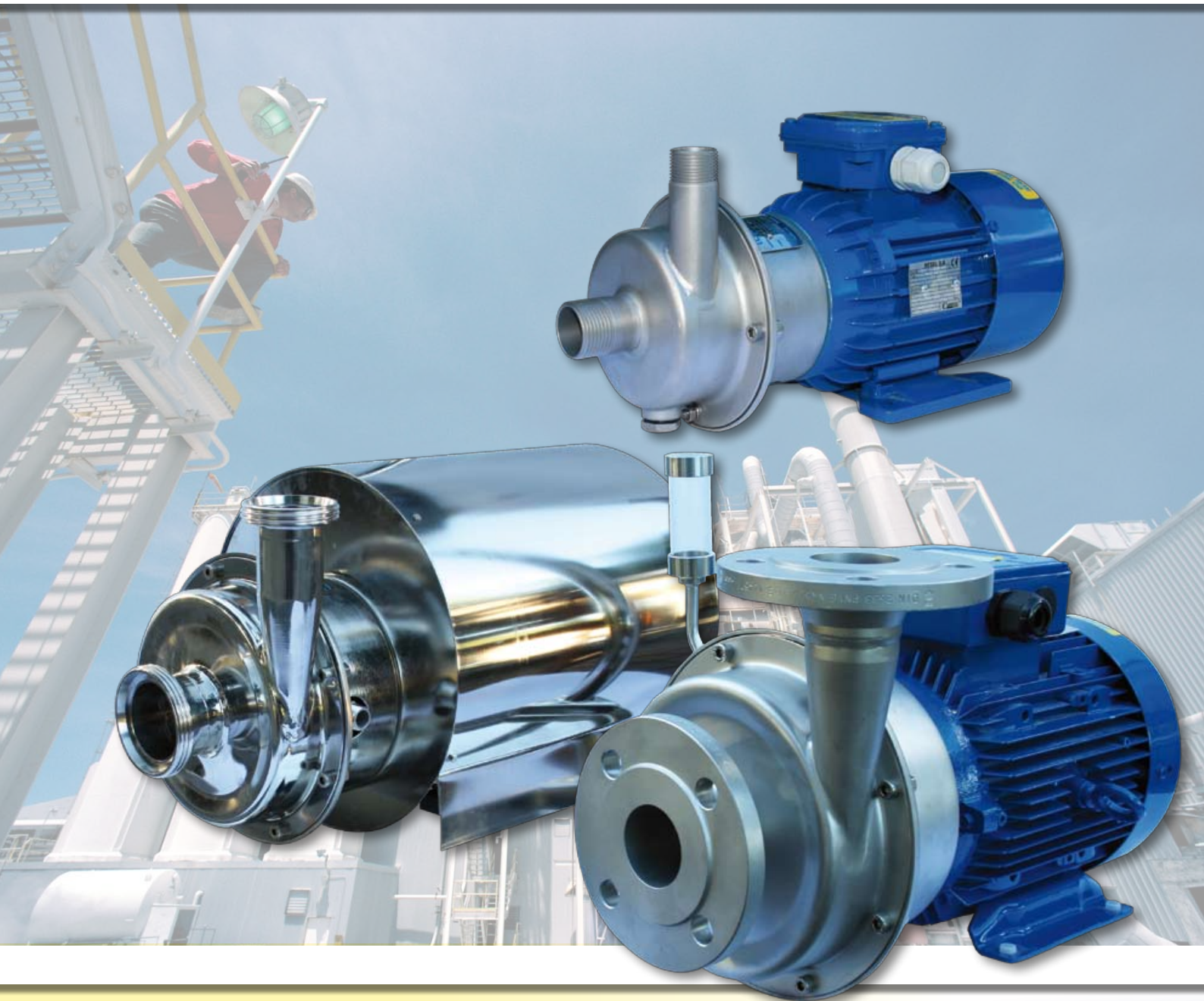


CT centrifugal pumps

2011 rev 1



topflo®

your reliable pumpchoice



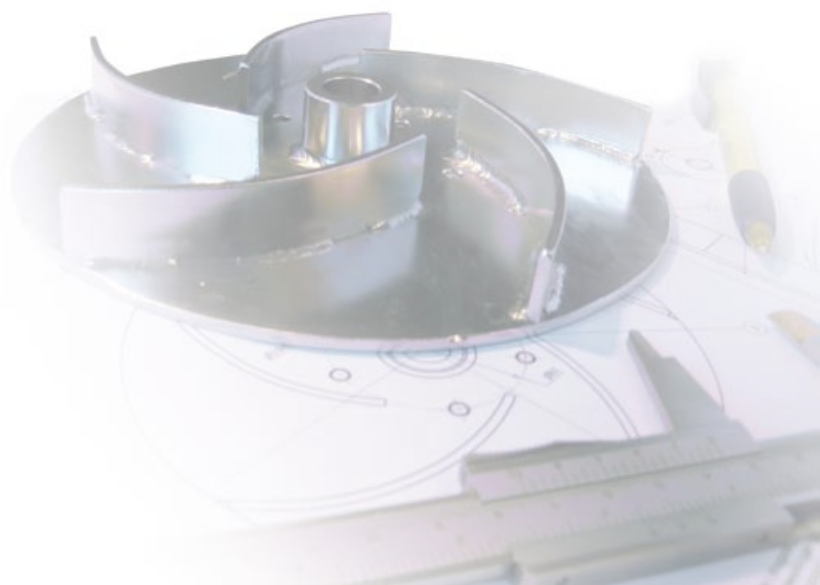
With experience from industrial fluid handling and pump manufacture since 1970, we know what you as a customer require from an industrial pump. Ever since we started our manufacture of air operated diaphragm pumps, we have always had our winning concept in mind: to create pumps for reliable duty and 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.

