



**Tecno  
—Matic**  
Pump

Every  
stroke  
counts

Overview Catalog



## Every stroke counts...

**Tecno-Matic** develops and manufactures diaphragm pumps that facilitate our customer's processes through innovative solutions. Our knowledge, development and production of pumps for the industry are based on more than 10 years of experience.

- ✓ over 10 years of pump production experience
- ✓ all pumps produced in the Czech Republic
- ✓ innovative solutions – patented
- ✓ proven low energy consumption
- ✓ low maintenance / parts costs
- ✓ use of premium materials

**Tecno-Matic** pumps are manufactured in the Czech Republic. Our location in combination with efficient logistics means that fast delivery times can be guaranteed.

**Tecno-Matic** provides diaphragm pumps for:

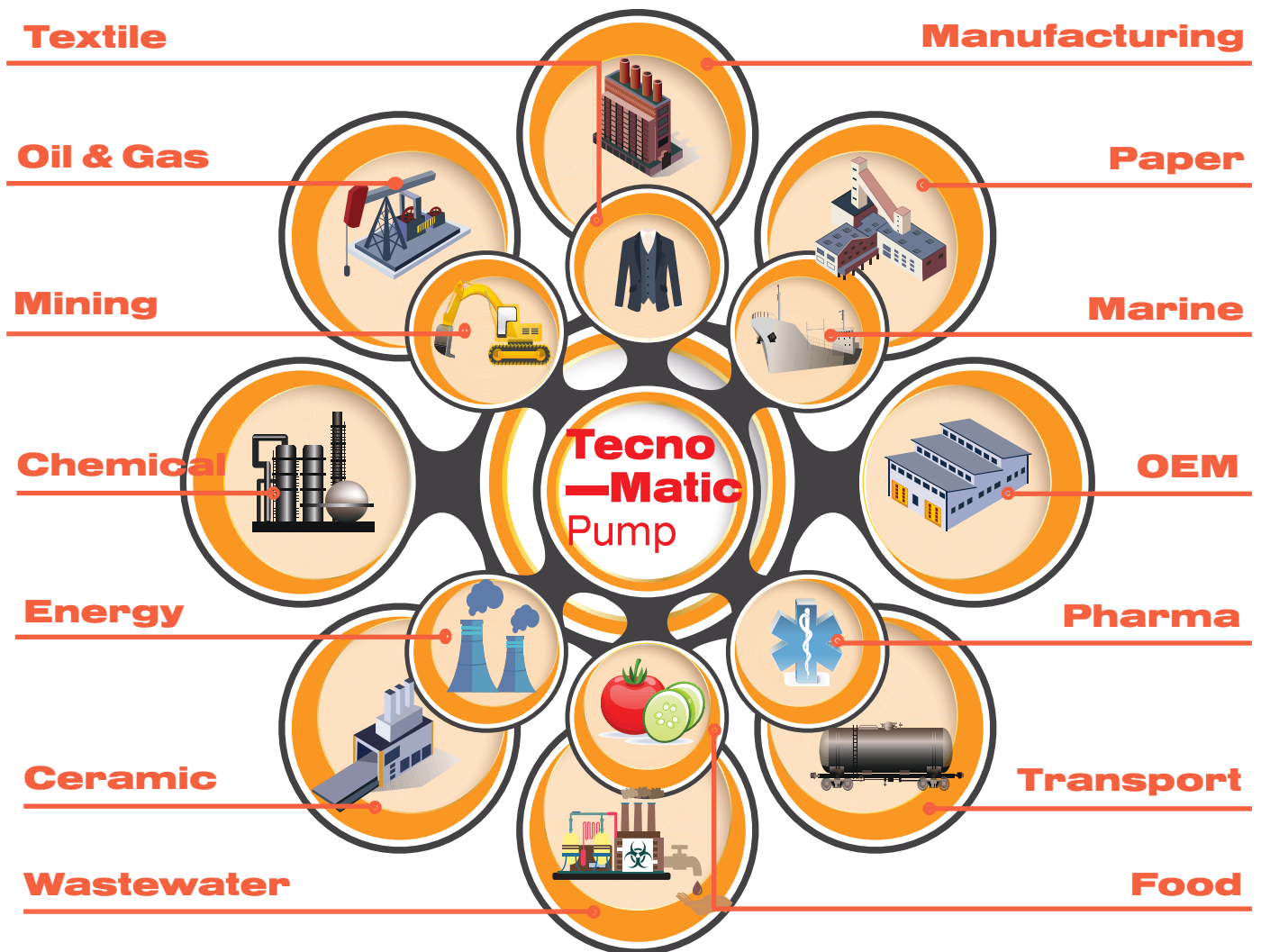
- paint & ink
- pulp & paper
- resins and adhesives
- wastewater
- food / sanitary
- marine
- transport
- mining and chemical process

## Quality certified

All our products are CE marked and followed by our comprehensive instruction manuals. Tecno Matic's manufacturing process is certified according to ISO 9001:2001. All of our products are available in versions that comply with EC ATEX directives for equipment in explosive and hazardous environments.



## Applications and Industries



## TM 1 series pumps

Tecno-Matic pumps are designed to meet your demands on high efficiency and low costs for energy and maintenance.

The unique pump design gives low pulsations and therefore low vibrations and sound levels. The loads in the system are reduced, increasing the number of potential application areas. Thanks to a direct central flow we have managed to minimize energy losses and thereby reducing air consumption. This, combined with its compact measurements and quiet, feathered flap valves, makes the pump particularly well suited for original equipment manufacturers (OEMs). Especially since the TM1 pumps can be installed in any given position.

Tecno-Matic TM1 pumps are made from aluminium, Polypropylene, HDPE, stainless steel or PTFE. They are suitable for handling almost any kind of liquid whether it is viscous, chemically aggressive or with solids.

The TECNO-MATIC TM1 pump is the perfect choice for anyone who today has conventional AODD pumps. Loud, noisy and frequent service demanding pumps can be replaced with quiet and efficient TM pumps – in virtually any application.



Double acting TM1 pump

Pneumatic TM1 pump

## Benefits

- ✓ Low noise
- ✓ Low vibration
- ✓ High stroke frequency, means low liquid pulsation
- ✓ Equipped with PEEK flat-valves
- ✓ Material choice for machined pump body
- ✓ Standard PTFE / NBR backup diaphragms
- ✓ Only few liquid wetted parts
- ✓ New high speed air-motor design
- ✓ Excellent abrasive liquid resistance
- ✓ Up to 35% lower air-consumption
- ✓ Very compact design
- ✓ Operating in each position
- ✓ Dry running capability
- ✓ Low maintenance costs

### Need Low Pulsation? No Problem!

The TM1 pumps are ideal for applications that require low pulsation and a smooth flow. The patented air valve allows us to eliminate and reduce pulsations WITHOUT expensive pulsation dampeners or surge tanks

#### Pulsation chart

**TM Series pumps  
(in low pulse mode)**



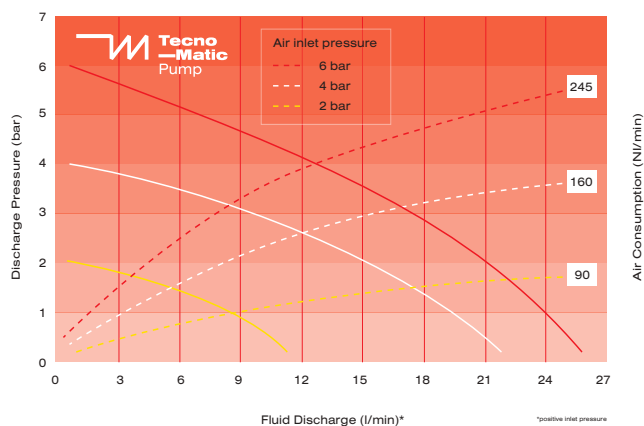
**AODD pumps**



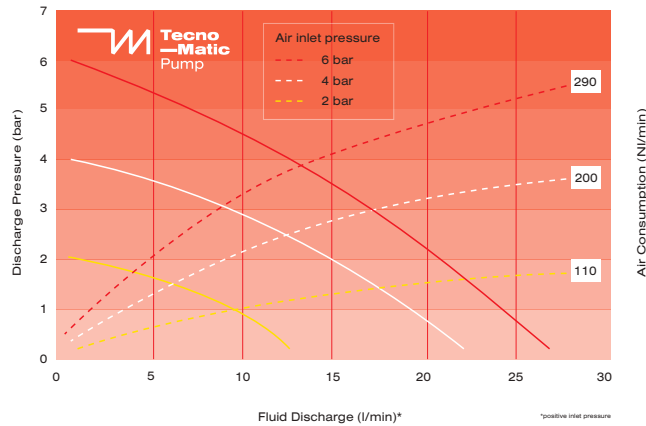
# Flowchart

The performance curves are based on water at 20°C. Other circumstances might change the performance.

