

TOPSFLO
Excellence in Micro Pump, DC Pump

Product Catalog

BRUSHLESS DC PUMP

TL-A Series / TL-B Series / TL-C Series / More



Overview

Topsflo micro centrifugal pumps are powered by brushless DC motors. They are designed to be cool, quiet, compact and light weight product. A variety of features, including a static seal design to prevent leakage forever, wide range of working voltage, stable performance, long lifetime, enable the pumps to meet a full spectrum of user's needs, with emphasis on ease of installation, operation and maintenance.

Features

- Advanced magnetic driving technology for static-seal, without any leakage.
- High efficiency ECM brushless DC motor with long lifetime 20,000 hours.
- Endurable graphite bearing, high precision, low noise and durable.
- Heavy duty work, can sustain 24 hours continuous work.
- 100°C high temperature.
- Submersible, RPM, PWM and powered by solar panel can be customized.

Typical Applications

Auto Pump

- Automotive pre-heaters
- Fuel operated heaters
- Truck AC system
- Bus AC system
- Car screen wiper
- Exhaust heat recovery
- Electric motorcycle

Food Grade Pump

- Drinking machine
- Beverage/water dispenser
- Coffee machine

Mechanical Equipment and Chemical Industry

- Environmental protection equipment
- Medical equipment cooling
- Sewage purifier
- Fuel cell
- Irrigation

Water Heater Pump

- Water heater recirculation pump
- Instant water heater
- Electric tankless water heater
- Water circulation for solar system
- Solar water heater
- Air source water heater
- Gas boiler

Home Appliance

- Instant boiling, chilled drinking water appliances
- PC water cooling system
- Sanitary product
- Washing machine
- Air conditioner
- Water fountain
- Chiller
- Residential humidifier
- Battery cooling system
- Hydroponics
- Beer home brewing

Typical Applications

- Water dispenser, water coolers
- Coffee maker, coffee machine
- Beverage dispenser, juice machine
- Water purifier
- Hydroponics
- Milk dispenser
- The fountain



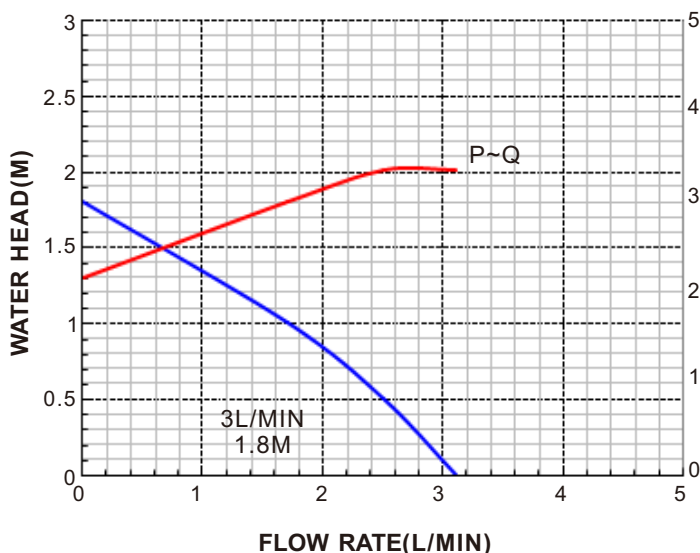
Specification

Model	Product Code	Max Flow Rate (L/Min)	Max Water Head (M)	Voltage (VDC)	Current (A)	Power (W)
TL-A02	TL-A02-A12-0302	3	1.8	12	0.28	3.36

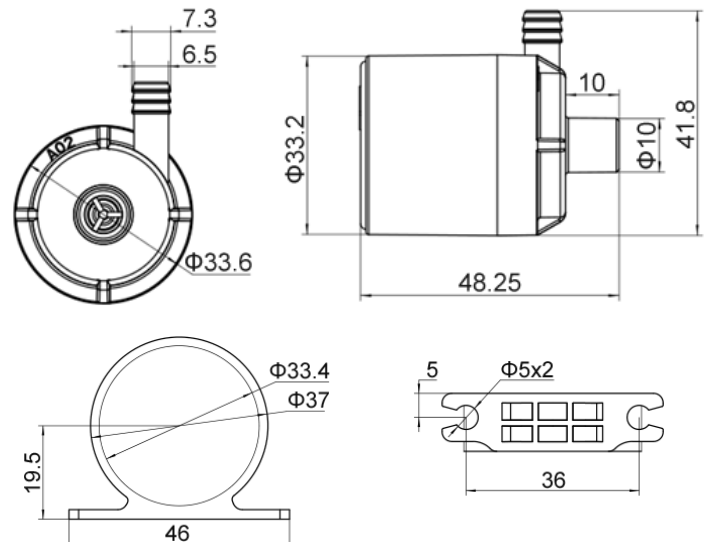
Customization: 1. /H High temperature 100°C (212°F) 2. /S Submersible, liquid ≤50°C 3. /FG (RPM) signal wire 4. /PWM or /5V speed control

Curve & Dimension

TL-A02 PERFORMANCE



DRAWING (mm)



Typical Applications

- Coffee maker, coffee machine
- Water purifier, water dispenser
- Beverage dispenser, juice machine
- Instant boiling, chilled drinking water appliances
- Water coolers
- Car screen wiper