Tapflo quality

The Tapflo pump is usually an essential part in the process with hazardous fluids. We always strive to supply the safest and most environmental friendly solution for these fluids. As a part of our safety thinking, we are in the frontline following important standards, guidelines and directives. Many of our products comply with the EC ATEX directive for equipment in explosion hazardous environments. All our pumps are of course CE marked and followed by our comprehensive instruction manuals. Tapflo is an ISO 9001:2001 certified company. The EHEDG certification of our aseptic diaphragm pump was achieved in 2009.

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 plastic models, to complete PE & PTFE, metal and sanitary series and lately also with complete ranges of centrifugal pumps. Tapflo has now established sales offices in 20 countries and independent distributors in another 30 countries - spare parts and pumps are available worldwide.



The CT pumps are open or semi open single stage centrifugal pumps. They are manufactured in high finish and mechanical strong material stainless steel AISI 316L. The pump range meets the demands from a variety of today's industry. After all, CT is still available at a very appealing price level.

CTI – industrial series

The industrial series CTI is designed with glass blasted pump casing. A variety of connection types, mechanical seal options and other executions are available to satisfy most type of industrial duties.

With 2900 rpm motor:

CTI AA-03	7 m ³ /h, 10 m
CTI AA-05	12 m ³ /h, 10 m
CTI BB-07	17 m ³ /h, 11 m
CTI CC-15	19 m ³ /h, 22 m
CTI CC-22	34 m ³ /h, 22 m
CTI CE-22	20 m ³ /h, 31 m
CTI DD-40	50 m ³ /h, 22 m
CTI DF-40	28 m ³ /h, 35 m
CTI DF-60	42 m ³ /h, 35 m
CTI DG-60	30 m ³ /h, 47 m
CTI EF-55	42 m ³ /h, 35 m
CTI EG-55	30 m ³ /h, 47 m
CTI EF-75	60 m ³ /h, 35 m
CTI EG-75	35 m ³ /h, 47 m

With 1450 rpm motor:

CTI AA-024	7 m ³ /h, 2.7 m
CTI BB-054	9 m ³ /h, 2.8 m
CTI CC-114	18 m ³ /h, 5.5 m
CTI CE-114	22 m ³ /h, 7.7 m
CTI DD-224	25 m ³ /h, 5.5 m
CTI DF-224	34 m ³ /h, 8.7 m
CTI DG-224	42 m ³ /h, 12.0 m



available in
AT 

CTH – hygienic series

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 keys.

With 2900 rpm motor:

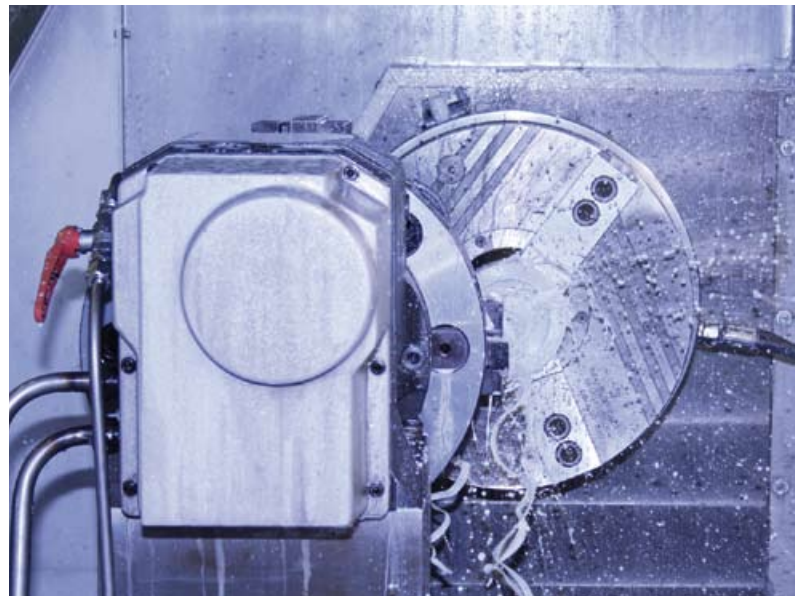
CTH AA-03	7 m ³ /h, 10 m
CTH AA-05	12 m ³ /h, 10 m
CTH BB-07	17 m ³ /h, 11 m
CTH CC-15	19 m ³ /h, 22 m
CTH CC-22	34 m ³ /h, 22 m
CTH CE-22	20 m ³ /h, 31 m
CTH DD-40	50 m ³ /h, 22 m
CTH DF-40	28 m ³ /h, 35 m
CTH DF-60	42 m ³ /h, 35 m
CTH DG-60	30 m ³ /h, 47 m
CTH EF-55	42 m ³ /h, 35 m
CTH EG-55	30 m ³ /h, 47 m
CTH EF-75	60 m ³ /h, 35 m
CTH EG-75	35 m ³ /h, 47 m

With 1450 rpm motor:

CTH AA-024	7 m ³ /h, 2.7 m
CTH BB-054	9 m ³ /h, 2.8 m
CTH CC-114	18 m ³ /h, 5.5 m
CTH CE-114	22 m ³ /h, 7.7 m
CTH DD-224	25 m ³ /h, 5.5 m
CTH DF-224	34 m ³ /h, 8.7 m
CTH DG-224	42 m ³ /h, 12.0 m



available in
AT 



Wide range of applications

The CT range has a very wide range of applications – from transfer of water, to pumping of mild chemicals. Now with the hygienic series CTH, the number of applications within food, beverage and pharmaceutical industries has increased dramatically.

