# tapflo

## CTI & CTH CENTRIFUGAL PUMPS

2021 | 1



➢ All about your flow

www.tapflo.com

## All about your flow

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.

Our solutions are designed and manufactured in Europe and distributed globally to offer the best service and flow solutions to our customers for a variety of applications.



Our values, Commitment, Quality and Simplicity are reflected both in our product and business approach.

For fast and flexible service and high-quality products readily available worldwide, choose Tapflo.

## **Quality commitment**

At Tapflo we are simply committed to quality. As a result, our production standards, as well as products quality, comply with various globally recognised certification and quality control standards. The Tapflo manufacturing process is certified according to ISO 9001:2015, confirming that our processes are appropriate, effective, customer-focused and continuously improved.









## **Tapflo values**

Our culture is concluded in Our values

#### **Commitment**

We are different from our competitors because of our willingness to exceed the customers' expectations, move fast and be flexible. Our culture is based on the spirit of togetherness, enthusiasm and integrity. We come from all over the world but we share the same values and we respect each other. We are committed.

#### Quality

We understand that the quality in our work is never better than the weakest link, that's why we focus on every small detail. We share a common passion for continuously finding more efficient and effective ways to provide value to our customers. As a manufacturer we have control of the complete process both in terms of our products and the way we operate internally. That is why we manufacture the highest quality pumps in our segment.

#### Simplicity

We have a saying, "Simple is art" which means we try to find smooth and uncomplicated solutions in everything. By keeping it simple we can focus on the essential, like designing uncomplicated pumps with few components. For us it is a key to success; strive to simplify what is complex.

## **CTI & CTH** Centrifugal Pumps

## meet the demands of various modern industries

The CT pumps are open or semi-open impeller single stage centrifugal pumps. They are manufactured in high finish and mechanically strong material - AISI 316L stainless steel. CT pumps are available in hygienic and industrial execution.

## **CTH** - hygienic execution

- » pump casing and wetted parts electropolished to Ra<0,8 μm</p>
- intended for hygienic duties in food, beverage and pharmaceutical industries, where cleanability is an important factor
- mechanical seals and elastomers FDA and EC1935 approved
- >> hygienic connections with DIN 11851 as standard

## **CTI** - industrial execution

- pump casing (both external and wetted parts) glass blasted to Ra<1,6 µm</p>
- a variety of connection types, mechanical seal options and other executions are available to satisfy most of industrial duties
- as standard BSPT thread connection or with flanged connections according to EN 1092-1 or ANSI 150 Lbs





Certificates may vary depending on material execution of particular product.

## Features



Simple and compact design



Low maintenance cost



Open impeller

High grade materials

# $\checkmark$

Wide range of applications

**Multiple options** 

Solids handling

Competitive price-quality ratio

## **Big choice of sealing solutions**

To suit most type of liquids the CTI & CTH pump range features top brand mechanical seals in a variety of materials:

- >> ceramics / carbon,
- >> carbon / SiC
- SiC / SiC

and elastomer parts made of EPDM (standard), FKM, FFKM, FEP / silicon or NBR.



## Wide range of applications (CTH & CTI)

### CTS H

#### **Industries:**

- » dairy
- » ice cream
- >> beverage
- » food
- » pharma
- > cosmetics
- » brewery and winery

#### **Applications:**

diary,	mil
fats,	hot
juices,	sus
alcohol,	clea
semi products,	wa
food additives,	fee
ingredients for cosmetic and pharmaceutical,	con
products in explosive and safe zones,	pov disj

mild and aggressive chemicals, hot and cold liquids, suspensions and emulsions, cleaning and washing agents, wastewater, feeding and unloading of storage tanks, containers, filters, sumps, powering process equipment, dosing systems, dispensing units,









## **CTS I**

#### **Industries:**

- » chemical,
- >> mining,
- » oil & gas,
- » packaging,
- >> printing,
- » automotive,
- machinery, wastewater treatments plants,

#### **Applications:**

oils, fuels,

- solvents,
- concentrated or diluted acids and alkalis in explosives and safe zones,
- mild and aggressive chemicals,
- hot and cold liquids,

- suspensions and emulsions,
- cleaning and washing agents,
- wastewater
- cooling and heating media,
- feeding and unloading of storage tanks, containers, filters, sumps.
- powering process equipment, dosing systems, dispensing units, test rigs,



## **CTH** - hygienic series

#### Materials, data and limits

Casing	AISI 316L stainless steel electropolished to Ra<0.8 µm						
casiliy	AIST STOL stainless steer electropolished to ha<0.0 µm						
Impeller	AISI 316L stainless steel electropolished to Ra<0.8 $\mu m$						
Mechanical seal	Single ceramic/carbon (standard), SiC/SiC or SiC/carbon						
O-rings	EPDM, FKM, FFKM, NBR, FEP compliant with FDA and EC 1935/2004 directive requirements						
Motor*	IEC standard, 3-phase, 2-pole/4-pole, IP55						
Max pressure	10 bar (PN10)						
Temperature	max 90 °C, max 180 °C for long coupled version						
Viscosity	max ~200 cSt						
Particles	max diameter is $\emptyset$ 6 mm (with standard open impeller), bigger if soft particles						

