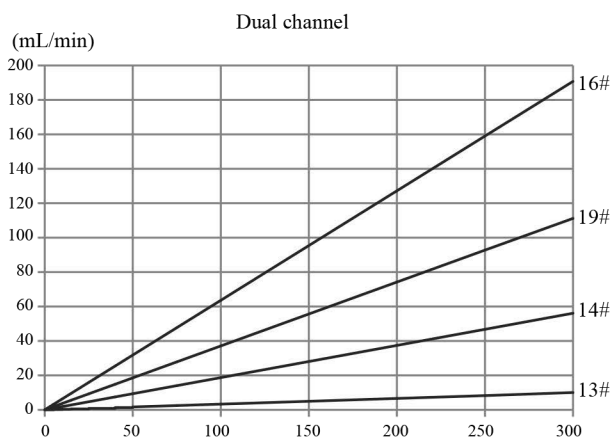
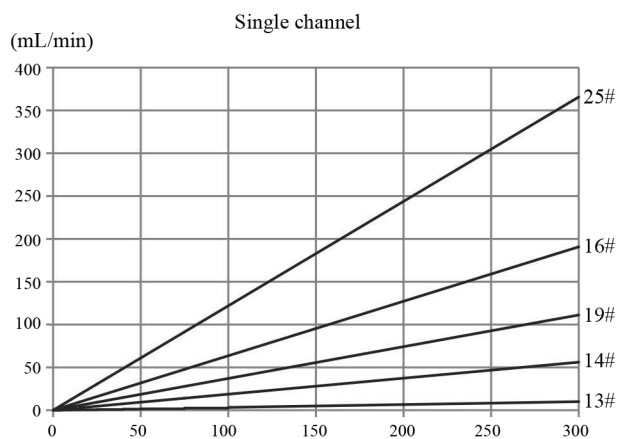


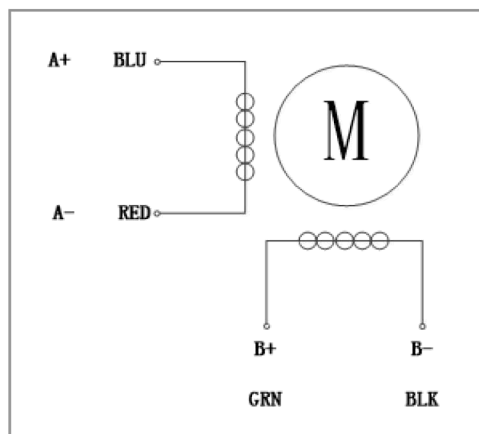
**Model No. : OEM-HYB019****Flow Data**

| Pump Head   | Channel number | Tubing | ID×Wall thickness(mm) | mL/r (3 rollers) | mL/r (6 rollers) | Flow Rate(mL/min) (0.1-300rpm) (3 rollers) | Flow Rate(mL/min) (0.1-300rpm) (6 rollers) | Weight(kg)        |
|-------------|----------------|--------|-----------------------|------------------|------------------|--------------------------------------------|--------------------------------------------|-------------------|
| HandyPump01 | Single channel | 13#    | 0.8×1.6               | 0.033            | 0.031            | 0.0033~10.03                               | 0.00312~9.36                               | 0.224 (3 rollers) |
|             |                | 14#    | 1.6×1.6               | 0.187            | 0.126            | 0.0187~56.09                               | 0.0208~37.68                               |                   |
|             |                | 19#    | 2.4×1.6               | 0.371            | 0.215            | 0.0371~111.17                              | 0.0036~64.51                               |                   |
|             |                | 16#    | 3.1×1.6               | 0.636            | 0.345            | 0.0636~190.76                              | 0.0059~103.51                              | 0.302 (6 rollers) |
|             |                | 25#    | 4.8×1.6               | 1.219            | 0.636            | 0.1219~365.69                              | 0.01038~190.81                             |                   |
| HandyPump02 | Dual channel   | 13#    | 0.8×1.6               | 0.033            | --               | 0.0033~10.03                               | --                                         | 0.224 (3 rollers) |
|             |                | 14#    | 1.6×1.6               | 0.187            | --               | 0.0187~56.09                               | --                                         |                   |
|             |                | 19#    | 2.4×2.4               | 0.371            | --               | 0.0371~111.17                              | --                                         |                   |
|             |                | 16#    | 3.1×2.4               | 0.636            | --               | 0.0636~190.76                              | --                                         |                   |



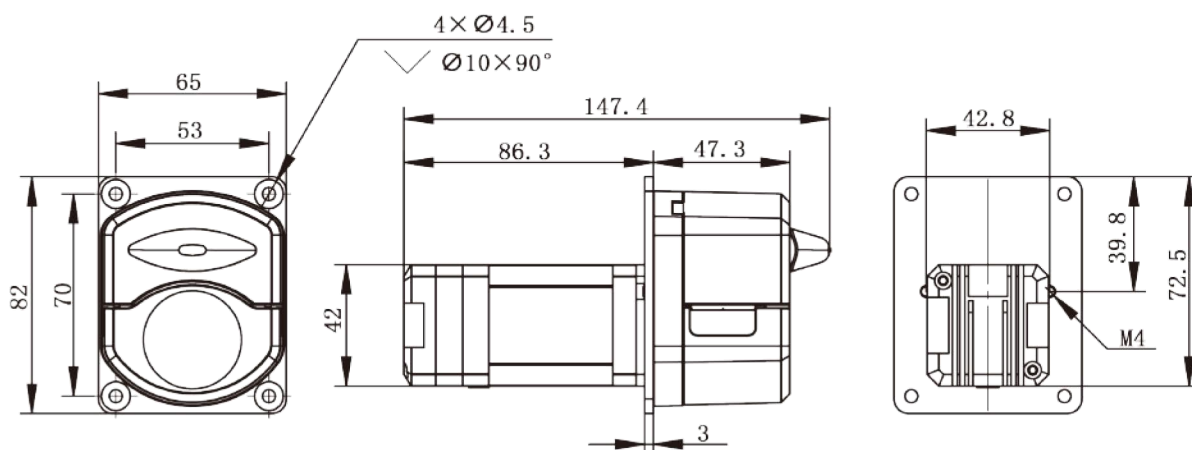


## Motor Specification



|                     |                                                             |
|---------------------|-------------------------------------------------------------|
| Model No.           | OEM-HYB019                                                  |
| Speed range         | 0.1-300rpm                                                  |
| Flow rate range     | 0.0033-365.69mL/min                                         |
| Motor type          | Integrated closed-loop stepper motor                        |
| Subdivisions        | 1/16 (Default) DIP switch can set a variety of subdivisions |
| Power supply        | DC24V~DC36V(recommendDC24V), ≥36W                           |
| Logic input voltage | DC3.3V~5V                                                   |
| Working environment | 0-40°C, 80%RH                                               |

## Dimension Drawing (Unit:mm)



## Tubing Installation Procedure



A. Turn the knob anticlockwise 180 ° , open the upper block.



B. Put the tube between rollers and upper block , tighten up the tubing lightly .



C. Turn the knob clockwise 180 ° , put the upper block back to original position , fasten the tube.