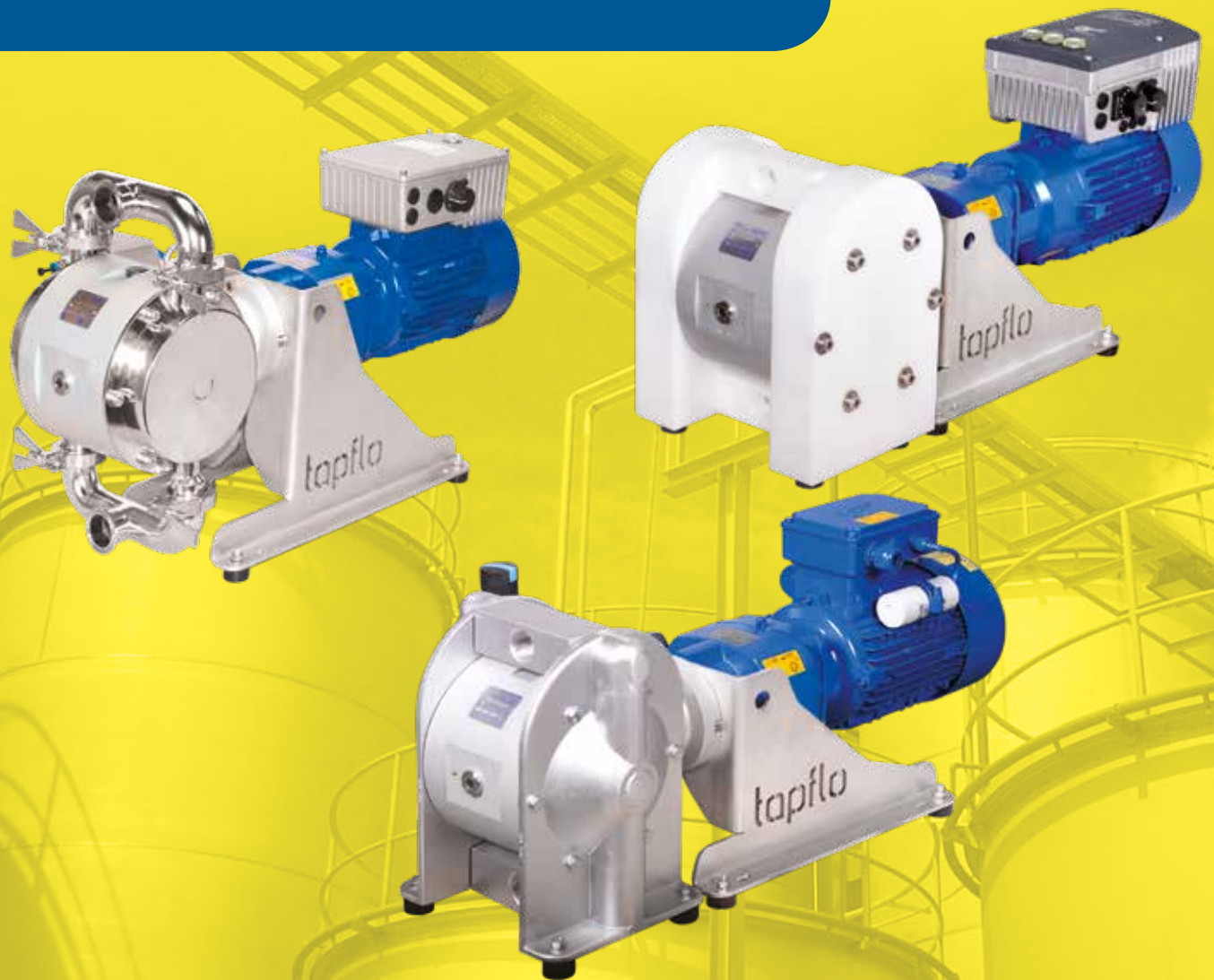


ELECTRICALLY OPERATED DOUBLE DIAPHRAGM PUMPS

2025 | 1



Electrically Operated Diaphragm pumps

Hygienic and Industrial



Features & Benefits

- ✓ **Low energy cost**
Electricity cost < compressed air cost, high efficient (IE3 class) drive
- ✓ **Long diaphragm lifetime**
Pneumatic and mechanical support of the diaphragm
- ✓ **Run dry without damage**
Easy to use, no need of guarding device
- ✓ **Low spare parts cost**
Pump has almost identical design of the wetted side as standard Tapflo air operated diaphragm pump therefore many spare parts are the same
- ✓ **Self-priming from dry suction pipe**
More options of installation
- ✓ **Clean & easy maintenance**
No hydraulic fluid required, no danger of leakage
- ✓ **Few components & long life design**
Low downtime and maintenance cost