\*other motor options available on request



#### **Connection dimensions**

Model	DIN 11851 thread (standard)		DIN 32676 clamp		ISO 2852 clamp		SMS 1145 thread		RJT thread	
	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet
CTH A	25	25	25	20	25	21.3	38	25	1 1⁄2"	1"
СТН В	40	32	40	25	38	25	51	38	1 1⁄2"	1 1⁄2"
СТН С	40	40	40	40	38	38	51	38	3 "	3"
CTH D	65	50	65	50	70	51	63	51	3"	2"
CTH E	65	50	65	50	70	51	63	51	3"	2"

#### **Options and special executions**



#### **Hygienic shroud**

The hygienic motor shroud in polished AISI 304L protects the motor from spraying water during pump cleaning procedure.



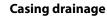
#### Long coupled execution

The perfect solution when pumping hot products like edible oil. Complete pump unit mounted on baseplate, with coupling and cover.



#### **Buffer fluid system**

A great option **when the product tends to solidify or crystalize**. An oil reservoir is connected to the mechanical seal chamber.



Draining plug with variety of connection types, **allow to empty the pump** at the end of the process.



#### Heating jacket

Great protection for the mechanical seal in cases where product solidification is likely. The heating jacket is also used when the pumped product has to maintain a specific temperature, high or low. A heating or cooling medium is continuously circulated in the jacket.



#### Adjustable feet

The solution allows **easy cleaning** of the surface underneath the pump. It can also prove useful when there is a need to move the pump to a different location.

## **CTI** - industrial series

#### Materials, data and limits

Casing	AISI 316L stainless steel glass blasted to Ra<1,6 $\mu m$					
Impeller	AISI 316L stainless steel electropolished					
Mechanical seal	Single ceramic/carbon (standard), SiC/SiC or SiC/carbon					
O-rings	EPDM (standard), FKM, FFKM, FEP/silicone or NBR					
Motor*	IEC standard, 3-phase, 2-pole/4-pole, IP55					
Max pressure	10 bar (PN10)					
Temperature	max 90 °C, max 180 °C for long coupled version					
Viscosity	max ~200 cSt					
Particles	max diameter is Ø 6 mm (with standard open impeller), bigger if soft particles					

\*other motor options available on request



#### **Connection dimensions**

Model		le thread dard)	EN 1	092-1	ANSI 150 Lbs flange		
	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet	
CTI A	1"	3⁄4"	DN25	DN 20	1"	3⁄4"	
СТІ В	1 1⁄2"	1"	DN40	DN25	1 1⁄2"	1"	
СТІ С	1 1⁄2"	1 1⁄2"	DN40	DN40	1 1⁄2"	1 1⁄2"	
CTI D	2 1⁄2"	2"	DN65	DN50	2 1⁄2"	2"	
CTI E	2 1⁄2"	2"	DN65	DN50	2 1⁄2"	2"	

#### **Options and special executions**



#### Flushed seal

Ideal when abrasive or sticky particles are present. System where a small amount of the pumped product is recirculated from the discharge side to the seal chamber through a strainer, will protect the mechanical seal and seal chamber from excessive wear.



#### Long coupled execution

The perfect solution **when pumping hot products** like oil or paraffin wax at temperatures **up to 180** °C. Complete pump unit **mounted on baseplate**, **with coupling and cover**.





#### **Buffer fluid system**

A great option **when the product tends to solidify or crystalize**. An oil reservoir is connected to the mechanical seal chamber.

#### **Casing drainage**

The drain connection at the bottom of the pump casing **allows to fully drain the pumped liquid from the casing**.



#### Flanged connections

The CTI pump can be supplied with a **standard BSPT thread connection** or with flanged connections according to **EN 1092-1 or ANSI 150 Lbs**.



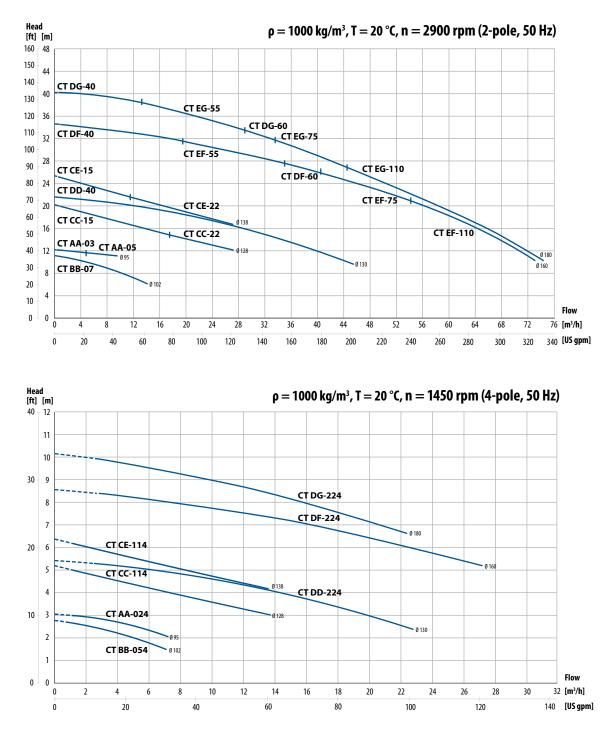
#### **Mounting brackets**

Complete pump unit may be assembled on a baseplate which can be firmly, permanently fixed to the foundation.

