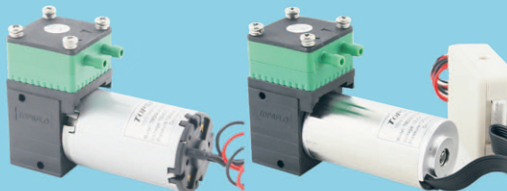


## TM30A Series

Up to 6 LPM  
120Kpa  
-70Kpa



### Discription

TOPSFLO micro diaphragm pumps and compressors are based on a simple principal, the circular power from the motor is converted into oscillating movement by an eccentric, which moves up and down its central point, this motion is then transferred to a diaphragm by means of a connecting rod, an elastic diaphragm, which in conjunction with an inlet and outlet valve creates a pumping action.

The TM30A Series offers multiple component configurations allowing them to be used for either vacuum operation, pressure operation, or alternating vacuum and pressure operations. The innovative, compact design incorporates leading edge technologies that allow it to operate harder, quieter and longer, reliabler, highly efficient.

TM30A pumps can be mounted in any position and can deliver up to 6 l/min depending on the model and will operate against pressures of up to 120Kpa.

### Features

#### Highest Performance/Size Ratio

Innovative and efficient engineering designs enable the TM30A Series to push the performance envelope in a lightweight, compact size.

#### Performs Quieter

Optimized head, chamber, and flow path reduce noise without compromising performance.

#### Lasts Reliably Longer

Using the advanced diaphragm elastomer and superior brushless motor design sets the highest benchmark for service-free operation that exceeds 10,000 hours.

#### Uncontaminated flow

no contamination of the media due to oil-free operation

#### Little vibration

Because of leading edge technologies, top quality bearing, superior brushless motor

#### High level of gas tightness

Thanks to stress-optimised structured diaphragm, newly-designed valves and sealing systems, precise placement of the pump head

#### Extreme chemical resistance

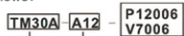
The use of chemically resistant materials optional such as FFPM PTFE FPM, or other material combinations for the parts which allows the corrosive gas to be pumped.

#### Optimal solution for your application

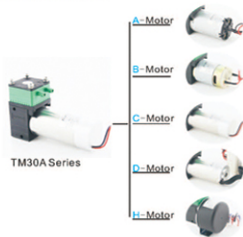
A wide standard range of materials, motors, voltages configures multiple components system selected

## MODEL CODE FOR EASY ORDERING

The model code is identical to the order number, it is made up as follows:



- Model Series
- 12VDC
- P: Pressure 120kpa, 6L/min
- V: Vacuum -70kpa, 6L/min
- A: Long lifetime Brush motor
- B: Long lifetime Brush motor
- C: Coreless brushless DC motor, inside controller type
- D: Coreless brushless DC motor, outside controller type
- H: Brushless DC motor



## Physical Properties

### Operating Environment

41 to 158 F (5 to 70C)

Duty dependent. Consult factory for high temperature applications over 50C

### Media:

Most Gases and Liquids

### Humidity:

0-95% RH

### Noise Level:

As low as 45 dB

### Wetted Material:

PA66, PPS

### Membrane:

EPDM, PTFE

### Valves:

EPDM, FPM, FFFM

Micro Diaphragm Pumps are available with a choice of four different drive motors.

### A premium duty DC brush motor

It provides a higher level of performance than the A version and more robust and durable, ideal life-time 5000 hours. This is ideal for higher operational.

### B normal DC brush motor

the pump is equipped with a normal dc motor, ideal life-time 1200 hours.

### C-Coreless Brushless DC motor

a brushless electronically commutated dc motor (electronics integrated in motor), the motor runs vibration and spark free, almost silently, is very dynamic and extremely durable ideal life-time 15000 hrs.

### D-Coreless Brushless DC motor with outer controller

With all advantages of brushless DC motor, ideal life-time 15000 hrs, and outer controller can realize more control function of speed adjustment, brake, instant starting work.

### H-Brushless DC motor

With ideal life-time 10000 hours, and with 4 wires can realize more control function of 0-5V speed adjustment, brake, instant starting work.

