



PERISTALTIC PUMPS

CATALOGUE 2021



ABOUT US

Hygiaflex is a high-tech enterprise, specialized in R&D, manufacturer and sales of peristaltic pump, syringe pump, gear pump and other precision fluid transferring equipment. Also can do OEM product according with costumers' different requirements.

Hygiaflex team is a high-qualified, young and innovative team, which has research engineer, professional sales and service engineer. With rich technical force, excellent technological process and outstanding product quality, Hygiaflex gets well corporate reputation from global customers.

Hygiaflex products are widely used in research laboratory, bio-pharmaceuticals, food & beverage, fine chemical, environment, etc.



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NEW GENERATION



EASY LOAD TYPE PUMP HEAD



Features:

- The tube clamp linkage mechanism makes it more convenient to install the tube.
- The rubbing wheel adjustment mechanism can easily fix different size tube.
- The lever assist mechanism makes the operation more labor-saving.
- The tube pressure gap fine-tuning mechanism can adjust the pressure, extend the life of the tube and improve the dispensing accuracy.
- Tube tubes can be installed at the same time to realize single pump head with two channels.



MULTICHANNEL TYPE PUMP HEAD



Features:

- The elastic positioning mechanism enables users remove and install cartridge with one hand.
- The elastic pressure tube design, effectively improving the flow rate accuracy between channels.
- The mute design of the roller assembly realizes low noise and high speed operation



Laboratory
chemical dosing

Analytical instrument
sampling

Waste water
treatment

Chromatography



Cosmetic filling

Pharmaceutical
filling

Food & Beverage
filling

Repacking the kit



PUMP HEAD FLOW RATE

 New generation multichannel type pump head	0.1~150rpm 0.0002~60.11ml/min
 HF-MC Series	0.1~150rpm 0.000166~65ml/min
 HF-MD1	0.1~200rpm 0.007~71.2ml/min
 HF-MicroPump	0.1~350rpm 0.004~149.23ml/min
 HF-MiniPump	0.1~300rpm 0.0024~190ml/min
 HF-HandyPump	0.1~300rpm 0.0033~365.69ml/min
 HF-UD15	0.1~350rpm 0.08~930ml/min
 HF-SN Series	0.1~600rpm 0.024~1500ml/min
 HF-YZ Series	0.1~600rpm 0.07~2280ml/min
 New generation easy load type pump head	0.1~600rpm 0.00053~3100ml/min
 HF-DZ25-3L	0.1~600rpm 0.211~3600ml/min
 HF-DY Series	0.1~600rpm 0.01~4340ml/min
 HF-DZ25-6L	0.1~600rpm 0.3~6000ml/min
 HF-UC25	0.1~600rpm 0.0875~6663ml/min
 HF-YZ35	0.1~600rpm 0.69~12000ml/min
 HF-DZ45	30~350rpm 1.0~28.15l/min