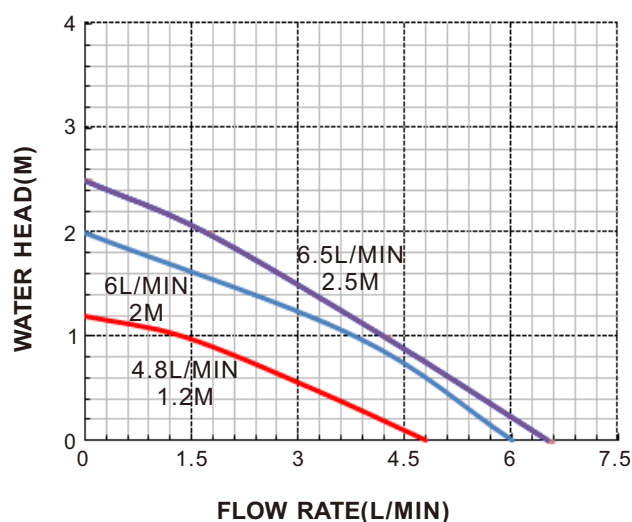


Specification

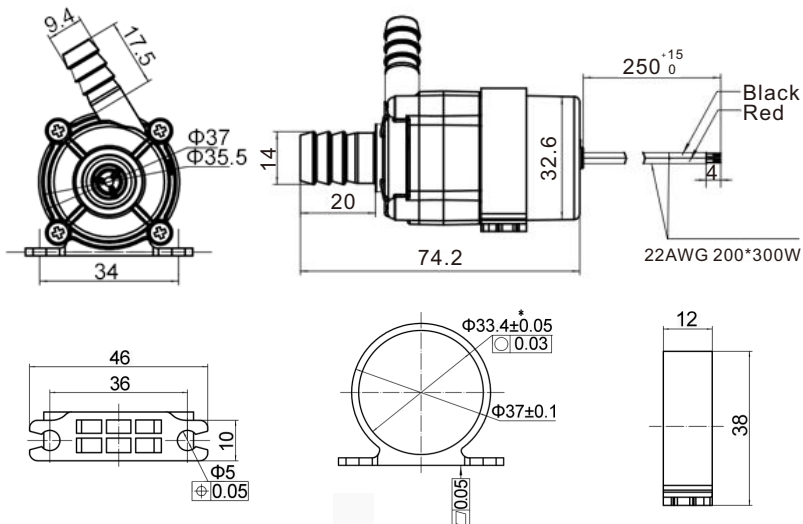
Model	Product Code	Max Flow Rate (L/Min)	Max Water Head (M)	Voltage (VDC)	Current (A)	Power (W)
TL-B03	TL-B03-A12-0501	4.8	1.2	12	0.2	2.4
	TL-B03-A24-0501	4.8	1.2	24	0.15	3.6
	TL-B03-A12-0602	6.5	2.5	12	0.43	5.16
	TL-B03-A24-0602	6	2	24	0.22	5.28
Customization: 1. /H High temperature 100°C (212°F) 2. /S Submersible, liquid ≤50°C 3. /FG (RPM) signal wire 4. /PWM or /5V speed control						

Curve & Dimension

TL-B03 PERFORMANCE



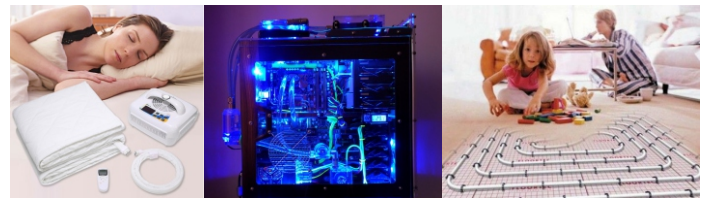
DRAWING (mm)





Typical Applications

- Water heating mattress
- Home circulating systems
- Computer cooling circulation
- Liquid transfer
- General purpose pumping

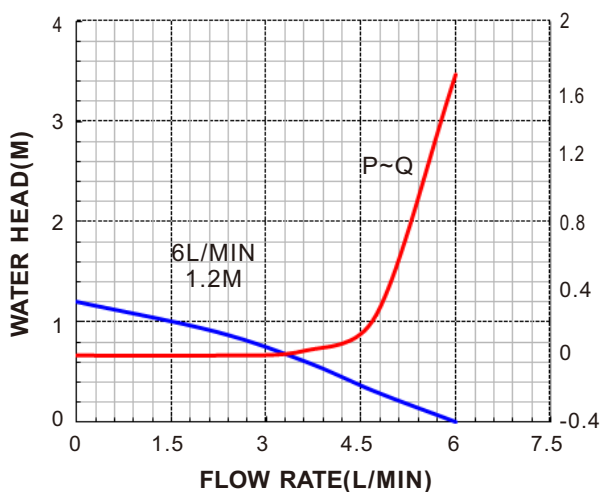


Specification

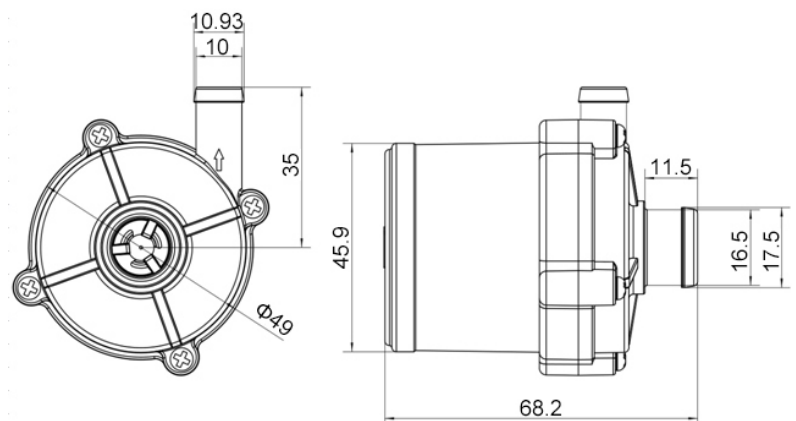
Model	Product Code	Max Flow Rate (L/Min)	Max Water Head (M)	Voltage (VDC)	Current (A)	Power (W)
TL-B09	TL-B09-A12-0601	6	1.2	12	0.2	2.4
Customization: 1. /H High temperature 100°C (212°F) 2. /S Submersible, liquid ≤50°C 3. /FG (RPM) signal wire 4./PWM speed control						

Curve & Dimension

TL-B09 PERFORMANCE



DRAWING (mm)



Pump A



Pump B



Typical Applications

- Water dispenser, water cooler
- Beverage dispenser
- Truck AC system
- Chillers, cooling circulation
- 3D laser printer cooling
- Battery cooling system
- Air-conditioner drain
- Home appliance