Fast facts

Materials of wetted parts	Aluminium, PTFE coated aluminium, Stainless steel (industrial and hygienic), Plastic (PE & PTFE)
Diaphragm and ball materials	PTFE, TFM modified PTFE, EPDM, NBR, FKM
Max. capacity and pressure	Up to 220 l/min Up to 4 bar

Wide range of applications

- » Chemical industry
- » Surface conditioning
- » Water treatment
- » Paint, print industry
- » Pulp and paper industry
- » Hygienic applications
- » Mechanical industry
- » Varnish industry

Options

Pressure switch

Device monitoring discharge pressure and protecting against closing of the discharge valve. This is for protection against excessive rise of the pressure on the wet side which could result in damage of the pump.

Built-on frequency inverter

Inverter allows full control over the operation of the pump by influencing motor speed. Changing motor speed affects pumping parameters.

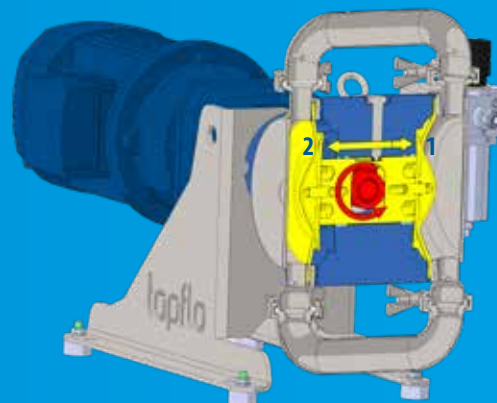
TXE series

Tapflo metal and conductive plastic EODD pumps can be used in Ex-zone 1 explosion hazardous environments. The conductive material ensures that no electrostatic loads will be accumulated in the pump. The pump unit is equipped with an ATEX rated coupling, gearmotor and air treatment system.



Working principle

The Tapflo electric diaphragm pump is driven by a gear-motor. In this type of pump there is a need to change rotary motion into reciprocating one. It is obtained by an eccentric shaft with a cam and piston. The rotary movement of the shaft (red part) is transferred to the reciprocating movement of the diaphragm shaft (yellow part).



Suction (chamber 1)