1. use 0-5V speed control: red "+", black "-"; blue "-", yellow "+" of 5V power supply
2. no need 0-5V speed control: red+yellow "+", black "-", blue useless

## TM30A Pressure Pump

Model: TM30A-	A12-P12006	B12-P9504	C12-P12004	D12-P12004	H12-P12004
DC Voltage (V)	6/12/24	6/12/24	6/12/24	6/12/24	6/12/24
Free Flow(L/M)	6	4.5	4.5	4	4.5
Operating Current(A)	0.4/0.24/0.15	0.4/0.24/0.15	0.4/0.24/0.15	0.4/0.24/0.15	0.4/0.24/0.15
Continuous Pressure(Kpa)					
Max Pressure(Kpa)	120	95	120	120	120
Noise from 1M(dB)	50	50	50	50	50
Operating Life(hrs)	>5,000	1,200	15,000	15,000	10,000

## TM30A Vacuum Pump

Model: TM30A-	A12-V7006	B12-V6004	C12-V7004	D12-V7004	H12-V7004
DC Voltage (V)	6/12/24	6/12/24	6/12/24	6/12/24	6/12/24
Free Flow(L/M)	6	4.5	4.5	4	4.5
Operating Current(A)	0.4/0.24/0.15	0.4/0.24/0.15	0.4/0.24/0.15	0.4/0.24/0.15	0.4/0.24/0.15
Continuous Pressure(Kpa)					
Max Vacuum (Kpa)	-70	-60	-70	-70	-70
Noise from 1M(dB)	50	50	50	50	50
Operating Life(hrs)	>5,000	1,200	15,000	15,000	10,000

The versatility of TOPSFLO pumps allows a wide field of applications to be covered. Over many years our pumps have proved themselves in the following areas:

Industrial pressure and vacuum applications

Portable Analytical Instruments

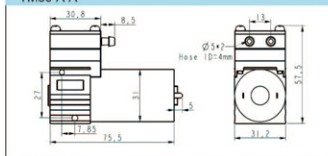
Medical Diagnostic Equipment

Air Quality Sampling Monitors

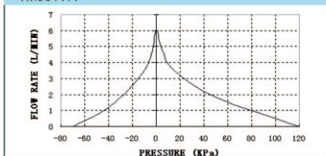
Respiration Monitors

Gas or Odor Leak Detectors

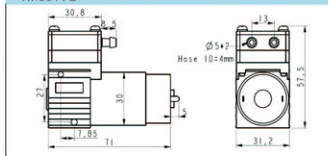
TM30 A-A



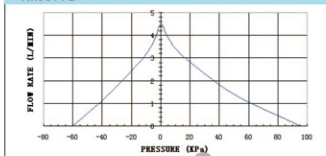
TM30 A-A



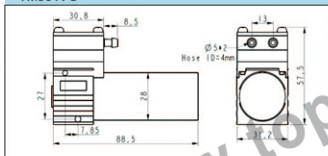
TM30 A-B



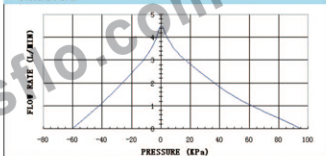
TM30 A-B



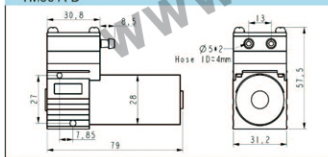
TM30 A-C



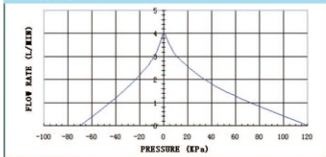
TM30 A-C



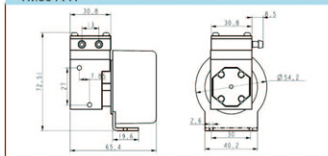
TM30 A-D



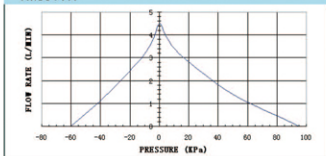
TM30 A-D



TM30 A-H



TM30 A-H



TOPS Pump Co.,td Effective November 2009 Specification are subject to change without notice