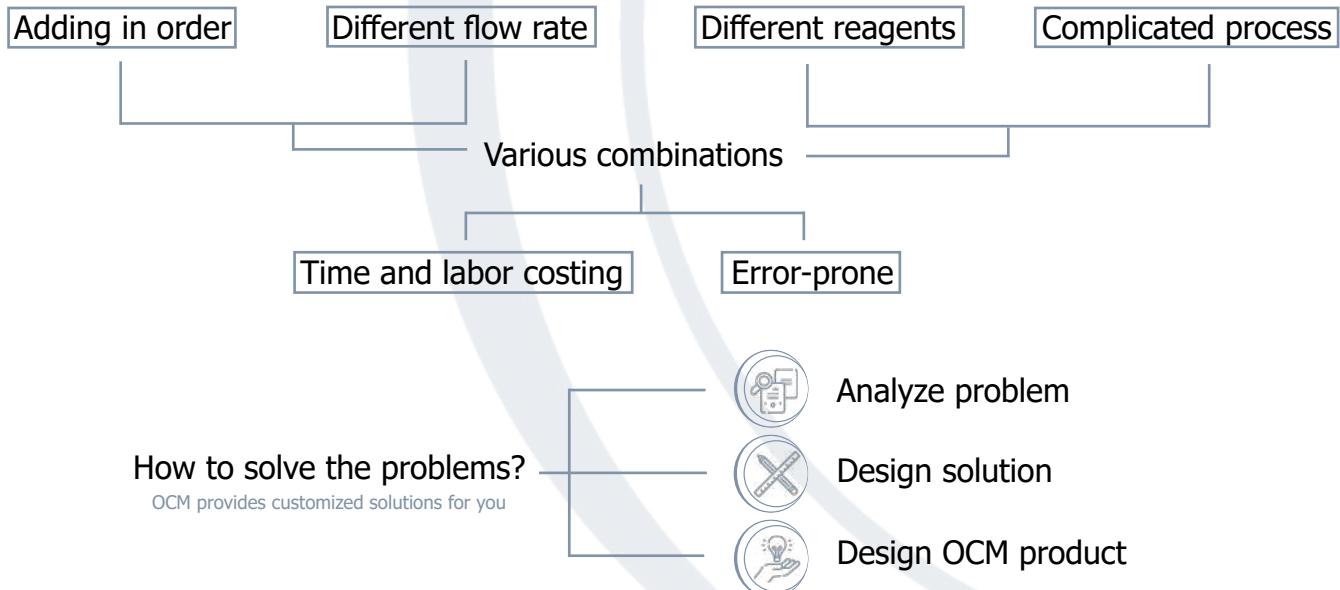
What is OCM (Original Customized Manufactured)



-  Peristaltic pump core technology
-  One-to-one customization of services
-  User-defined work mode

PROBLEMS

Conventional products can't be solved



Our
advantages

-  CUSTOMIZED Professional engineer offer one to one customized service
-  EXPERIENCE 15 years of fluid transmission
-  TECHNOLOGY Peristaltic pump technology research center

OCM Application

**1. Medical industry**

Automatic liquid mixing system, intelligent proportional mixing of different liquids, the system can intelligently detect the liquid level of the barrel. Through the analysis of the liquid state of each barrel, control the start and stop of the peristaltic pump, open and close OF solenoid valve, so as to realize the automation.

**2. Printing and Dyeing Industry**

Pigment accurate allocation, use several different pump heads to allocate different colors of pigment.

**3. Pharmaceutical Industry**

Filling one bottle with several times during filling process to prevent foaming.

**4. Reagent Dispensing**

It can fill a variety of different liquids in same time. About 5000-6000 pcs 96 deep well plates can be filled every day.



5. Fermentor Supporting

Peristaltic pump used in fermentor supporting, 4 HF-Handypump head used for adding acid, alkali, antifoaming agents and nutritional agents. The Lab series pump used for waste discharge.



6. Bio-pharmaceutical

Work with reactor or fermetation tank, the OCM system add different liquids with proportion and order into reactor. Together accomplish adding liquid, mixing, reaction, dispensing, waste discharge and washing function.



7. Research Laboratory

Customized OCM system, one controller with different pump heads and one pneumatic pump, with foot pedal switch control the pump start/stop.



8. Food Industry

Suitable for high temperature and high humidity working environment. High filling accuracy, the errors between each channels is $\pm 3\%$, non pollution filling. Friendly operation interface, easy operation. Reversible.



9. Ink Cartridge Filling

30 channels peristaltic pump filling 30 ink cartridges in same time, high accuracy and high efficiency.

Nucleic acid detection reagent dispensing system

BioD-I**Introduction**

This product is an intelligent platform for automatic separation of nucleic acid detection reagents. It has achieved high precision automatic batch production of reagents.

Features

- 1** 8 different reagents are packed in unequal or equal amounts.
- 2** Up to 0,5% packing accuracy.
- 3** 7 inch industrial true color LCD touch screen operation, man-machine interface is friendly, can store more than a group of commonly used work mode, simple and convenient.

- 4** The utility model has two-way quick liquid filling function, can be used for bidirectional operation and is convenient for cleaning the hose, and can quickly fill the reagent in the preparation stage or the packaging line before and after the packing.
- 5** Mechanical arm operation program can be edited to apply different size, different shape of reagent box, accurate positioning, production efficiency.