Food & beverage (CTH series)

Transfer of various ingredients and products like edible oil, flavor, alcohol, dairy products and juice. With heating jacket version there are further possibilities like pumping margarine, paraffin and chocolate. There are also many auxiliary applications like transfer of CIP liquids, detergents and water.

Chemical & pharma (CTI & CTH series)

Transfer of a variety of mild chemicals and solvents.

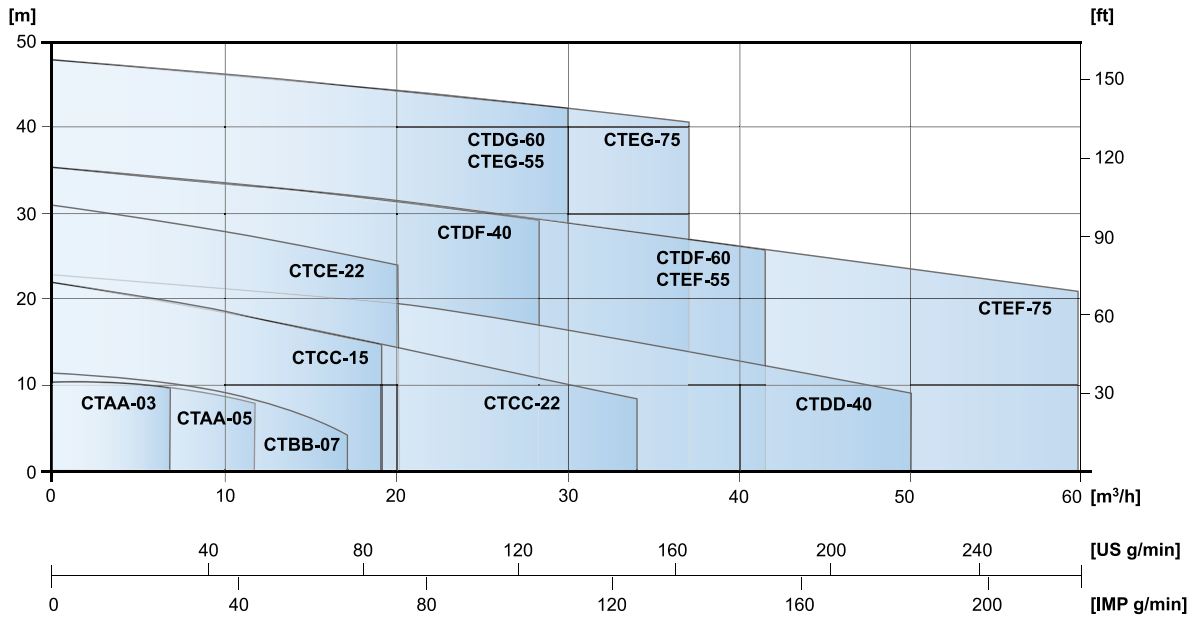
Mechanic industries (CTI series)

Handling of oil, lubricants, coolants and detergents etc.

