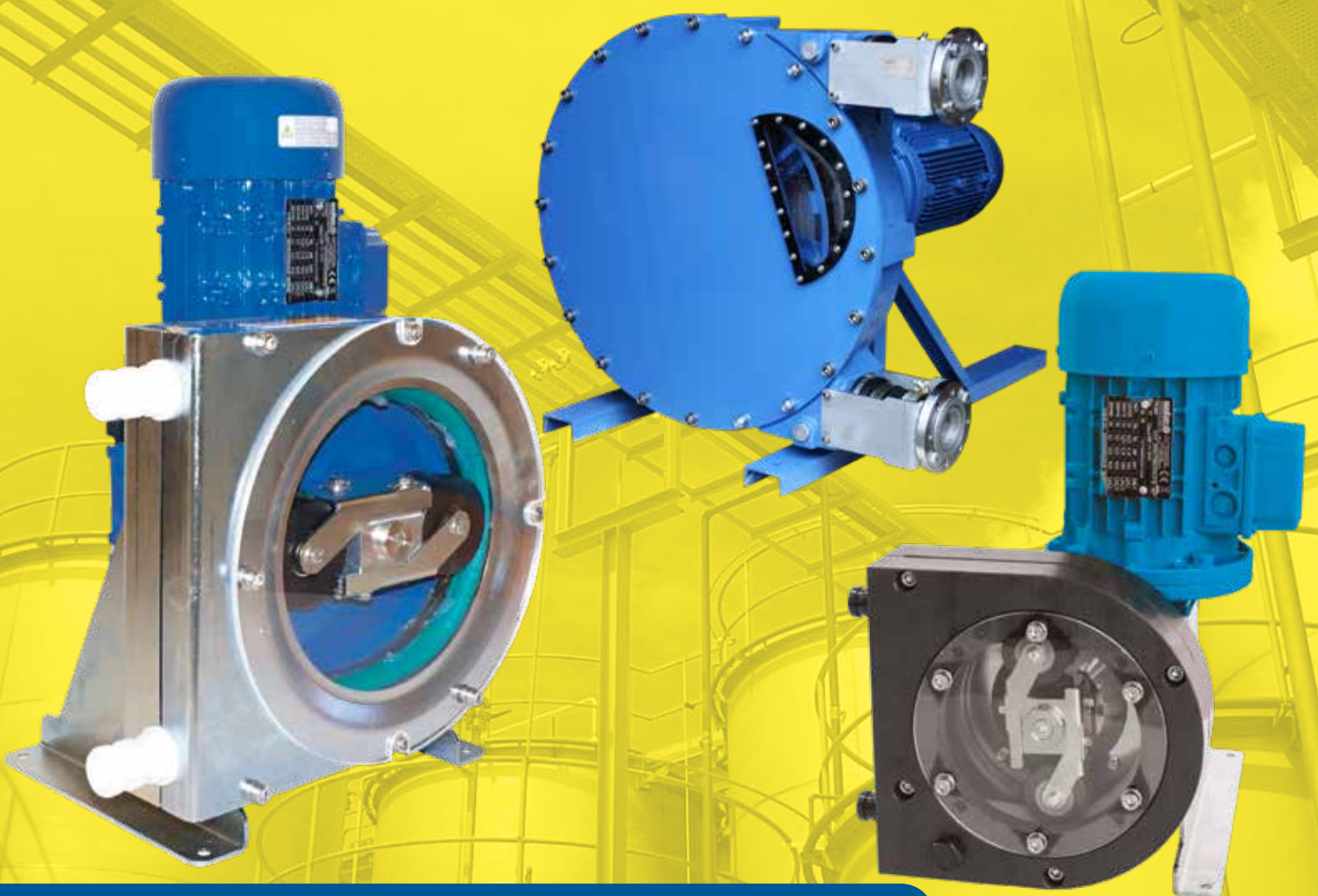


HOSE PUMPS

2021 | 1



Hose Pumps

Effective hose pump solutions for difficult, abrasive, corrosive and viscous liquids with particles

Innovative & reliable high pressure hose pumps

PT

- » Effective hose pump solutions for difficult, abrasive, corrosive & viscous liquids with particles.