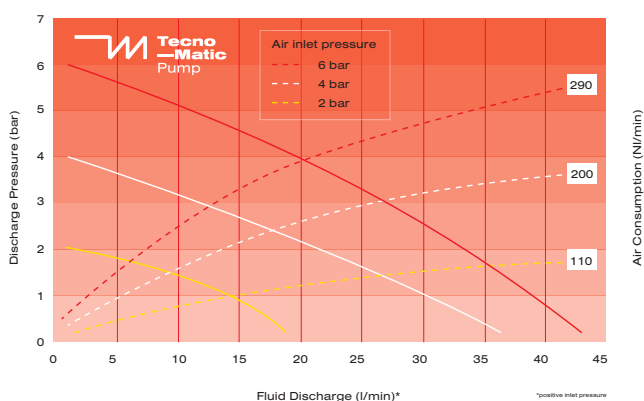
TM1-15



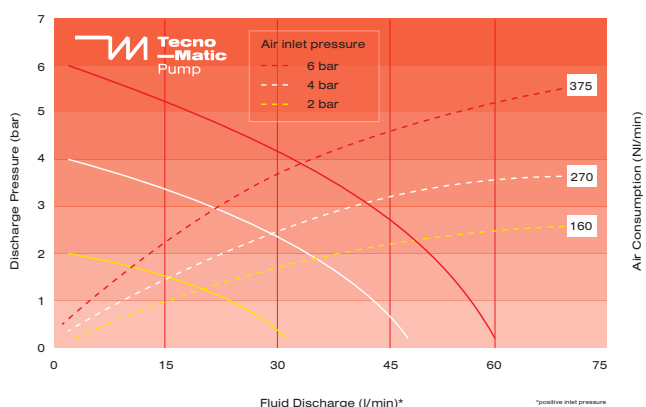
TM1-30



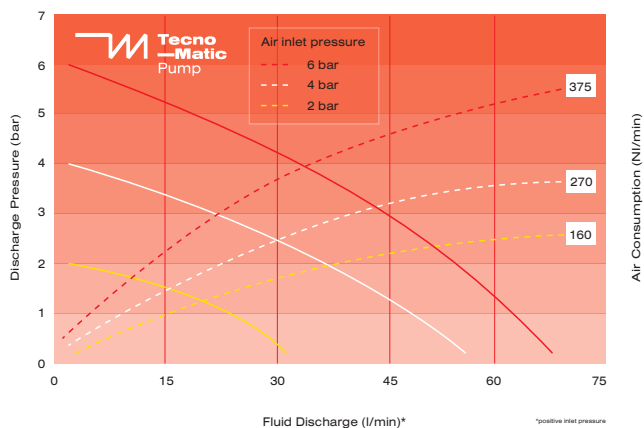
TM1-40



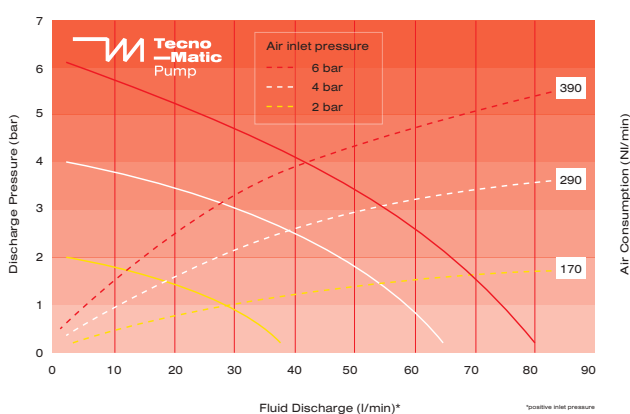
TM1-60



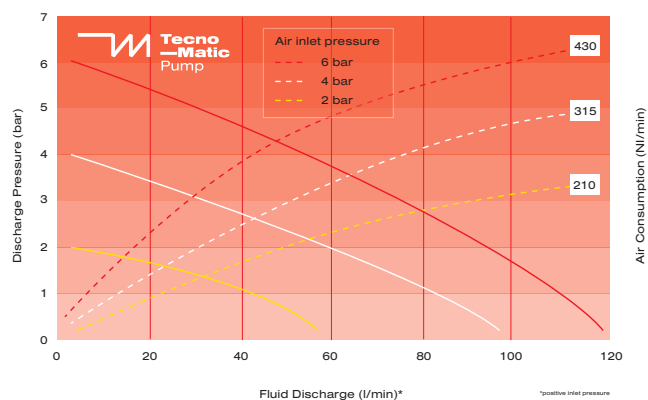
TM1-70



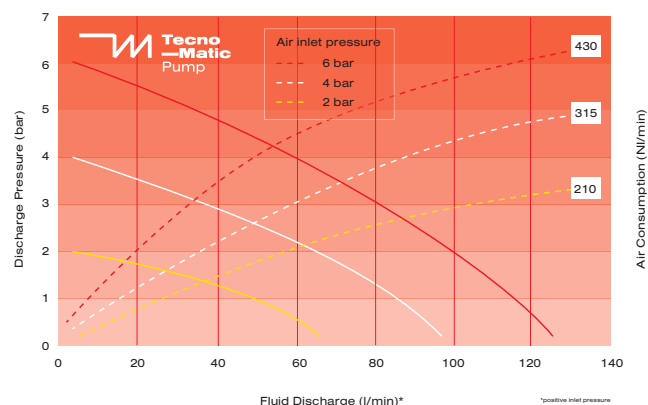
TM1-80



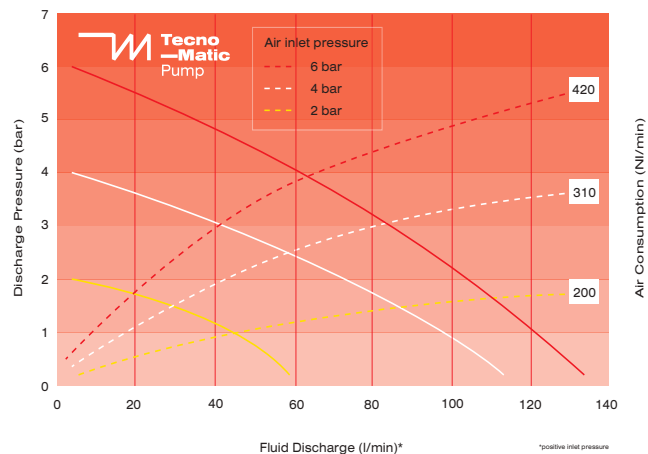
TM1-120



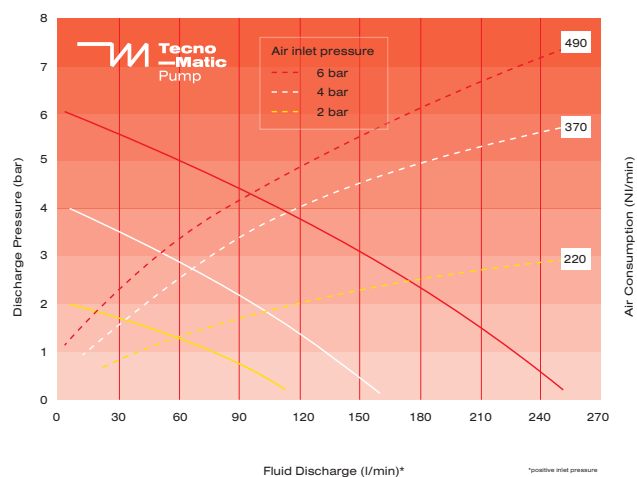
TM1-125



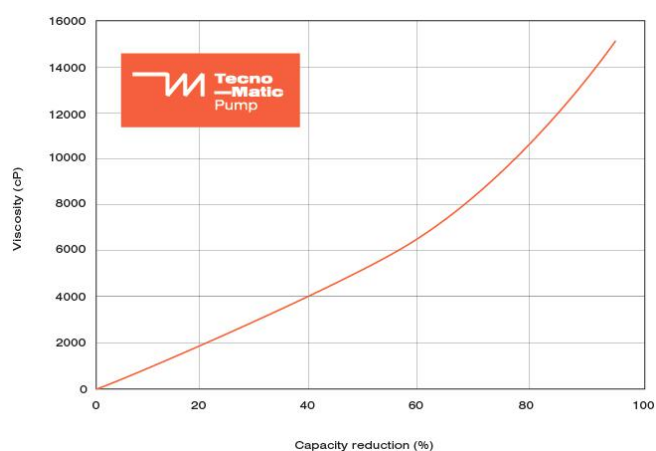
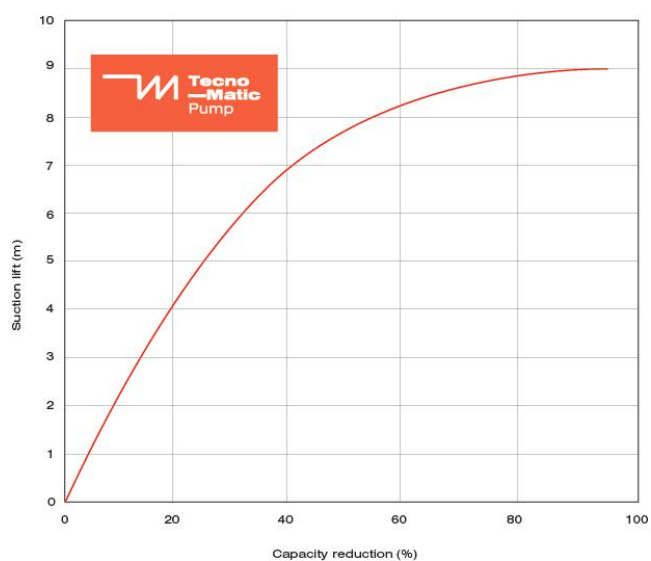
TM1-140



TM1-250



## Changes of capacity



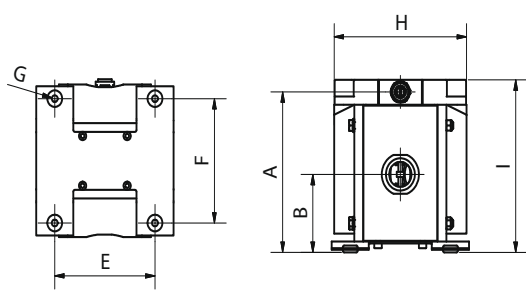


## Technical data

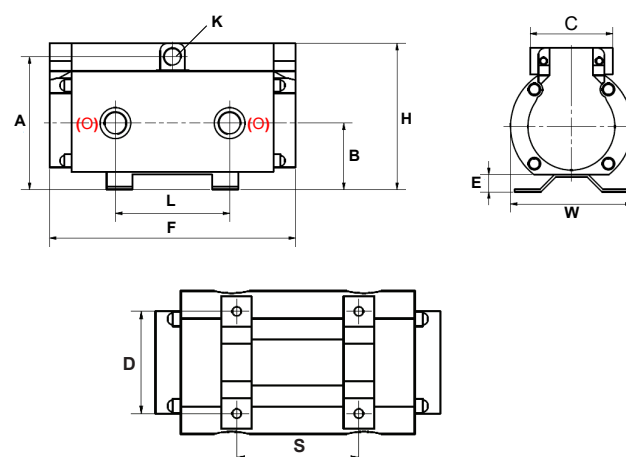
Data	Pump size									
	15	30	40	60	70	80	120	125	140	250
<b>General characteristics</b>										
Max capacity (l/min)	15	30	40	60	70	2 x 40	120	125	2 x 70	250
Max pressure (bar) non metallic / metallic	8 / 10	8 / 10	8 / 10	8 / 10	8 / 10	7	8 / 10	8 / 10	7	8 / 10
Max suction lift dry (m)	3	3	3	3	3	3	3	3	3	3
Max suction lift wet (m)	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5
Max size of solids (ø in mm)	3	3	3	4	4	3	5	5	3	5
Max temp, pump in PP (°C)	130	130	130	130	130	130	130	130	130	130
Max temp, pump in Alu, SST (°C)	It is quite high, but the elastomers are the limit in those pumps									