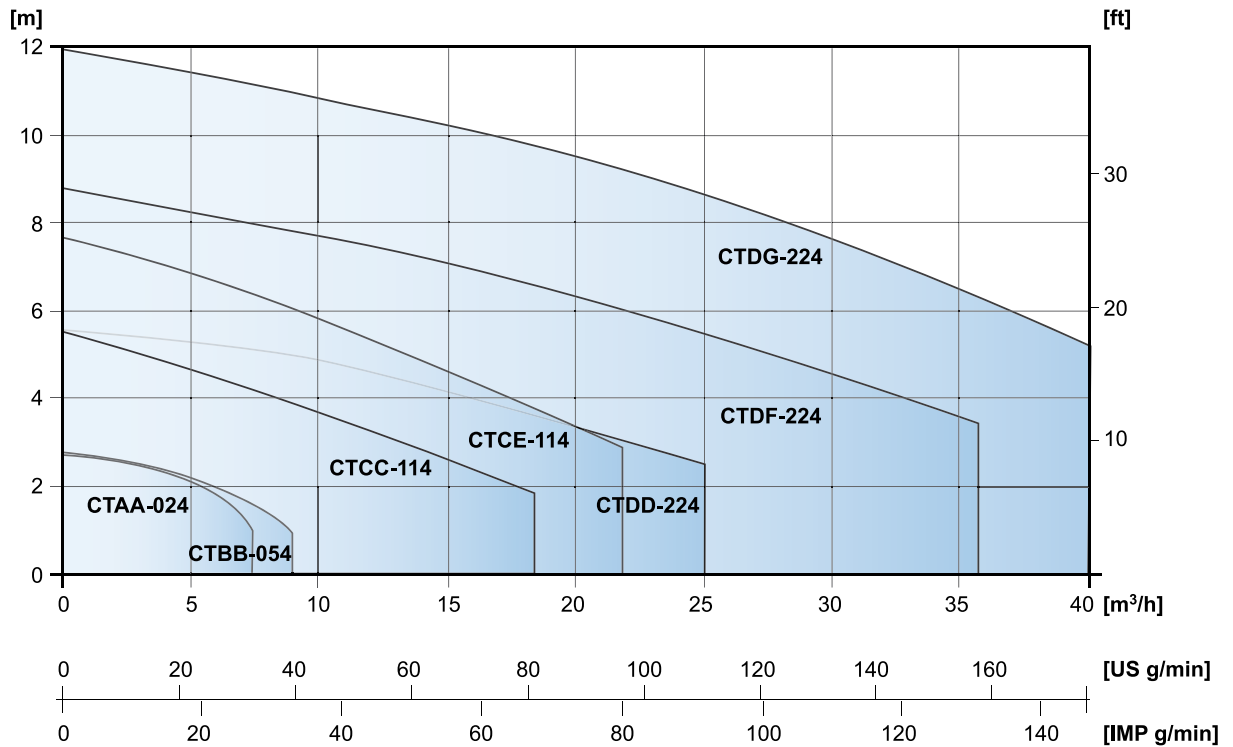
Performance curves

The performance curves are based on water at 20°C. Other circumstances will affect the performance. These curves are only for first selection, contact us for detailed curves with required power, NPSH etc.

With 2900 rpm motor

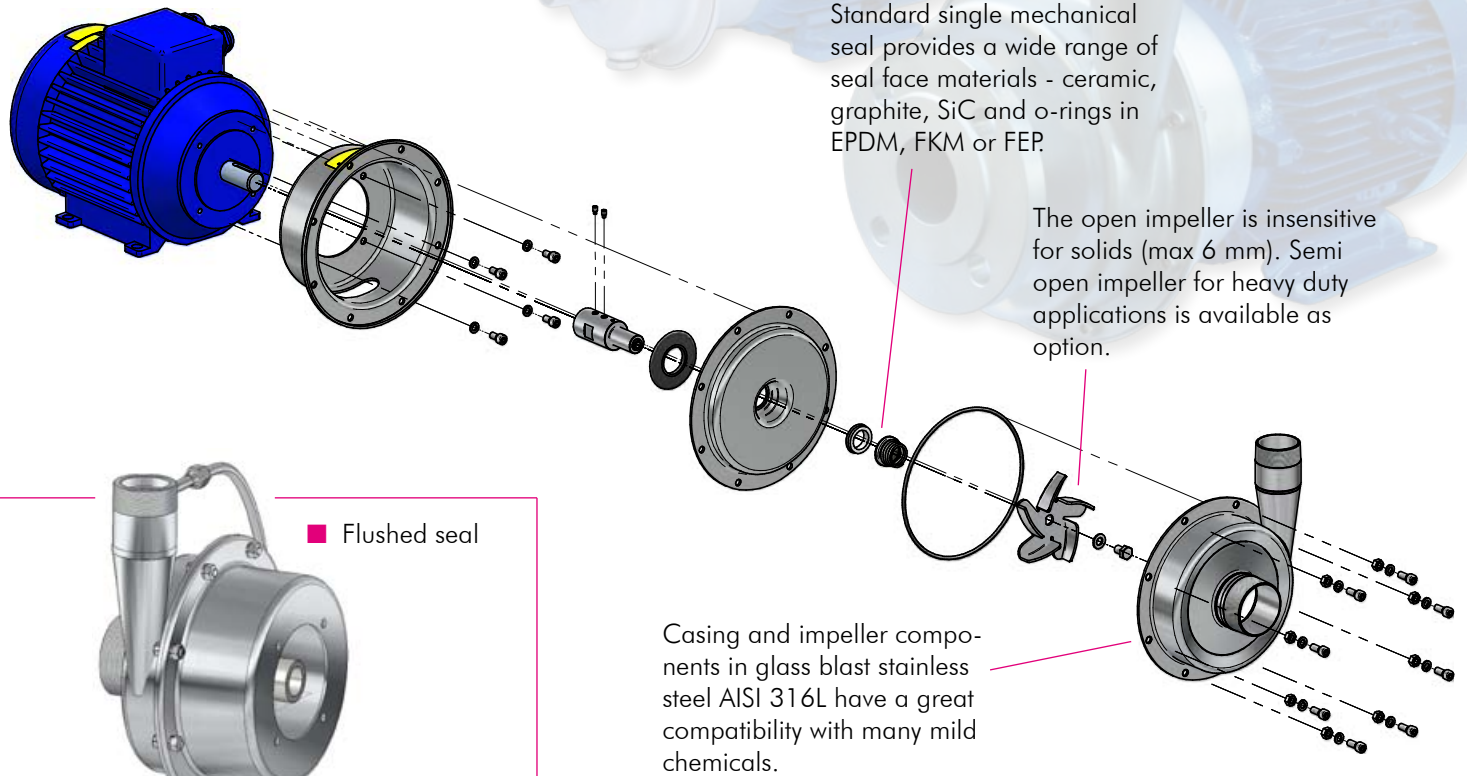


With 1450 rpm motor



CTI - industrial series

A very simple and ingenious design, with only 19 different components grants for easy and quick maintenance, in many cases completely maintenance free. The effect is very short down time and extremely low maintenance costs.