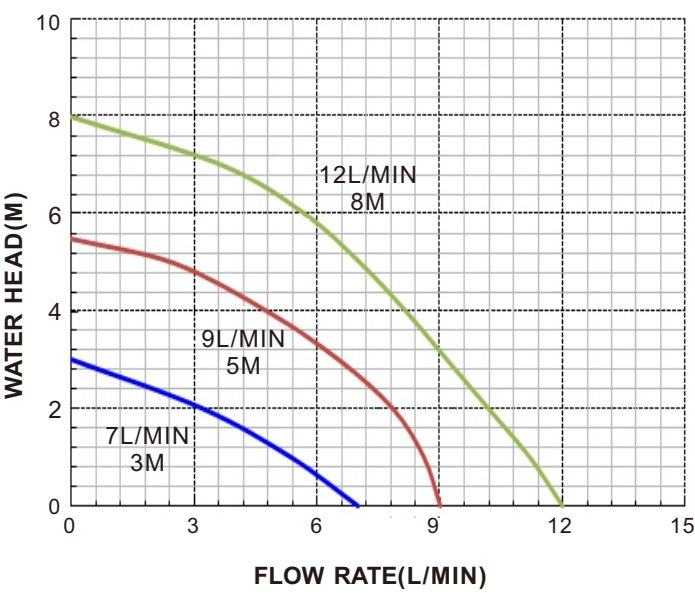
Specification

Model	Product Code	Max Flow Rate (L/Min)	Max Water Head (M)	Voltage (VDC)	Current (A)	Power (W)
TL-B10-A	TL-B10-A12-0703	7	3	12	0.6	7
	TL-B10-A12-0905	9	5	12	1.4	16.8
	TL-B10-A24-0703	7	3	24	0.35	10
	TL-B10-A24-0905	9	5	24	0.55	15
	TL-B10-A24-1208	12	8	24	1.3	31.2
TL-B10-B	TL-B10-B12-0703	7	3	12	0.6	7
	TL-B10-B12-0905	9	5	12	1.4	16.8
	TL-B10-B24-0703	7	3	24	0.35	10
	TL-B10-B24-0905	9	5	24	0.55	15
	TL-B10-B24-1208	12	8	24	1.3	31.2

Customization: 1. /H High temperature 100°C (212°F) 2. /S Submersible, liquid ≤50°C 3. /FG (RPM) signal wire
4. /PV Powered by solar panel directly 5. /PWM or /5V speed control

Curve

TL-B10 PERFORMANCE



Pump A

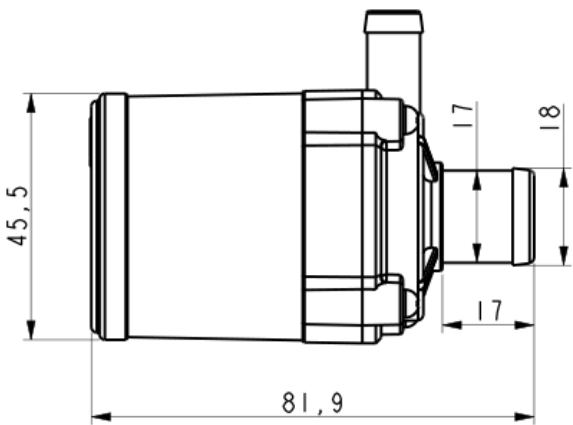
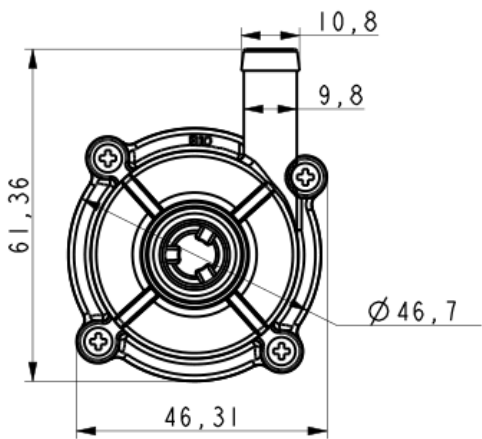


Pump B

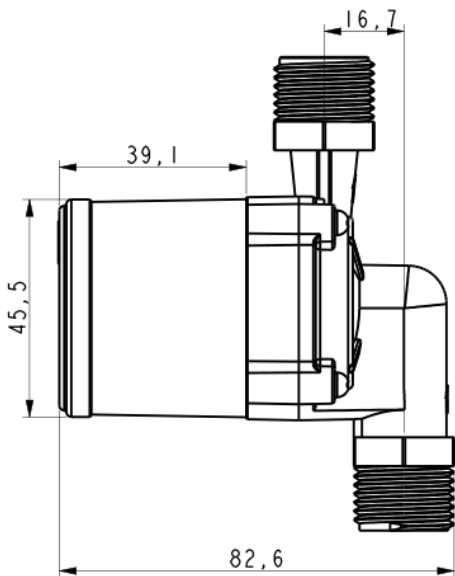
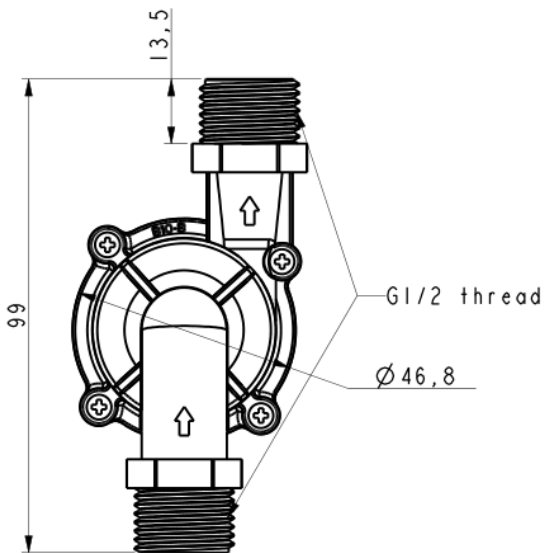


Dimension (mm)

Pump A



Pump B





Pump A



Pump B



Pump C

Typical Applications

- Water heater recirculation pump
- Instant water heater, heat pump, gas boiler
- Water cooling circulation, chillers
- Water dispenser, carbonated machine
- Air condition and ventilation systems circulator
- Cooling system
- Boosting applications