## Dimensions

TM1 pump



Double acting TM1 pump



TYPE	A	B	C	D	E	H	K	L	R	S	W	in-out-let	F	Weight (kg)
15	65	65	100	100	15	145	12	145	15	120	140	0,25"	-	3
30	65	65	100	100	15	145	12	145	15	120	140	0,5"	-	8
40	65	65	100	100	15	145	12	145	15	120	140	0,5"	-	3
60	75	75	100	100	15	165	12	145	15	120	140	0,75"	-	10
70	75	75	100	100	15	165	12	145	15	120	140	0,75"	-	5
80	130	65	75	115	15	145	ø 12	130	-	100	120	(O) 0,5"	275	7
120	100	100	100	135	15	210	12	180	15	150	185	1,25"	-	18
125	100	100	100	135	15	210	12	180	15	150	185	1,25"	-	7
140	130	75	75	115	15	165	ø 12	130	-	100	140	(O) 0,75"	275	9
250	190	90	95	145	15	205	ø 12	255	330	135	330	(O) 2"	-	15

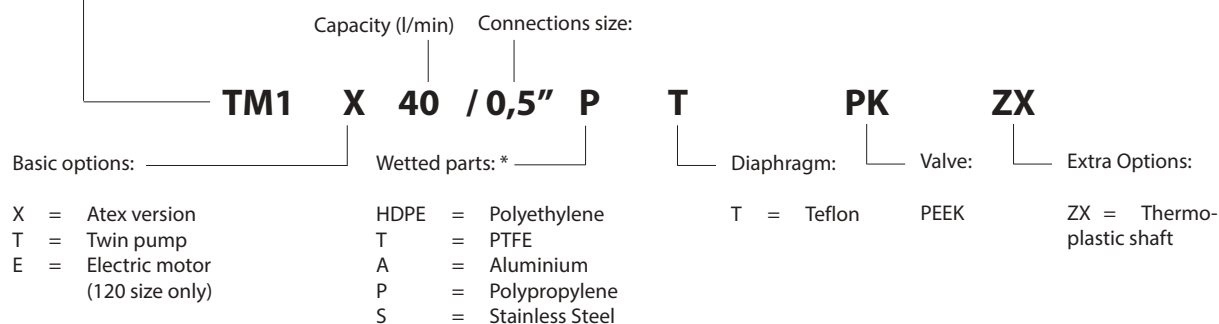
Dimensions in mm (where other is not indicated).

General dimensions only, ask us for detailed drawings.

## Tecno Matic Pump code

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

Tecno Matic Pump Series: 1 (ex ADF)



\* - See availability for each series

## TM 1 pump range

- ✓ 15 - 15 l/min, 0,25"
- ✓ 30 - 30 l/min, 0,5"
- ✓ 40 - 40 l/min, 0,5"
- ✓ 60 - 60 l/min, 0,75"
- ✓ 70 - 70 l/min, 0,75"
- ✓ 80 - 2x40 l/min, 0,5"
- ✓ 120 - 120 l/min, 1,25"
- ✓ 125 - 125 l/min, 1,25"
- ✓ 140 - 2x70 l/min, 0,75"
- ✓ 250 - 250 l/min, 2"