CIP

- » Long life high pressure hose pumps developed for easy maintenance in various food & beverage or pharmaceutical applications with CIP.



PTL

- » The best solution for simple transfer or dosing applications, allowing you a quick hose exchange to optimize pump operation time.

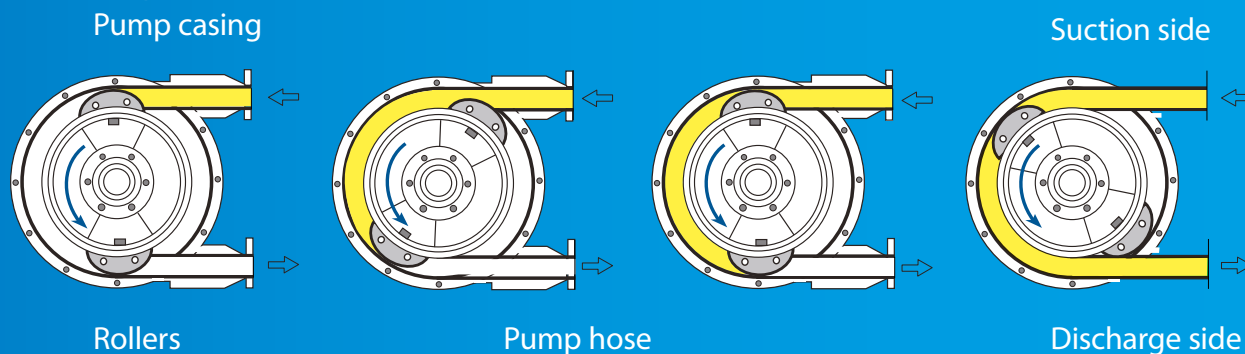


PTL P

- » Closed casing PEHD hose pump solutions resistant against most aggressive chemicals for difficult applications.



Working principle



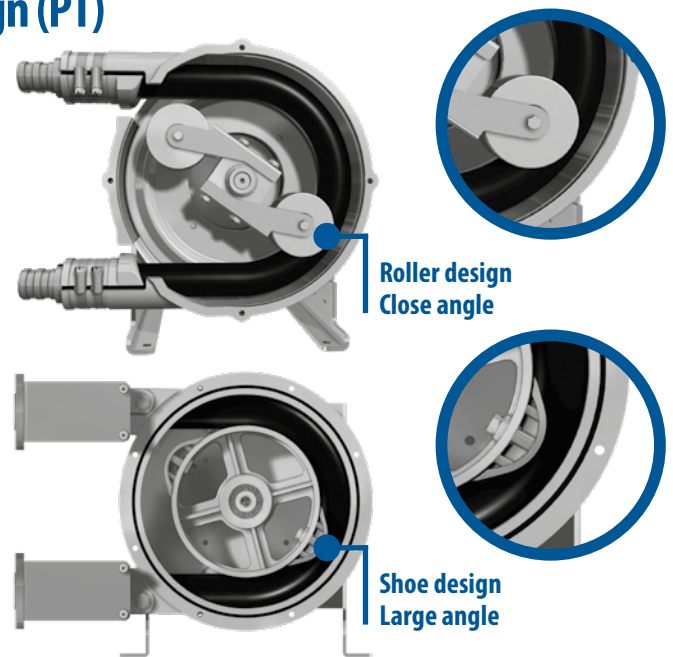
Two rollers* mounted at 180° on a rotor compress alternatively a thick-walled hose in a patented concentric guide and push the pumped liquid from the suction to the discharge side. Roller movement compresses the hose along the casing wall and creates constant vacuum at the suction side of the pump. In this way, liquids are conveyed within the hose and do not get in contact with any metal part.

* PT series is equipped with shoes instead of rollers

Roller design (PTL & PTL P) vs Shoe Design (PT)

The roller design in **PTL & PTL P** pumps has been proven to be successful in the lower pressure applications until **4 bars**, since lubrication is not really necessary between hose and roller and the radial force are very low allowing the rotation. To protect the hose, the rollers operate in grease.

For higher pressures until **15 bars**, from approximate 4 bar, the rollers do not rotate anymore and the angle at the point of compression becomes fairly steep, which acts negatively on the hose. In this case, the **shoe design** of **PT** pumps has been proven to be more efficient, since they act more gentle on the hose.