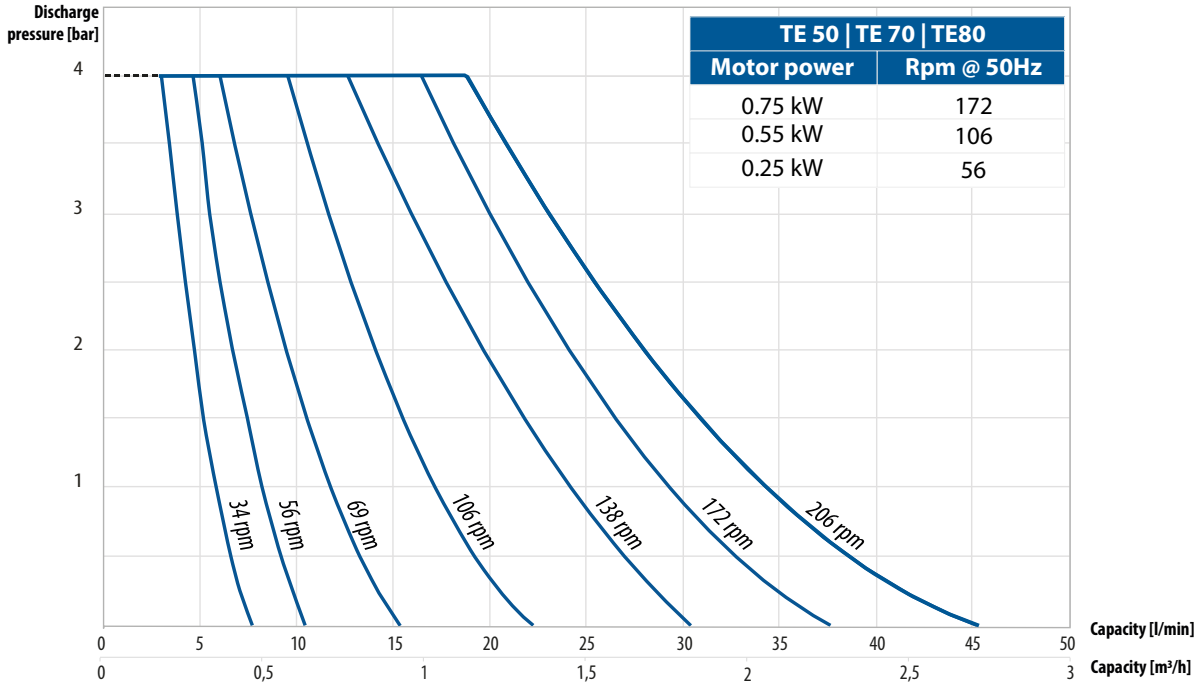
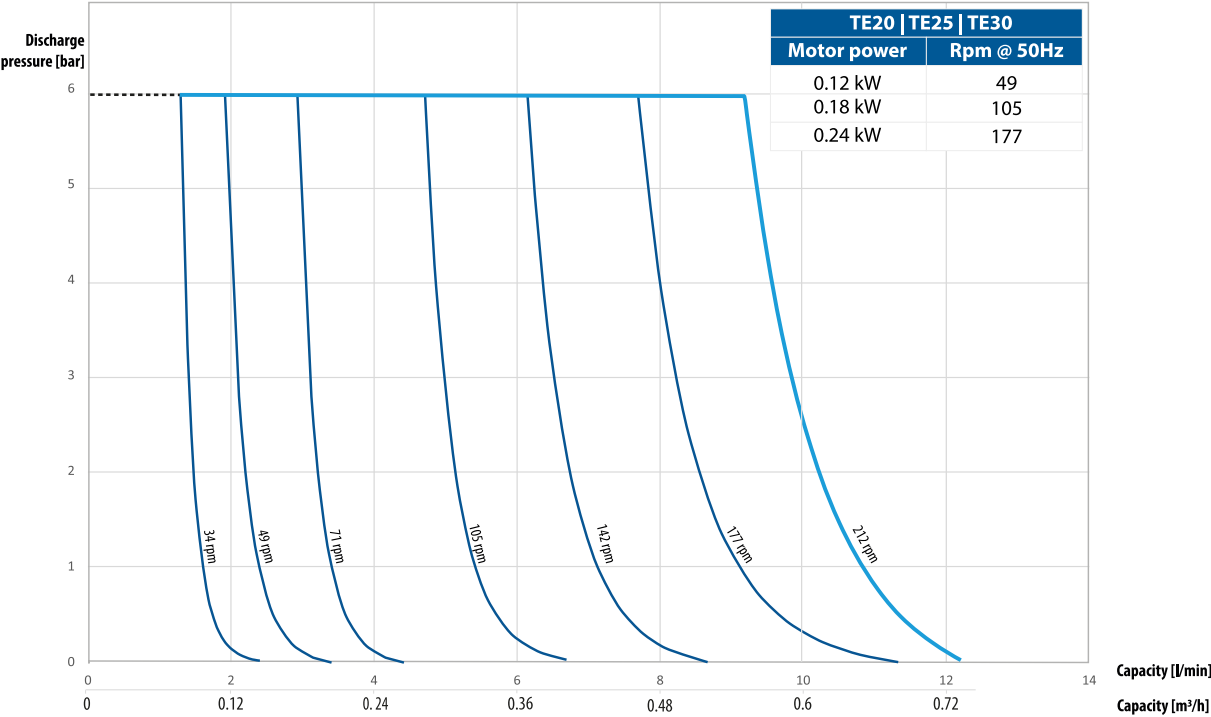
One diaphragm creates a suction action in one chamber (right side) when being pulled back from the housing.