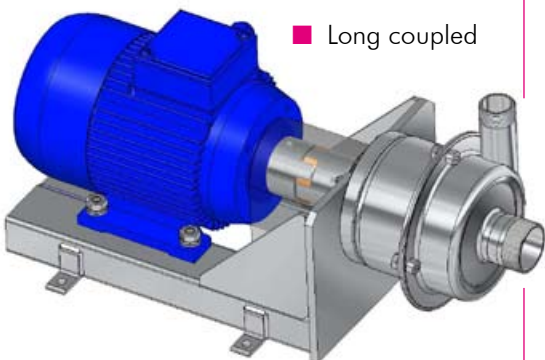
■ Flushed seal



■ Lubricated seal



■ Long coupled



Options and special executions

■ Flushed seal

Ideal when abrasive or sticky particles are present. This system where a small amount of the pumped product is recirculated from the discharge side to the seal chamber, will save the mechanical seal and seal chamber from being worn.

■ Lubricated seal

A great option where there is a potential risk of dry running, or where the product tends to solidify or crystallize. An oil cup is connected to the mechanical seal chamber.

■ Long coupled execution

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

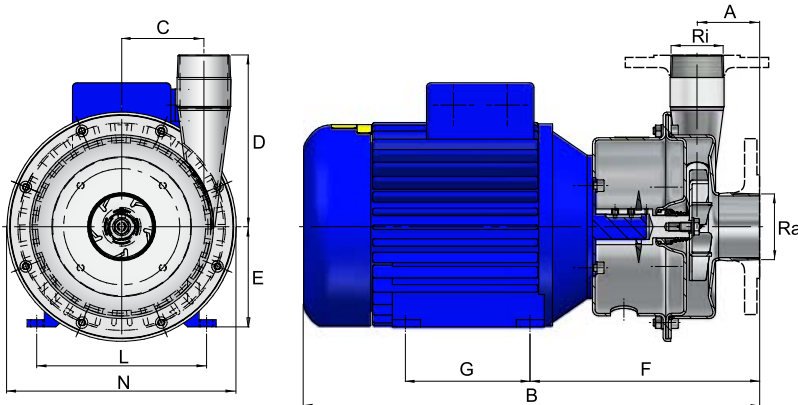
■ Flanged connections

Instead of the standard BSP threaded connections, you can order all CTI pumps with flanged connections according to DIN (2633) or ANSI 150.

■ Draining device

Plug at the bottom of the pump casing allows draining.

CTI - technical data



Connection dimensions

Model	BSPT male thread (standard)*		DIN 2633/ PN16 flange		ANSI 150 flange	
	Ra	Ri	Ra	Ri	Ra	Ri
CTI A..	1"	3/4"	25	20	1"	3/4"
CTI B..	1 1/2"	1"	40	25	1 1/2"	1"
CTI C..	1 1/2"	1 1/2"	40	40	1 1/2"	1 1/2"
CTI D..	2 1/2"	2"	65	50	2 1/2"	2"
CTI E..	2 1/2"	2"	65	50	2 1/2"	2"

* = NPT thread available as option

General dimensions

Model	Motor power (kW)	IEC motor size	A	B**	C	D	E	F	G	L	N
CTI AA-03	0.37	71	60	358	36	100	71	193	90	112	145
CTI AA-05	0.55	71	60	358	36	100	71	193	90	112	145
CTI BB-07	0.75	80	63	395	50	110	80	205	100	125	170
CTI CC-15	1.5	90	64	451	68	160	90	226	125	140	205
CTI CC-22	2.2	90	64	451	68	160	90	226	125	140	205
CTI CE-22	2.2	90	64	451	68	160	90	226	125	140	205
CTI DD-40	4.0	112	70	510	92	192	112	257	140	190	256
CTI DF-40	4.0	112	70	510	92	192	112	257	140	190	256
CTI DF-60***	6.0	112	70	521	92	192	112	262	140	190	256
CTI DG-60***	6.0	112	70	521	92	192	112	262	140	190	256
CTI EF-55	5.5	132	70	587	92	192	132	304	140	216	256
CTI EG-55	5.5	132	70	587	92	192	132	304	140	216	256
CTI EF-75	7.5	132	70	587	92	192	132	304	140	216	256
CTI EG-75	7.5	132	70	587	92	192	132	304	140	216	256
CTI AA-024	0.25	71	60	358	36	100	71	193	90	112	145
CTI BB-054	0.55	80	63	395	50	110	80	205	100	125	170
CTI CC-114	1.1	90	64	451	68	160	90	226	125	140	205
CTI CE-114	1.1	90	64	451	68	160	90	226	125	140	205
CTI DD-224	2.2	100	70	478	92	192	100	250	140	160	256
CTI DF-224	2.2	100	70	478	92	192	100	250	140	160	256
CTI DG-224	2.2	100	70	478	92	192	100	250	140	160	256