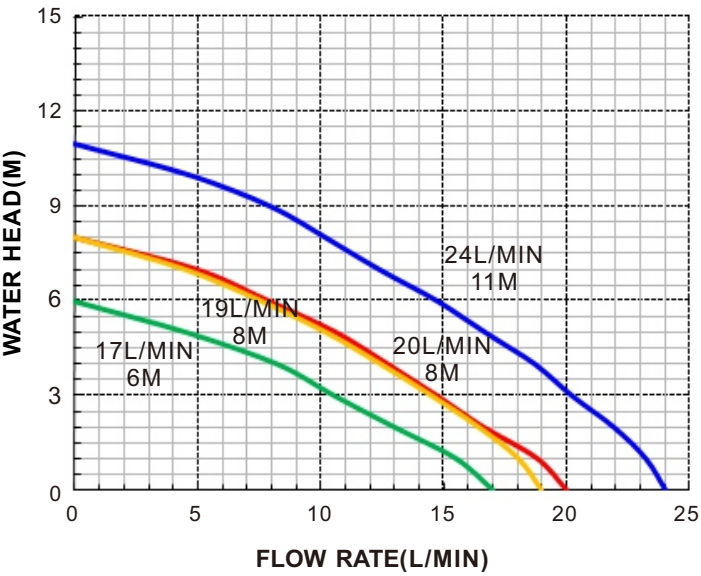
Specification

Model	Product Code	Max Flow Rate (L/Min)	Max Water Head (M)	Voltage (VDC)	Current (A)	Power (W)
TL-C01-A	TL-C01-A12-1706	17	6	12	2.2	26.4
	TL-C01-A12-2008	20	8	12	2.8	34
	TL-C01-A24-1908	19	8	24	1.5	36
	TL-C01-A24-2411	24	11	24	2	48
TL-C01-B	TL-C01-B12-1606	16	6	12	2.2	26.4
	TL-C01-B12-1908	19	8	12	2.8	34
	TL-C01-B24-1808	18	8	24	1.5	36
	TL-C01-B24-2211	22	11	24	2	48
TL-C01-C	TL-C01-C12-1706	17	6	12	2.2	26.4
	TL-C01-C12-2008	20	8	12	2.8	34
	TL-C01-C24-1908	19	8	24	1.5	36
	TL-C01-C24-2411	24	11	24	2	48

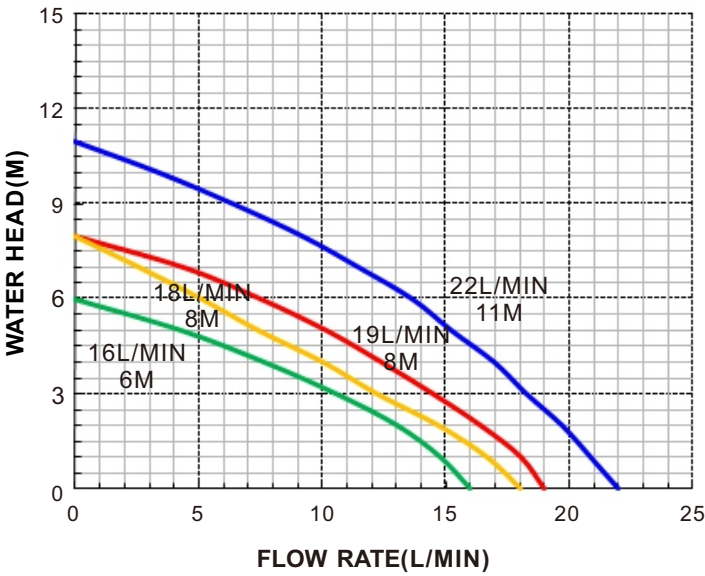
Customization: 1. /H High temperature 100°C (212°F) 2. /S Submersible, liquid ≤50°C 3. /FG (RPM) signal wire
4. /PV Powered by solar panel directly 5. /PWM or /5V speed control

Curve

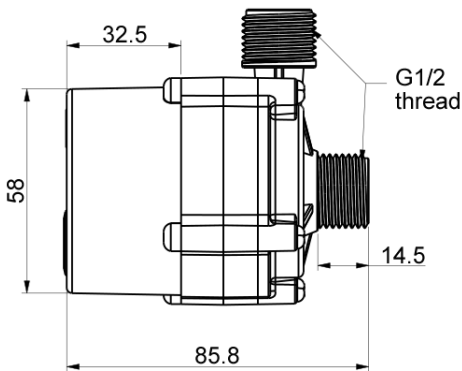
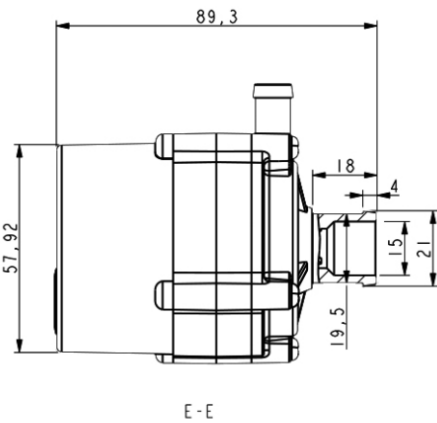
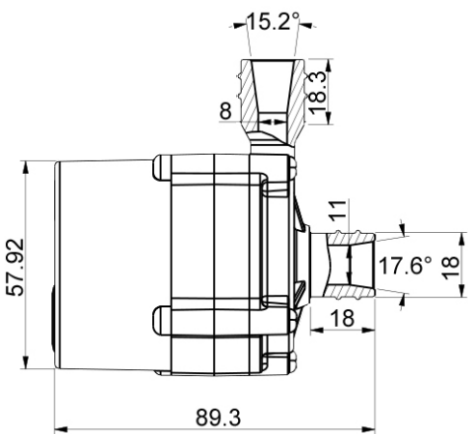
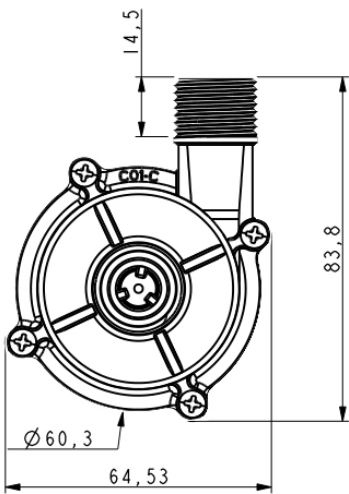
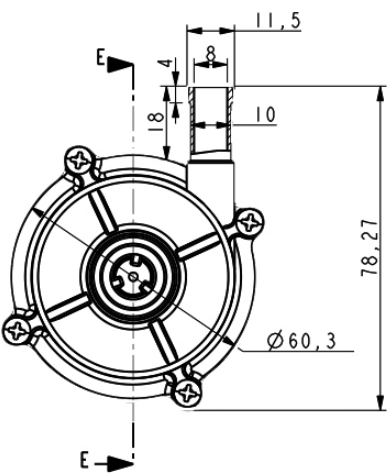
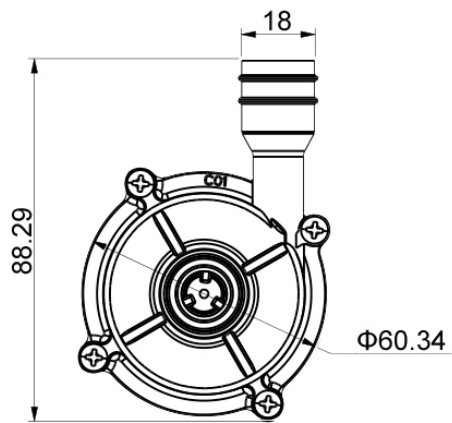
TL-C01(PUMP A and Pump C)
PERFORMANCE