Tapflo hose pumps features and benefits



Safe to run dry
Easy to use, no monitoring required



Dosing
Dosing accuracy up to $\pm 5\%$



Few components
The only wear part is the hose, there are no valves, low maintenance costs



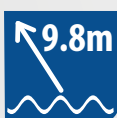
Abrasive media
Peristaltic pumps are ideally suited for pumping highly abrasive media.



High viscosity
Viscosities of up to 100,000 mPas can be conveyed



Conveying direction reversible
Simply change the direction of rotation to empty lines



Self priming
Hardly any other type of pump achieves the suction power of a hose pump of up to 9.8 m dry suction height for water



Adjustable
By changing the speed, e.g. using a frequency converter, the delivery rate can be regulated, also for dosing tasks



No turbulence
In the case of highly abrasive media, gentle, low-wear pumping takes place. Also for sensitive media.



Suitable for food and pharmaceuticals
FDA-certified hoses are available for conveying food. Dairy pipe DIN 11 851 or clamps can be supplied as product connections. USP VI is also available.

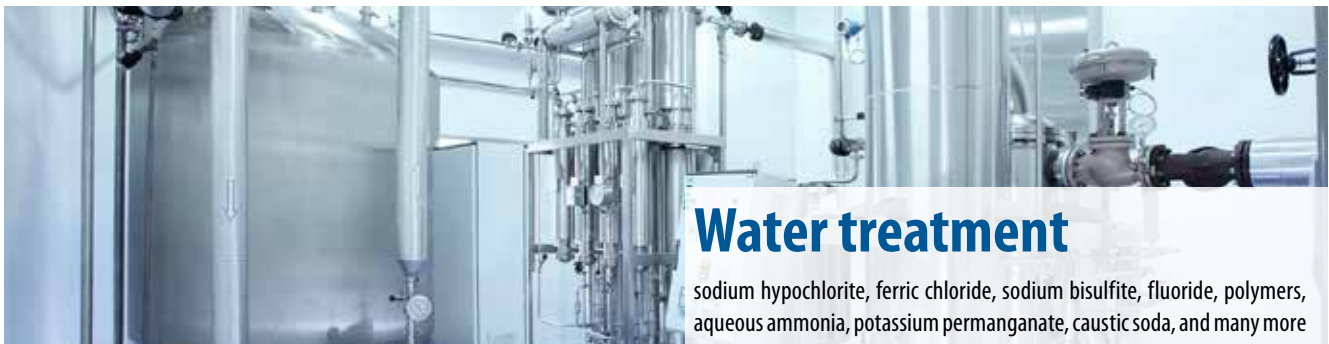
PTL series

Typical applications



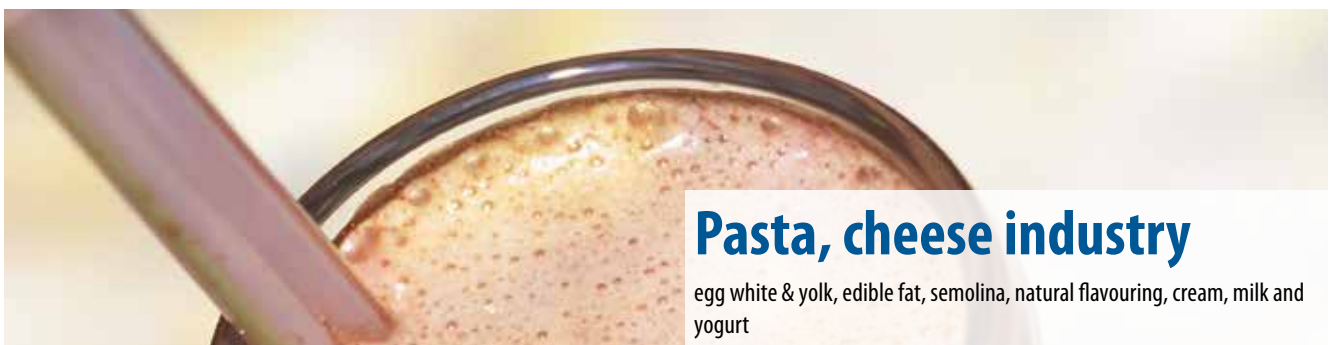
Pharmaceutical industry

chemical dosing, liquid protein, vaccines, serum, plasma, syrups



Water treatment

sodium hypochlorite, ferric chloride, sodium bisulfite, fluoride, polymers, aqueous ammonia, potassium permanganate, caustic soda, and many more