** = This dimension may vary depending on motor brand

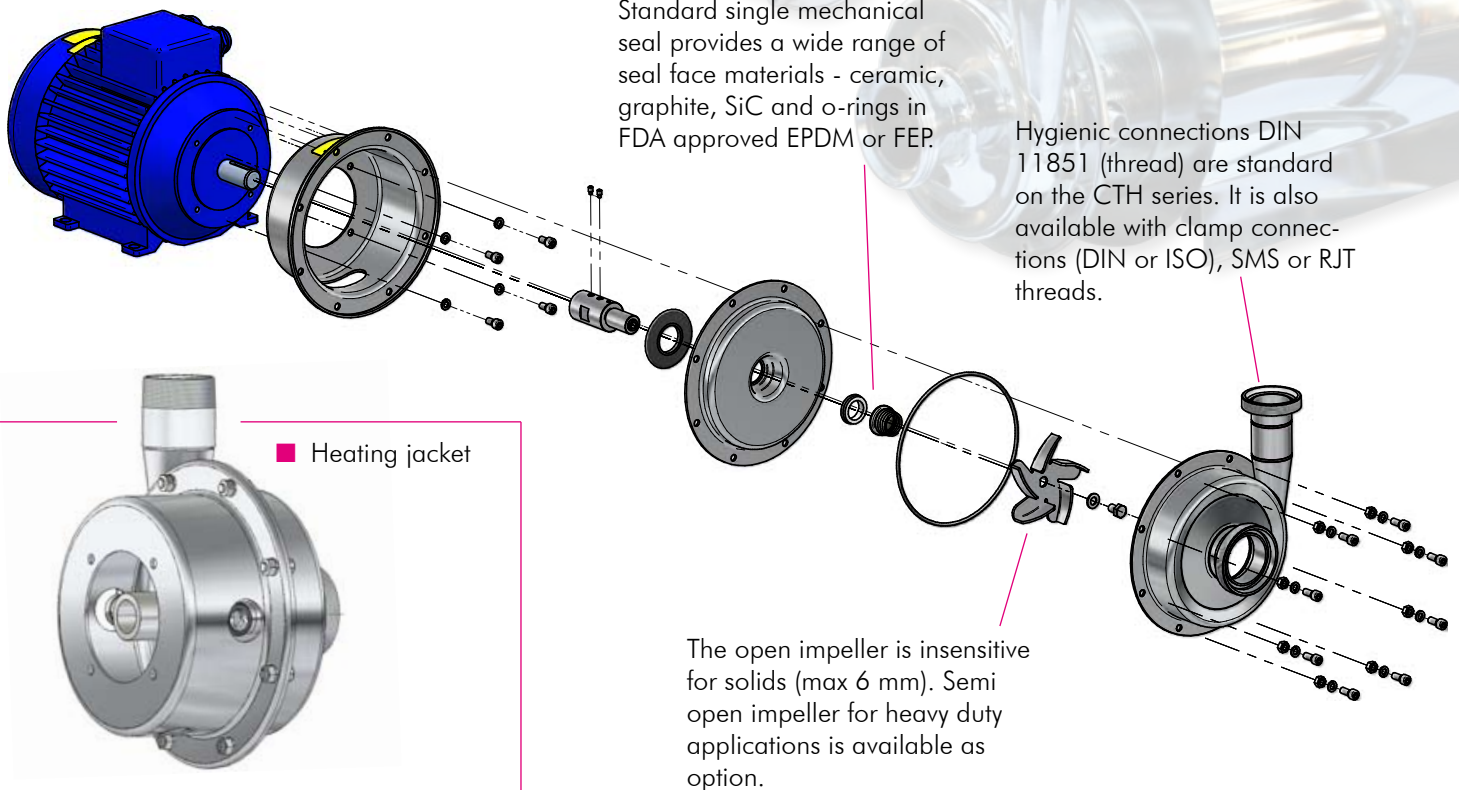
*** = Special motor with increased power. Not available in EX-proof (ATEX) version

Materials, data and limits

Casing	Stainless steel AISI 316L glass blast
Impeller	Stainless steel AISI 316L glass blast, open (standard) or optional semi open type
Mechanical seal	Single ceramic/graphite (standard), SiC/SiC or SiC/graphite, optional with oil lube or flushed
O-rings	EPDM (standard), FKM, FEP/silicone or NBR
Motor	IP55, IEC frame B3/B14 (B3 on long coupled version). Available with ATEX cat 2 or 3, Eex e or Eex d motor
Max pressure	10 bar (PN10)
Temperature	max 90°C, max 180°C for long coupled version
Viscosity	max ~200 cSt
Particles	max diameter 6 mm (with standard open impeller), bigger if soft particles

CTH - hygienic series

The CTH series is dedicated for hygienic duties mainly within food, beverage and pharmaceutical industries. With casing and impeller in <math><0.8\text{ Ra}</math> electro polished stainless steel AISI 316L, draining possibilities and hygienic shroud option it meets the demands of clean ability and high finish. Elastomers are approved according to FDA article 177.2600.



■ Heating jacket



■ Hygienic shroud



■ Casing drainage

Options and special executions

■ Heating jacket

Great protection for the mechanical seal in cases where there is a risk for solidification of the product. 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. Chocolate glaze, paraffin, starch, glucose syrup, margarine and edible oil are some application examples.

■ Hygienic shroud

The hygienic motor shroud in polished AISI 316L protects the motor from spraying water.

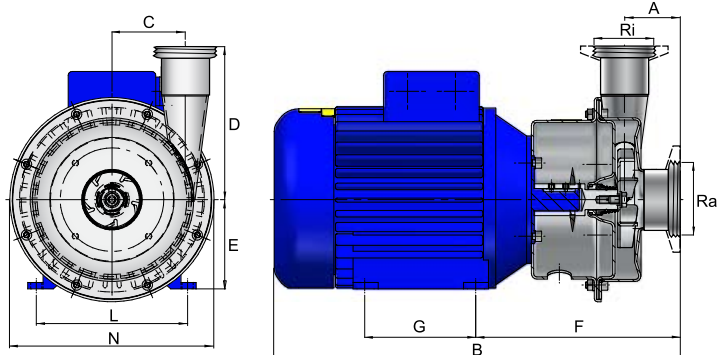
■ Casing drainage

By positioning the outlet horizontal at the bottom, the pump features a hygienic and automatic draining.