## TM 1 typical application



Paints, solvents, preservatives



Printing ink



Pigments in textile sector



Surface treatment



Glues, solvents, and resins



Automotive



Lotions, shampoo, liquid soap, soap emulsion



OEM business



Polymers dosing



Liquids mixing, and dosing



Various chemicals

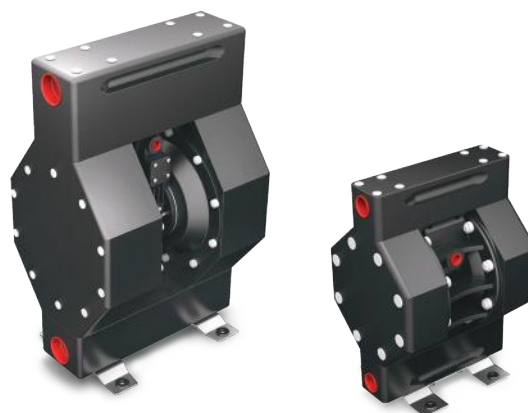


## TM2 series non-metallic pumps

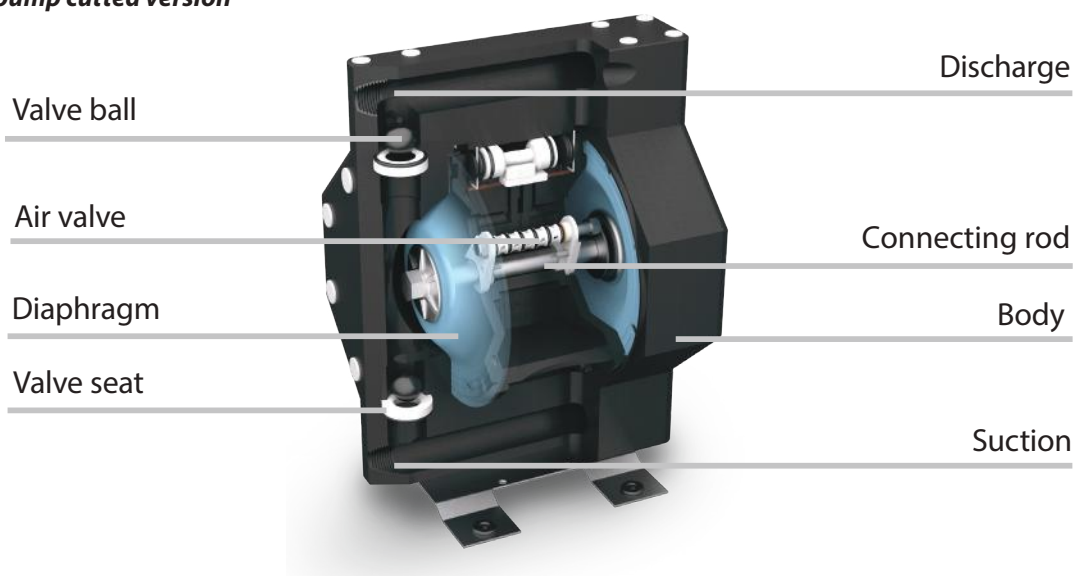
Tecno-Matic TM2 non-metallic pumps are constructed to meet various needs of our customers. Either injected polypropylene parts or CNC machined polyethylene blocks, which our pumps are made of, allow you to transport highly corrosive and aggressive fluids. With a wide range of elastomers to choose from, our customers can be sure to find the right pump for the requested job.

Options in ATEX execution.

Pumps of this type are used for pumping clean liquids and liquids sensitive to shear. They are also the preferred choice for feeding viscous, aggressive and abrasive media. These high-performance pumps do not require the use of other types of energy besides compressed air. This is one of the main reasons for their common use in explosive areas (there is no risk of sparks) and indoors (no emissions of harmful substances and generation of additional heat). The Tecno Matic TM2 pumps are the preferred choice for pumping difficult liquids.



### TM2 pump cutted version

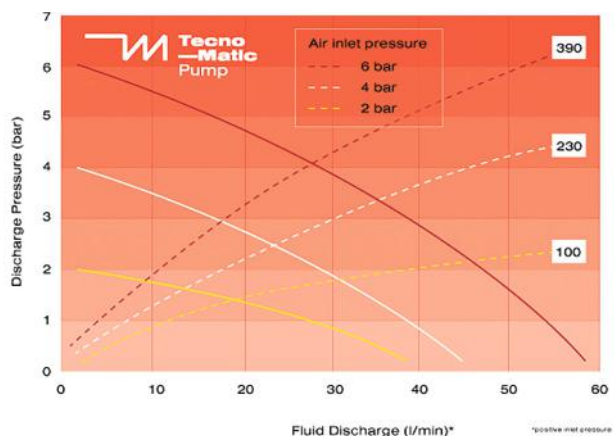


## Benefits

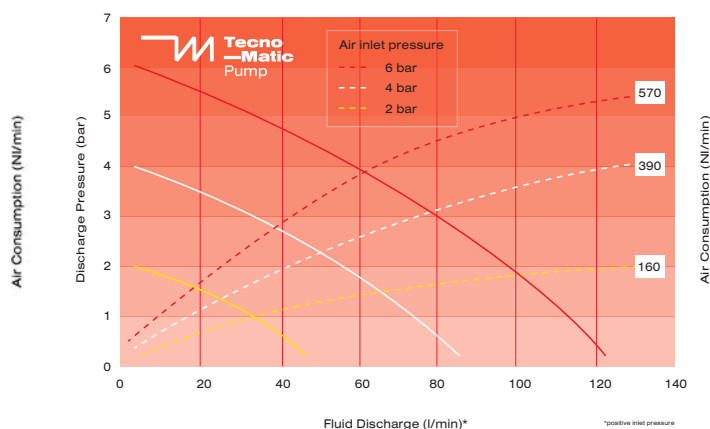
- ✓ Low noise
- ✓ One pump body material: corrosion-resistant & abrasion-resistant plastic instead of 3 (Alu, SS, PP)
- ✓ Suitable for abrasive liquids
- ✓ Low air-consumption!
- ✓ Dry running capability
- ✓ Low maintenance and parts costs
- ✓ Elastomers from chemically resistant PTFE or Santoprene to choose from
- ✓ Ceramic parts of the pneumatic drive allow you to avoid using grease in work
- ✓ Bolted (SST) leakage free design
- ✓ No Air leakage at liquid stop
- ✓ Flat-valve technology (on request)

# Flowchart

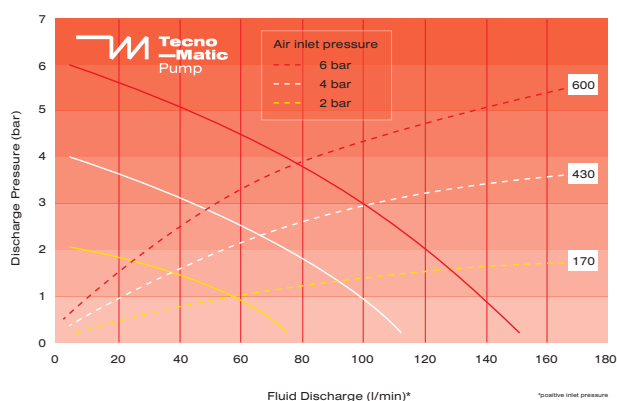
TM2-60



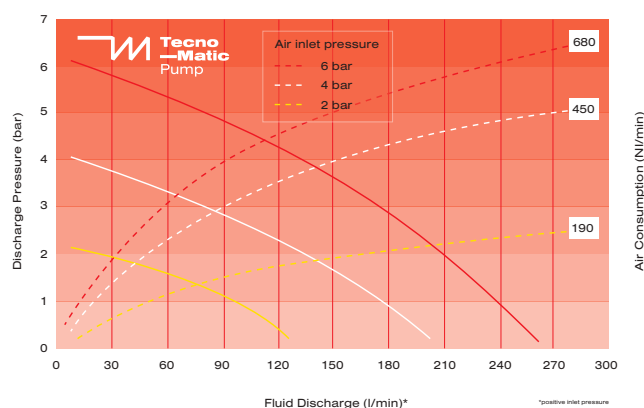
TM2 - 120



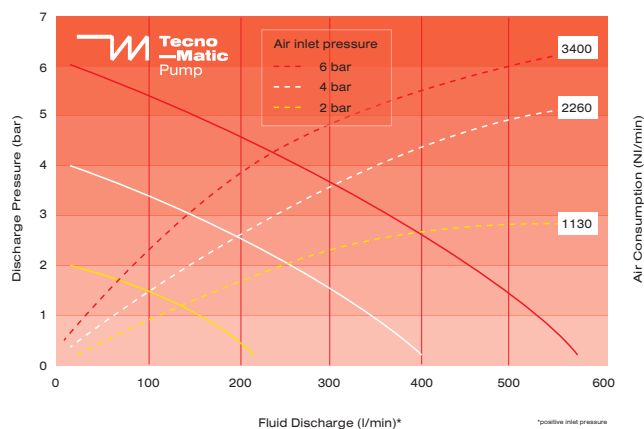
TM2 - 150



TM2 - 260



TM2 - 550



The performance curves are based on water at 20°C. Other circumstances might change the performance.

