(kg/lb)	7/15	10/22	17/37	44/97	80/176	-
Weight s. s.	(kg/lb)	-	7/15	16/35	38/84	68/150	-

◀ Aluminium and cast iron pumps.

▼ Tapflo pump range from stainless steel AISI 316 - superior mechanical strength and chemical resistance.

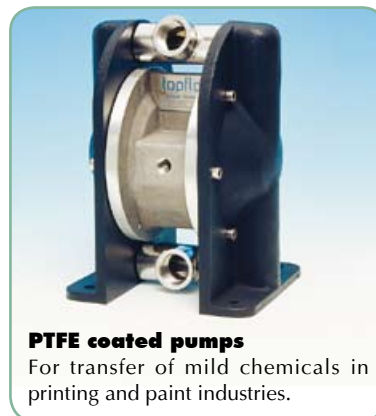


▼ Special versions...



Drum pumps

You will easily move your Tapflo drum pump between drums and containers. 0-120 l/min.



PTFE coated pumps

For transfer of mild chemicals in printing and paint industries.



Twin pumps

Double in/outlet to achieve "two pumps in one".

▼ Sanitary series pumps



Sanitary series

The Tapflo sanitary series, made from electro polished AISI 316L is particularly designed to meet the requirements of the food, beverage, pharmaceutical and cosmetic industries. Lubrication free air distribution system, maintenance free ball check valve system and total visual inspection of the wetted parts are some of the major features for this pump series.

Made to be clean

Our design allows for total visual inspection of the wetted parts. There are no hidden areas where bacteria can grow. The manifold clamps and the housing screws are simply removed for complete disassembly and cleaning. The pump is also designed for cleaning and sterilization in place – C.I.P. and S.I.P. After such operations, the pump is easily turned in its support for drainage.

Model		T30	T80	T125	T225	T425
In/outlet ports		1"	1"	1 1/2"	2"	2 1/2"
Max flow (l/min) (US gpm)		28	78	155	330	570
		7.4	20.6	41	87	150
Max pressure (bar) (psi)		8	8	8	8	8
		116	116	116	116	116
Length	(mm)	160	290	290	360	440
	(inch)	6.3	11.4	11.4	14.2	17.3
Width	(mm)	230	295	320	420	485
	(inch)	9.1	11.6	12.6	16.5	19.1
Height	(mm)	302	396	445	639	840
	(inch)	11.9	15.6	17.5	25.2	33.1
Weight	(kg)	4	8	11	21	35
	(lb)	9	18	24	46	77



▲ Heating jacket

Heating or cooling medium is circulated in the jacket, to maintain a certain temperature of the product.



▲ Aseptic EHEDG pumps

Satisfy the strictest requirements in food- and pharmaceutical industries.



▲ Variety of connections

Available with almost any type of connection used in the hygienic field – TC clamp, DIN, SMS, RJT, ANSI etc.



▲ Pump on trolley



Active pulsation dampeners

The active pulsation dampener is the most efficient way to remove pressure variations on the discharge of the pump. Available for all Tapflo pump sizes and material versions.



Pneumatic batch control unit

The pneumatic batch unit allows you to set and pump a certain number of pump strokes - all this without any electricity. The system is easily applied on all Tapflo pumps.



Level control system

This ingenious system is operated with pneumatic components only. The level control system may be installed in sumps, tanks or tubs to start and stop the pump at certain liquid levels.

The Pneumix...

The Pneumix works both as product transport pump as well as mixer. The Pneumix utilises the container the product arrives in to mix and dispense and simply fits securely in the vessels fill hole.



Pharmaceutical USP VI pumps

We introduce our unique USP approved hygienic PE pump, now upgraded to USP VI. It serves the biotech- and pharmaceutical industries in numerous applications.



50 m³/h
47 m

CT centrifugal pumps

CT is a compact pump, manufactured from stainless steel AISI 316L. With electro polished surfaces, high finish and mechanical strength, the CT meet the demands from today's industries.



10 m³/h
13.5 m

CTM magnetic drive pumps

CTM is a close coupled, compact and hermetic pump ideal for service in little spaces like in OEM installations. CTM is available in PP and PVDF.

CTV vertical pumps

CTV is a vertical centrifugal pump that is simple but very reliable in duty. The pump is specialized for transfer and circulation of various liquids from containers, sumps and tanks. CTV is available in PP, PVDF and stainless steel AISI 316L.



34 m³/h
31 m

www.tapflo.com

Tapflo is represented in more than 45 countries worldwide. Visit our website for updated information.



Tapflo offices

Belarus

Tapflo Belarus
Tel: +375 17 3121370
Fax: +375 17 3121370

Bulgaria

Tapflo EOOD
Tel: +359 (0) 888 765 288
Fax: +359 (2) 974 18 54

Czech & Slovakia

Tapflo s.r.o.
Tel: +420 734 49381
Fax: +420 548 138661

China

Tapflo (Wuxi)
Tel: +86 510 8241 7602
Fax: +86 510 8241 6807

Denmark

Tapflo Danmark
Tel: +45 36 454600
Fax: +45 36 453500

France

Tapflo France
Tel: +33 1 34 78 82 40
Fax: +33 1 34 78 82 41

India

Tapflo Pumps (India)
Tel: +91 44 42103695
Fax: +91 44 26203479

Ireland

Tapflo Ireland Ltd
Tel: +353 1 2011911
Fax: +353 1 2011912

Italy

Tapflo Italia
Tel: +39 0362307698
Fax: +39 0362307697

Kazakhstan

Tapflo Kazakstan
Tel: +7 702 626 7997
Fax: +7 702 626 7997

Latvia

Tapflo Latvia
Tel: +371 7472205
Fax: +371 29288837

Poland

Tapflo Sp. z o.o.
Tel: +48 58 5301181
Fax: +48 58 5324767

Romania

S.C. Tapflo Rom. S.r.l.
Tel: +40 21 3451255
Fax: +40 21 3451166

Russia

OOO Tapflo
Tel: +7 095 2411017
Fax: +7 095 2411017

Spain

Tapflo Iberica
Tel: +34 91 8093182
Fax: +34 91 8093157

South Africa

Tapflo (Pty) Ltd
Tel: +27 41 5831412
Fax: +27 41 5831704

Turkey

Tapflo Makina Ltd
Tel: +90 216 467 33 11
Fax: +90 216 467 33 42

Ukraine

TOB Tapflo
Tel: +380 44 222 68 44
Fax: +380 44 222 68 45

United Kingdom

Tapflo (UK) Ltd
Tel: +44 2380 252325
Fax: +44 2380 269016

tapflo®

Swedish office

Tapflo AB

Filaregatan 4, S-442 34 Kungälv, Sweden
Tel: +46 303 63390, Fax: +46 303 19916
E-mail: sales@tapflo.com, internet: www.tapflo.com