Application

This product is used for gene testing reagent packing, microporous plate packing, reagent box packing, micro reagent packing, biological reagent packing and so on.



Gene testing reagent packing



Microporous plate packing



Reagent box packing



Micro reagent packing



Biological reagent packing

PRODUCTS

10

Product Introduction

HF-PDS



- One controller can control maximum 8 pump units.
- Each pump unit with same or different pump head.
- The OCM controller and pump unit, can be integrated type or split type.

Four working modes

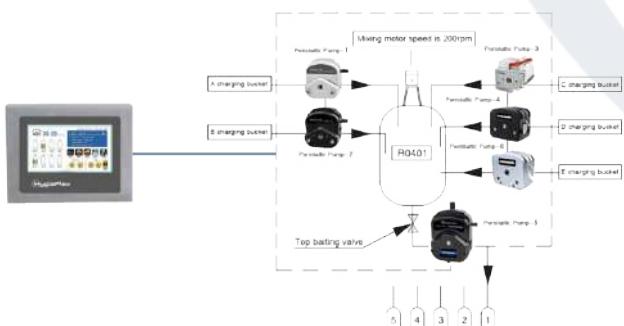
- Logic working mode: PDSI.
- Independent working mode: PDSII.
- Independent working mode and steps filling mode: PDSIII.
- Comprehensive working mode: PDSIV.

Suitable pump head

- HF-MC Series, HF-MiniPump, HF-UD15, HF-HandyPump.
- HF-YZ1515x, HF-YZ2515x, HF-YZ35.
- HF-DZ25-3L, HF-DZ25-6L, HF-DY15, HF-DY25.

Technical Specifications

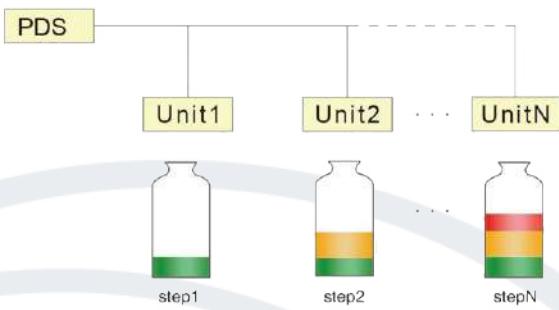
Speed range	0.1~600rpm, also depend on pump head	Power supply	AC10-240V
Speed resolution	0.01rpm	Power consumption	15W
Back suction angle	0-360°	Controller dimension	240*221*111mm
Display	7 inch- industrial grade- true color LCD TFT screen	Controller weight	2.1kg
Control	Touch screen	Memory function	Storage the running parameters when power off
Start/stop, direction signal	Active switch signal 5V	IP rate	IP31
		Pump housing material	Mirror stainless steel



Application 1: Chemical Industry. Recator liquid adding, dispensing and washing, with different volume and adding liquid according to preset order.

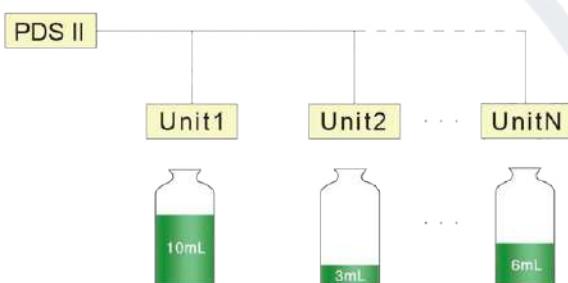


Application 2: PDSIV. One controller with 7 pump units, 4 HF-MiniPump and 3 HF-YZ1515x pump heads, for different liquid filling with different time sequence.