## Technical data

Data	Pump size				
	60	120	150	260	550
<b>General characteristics</b>					
Max capacity (l/min)	60	120	150	260	550
Max pressure (bar)	7	7	7	7	7
Max suction lift dry (m)	3	4	4	4	4,5
Max suction lift wet (m)	8,5	8,5	8,5	8,5	8,5
Max size of solids (ø in mm)	2,5	4	5	6	7
Max temperature (°C) *	120	120	120	120	120

\* The limit is the diaphragm.

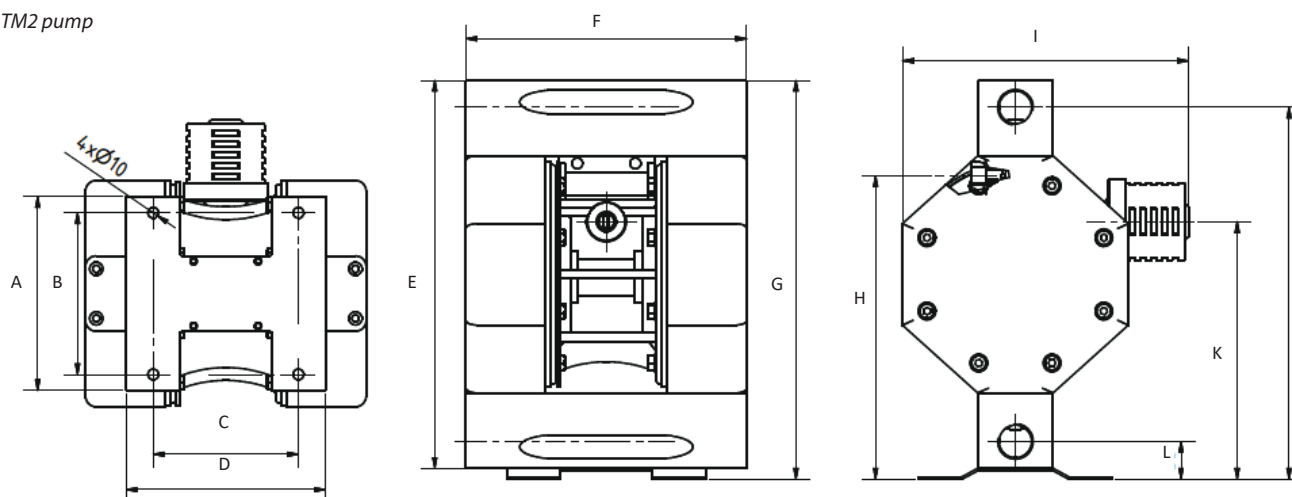
NBR - minus 30 °C to 100 °C

Santoprene - minus 30 °C to 130 °C

PTFE - minus 0 to 95 °C

## Dimensions

TM2 pump



TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M Liquid in/out	N Air in/out	Weight (kg)
60	145	120	100	140	218	274	197	221	-	163	30	264	1/2" female	3/8" female	8
120	180	150	135	185	360	261	370	282	266	345 - 0,75"	239	30 - 0,75"	-	-	14
150	180	150	135	185	360	261	370	282	266	345 - 1"	239	30 - 1"	-	-	14
260	180	150	135	185	360	261	370	282	266	345 - 1"	239	30 - 1"	-	-	24
550	254	240	-	-	504	455	713	-	330	605	G2	65	G 1/2	G2	80

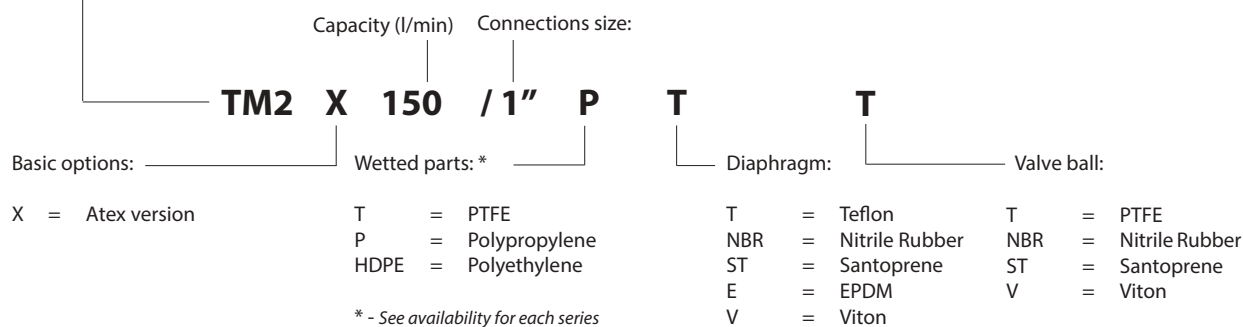
Dimensions in mm (where other is not indicated).

General dimensions only, ask us for detailed drawings.

## Tecno Matic Pump code

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

Tecno Matic Pump Series: 2 (exTAD)



## TM2 pump range

- ✓ 60 - 60 l/min, 0,5"
- ✓ 120 - 120 l/min, 0,75"
- ✓ 150 - 150 l/min, 1"
- ✓ 260 - 260 l/min, 1,25"
- ✓ 550 - 550 l/min, 2"

## TM2 typical application



Fine chemicals



Petrochemical products



Water treatment



Acids, lye, alkalis, varnish



Lubricants



Food, and beverages



Galvanic sector



Perfume, deodorants



Galvanized wash, solvents



Dispersions, latex



Acetone, turpentine, resin



Syrup, sweeteners, flavours

## TM3 series pumps



The reliability and low maintenance costs of Tecno-Matic air-operated double diaphragm pumps are proven by years of experience. The pumps are constructed using the best available materials for unparalleled reliability and the possibility to function under the most severe conditions in various production sites around the world.

The TM3 pumps combination of high quality materials, efficient performance and competitive price makes this the ideal pump

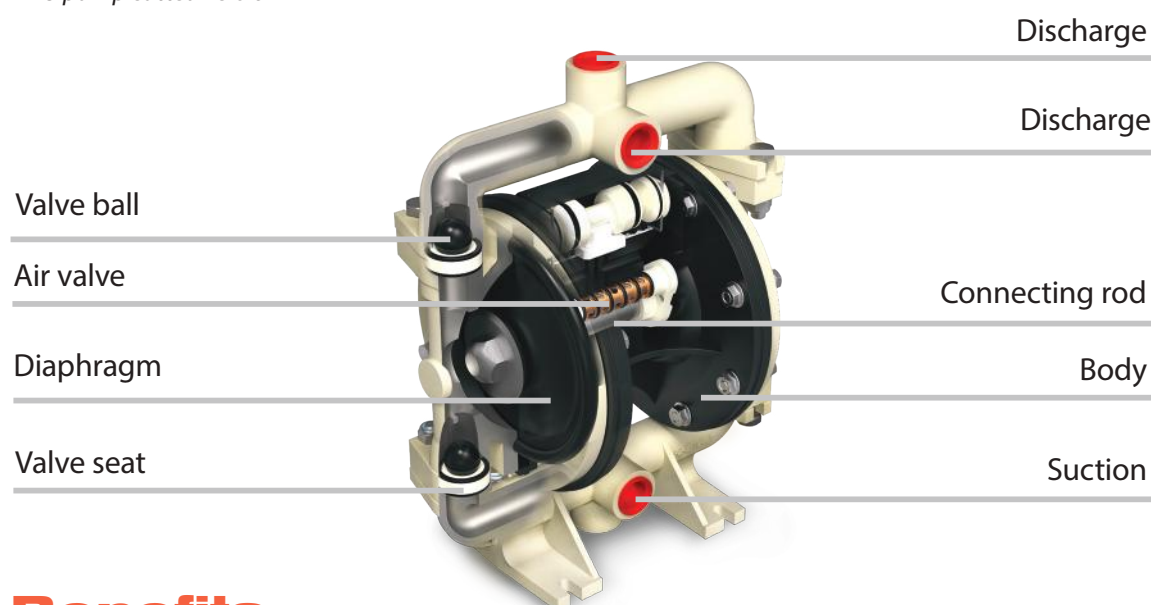
for today's industry.