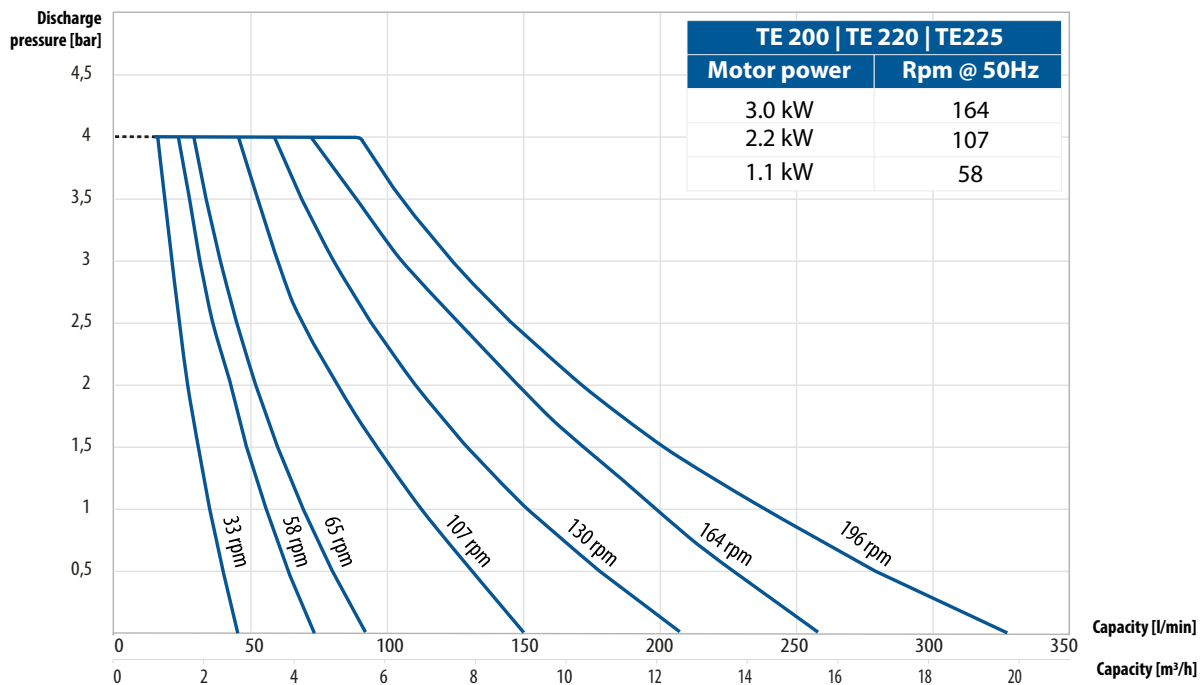
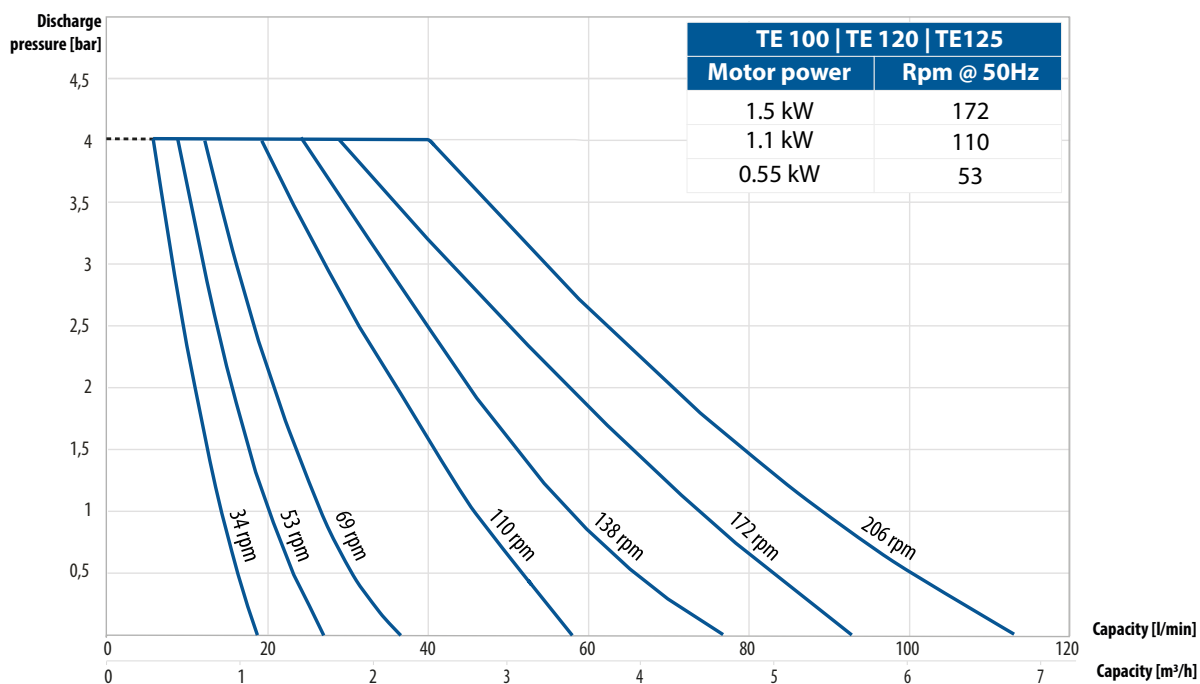
Discharge (chamber 2)