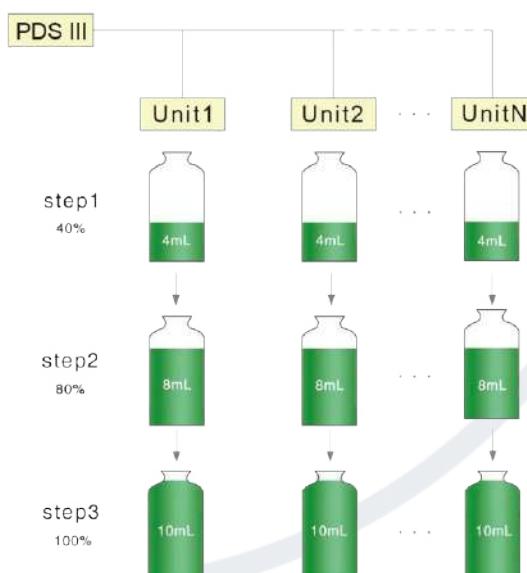


Logic working mode

In logic working mode, each unit working cooperatively. Filling or transferring with orders, also with different proportion adding, finish automation mixing work.
 Maximum steps: 50 steps
 Common mode: can save maximum 5 groups data.
 Working time: 0.1sec ~ 9999hour
 Pause time: 0.1sec ~ 9999hour
 Steps trigger way: time trigger or external trigger.
 Calibration: can calibrate each step separately, online micro adjusting function.



In independent working mode, each unit working independently, can fill different volume.
 Working mode: transferring or dispensing.
 Maximum steps: 50 steps
 Common mode: in dispensing mode can save 5 groups data.
 Calibration: each pump unit can calibrate separately, online micro adjusting function.
 Dispensing time: 0.1sec - 9999sec
 Pause time: 0.1sec ~ 9999sec
 Repeat number: 1 - 9999times, set '0' for unlimited times
 Communication: RS232/RS485, Modbus protocol (RTU mode)



Independent and steps filling working mode

In independent working mode, each unit can finish filling process with multiple different filling volume. This function suitable for prevent fluid splashing and foaming. This process can also repeat many times, achieving complicated dispensing function.
 Working mode: transferring or dispensing mode.
 Transferring total volume: can record the total liquid volume transferred by each unit in transfer mode.
 Dispensing step: it can be dispensed in three steps, and different parameters can be set for each step.
 Calibration: each pump unit can calibrate separately, online micro adjusting function.
 Common mode: in dispensing mode can save 5 groups data.
 Dispensing time: 0.1sec - 9999sec
 Pause time: 0.1sec ~ 9999sec
 Repeat number: 1 - 9999times, set '0' for unlimited times
 Communication: RS232/RS485, Modbus protocol (RTU mode)



Working mode: Include logic working mode, independent working mode, independent and steps filling mode.

Product Introduction

- ABS engineering plastic housing, anti-corrosion, anti-static.
- OLED screen display motor speed, digital knob control speed.
- Compact design, various external control.
- Easy to observe the pump head and tubing working situation

HF-LabK1



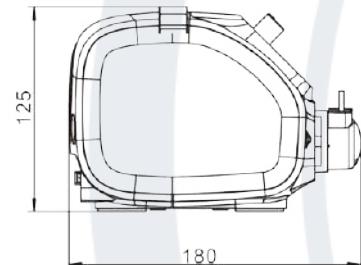
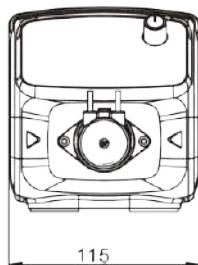
Product Features

- Low power consumption, mute working.
- Stable flow rate and suitable for continuous dosing applications.
- Easy to replace long life PharMed tubing.
- Digital knob control speed, memory back up, user setting saved if power lost.

Color selection



Dimension Drawing (Unit: mm)



Technical Specifications

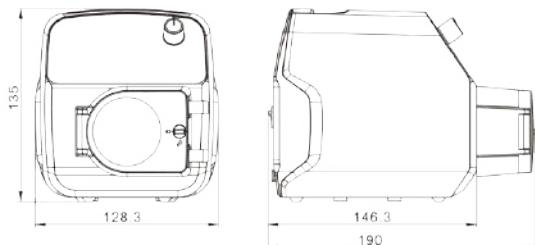
Flow rate range	0.004-63.96 ml/min	External control	Start/stop direction control (switch signal)
Speed range	0.1-150rpm reversible		0-5V, 4.20mA (standard)
Speed resolution	0.1rpm		0-10V (optional)
Speed control	Digital knob	Power adapter	DC 12V/1A with power adapter
Control method	Mechanical keypad	Dimension	180*115*125mm (L×W×H)
Keypad lifetime	300,000 times	Weight	0.8kg
Display	0.96" OLED display	Condition temperature	0-40°C
Communication interface	USB connector, RS485 interface (MODBUS protocol, RTU mode)	Relative humidity	<80%
		IP rate	IP31