Pasta, cheese industry

egg white & yolk, edible fat, semolina, natural flavouring, cream, milk and yogurt



Bread dough & fruit cake

water & salt mixtures, natural flavourings, fats, fruit cake dough/mixture (i.e. fruit cake has nuts and fruit pieces that need to stay whole)



Cosmetics industry

shampoo, liquid soap, shower gel, lotion,

PT series

Typical applications



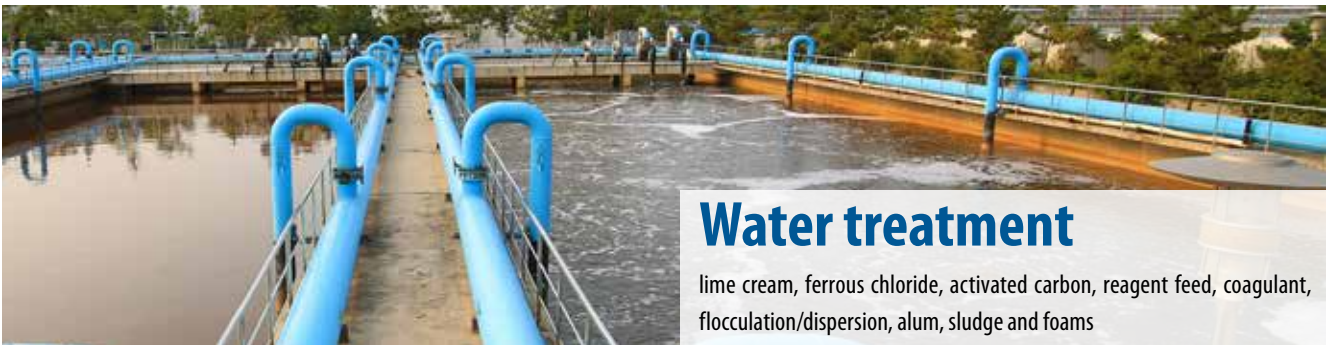
Industry

various acids, PVDF latex, alcohol, soap, non aromatic solvents, sludge with viscosity up to 60 000 Cps, clay up to 800g/l, particle size: 30 mm, lead sulfate, pyrite, SABX, cyanide, various acids



Paint

water based paint, acrylics, pigments, ink, wall coating



Water treatment

lime cream, ferrous chloride, activated carbon, reagent feed, coagulant, flocculation/dispersion, alum, sludge and foams



Food industry

tomato sauce, mash potatoes, gelatin, beer yeast, fish paste, olive oil, wine, PAINT water based paint, acrylics, pigments, ink, wall coating



Paper mills

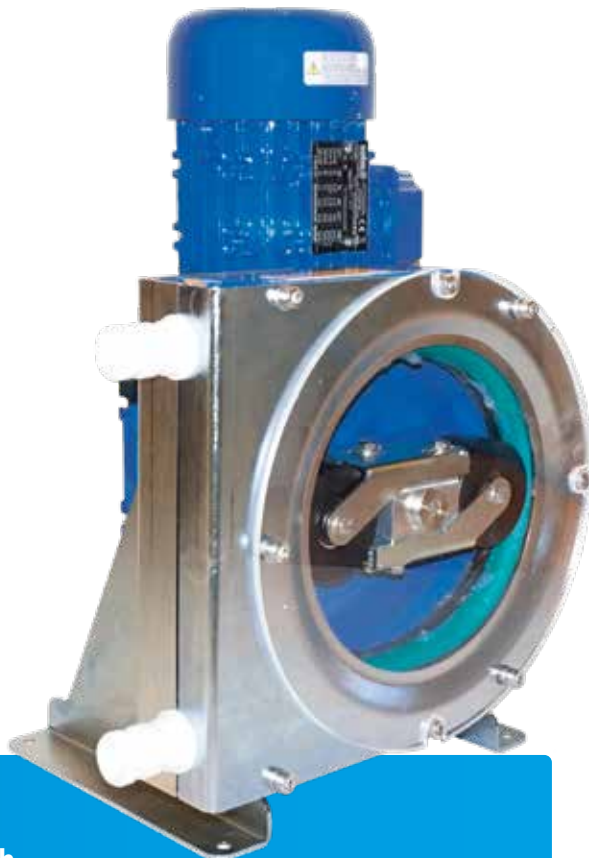
latex, kaolin, paper waste sludge, various chemical dosing