TL-C01(PUMP B) PERFORMANCE



Dimension (mm)



Pump A

(circle nozzles $\phi 18\text{mm}/\phi 18\text{mm}$)

Pump B

(barb nozzles $\phi 19.5\text{mm}/\phi 10\text{mm}$)

Pump C

(thread nozzles G1/2)



Typical Applications

- Car engine cooling circulation
- Car engine pre-heating
- Heating system (car auxiliary heaters, parking heaters)
- Electric vehicles water circulation system
- Normal hot water circulation
- Liquid transfer
- General purpose pumping

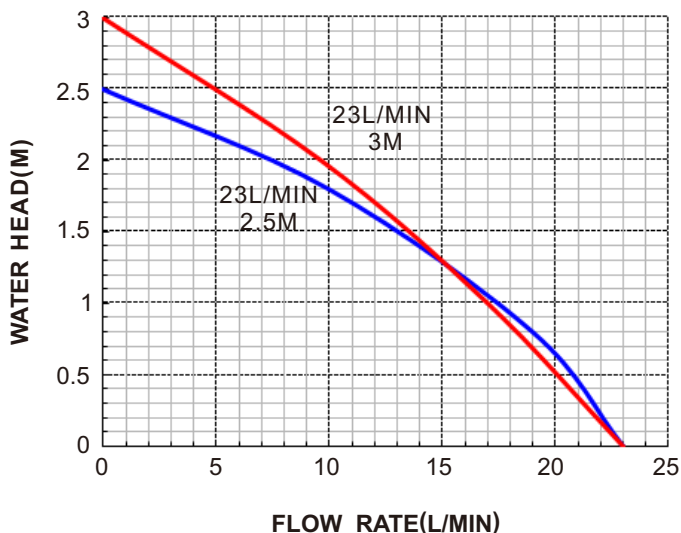


Specification

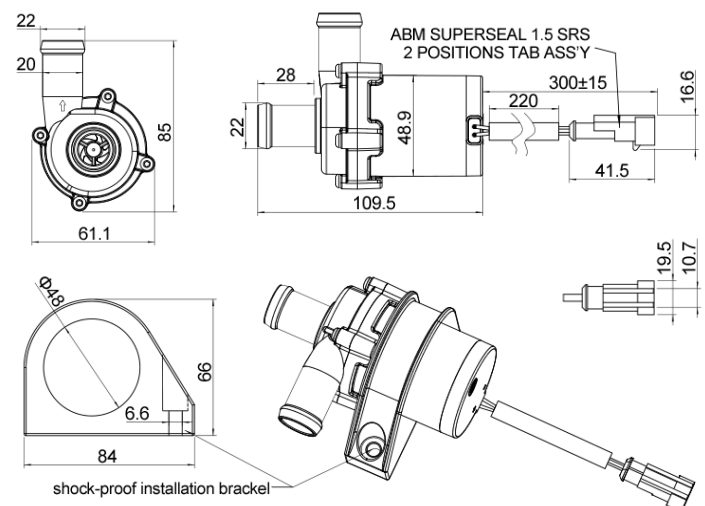
Model	Product Code	Max Flow Rate (L/Min)	Max Water Head (M)	Voltage (VDC)	Current (A)	Power (W)
TA50	TA50-R12-2302	23	2.5	12	1.1	13.5
	TA50-R24-2303	23	3	24	0.75	18
Note: Temperature range -40°C~125°C						

Curve & Dimension

TA50 PERFORMANCE



DRAWING (mm)





Typical Applications

- Car engine cooling circulation
- HVAC circulation system
- Heating system (car auxiliary heaters, parking heaters)
- Electric vehicles water circulation system
- Normal hot water circulation
- Liquid transfer
- General purpose pumping
- EV battery cooling system



