

# TH152 OEM M50043 Product Specifications



# **Product specification**

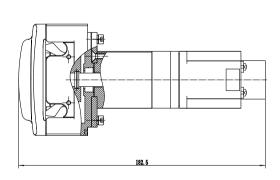
Model	DC brushless Motor–TH152		
Motor	DC brushless Motor, Servo Drive		
Pump head	TH152		
Tubing	Φ6*Φ10		
Product code	M50043		

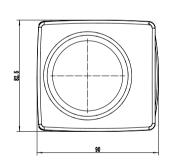


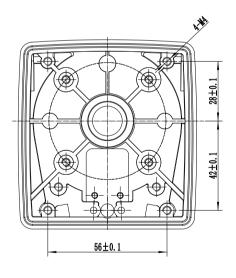
#### **Features:**

- The pump head uses the streamlined casting, metal shell, surface with Teflon coating the pump cover use the high transparent PC material.
- Spring roller assembly efficiently decreases tubing abrasion, maintain exit pressure from 0–1.5 bar, pump head spring reduce pressure avoid fluid erupting.
- Low noise, IMS planetary gear reducer imported from Germany, low noise and long life.
- Servo control, speed, torque, closed loop control, speed running smoothly, precise control, torque could adjust according to the load change.
- Low heat, servo control brushless motor, flow rate change accordingly, the temperate below 3°C.
- RS232 communication, ModBus RTU communication protocol control start, stop and rotation speed.

#### **Dimension**







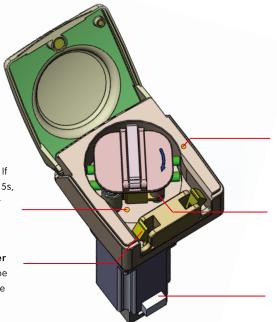
## **Specifications**

Configuration	TH152 Pumphead+DC servo motor with IMS gear box+Drive		
Configuration	Motor consists of 42 DC servo motor and IMS gear box+Drive		
Dimension	Pump head 82.5*90*50.5		
Flow rate	0–430ml/min		
Operating noise	< 48dB		
Cotrol	Communication protocol : Modbus RTU	Port: RS232	Baud Rate: 38400

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# **Safety Protection Design**



#### Magnetic Switch Protective Facility

Cease pumping in case of opening cassette by accident during operation.

#### **Sprung Rotor**

Different sized tube options for transferring different physical properties blood.

#### High Precision Encoder

Pump status signal feedback.

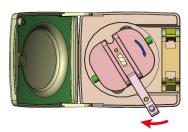
#### **Monitoring Unit**

To monitor the rotor operation. If the rotor is not detected within 5s, the alarm will sound to prevent abnormal rotor running during normal motor operation.

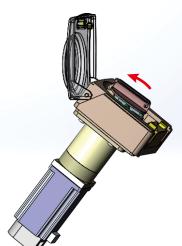
#### Self-adjustment Tube Holder

Quick—load design for easy tube loading and unloading with one hand.

#### ★ In charged State

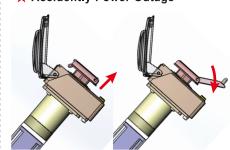


Unfold the hand-crank to rotate the rotor for keeping normal flow

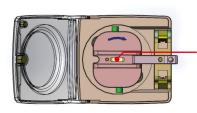


Fold the hand—crank back when finished

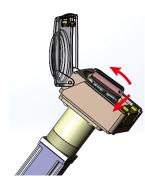
#### ★ Accidently Power Outage



For easier operation, roll out the interface from motor shaft and then unfold the hand—crankd to rotate

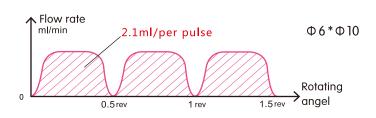


When completed, Align the central position hole of console disk with motor shaft by turning



Press the interface down to the original position, fold back the crank

## **Pulsation Diagram**

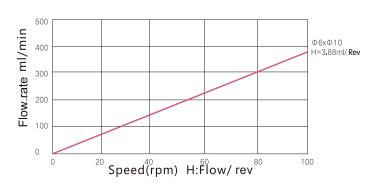


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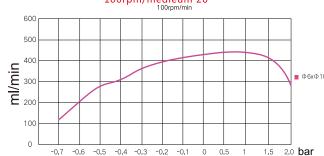
## Flow rate curve

Obtained with pumping water at  $25\,^{\circ}\!\!\mathrm{C}$  , 1 atm



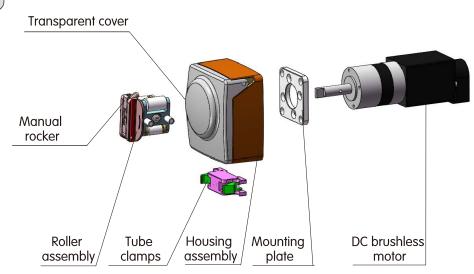
# Export back pressure flow rate curve

Working condition:zero import pressure/pump speed 100rpm/medieum 20 100rpm/min



when the export reach to 1.5bar,the spring release the pressure to stop the liquid

# TH152 Structure



# **Tubing loading**







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