The other diaphragm is being moved by the piston to the left. This action creates pressure in chamber.

Performance curves

The performance curves are based on water. (T = 20°C, ρ = 1000 kg/m³, n = 2900 rpm).





Technical data

Technical data	PE & PTFE							
	TER20 P	TE50 P	TE100 P	TE200 P	TER20 T	TE50 T	TE100 T	TE200 T
Max capacity* [l/min] / [US GPM]	24 / 6.3	48 / 12.7	110 / 29.1	220 / 58.1	24 / 6.3	48 / 12.7	110 / 29.1	220 / 58.1
Max air pressure [bar] / [psi]	-	1.5 / 22	1.5 / 22	1.5 / 22	-	1.5 / 22	1.5 / 22	1.5 / 22
Max discharge pressure [bar] / [psi]	6 / 87	4 / 58	4 / 58	4 / 58	6 / 87	4 / 58	4 / 58	4 / 58
Max suction lift dry** [m] / [Ft]	1.6 / 5.25	4.5 / 14.8	4.6 / 15.1	3 / 9.8	1.6 / 5.25	4.5 / 11	4.6 / 13	3 / 9.8
Max suction lift wet [m] / [Ft]	8 / 26	8 / 26	8 / 26	8 / 26	8 / 26	8 / 26	8 / 26	8 / 26
Max size of solids ø in [mm] / [in]	2 / 0.08	4 / 0.16	6 / 0.24	10 / 0.39	2 / 0.08	4 / 0.16	6 / 0.24	10 / 0.39
Maximum pump speed [cycles per minute]	177@50Hz 212 @60Hz	172 @50Hz 206 @60Hz		164 @50Hz 200 @60Hz	177@50Hz 212 @60Hz	172 @50Hz 206 @60Hz		164 @50Hz; 200 @60Hz
Max liquid temp. with EPDM/NBR [°C] / [°F]	70 / 158	70 / 158	70 / 158	70 / 158	90 / 194	90 / 194	90 / 194	90 / 194
Max liquid temp. with PTFE [°C] / [°F]	70 / 158	70 / 158	70 / 158	70 / 158	110 / 230	110 / 230	110 / 230	110 / 230
Connection standard BSP female thread (G)	3/8"	1/2"	1"	1 1/2" B	3/8"	1/2"	1"	1 1/2"