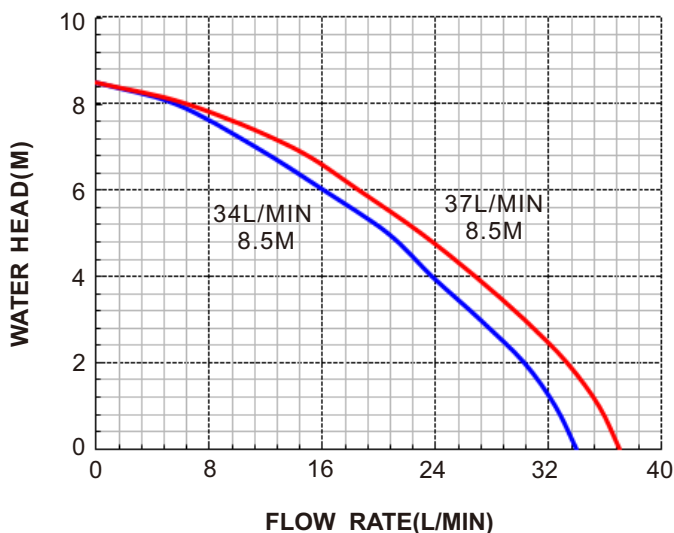
Specification

Model	Product Code	Max Flow Rate (L/Min)	Max Water Head (M)	Voltage (VDC)	Current (A)	Power (W)
TA60	TA60-R12-3409	34	8.5	12	4.5	54
	TA60-R24-3709	37	8.5	24	2.5	60

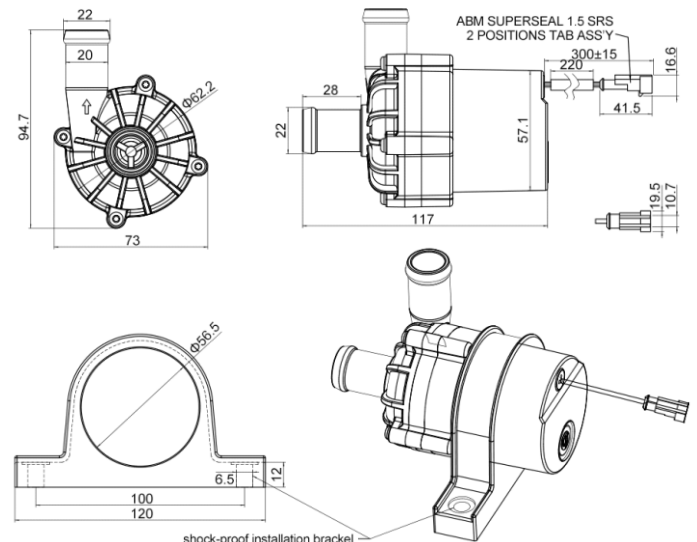
Note: 1. Temperature range -40°C~125°C 2. Customization: /FG (RPM) signal wire; /PWM speed control

Curve & Dimension

TA60 PERFORMANCE



DRAWING (mm)





Typical Applications

- Hot water circulation
- Radiant floor heating
- Solar applications
- Liquid transfer
- General purpose pumping



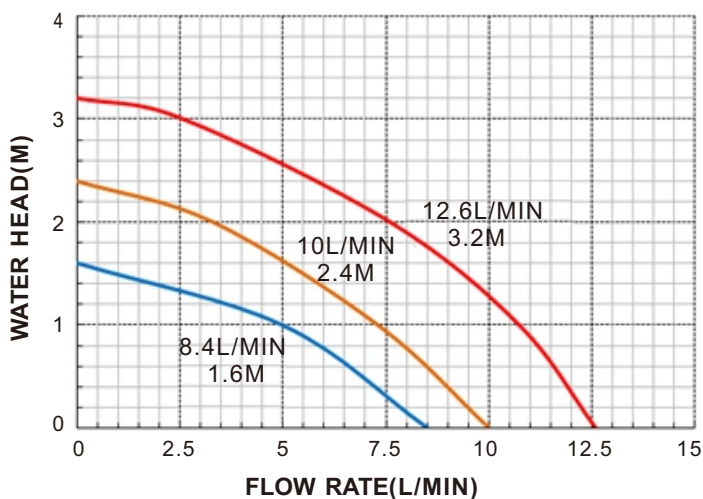
Specification

Model	Product Code	Max Flow Rate (L/Min)	Max Water Head (M)	Voltage (VDC)	Current (A)	Power (W)
TS5/PV	TS5-A12-5PV	8.4	1.6	12	0.41	5
	TS5-A12-10PV	10	2.4	12	0.83	10
	TS5-A12-15PV	12.6	3.2	12	1.25	15

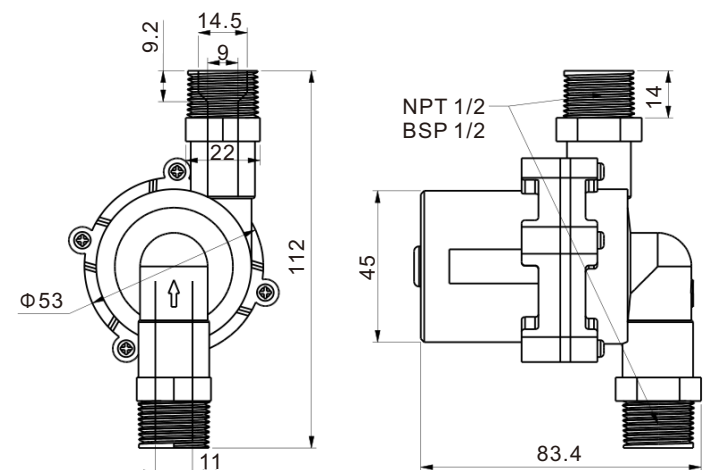
Note: High temperature 110°C (230°F)

Curve & Dimension

TS5/PV PERFORMANCE



DRAWING (mm)





Typical Applications

- Home beer brewing pump
- Hot water circulation
- Beverage dispenser
- General liquid transfer



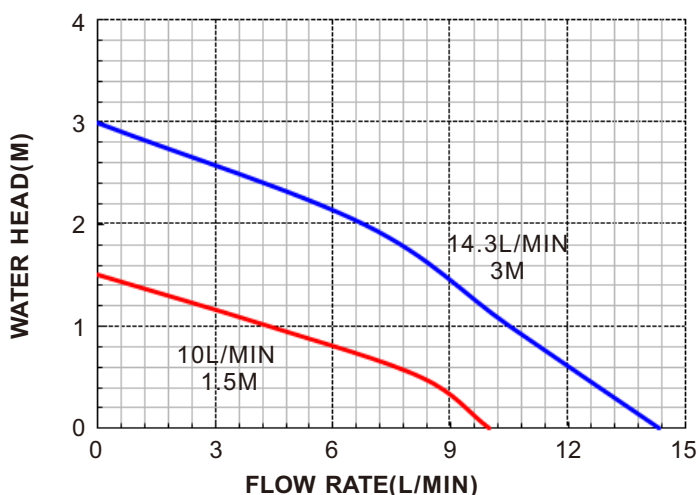
Specification

Model	Product Code	Max Flow Rate (L/Min)	Max Water Head (M)	Voltage (VDC)	Current (A)	Power (W)
TS5	TS5-A12-1001	10	1.5	12	0.45	5.4
	TS5-A12-1403	14.3	3.0	12	1.08	13
	TS5-A24-1001	10L	1.5	24	0.28	6.72
	TS5-A24-1403	14.3	3.0	24	0.6	14.4