Tecno-Matic TM3 pumps are made in aluminium, stainless steel & polypropylene executions. The range of materials makes it easy to find a suitable pump for your needs.

Tecno-Matic TM3 pumps are available in:

0,5"; 0,75"; 1"; 1,25"; 2" and 3" connections with capacities up to 980 l/min.

### TM3 pump cutted version

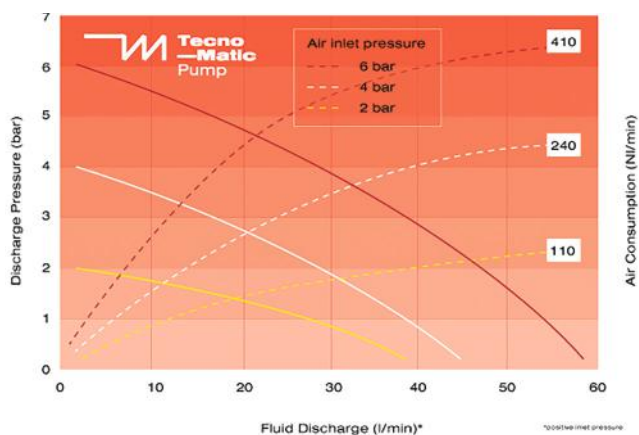


## Benefits

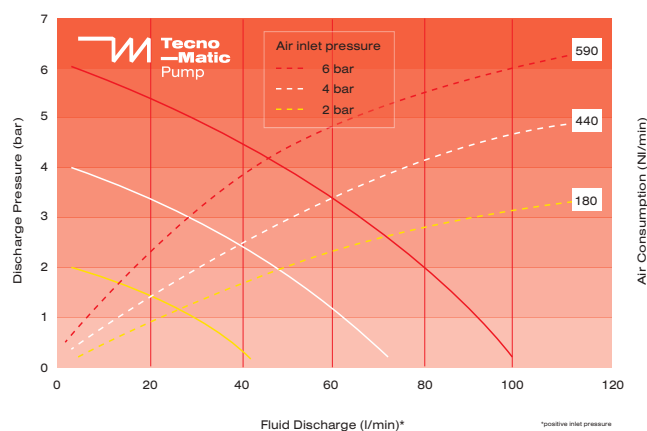
- ✓ Low noise
- ✓ Suitable for abrasive liquids
- ✓ Low air-consumption!
- ✓ Dry running capability
- ✓ Low maintenance and parts costs
- ✓ Bolted (SST) leakage free design
- ✓ No Air leakage at liquid stop
- ✓ Versions available for use in hazardous areas
- ✓ Pneumatic motor is located in the center of the housing
- ✓ Pneumatic motor does not wedge, does not freeze and does not require lubrication
- ✓ In / out connections may be rotated by 180°
- ✓ Elements of the air valve are made of ceramics and do not require maintenance