PTL series

Low pressure hose pumps

Reduce maintenance downtime...

Suitable for pumping and dosing low or high viscous, pasty, pure, neutral, aggressive or abrasive liquids, those containing gases or which tend to froth or those containing solids in the following industries: paint, dairy and beverage, meat and fish processing, pharmaceutical and cosmetics, waste water and water treatment, chemical and petrochemical industries, pulp and paper, textile, soap and fats, building, ceramics.



Operating data

Capacity:	up to 10 m ³ /h
Viscosity:	up to 15000 cps ***
Temperature of pumped liquid:	up to 135°C *
Differential pressure:	up to 4 bar **
Discharge pressure:	up to 4 bar
Achievable suction:	up to 0,6 bar ***

* At a room temperature of 20°C. Furthermore, it depends on the pumped fluid, on the hose quality and on the motor construction.

** It depends on the pump dimension and on the hose quality.

*** It depends on the pump dimension/execution, on the speed and on the tube material.

Flow table PTL pumps

[l/h]

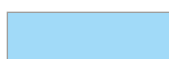
TYPE	10 Rpm	20 Rpm	40 Rpm	60 Rpm	80 Rpm	100 Rpm
PTL09		20	40	60	80	
PTL13		49	98	167	196	245
PTL17		129	259	389	518	648

[m³/h]

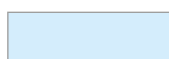
TYPE	20 Rpm	40 Rpm	60 Rpm	80 Rpm	100 Rpm
PTL25	0,38	0,76	1,15	1,53	1,92
PTL30	0,82	1,64	2,64	3,28	4,10
PTL45	2,30	4,61	6,92	9,23	11,5



Continuous use



Intermittent use



Occasional use
< 1 hour/day

Available drives

Gear motors or variable speed motors, both TEFC and explosion, electronic gear motor, inverters. Upon request, pneumatic drive units are available.

Available hoses materials & dimensions

Without reinforcing: Norprene®; Tygoprene, Silicone;

Reinforcing food hoses: NR FDA; NBR FDA; EPDM FDA

With polyamide reinforcing: Natural rubber (NR); NBR; EPDM



Size	ID	OD	Length
PTL 09	9	16	330
PTL 13	13	22	390
PTL 17	17	31	590
PTL 25	25	43	1150
PTL 30	30	55	1150
PTL 45	45	75	1455

Mineral	Hose Identification	Available
Tygoprene	Transparent smooth surface	PTL09 - PTL25
Norprene®	Off white, smooth surface	PTL09 - PTL25
Silicone	Transparent, smooth surface or rust colour	PTL09 - PTL25
EPDM Rubber	Black colour white stripe, double braided	PTL09 - PTL45
Natural Rubber	Black colour, green stripe, double braided	
Nitrile Rubber	Black colour	



TAPFLO PTL - Reliable Hose Pumps
 Exceptionally low shear, ensuring product quality,
 accurate and predictable performance
 with subsequent savings.

PTL P series

Resistance to corrosive products

The PTL P peristaltic plastic pump is designed to withstand the most aggressive chemical media to ensure safety and protection.

Housing of our PTL P series pumps are made from antistatic polyethylene (PE HD) which has a superior wear resistance. The pump housing is fully sealed, so the liquid remains inside to avoid any contamination of the floor. The rotor and the roller holders are nickel plated to reduce the downtime and maintenance.



Operating data

Capacity:	up to 10 m ³ /h
Viscosity:	up to 15000 cps ***
Temperature of pumped liquid:	up to 80°C *
Differential pressure:	up to 4 bar **
Discharge pressure:	up to 2 bar
Self-priming:	up to 7 m ***

* At a room temperature of 20°C. Furthermore, it depends on the pumped fluid, on the hose quality and on the motor construction.