Product Composition and Flow Rate Range

Model	Pump Head	Speed(rpm)	Tubing Size (IDxWall Thickness(mm))	Flow Rate Range(ml/min)
HF-LabK1	HF-MicroPump	0.1-150	1*1	0.004-6.38
			2*1	0.014-21.45
			3*1	0.031-47.26
			4*1	0.042-63.96

HF-LabS3 Product Introduction

Dimension Drawing (Unit: mm)



- ABS engineering plastic housing, anti-corrosion, anti-static.
- OLED screen display motor speed, digital knob control speed.
- Compact design, various external control.
- Easy to observe the pump head and tubing working situation

Product Features

- Low power consumption, mute working.
- Stable flow rate and suitable for continuous dosing applications.
- Easy to replace long life PharMed tubing.
- Digital knob control speed, memory back up, user setting saved if power lost.

Color selection



HF-Minipump



HF-UD15

Technical Specifications

Flow rate range	0.0024-930ml/min	Communication interface	USB connector, RS485 interface (MODBUS protocol, RTU mode)
Speed range	HF-LabS3/UD15 0.1-350 reversible HF-LabS3/Minipump 0.1-300 reversible	External control	Start/stop direction control (switch signal) 0-5V, 4.20mA (standard), 0-10V (optional)
Speed resolution	0.1rpm	Power supply	DC24V/1A with power adapter
Speed control	Digital knob	Dimension	190x128.3x135mm(LxWxH)
Control method	Mechanical keypad	Weight	800g
Keypad lifetime	300,000 times	Condition temperature	0-40°C
Display	0.96" OLED display	Relative humidity	<80%
IP rate	IP31		

Product Composition and Flow Rate Range

Model	Pump Head	Speed(rpm)	Tubing Size	Flow Rate Range(ml/min)
HF-LabS3	HF-UD15	0.1-350	16#, 17#, 25#	0.08-930
	HF-Minipump01	0.1-300	1x1, 2x1, 2.5x1, 3x1	0.0024-190
	HF-Minipump02		13#, 14#, 19#, 16#, 25#	0.005-108.39

Product Introduction

- 304 stainless steel shell, anti-corrosion, resistant to rust conform to GPM request.
- OLED screen display motor speed and working status, digital knob control speed.
- HF-SK-HandyPump external control adopts standard wiring terminal, which is more suitable for supporting industrial use.
- Support RS232, RS485 communication, Modbus protocol, more convenient to connect with PLC.
- With power-down memory function, cost effective.
- The external control function interface is rich, and the external control isolation signal is 5-24V.
- Compact structure, can be stacked.

HF-SK-HandyPump


Model Number HF-SK-HandyPump

Pump head

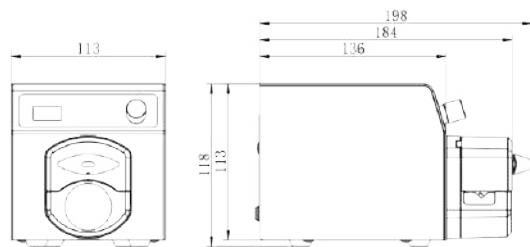


HF-HandyPump01



HF-HandyPump02

Dimension Drawing (Unit: mm)



Technical Specifications

Flow rate range	0.0033~365.69ml/min	Power supply	DC24V/1A with power adapter
Speed range	0.1~300rpm	External control	Start/stop control(switch signal)
Speed resolution	0.1rpm		Speed: 0-5V, 4-20mA(standard), 0-10V(optional)
Control method	Digital knob control/Mechanical keypad	Communication interface	RS485, RS232
Motor type	Stepper motor	Condition temperature	0-40°C
Display	OLED display(0.96")	Relative humidity	<80%
Power consumption	15W	Output interface	Output motor working status
Weight	1.75Kg	IP rate	IP31
Keypad lifetime	300,000 times	Drive dimension	198*113*118mm(L*W*H)