■ Long coupled execution

The perfect solution when pumping hot products like edible oil. Complete pump unit mounted on baseplate, with coupling and guard. See image on page 6.

CTH - technical data



Connection dimensions

Connection type	Dim	Model CTH				
		A..	B..	C..	D..	E..
DIN 11851 thread (standard)	Ra	25	40	40	65	65
	Ri	25	32	40	50	50
DIN 32676 clamp	Ra	25	40	40	65	65
	Ri	20	25	40	50	50
ISO 2852 clamp	Ra	25	38	38	70	70
	Ri	21.3	25	38	51	51
SMS thread	Ra	38	51	51	63	63
	Ri	25	38	38	51	51
RJT thread	Ra	1 1/2"	1 1/2"	2"	3"	3"
	Ri	1"	1 1/2"	2"	2"	2"

General dimensions

Model	Motor power (kW)	IEC motor size	A	B**	C	D	E	F	G	L	N
CTH AA-03	0.37	71	60	358	36	100	71	193	90	112	145
CTH AA-05	0.55	71	60	358	36	100	71	193	90	112	145
CTH BB-07	0.75	80	63	395	50	110	80	205	100	125	170
CTH CC-15	1.5	90	64	451	68	160	90	226	125	140	205
CTH CC-22	2.2	90	64	451	68	160	90	226	125	140	205
CTH CE-22	2.2	90	64	451	68	160	90	226	125	140	205
CTH DD-40	4.0	112	70	510	92	192	112	257	140	190	256
CTH DF-40	4.0	112	70	510	92	192	112	257	140	190	256
CTH DF-60***	6.0	112	70	521	92	192	112	262	140	190	256
CTH DG-60***	6.0	112	70	521	92	192	112	262	140	190	256
CTH EF-55	5.5	132	70	587	92	192	132	304	140	216	256
CTH EG-55	5.5	132	70	587	92	192	132	304	140	216	256
CTH EF-75	7.5	132	70	587	92	192	132	304	140	216	256
CTH EG-75	7.5	132	70	587	92	192	132	304	140	216	256
CTH AA-024	0.25	71	60	358	36	100	71	197	90	112	145
CTH BB-054	0.55	80	63	395	50	110	80	205	100	125	170
CTH CC-114	1.1	90	64	451	68	160	90	226	125	140	205
CTH CE-114	1.1	90	64	451	68	160	90	226	125	140	205
CTH DD-224	2.2	100	70	478	92	192	100	250	140	160	256
CTH DF-224	2.2	100	70	478	92	192	100	250	140	160	256
CTH DG-224	2.2	100	70	478	92	192	100	250	140	160	256

** = This dimension may vary depending on motor brand

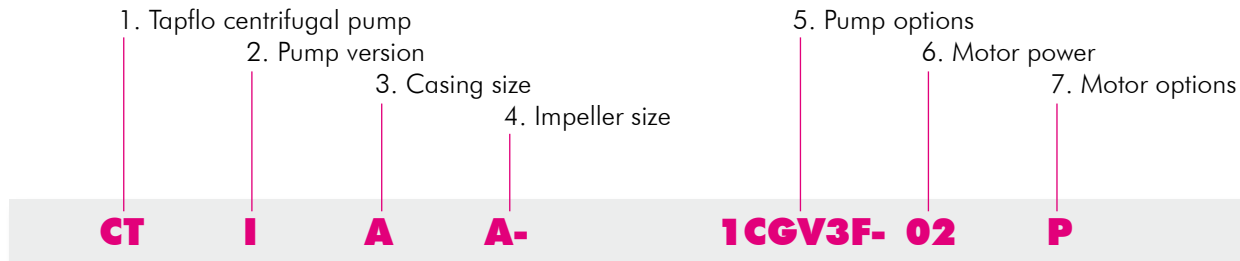
*** = Special motor with increased power. Not available in EX-proof (ATEX) version

Materials, data and limits

Casing	Stainless steel AISI 316L electro polished Ra <0.8
Impeller	Stainless steel AISI 316L electro polished Ra <0.8, open (standard) or optional semi open type
Mechanical seal	Single ceramic/graphite (standard), SiC/SiC or SiC/graphite, optional flushed
O-rings	EPDM FDA approved (standard), or FEP/silicone FDA approved
Motor	IP55, IEC frame B3/B14 (B3 on long coupled version). Available with ATEX cat 2 or 3, Eex e or Eex d motor
Max pressure	10 bar (PN10)
Temperature	max 90°C, max 180°C for long coupled version
Viscosity	max ~200 cSt
Particles	max diameter 6 mm (with standard open impeller), bigger if soft particles

Ordering a CT pump

CTI and CTH series are available in standard versions from stock as well as special versions to suit any requirements. When ordering, please follow below example.