** It depends on the pump dimension and on the hose quality.

*** It depends on the pump dimension/execution, on the speed and on the tube material.

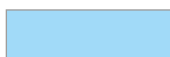
Flow table PTL pumps

[l/h]

TYPE	10 Rpm	20 Rpm	40 Rpm	60 Rpm	80 Rpm
PTL P 09		20	40	60	80
PTL P 13		49	98	167	196
PTL P 17		129	259	389	518



Continuous use



Intermittent use



Occasional use < 1 hour/day

Available hoses materials & dimensions

Natural rubber (NR) ; perbunan (NBR), EPDM, Neoprene, Neoprene®, Pharmed, Silicone and Hypalon, Tygon®

PT series

High pressure hose pumps

The latest design

PT pumps combine the best available materials with smart design solutions in order to maximise running time and minimise maintenance.

The PT series pump is an extremely reliable pump with a wide performance range, up to 150 m³/h and 15 bars, that can handle most fluids in most applications.



Operating data

Capacity:	up to 150 m ³ /h
Viscosity:	up to 100000 cps
Temperature of pumped liquid:	up to 135°C
Discharge pressure:	up to 15 bar
Self-priming:	up to 9,8 m

Flow table PT pumps

[l/h]

TYPE	10 Rpm	20 Rpm	40 Rpm	60 Rpm	80 Rpm
PT 05 (3 lobes)	3.4	6.8	13.6	20.4	
PT10 (3 lobes)	10	20	40	60	
PT 10	15	30	60	90	120
PT 15	50	100	200	300	400
PT 20	65	170	340	500	670
PT 25	200	400	800	1 200	1 600
PT 32	375	750	1 500	2 250	3 000
PT 40	565	1 170	2 340	3 510	4 680
PTX 40	800	1 600	3 200	4 800	6 400
PT 50	1750	3 500	7 000	10 500	14 000
PT 65	2300	4 600	9 200	13 800	18 400

[l/h]

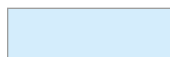
TYPE	10 Rpm	20 Rpm	30 Rpm	35 Rpm	40 Rpm	45 Rpm	50 Rpm
PTX 80	5 500	11 000	16 500	19 250	22 000	24 750	27 500
PT 80	7 000	14 000	21 000	24 500	28 000	31 500	35 000
PT 100	12 000	24 000	36 000	42 000	48 000	54 000	
PT 125	22 000	44 000	66 000	77 000	88 000		



Continuous use



Intermittent use











Occasional use < 1 hour/day

Available hoses materials

The PT series is designed to make hose changes quick and easy with no technical knowledge required. We only work with high quality compounded rubbers, reinforced with 2 to 6 individual layers of braided polyamide and with an outer layer made to strict tolerances to ensure perfect compression. The characteristics of Tapflo hoses enable them to last approximately 30% longer than other hoses on the market. They also fit the majority of other hose pumps.

For the hose inner layers, 8 materials are available to suit the diversity of the pumped fluids.

	white marking	double white marking	yellow marking	white & yellow marking	red marking	red marking	blue marking	purple marking
	NR (natural rubber)	NR FDA	NBR (buna)	NBR Food (approved FDA)	EPDM	EPDM (approved FDA)	HYPALON/CSM	VITON/FKM
								
Water treatment & Industrial waste	X	X	X		X		X	X
Ceramic industry	X				X			
Mining & quarries	X		X		X		X	X
Building & constructions	X		X		X			
Chemical	X		X		X		X	X
Food & beverage	X	X		X		X		
Paint	X				X			
Pulp & paper	X				X			
Agriculture, biogas	X	X	X		X		X	X

Pulsation dampener

In-line pulsation dampener will reduce vibration and water hammers in the piping therefore increasing the hose life.

Features & Benefits

- Pulsation reduction up to 90%
- Easy installation
- Few parts in contact with media



PT CIP

The revolutionary high pressure CLEAN IN PLACE

Tapflo as the leader of innovative peristaltic hose pump has developed a solution for easier and better clean in place hose pumps - A unique wheel to meet the requirements of its industrial customers from food, cosmetic and pharmaceutical industries.