Technical data	Metal						
	TE70 S	TE120 S	TE220 S	TE25 A/C	TE70 A/C	TE120 A/C	TE220 A/C
Max capacity* [l/min] / [US GPM]	48 / 12.7	110 / 29.1	220 / 58.1	26 / 6.8	48 / 12.7	110 / 29.1	220 / 58.1
Max air pressure [bar] / [psi]	1.5 / 22	1.5 / 22	1.5 / 22	-	1.5 / 22	1.5 / 22	1.5 / 22
Max discharge pressure [bar] / [psi]	4 / 58	4 / 58	4 / 58	6 / 87	4 / 58	4 / 58	4 / 58
Max suction lift dry** [m] / [Ft]	3.5 / 11	4 / 13	3 / 9.8	1.5 / 5	3.5 / 11	4 / 13	3 / 9.8
Max suction lift wet [m] / [Ft]	8 / 26	8 / 26	8 / 26	8 / 26	8 / 26	8 / 26	8 / 26
Max size of solids ø in [mm] / [in]	4 / 0.16	6 / 0.24	10 / 0.39	3 / 0.12	4 / 0.16	6 / 0.24	10 / 0.39
Maximum pump speed [cycles per minute]	172 @50Hz 206 @60Hz		164 @50Hz 200 @60Hz	177@50Hz 212 @60Hz	172 @50Hz 206 @60Hz		164 @50Hz 200 @60Hz
Max liquid temp. with EPDM/NBR [°C] / [°F]	90 / 194	90 / 194	90 / 194	90 / 194	90 / 194	90 / 194	90 / 194
Max liquid temp. with PTFE [°C] / [°F]	110 / 230	110 / 230	110 / 230	110 / 230	110 / 230	110 / 230	110 / 230
Connection standard BSP female thread (G)	3/4"	1"	1 1/2"	3/8"	3/4"	1"	1 1/2"

Technical data	Sanitary			
	TE30	TE80	TE125	TE225
Max capacity* [l/min] / [US GPM]	28 / 7.4	48 / 12.7	110 / 29.1	220 / 58.1
Max air pressure [bar] / [psi]	-	1.5 / 22	1.5 / 22	1.5 / 22
Max discharge pressure [bar] / [psi]	6 / 87	4 / 58	4 / 58	4 / 58
Max suction lift dry** [m] / [Ft]	2 / 6.6	3.5 / 11	4 / 13	3 / 9.8
Max suction lift wet [m] / [Ft]	7 / 23	8 / 26	8 / 26	8 / 26
Max size of solids ø in [mm] / [in]	3 / 0.12	4 / 0.16 18 / 0.7***	6 / 0.24 18 / 0.7***	10 / 0.39 51 / 2***
Maximum pump speed [cycles per minute]	177@50Hz	172 @50Hz 206 @60Hz		164 @50Hz 200 @60Hz
Max liquid temp. with EPDM/NBR [°C] / [°F]	90 / 194	90 / 194	90 / 194	90 / 194
Max liquid temp. with PTFE [°C] / [°F]	110 / 230	110 / 230	110 / 230	110 / 230
Connection standard	DN 25 SMS 3017 tri-clamp	DN 25 SMS 3017 tri-clamp	DN 38 SMS 3017 tri-clamp	DN 51 SMS 3017 tri-clamp

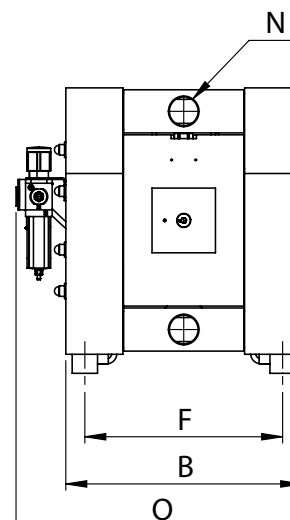
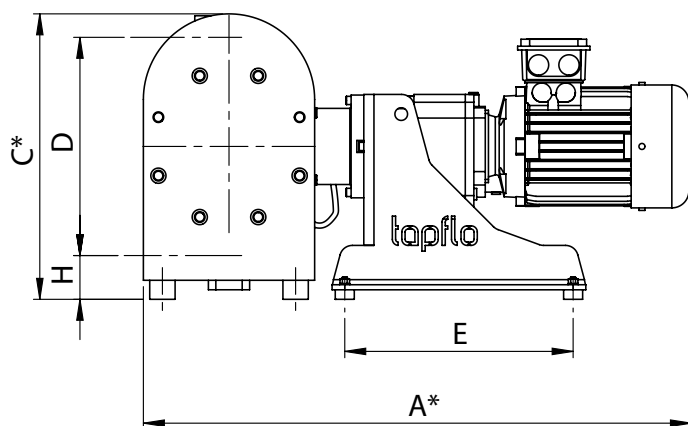
* = @ 60 Hz