1. CT = Tapflo centrifugal pump

2. Pump version

- I = Industrial version
- H = Hygienic version

3. Casing size

Motor flange diameter / motor IEC size

- A = 105 mm / 71
- B = 120 mm / 80
- C = 140 mm / 90
- D = 160 mm / 100 or 112
- E = 200 mm / 132

4. Impeller size

- A = 90 mm
- B = 98 mm
- C = 125 mm
- D = 130 mm
- E = 135 mm
- F = 155 mm
- G = 180 mm

5. Pump options

1. Mechanical seal

- Blank* = ceramic/graphite/EPDM (FDA on CTH)
- 1CGV = ceramic/graphite/FKM (CTI only)
- 1CGF = ceramic/graphite/FEP (FDA)
- 1CGN = ceramic/graphite/NBR (CTI only)
- 1SSE = SiC/SiC/EPDM (FDA on CTH)
- 1SSV = SiC/SiC/FKM (CTI only)
- 1SSF = SiC/SiC/FEP (FDA)
- 1SSN = SiC/SiC/NBR (CTI only)
- 1SGE = SiC/graphite/EPDM (FDA on CTH)
- 1SGV = SiC/graphite/FKM (CTI only)
- 1SGF = SiC/graphite/FEP (FDA)
- 1SGN = SiC/graphite/NBR (CTI only)

3. Connection options

- Blank* = Thread BSP on CTI
Thread DIN 11851 on CTH
- 3A = Flanged ANSI 150 (CTI only)
- 3F = Flanged DIN 2633, PN10/16 (CTI only)
- 3C = Clamp ISO 2852 (CTH only)
- 3T = Clamp DIN 32676 (CTH only)
- 3S = Thread SMS (CTH only)
- 3R = Thread RJT (CTH only)

4. Special executions

- 4J = Heating jacket
- 4F = Flushed seal
- 4Z = Oil lubricated seal
- 4H = Semi open heavy duty impeller
- 4K = Drain plug
- 4P05 = Polished to Ra<0.5 (CTH only)

6. Motor power / IEC motor size

2900 rpm motors (2-pole):

- 03 = 0.37 kW / 71
- 05 = 0.55 kW / 71
- 07 = 0.75 kW / 80
- 15 = 1.5 kW / 90
- 22 = 2.2 kW / 90
- 40 = 4.0 kW / 112
- 60 = 6.0 kW / 112 special increased power
- 55 = 5.5 kW / 132
- 75 = 7.5 kW / 132

1450 rpm motors (4-pole):

- 024 = 0.25 kW / 71
- 054 = 0.55 kW / 80
- 114 = 1.1 kW / 90
- 224 = 2.2 kW / 100

7. Motor options

- M = Hygienic motor shroud (CTH only)
- B = Long coupled pump w. base plate/coupling
- X2d = Eex d IIB T4 motor
- X2e = Eex e IIB T3 motor
- P = Single phase motor
- T = Motor with PTC thermistor

* = standard execution

Other Tapflo products

Tapflo is today one of the leading European manufacturers of air operated diaphragm pumps. With comprehensive ranges in metals and plastics, the diaphragm pumps are the core of Tapflo. The portfolio is now also widened with magdrive centrifugal pumps, vertical centrifugal pumps and filter units.

■ Air operated diaphragm pumps

PE & PTFE pumps

Pumps made of polyethylene (PE) or virgin PTFE- plastics are suitable for handling almost any kind of liquid.

Metal pumps

Available in aluminium, cast iron, stainless steel, Hastelloy and PTFE-coated aluminium.

Sanitary pumps

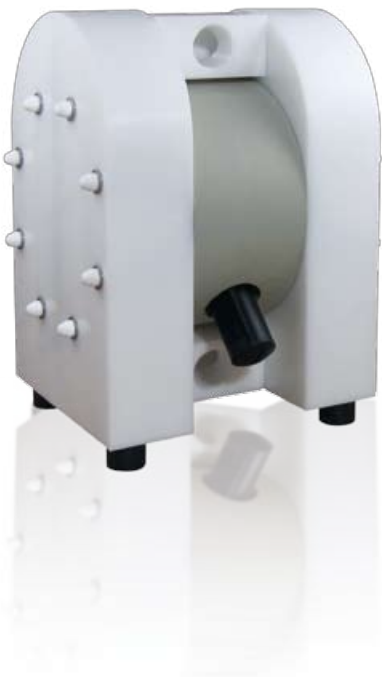
Pumps particularly designed to meet the requirements of the food, beverage, pharmaceutical and cosmetic industries.

Pharmaceutical pumps

This series is produced to serve the biotech- and pharmaceutical industries in numerous applications.

EHEDG aseptic pumps

Our new aseptic series for sterile applications in primarily the pharmaceuticals, bio technology and foodstuffs industries.



■ Magdrive centrifugal pumps



■ Vertical centrifugal pumps



■ Filter units



Please contact us at your nearest Tapflo office

Tapflo has approximately 50 sales offices spread over more than 20 countries. In addition to this we are represented by independent distributors in about another 30 countries.

■ Australia ■ Belarus ■ Belgium ■ Bosnia ■ Brazil ■ Bulgaria ■ Chile ■ China ■ Colombia ■ Croatia ■ Czech/Slovakia ■ Denmark ■ Ecuador ■ Estonia ■ Finland ■ France ■ Greece ■ Germany ■ Hong-Kong ■ Hungary ■ India ■ Indonesia ■ Iran ■ Ireland ■ Israel ■ Italy ■ Kazakhstan ■ Latvia ■ Lithuania ■ Macedonia ■ Malaysia ■ Montenegro ■ The Netherlands ■ New Zealand ■ Norway ■ Poland ■ Philippines ■ Romania ■ Russia ■ Singapore ■ Slovenia ■ South Africa ■ Spain ■ Sweden ■ Switzerland ■ Syria ■ Taiwan ■ Thailand ■ Turkey ■ Ukraine ■ United Arab Emirate ■ United Kingdom ■ USA

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