The new PT CIP pump has a patent pending designed pump-wheel that will allow the pressing shoes to retract (not to compress the pump) for an efficient clean in place process.

Operating data

Capacity: from 0,5 up to 10 m³/h
Discharge pressure: up to 15 bar



PT pumps are available in "CIP wheel" (Clean In Place) option. It allows users, by simply reversing the direction of rotation of the pump (1/2 turn), to be able to retract the shoes automatically, in order to make the cleaning and sterilization operations, without any action on the pump. The client saves time and will keep the highest level of functionality in the process.

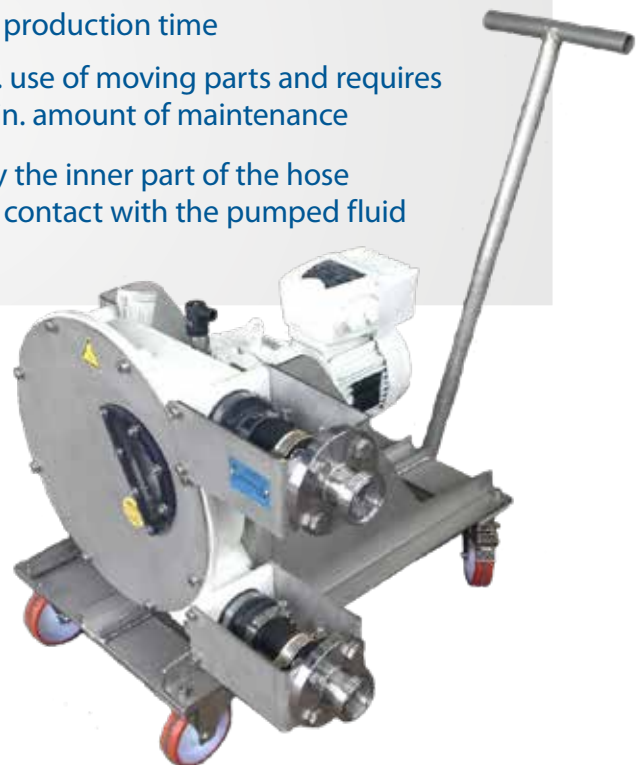
Features & Benefits

- ✓ Seal-less design
- ✓ Can run dry without damage
- ✓ Does not damage or shear the pumped fluid while maintaining a high level of hygiene
- ✓ A maximum amount of function and production time
- ✓ Min. use of moving parts and requires a min. amount of maintenance
- ✓ Only the inner part of the hose is in contact with the pumped fluid

Available hoses materials

Tapflo can offer food grade hoses in **EPDM FDA**, **NBR FDA** and **NR FDA** and meet the certifications EC 1935/2004 and FDA CFR21§177.2600.

The internal of the hose is white (**NR FDA** and **EPDM FDA**) or black (**NBR FDA**), according to the pumped fluid.



Sweden

Filaregatan 4 | S-442 34 Kungälv

Tel: +46 303 63390

Fax: +46 303 19916

E-mail addresses:

Commercial questions: sales@tapflo.com

Orders: order@tapflo.com

Tech support: support@tapflo.com

We began our journey in 1980 in Kungälv, a small town on the Swedish west coast, as a family company with an ambition to one day become a global player on the pump market.

Since the foundation, we have taken pride in delivering a wealth of knowledge and passion for pumps to the industry, whilst supplying a wide range of premium products for various industrial applications.

Over the years, the company has developed into a global Tapflo Group with branches and distributors present in nearly every region of the world.

One thing did not change - we are still a family company.

Tapflo products and services are available worldwide.