6

#### **Performance curves**

The performance curves are based on water.



#### **Available motor powers**

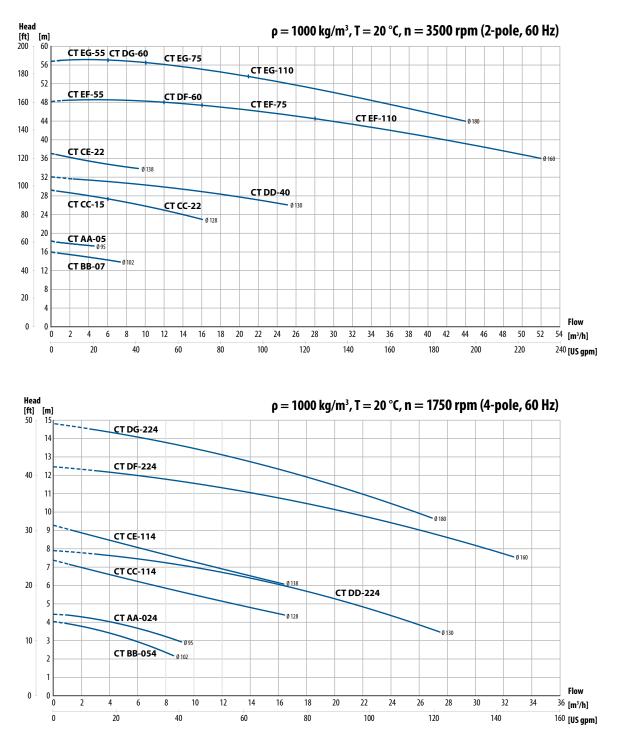
2-pole motor	AA-03	AA-05	BB-07	CC-15	CC-22 CE-22	DD-40 DF-40	DF-60 DG-60	EF-55 EG-55	EF-75 EG-75	EG-110 EF-110
Motor power [kW]	0.37	0.55	0.75	1.5	2.2	4.0	6.0	5.5	7.5	11*
IEC motor size	71	71	80	90	90	112	112	132	132	160

\* Long coupled execution

4-pole motor	AA-024	BB-054	CC-114; E-114	DD-224; DF-224; DG-224
Motor power [kW]	0.25	0.55	1.1	2.2
IEC motor size	71	80	90	100

#### Performance curves

The performance curves are based on water.



### **CT Pump code**



## **Special executions and options**

#### **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, lubricated and quenched seals are available.

Open impeller

#### Semi-open impeller

Tapflo CT pumps can be fitted with a semi-open impeller in comparison to its standard open impeller. This option ensures more stable operation, lower noise, lower vibrations and more robust construction. It is recommended to use the semi-open impeller when hard solids can be present in the pumped liquid.





Semi-open impeller

## **Mobile Pump Solutions**

## solve the problem of spread technological processes

The portability of the units allows easy movement to various locations. This means almost limitless application.

Mobile pump units are available in both hygienic and industrial designs. The great advantage is the compatibility with the majority of Tapflo centrifugal pumps range.

Moreover, it is possible to compose the trolley to your own needs by using a number of accessories such as ON-OFF switches, frequency inverters, or cable holders.

## Hygienic Trolleys

- >> Stainless steel polished drip tray
- >> Valve for drainage
- >> 3 sizes available



## **Industrial Trolleys**

- Stainless steel construction
- Compact and strong baseplate
- >> 3 sizes available



## **Special executions**



CTH Liquid Soap Dispensing Unit on M hygienic trolley



CTI mobile transferring pump on the dedicated trolley

## **Product range**

Diaphragm pumps & accessories



pumps



**PE & PTFE pumps** 







**Pharmaceutical pumps** 









**TF Filter press pumps** 







dampeners







**PT pumps** 

Peristaltic Pumps



Centrifugal pumps, filter units & accessories





### **TAPFLO AB**

#### 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

#### 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.I. 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

fly

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@tapflopumps.co.uk



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

## www.tapflo.com

Tapflo is a registered trademark of Tapflo AB. All rights reserved

ation in this document is subject to change without notice. Reproduction in any manner without written permission of Tapflo Group is forbidden Tapflo Group reserves the right to make changes in product design, or detail, and to discontinue any product or material without notice

rt. No. 10-2225