# Flowchart

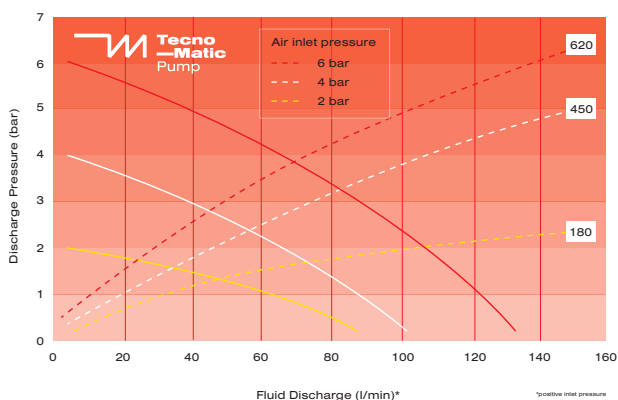
TM3-50 Metallic/Non-metallic



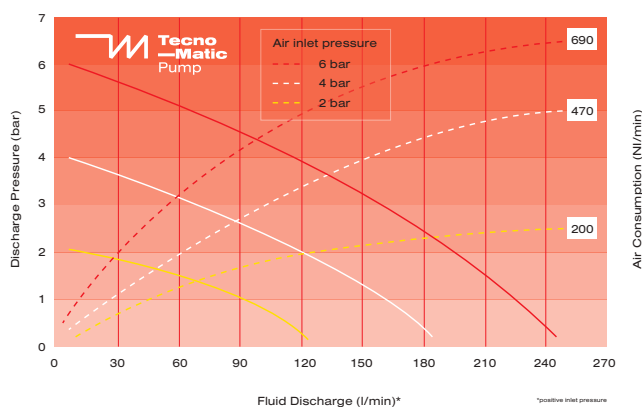
TM3-100 Metallic/Non-metallic



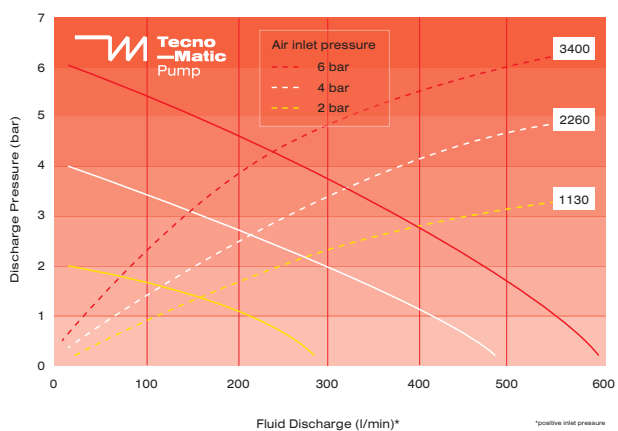
TM3-130 Metallic/Non-metallic



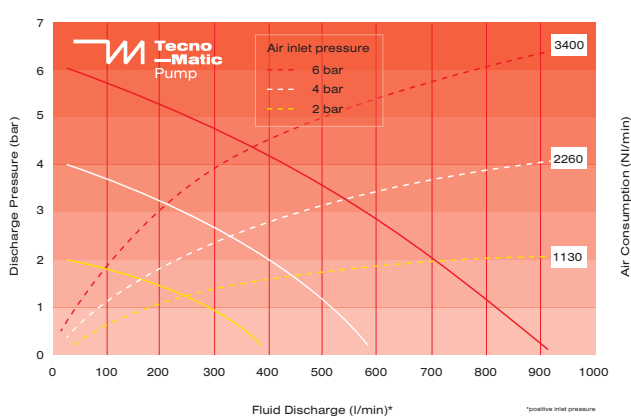
TM3-240 Metallic



TM3-530 Metallic



TM3-980 Metallic



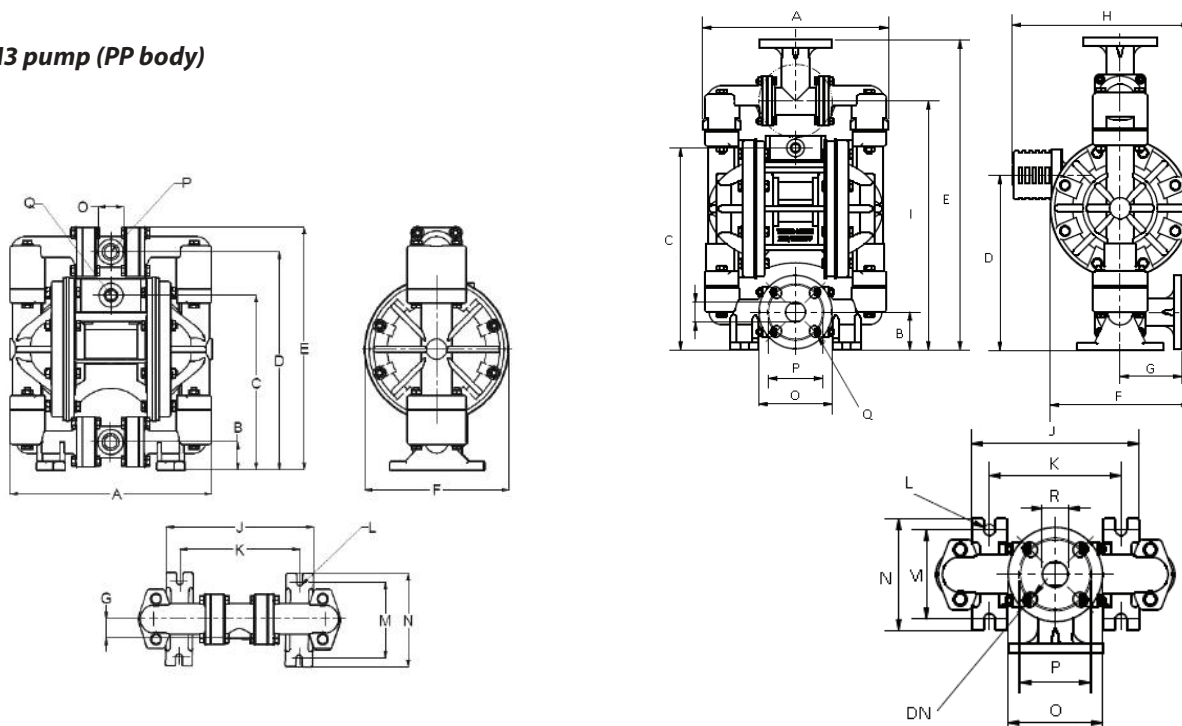
The performance curves are based on water at 20°C. Other circumstances might change the performance.

## Technical data

Data	Pump size									
	Pump housing									
	Polypropylene			Aluminium					St. steel	
	50	100	130	50	130	240	530	980	130	530
<b>General characteristics</b>										
Max capacity (l/min)	50	100	130	50	130	240	530	980	130	530
Max pressure (bar)	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5
Max suction lift dry (m)	3	3	3	3	4	4,5	5	5	3	3
Max suction lift wet (m)	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5
Max size of solids (ø in mm)	1,5	3	4	1,5	4	5	6,5	10	4	6,5
Max temperature (°C)	130	130	130	It is quite high, but the elastomers are the limit in those pumps						

## Dimensions

### TM3 pump (PP body)



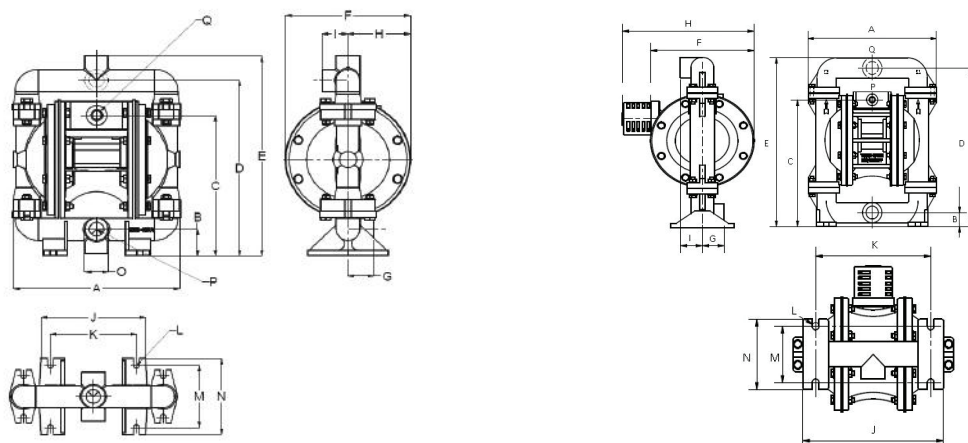
TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	DN	Weight (kg)
50	224	31	194	242	270	160	21	-	-	163	133	7	84	104	28	1/2"	3/8"	-	4
100	279	57	329	374	429	209	92	13	92	194	154	13	104	130	110	82-85	3/8"	30	9
130	305	32	313	359	382	209	44	61	44	267	219	13	102	127	46	1"	-	-	9

Dimensions in mm (where other is not indicated).

General dimensions only, ask us for detailed drawings.



### TM3 pump (Alu body)

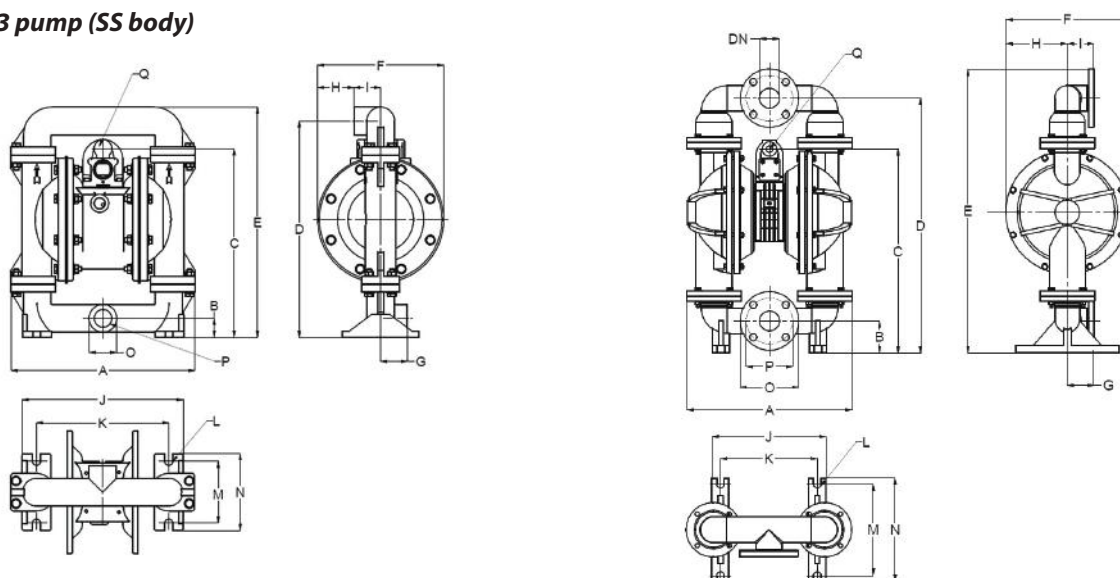


TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	DN	Weight (kg)
50	213	36	191	238	271	160	33	80	33	134	110	7	84	103	30	1/2"	-	-	5
130	305	32	313	359	382	209	44	61	44	267	219	13	102	127	46	1"	-	-	12
240	367	71	358	460	250	-	-	209	-	252	225	8	155	175	127	99	3/8"	45	18
530	435	84	535	669	746	323	70	162	70	299	254	20	240	270	153	121	1/2"	52	35
980	538	102	600	811	907	400	100	200	100	370	305	15	249	278	192	153	1/2"	76	70

Dimensions in mm (where other is not indicated).

General dimensions only, ask us for detailed drawings.

### TM3 pump (SS body)



TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	DN	Weight (kg)
130	305	32	313	359	382	209	44	61	44	267	219	13	102	127	46	1"	-	-	18
530	435	84	535	669	746	323	70	162	70	299	254	20	240	270	153	121	1/2"	52	70

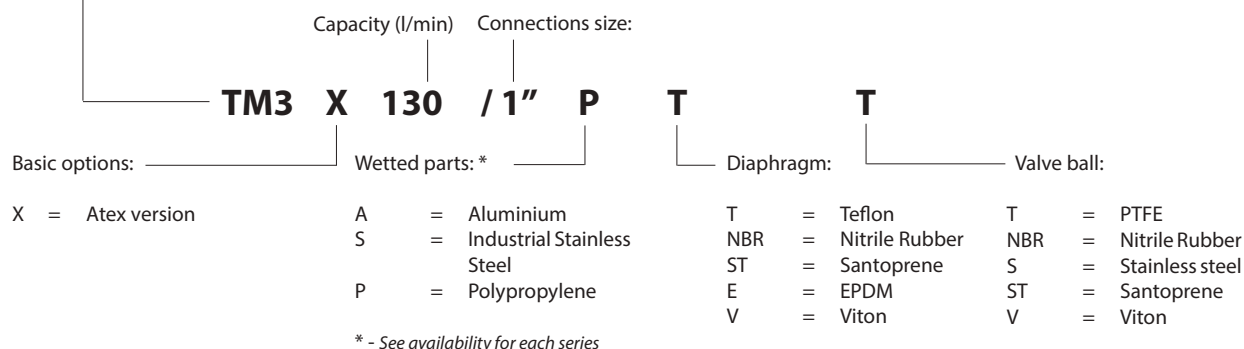
Dimensions in mm (where other is not indicated).