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

AUSTRALIA | AUSTRIA | AZERBAIJAN | BAHRAIN | BELARUS | BELGIUM | BOSNIA | BRAZIL | BULGARIA | CANADA | CHILE | CHINA | COLOMBIA | CROATIA | CZECH REPUBLIC | DENMARK | ECUADOR | EGYPT | ESTONIA | FINLAND | FRANCE | GREECE | GEORGIA | GERMANY | HONG-KONG | HUNGARY | ICELAND | INDIA | INDONESIA | IRELAND | ISRAEL | ITALY | JAPAN | JORDAN | KAZAKHSTAN | KUWAIT | LATVIA | LIBYA | LITHUANIA | MACEDONIA | MALAYSIA | MEXICO | MONTENEGRO | MOROCCO | NETHERLANDS | NEW ZEALAND | NORWAY | POLAND | PORTUGAL | PHILIPPINES | QATAR | ROMANIA | RUSSIA | SAUDI ARABIA | SERBIA | SINGAPORE | SLOVAKIA | SLOVENIA | SOUTH AFRICA | SOUTH KOREA | SPAIN | SWEDEN | SWITZERLAND | TAIWAN | THAILAND | TURKEY | UKRAINE | UNITED ARAB EMIRATES | UNITED KINGDOM | USA | UZBEKISTAN | VIETNAM

Tapflo Group Companies

Australia

Tapflo Oceania (Pty) Ltd.
Tel: +61 1800303633
sales@tapflo.com.au

Austria

Tapflo GmbH
Tel: +43 73227292910
sales@tapflo.at

Baltic States

Tapflo SIA
Tel: +371 67472205
sales@tapflo.lv

Belarus

Tapflo LLC
Tel: +375 173934609
sales@tapflo.by

Belgium

Tapflo Benelux B.V.
Tel: +31 (0)850074300
info@tapflo.nl

Bulgaria

Tapflo EOOD
Tel: +359 (0)29741854
office@tapflo.bg

Canada

Tapflo Canada
Tel: +1 5148135754
canada@tapflo.com

China

Tapflo (Wuxi) Pumps Co. Ltd.
Tel: +86 51082417072
sales@tapflo.cn

Croatia

Tapflo d.o.o.
Tel: +385 914884666
sales@tapflo.hr

Czech Republic

Tapflo s.r.o.
Tel: +420 513033924
tapflo@tapflo.cz

Denmark

Tapflo Danmark ApS
Tel: +45 36454600
info@tapflo.dk

France

Sarl Tapflo France
Tel: +33 134788240
info@tapflo.fr

Hungary

Tapflo Kft.
Tel: +36 30148 8551
office@tapflo.hu

India

Tapflo Fluid Handling India Pvt Ltd.
Tel: +91 2065000215
ac@tapflo.in

Ireland

Tapflo Ireland Ltd.
Tel: +353 12011911
info@tapflo.ie

Italy

Tapflo Italia S.r.l.
Tel: +39 0362306528
info@tapfloitalia.com

Japan

Tapflo Japan K.K.
Tel: +81 362403510
tapflojp@tapflo.co.jp

Kazakhstan

Tapflo LLP
Tel: +7 7273278347
sales@tapflo.kz

Netherlands

Tapflo Benelux B.V.
Tel: +31 (0)850074300
info@tapflo.nl

Poland

Tapflo Sp. z o.o.
Tel: +48 585304212
info@tapflo.pl

Romania

S.C. Tapflo Rom. S.r.l.
Tel: +40 213451255
sales@tapflo.ro

Russia

Tapflo Company LLP
Tel: +7 4952321828
sales@tapflo.com.ru

Serbia

Tapflo d.o.o.
Tel: +381 21445808
sales@tapflo.rs

Slovakia

Tapflo s.r.o.
Tel: +421 911137883
tapflo@tapflo.sk

Slovenia

Tapflo d.o.o.
Tel: +386 68613474
sales@tapflo.hr

Spain

Tapflo Ibérica S.L.
Tel: +34 918093182
avives@tapfloiberica.es

South Africa

Tapflo (Pty) Ltd.
Tel: +27 317015255
sales@tapflo.co.za

Sweden

Tapflo AB
Tel: +46 (0)30314050
info@tapflo.com

Turkey

Tapflo Makina Ltd.
Tel: +90 2164673311
sales@tapflo.com.tr

Ukraine

Tapflo LLC
Tel: +380 442226844
sales@tapflo.ua

Uzbekistan

Tapflo Uzbekistan
Tel: +998 712370940
sales@tapflo.uz

United Kingdom

Tapflo (UK) Ltd.
Tel: +44 2380252325
sales@tapflo pumps.co.uk



If your country is not listed please visit www.tapflo.com/en/contact