*** = With stainless steel valve balls, other materials may reduce suction. Please consult us in this matter.

**** = Flap valve version

Dimensions

Dimensions in mm (where other is not indicated) Dimensions in inch (where other is not indicated)



		Pump size											
		PE& PTFE				Metal				Sanitary			
		TER20	TE50	TE100	TE200	TE25	TE70	TE120	TE220	TE3	TE80	TE125	TE225
A*		491 / 19.33	653 / 25.71	780 / 30.71	864 / 34.02	491 / 19.33	653 / 25.71	781 / 30.75	865 / 34.06	491 / 19.33	653 / 25.71	720 / 28.35	864 / 34.02
B		163 / 6.42	244 / 9.61	256 / 10.08	372 / 14.65	186 / 7.32	244 / 9.61	246 / 9.69	351 / 13.82	199 / 7.83	244 / 9.61	234 / 9.21	351 / 13.82
C*		169 / 6.65	246 / 9.69	322 / 12.68	450 / 17.72	213 / 8.39	275 / 10.83	325 / 12.80	453 / 17.83	307 / 12.09	370.6 / 14.57	434 / 17.09	639 / 25.16
D		186 / 7.32	190 / 7.48	252 / 9.92	345 / 13.58	132 / 5.20	192 / 7.56	257 / 10.12	348 / 13.70	240 / 9.45	294 / 11.57	350 / 13.78	528 / 20.79
E		240 / 9.45	290 / 11.42	330 / 12.99	360 / 14.17	240 / 9.45	290 / 11.42	330 / 12.99	360 / 14.17	240 / 9.45	290 / 11.42	390 / 15.35	450 / 17.72
F		112 / 4.41	214 / 8.43	214 / 8.43	311 / 12.24	120 / 4.72	214 / 8.43	214 / 8.43	311 / 12.24	173 / 6.81	214 / 8.43	204 / 8.03	311 / 12.24
H		24 / 0.94	38 / 1.5	45 / 1.77	69 / 2.72	24 / 0.94	37 / 1.46	42 / 1.65	68 / 2.68	42 / 1.65	52 / 2.05	62 / 2.44	79 / 3.11
N	BSP	¾"	½"	1"	1 ½"	¾"	¾"	1"	1 ½"	-	-	-	-
	TC ¹	-	-	-	-	-	-	-	-	1"	1"	1 ½"	2"
	DIN flange	DN15	DN15	DN25	DN40	DN15	DN20	DN25	DN40	-	-	-	-
	ANSI flange	½"	½"	1"	1 ½"	½"	¾"	1"	1 ½"	-	-	-	-
	DIN ²	-	-	-	-	-	-	-	-	DN25	DN25	DN40	DN50
	SMS ³	-	-	-	-	-	-	-	-	25	25	38	51
	RJT	-	-	-	-	-	-	-	-	1"	1"	1 ½"	2"
O		-	312 / 12.28	335 / 13.19	450 / 17.72	-	300 / 11.81	305 / 12.01	406 / 15.98	-	298 / 11.73	310 / 12.20	398 / 15.67

¹ SMS3017 ² DIN 11851 ³ SMS 1145 *Max height and length may vary depending on motor type

Pump code

The model number on the pump tells the pump size and material of the pump components

I.	II.	III.	IV.	V.	VI.	VII.	VIII.
TE	B	100	P	T	T	054	D

I. TE = Tapflo electric double diaphragm pump

II. Basic options:

B = Backup diaphragm pump

J = Heating jacket (sanitary series only)

K = Built-on dampener (plastic and alu pumps only)

L = Valve lifting system (metal series only)

T = Twin inlet/outlet pump

R = Rod valve pump (instead of balls)