Product Composition and Flow Rate Range

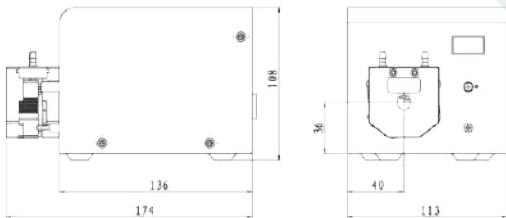
Model	Pump Head	Speed(rpm)	Tubing Size	Flow Rate Range(ml/min)
HF-SK-HandyPump	HF-HandyPump01	0.1-300	13#, 14#, 19#, 16#, 25#	0.0033-365.69
	HF-HandyPump02		13#, 14#, 19#, 16#	0.0033-190.76

HF-SP-MiniPump

Product Introduction



Dimension Drawing (Unit: mm)

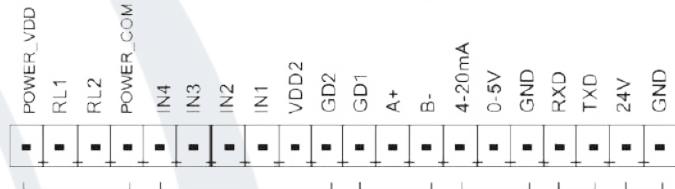


- 304 stainless steel housing, resisting corrosion, space-saved.
- OLED screen, display the current motor speed and working status.
- Digital knob control speed, toggle switch control direction and start/stop.
- Various external control functions, support RS485 standard MODBUS protocol.

Model Number

HF-SP-MiniPump01, HF-SP-MiniPump02

External Control Schematic Diagram



Technical Specifications

Flow rate range	0.0024~190 ml/min	Communication interface	RS485 support MODBUS protocol (RUT mode)
Speed range	0.1~300rpm, reversible	Power supply	24V/1A DC power
Speed resolution	0.1rpm	Drive dimension	174x113x108mm (LxWxH)
Speed control	Digital knob control speed	Weight	1.64kg
Motor type	Stepper motor	Power consumption	<15W
Display	OLED display	Condition temperature	0~40°C
External control	Start/stop control (switch signal) 0-5V, 4-20mA(standard), 0-10V (optional)	Relative humidity	<80%
		IP rate	IP31

HF-SP-MiniPump Speed/Flow Rate Reference

Rotation Speed (rpm)	Dual Channel Flow Rate (ml/min) and Tubing 1mm wall thickness)			
	ID 1mm	ID 2mm	ID 2.5mm	ID 3mm
5	0.25	0.90	1.28	1.78
10	0.49	1.84	2.59	3.52
15	0.74	2.76	3.85	5.30
25	1.25	4.57	6.43	8.80
40	2.00	7.31	10.25	14.02
50	2.52	9.14	12.78	17.47
75	3.76	13.64	19.04	26.12
100	5.03	18.17	25.42	35.34
200	10.12	36.45	51.27	71.44
250	12.63	45.75	64.34	88.35
300	15.01	54.63	76.84	108.39

Rotation Speed (rpm)	Single Channel Flow Rate (ml/min) and Tubing 1.6mm wall thickness)				
	13#Tubing ID 0.8mm	14#Tubing ID 1.6mm	19#Tubing ID 2.4mm	16#Tubing ID 3.1mm	25#Tubing ID 4.8mm
5	0.12	0.56	1.26	1.97	3.26
10	0.26	1.15	2.53	3.90	6.41
15	0.39	1.74	3.80	5.80	9.52
25	0.66	2.88	6.31	9.59	15.74
40	1.08	4.59	10.11	15.29	25.15
50	1.34	5.69	12.62	18.96	31.14
75	2.00	8.54	18.93	28.36	46.55
100	2.73	11.37	25.27	37.66	61.98
200	5.46	22.76	50.82	76.02	124.14
250	6.81	28.40	65.39	95.08	153.63
300	8.28	33.88	77.23	114.31	190.00