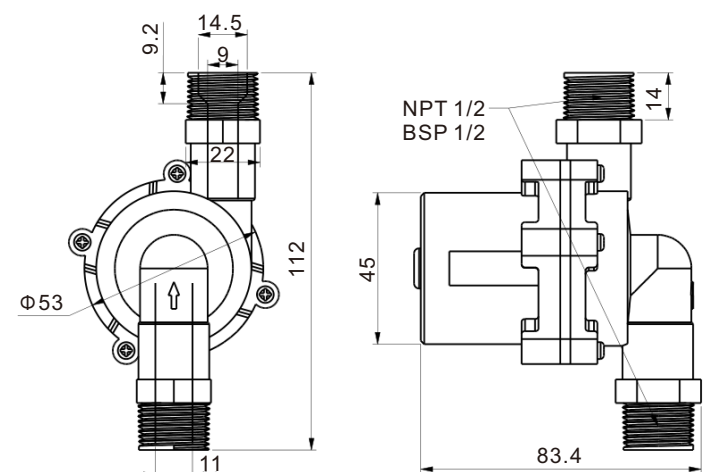
Note: 1. High temperature 110°C (230°F) 2. Customization: /S Submersible, liquid ≤50°C; /FG (RPM) signal wire; /PWM or /5V speed control

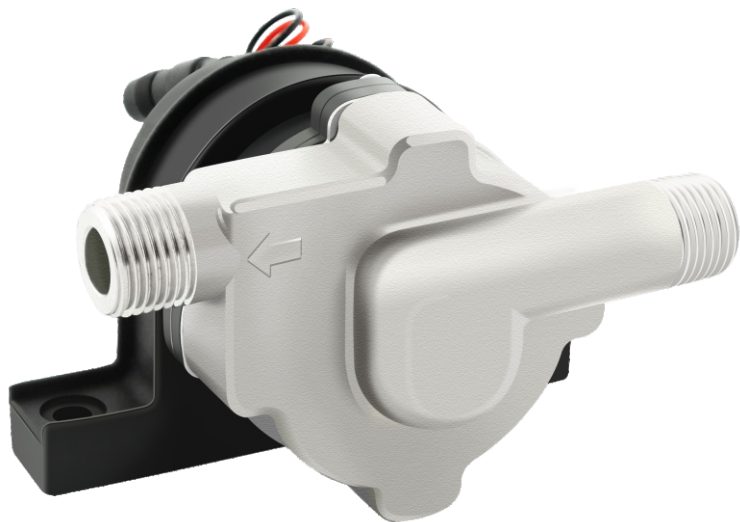
Curve & Dimension

TS5 HOMEBREW PERFORMANCE



DRAWING (mm)





Typical Applications

- Solar water heating system
- Hot water circulation
- Radiant floor heating
- Heat transfer application
- Cooling system
- Food-grade liquid transfer



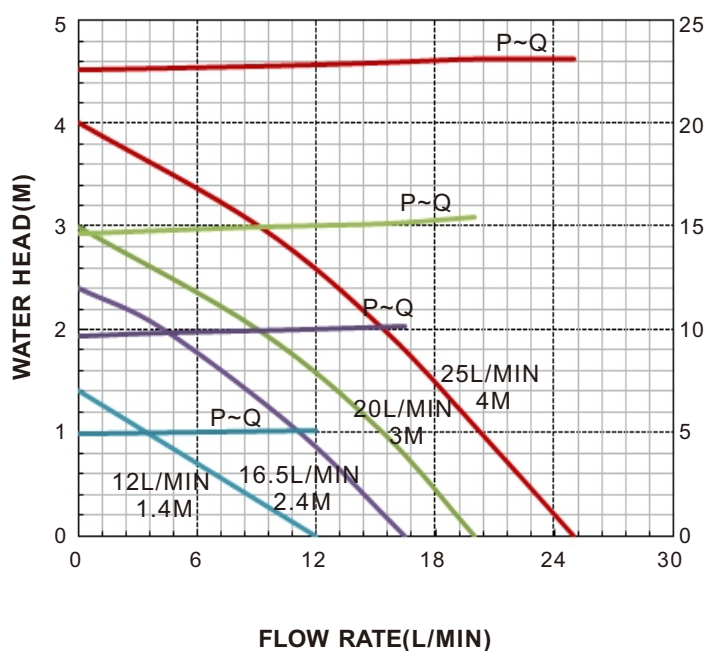
Specification

Model	Product Code	Max Flow Rate (L/Min)	Max Water Head (M)	Voltage (VDC)	Current (A)	Power (W)
TD5/PV	TD5/PV-A17-2504	25	4	17	1.4	25