General dimensions only, ask us for detailed drawings.

## Tecno Matic Pump code

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

Tecno Matic Pump Series: 3 (ex TEP)



## TM3 pump range

### NON-METALLIC SERIES

- ✓ TM3 50 - 50 l/min, 0,5"
- ✓ TM3 100 - 100 l/min, 0,75"
- ✓ TM3 130 - 130 l/min, 1"

### METALLIC SERIES

- ✓ TM3 50\* - 50 l/min, 0,5"
- ✓ TM3 130 - 100 l/min, 0,75"
- ✓ TM3 240\* - 130 l/min, 1,5"
- ✓ TM3 530 - 530 l/min, 2"
- ✓ TM3 980\* - 980 l/min, 3"

\* = aluminium only

## TM3 typical application



## Accessories

**Tecno-Matic** offers a wide range of accessories to the pumps that we produce and the installations that they will function in. This equipment will help to optimize your system, prolong the life-time of your equipment and lower the maintenance costs.

### SOFT-STARTER

*"Ensures smooth start of you pneumatic equipment"*

Opening the air-supply valve of the AODD pumps causes it to start within milliseconds. This stresses the internals of the pump and can reduce lifetime of moving parts. To avoid problems, minimise maintenance cost and to optimise the function of your equipment we advise our clients to use our soft starter. This is a fully mechanical system that will help the AODD pump to start smooth and performance will rise from 0% to 100% within a short time period minimising the stress on the pump and the moving parts.



### PULSATION DAMPENERS

*"Effective elimination of pulsations in your pipeline"*

Our active pulsation dampeners adjust themselves automatically to the conditions of the application for the best possible result. This will guarantee an optimal reduction of pulsations for a smooth flow.



### VALVES

*"Wide range of valves for your application"*

We provide a full range of valves. Please contact us for your specific needs.



### AIR PREPARATION

*"Adjusts proper feed of pneumatic equipment by air"*

This set of accessories gives you the possibility to properly adjust your air operated pumps and pneumatic equipment for best lifetime and minimum of service.



## LIQUID LEVEL CONTROLLERS

*"Controls the liquid level in the tank"*

This is an all pneumatic system for controlling the liquid level of the tank. It is perfect for lowering into a tank or pit to pump out the last amount of liquid that the centrifugal pump cannot remove. This can be used for emptying a tank when the level reaches the upper set-point, or to fill up a tank when the level reaches the lower set-point. The system is all automatic and without any need for an electric connection for functioning.



## DRY RUN PROTECTION

*"Ensures dry running will not appear"*

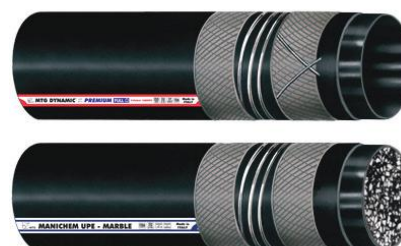
Tecno Matic offers a wide range of dry run protecting system for pneumatic equipment and also electrically driven pumps. The protection is based on principles of pressure peaks, current peaks and temperature monitoring.



## HOSES

*"Use proper hose for every application"*

Tecno Matic offers a wide range of special hoses. The hoses are properly selected to handle the fluid that needs to be pumped. We can also provide tailored made products in the desired length and with the connection that meet your needs.



## Tecno-Matic Production

Malhotice 16

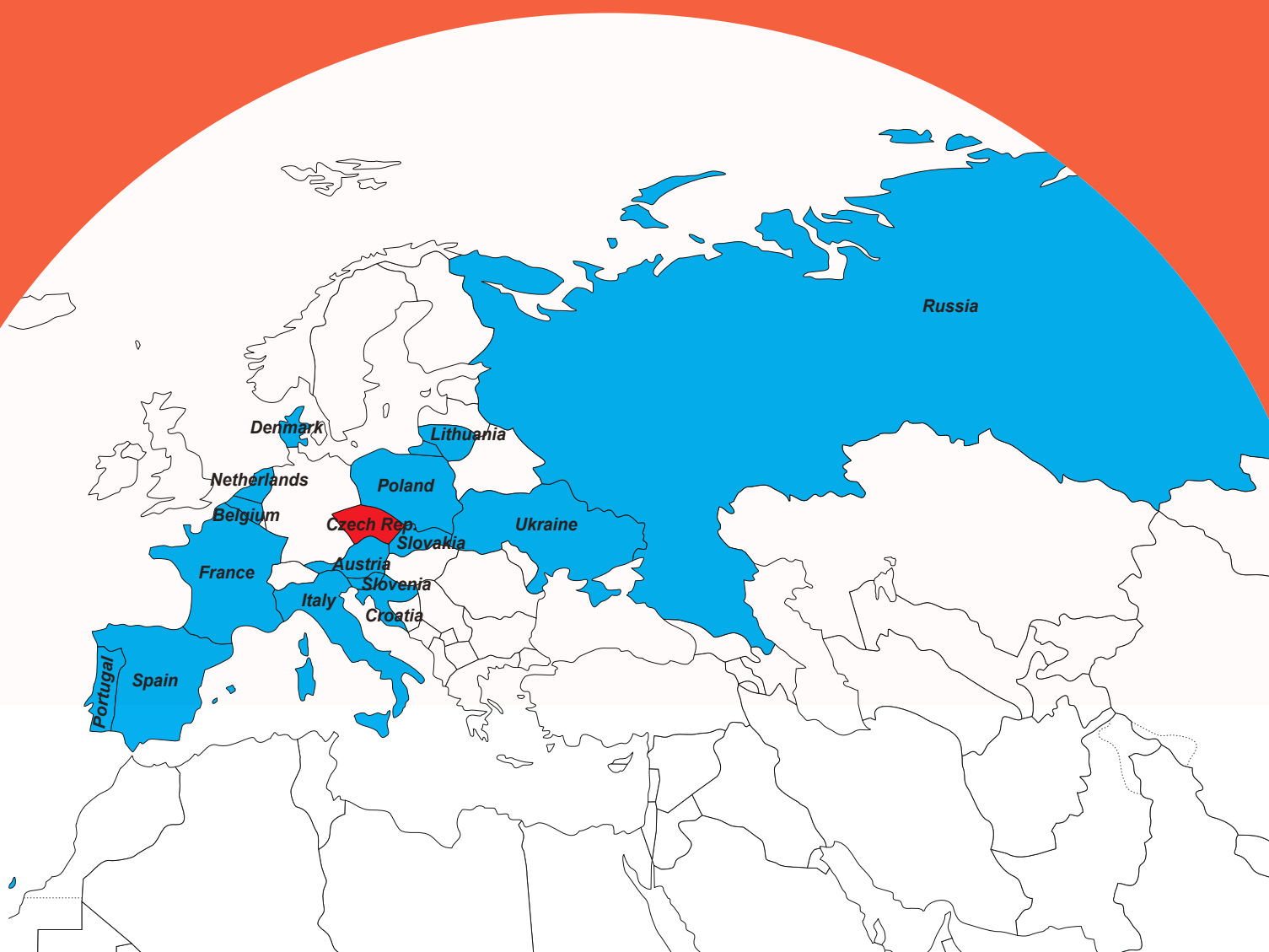
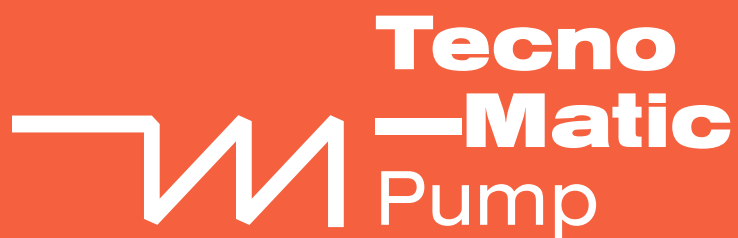
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**Learn more about Tecno-Matic at**  
**[www.tecnomaticpump.com](http://www.tecnomaticpump.com)**

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