X = ATEX approved, II 2G Ex h IIC T6...T4 Gb X

Y = High lift valve seats (plastic series only)

III. Pump size

20; 50; 100; 200 = Plastic series

25; 70; 120; 220 = Metal series

30; 80; 125; 225 = Hygienic series

IV. Material of wetted parts:

P = PE

T = PTFE

S = Stainless steel AISI316L

A = Aluminium

X = PTFE coated aluminium

V. Material of diaphragms:

E = EPDM

N = NBR (nitrile rubber)

T = PTFE

B = PTFE TFM 1705b

V = FKM

W = White EPDM

Z = PTFE with white EPDM back

VI. Material of valve balls:

E = EPDM

N = NBR (nitrile rubber)

T = PTFE

S = AISI 316 stainless steel

U = PU (polyurethane)

K = Ceramic

V = FKM

B = PTFE TFM 1635

P = PE1000

C = SiC

VII. Gearmotor

024 = 0.25 kW

054 = 0.55 kW

074 = 0.75 kW

114 = 1.1 kW

154 = 1.5 kW

224 = 2.2 kW

304 = 3.0 kW

VIII. Motor options:

M = Hygienic motor shroud

C = External motor cooling

D = Built-on frequency inverter

X2DE = II 2G Ex db eb IIC T4 Gb

P = Single phase motor

Changes reserved without notice

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.

ARMENIA | AUSTRALIA | AUSTRIA | AZERBAIJAN | BAHRAIN | BELGIUM | BOSNIA | BRAZIL | BULGARIA | CANADA | CHILE | CHINA | COLOMBIA | CROATIA | CZECH REPUBLIC | DENMARK | ECUADOR | EGYPT | ESTONIA | FINLAND | FRANCE | GEORGIA | GERMANY | GREECE | 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 | OMAN | PHILIPPINES | POLAND | PORTUGAL | QATAR | ROMANIA | 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

China

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

Ireland

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

Poland

Tapflo Sp. z o.o.
Tel: +48 609 995 500
info@tapflo.pl

Spain

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

Uzbekistan

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

Austria

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

Croatia

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

Italy

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

Qatar

Tapflo Gulf General Trading Co. L.L.C.
Tel: +971 58 582 3630
sales@tapfloqulf.com

South Africa

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

Bahrain

Tapflo Gulf General Trading Co. L.L.C.
Tel: +971 58 582 3630
sales@tapfloqulf.com

Czech Republic

Tapflo s.r.o.
Tel: +420 513033920
tapflo@tapflo.cz

Japan

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

Romania

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

Sweden

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

Baltic States

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

Denmark

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

Kazakhstan

Tapflo LLP
Tel: +7 727 327 83 47
sales@tapflo.kz

Saudi Arabia

Tapflo Gulf General Trading Co. L.L.C.
Tel: +971 58 582 3630
sales@tapfloqulf.com

Turkey

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

Belgium

Tapflo Benelux B.V.
Tel: +31 (0) 6 21850664
info@tapflo.nl

France

Sarl Tapflo France
Tel: +33188788240
info@tapflo.fr

Kuwait

Tapflo Gulf General Trading Co. L.L.C.
Tel: +971 58 582 3630
sales@tapfloqulf.com

Serbia

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

Ukraine

Tapflo LLC
Tel: +380 44226844
sales@tapflo.ua

Bulgaria

Tapflo EOOD
Tel: +359 886 124 937
office@tapflo.bg

Hungary

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

Netherlands

Tapflo Benelux B.V.
Tel: +31 (0) 6 21850664
info@tapflo.nl

Slovakia

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

United Arab Emirates

Tapflo Gulf General Trading Co. L.L.C.
Tel: +971 58 582 3630
sales@tapfloqulf.com

Canada

Tapflo Canada
Tel: +1 514 409 8380
office@tapflo.ca

India

Tapflo Fluid Handling India Pvt Ltd.
Tel: +91 9028574063
enquiry@tapflo.in

Oman

Tapflo Gulf General Trading Co. L.L.C.
Tel: +971 58 582 3630
sales@tapfloqulf.com

Slovenia

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

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