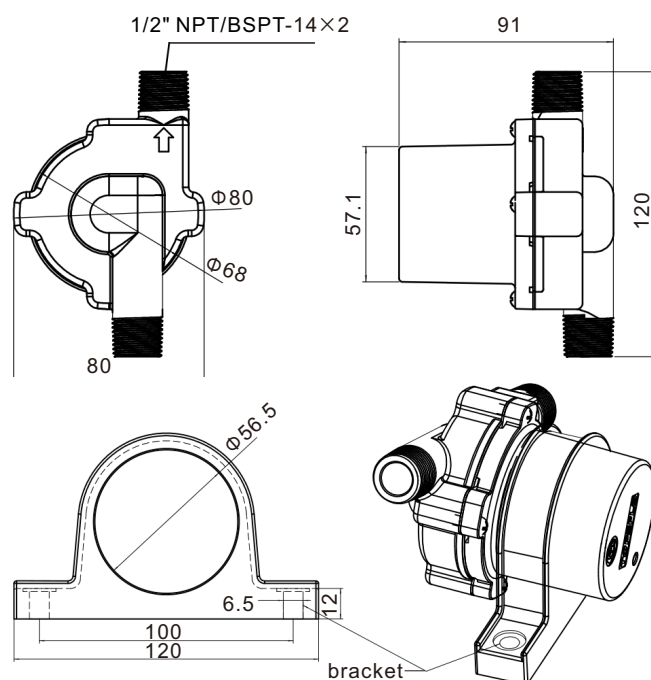
Note: High temperature 110°C (230°F)

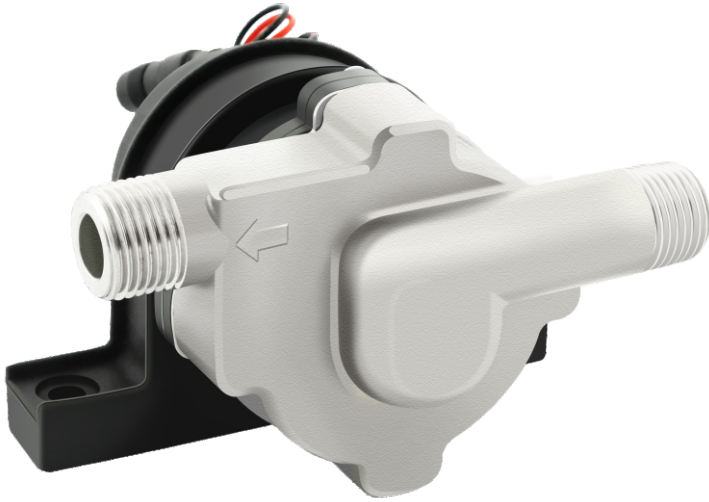
Curve & Dimension

TD5/PV PERFORMANCE



DRAWING (mm)





Typical Applications

- Home beer brewing pump
- Hot water circulation
- Beverage dispenser
- General liquid transfer



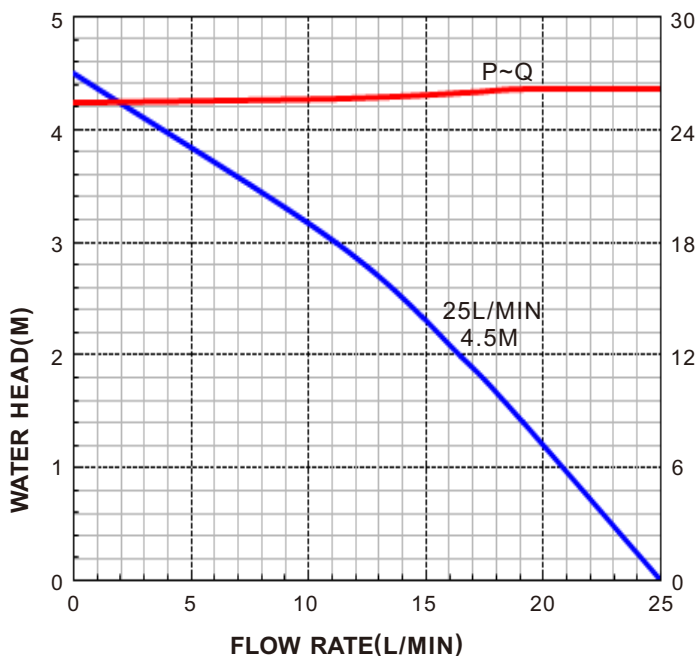
Specification

Model	Product Code	Max Flow Rate (L/Min)	Max Water Head (M)	Voltage (VDC)	Current (A)	Power (W)	Adaptor Type
TD5	TD5-A24-2505-P/US	25	4.5	24	1.4	35	USA
	TD5-A24-2505-P/UK	25	4.5	24	1.4	35	UK
	TD5-A24-2505-P/EU	25	4.5	24	1.4	35	European
	TD5-A24-2505-P/AU	25	4.5	24	1.4	35	Australia

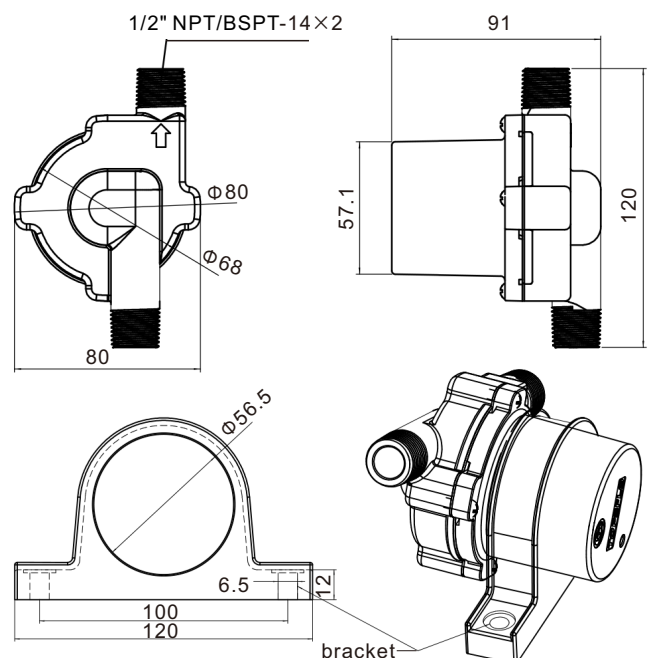
Note: 1. /H High temperature 110°C (230°F) 2. Customization: /FG (RPM) signal wire; PWM or /5V speed control

Curve & Dimension

TD5 PERFORMANCE



DRAWING (mm)





**TOPS Industry & Technology
(Micro Pump & Motor) Co., Ltd.**

 +86-731-82739266  +86-731-82739255
 info@topsflo.com  www.topsflo.com

No.188, Huanbao Rd. Huanbao Industrial Zone, Yuhua, Changsha, Hunan, 410116, China