HF-LabV1, HF-LabV3, HF-LabV6


HF-LabV1, HF-LabV3, HF-LabV6

Laboratory
Industrial equipment supporting


HF-V1, HF-V3, HF-V6

 New generation Easy Load
Type Pump Head


HF-YZ Series


 New generation Multichannel
Type Pump Head


HF-MC Series

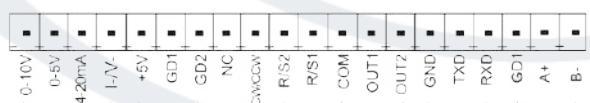


HF-V1, HF-V3, HF-V6

Laboratory
Industrial equipment supporting

- Industrial grade 4.3" true color LCD screen, touch screen control, both Chinese and English interface available.
- Dynamic display transferring status. Flow rate data setting parameters and system configuration display in the same screen.
- 3 Kinds of working mode: fixed volume metering, fixed time and volume, timer start and stop, meet different transferring and dispensing request.
- Intelligent calibration function and online micro adjusting function.

External Control Schematic Diagram



Flow Rates Peristaltic Pump

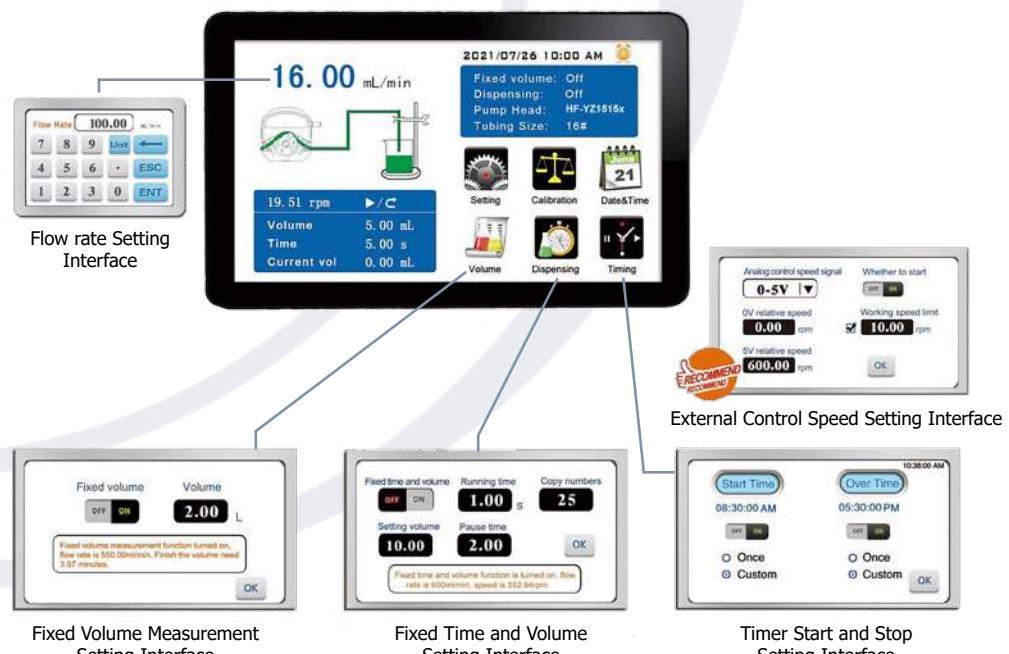


Technical Specifications

Flow rate range	HF-LabV1/V1:0.000166~775ml/min HF-LabV3/V3:0.000166~1808ml/min HF-LabV6/V6:0.000166~3100ml/min	Start/stop, direction signal	Passive switch signal, such as foot pedal switch Active switch signal: 5V, 12V and 24V for option
Speed range	0.1-600rpm	Communication interface	RS232, RS485 support MODBUS protocol (RTU mode)
Speed resolution	0.01rpm	Output interface	Output motor working status (Open-Collector output)
Flow rate resolution	0.01μl	Power supply	AC 220V±10% 50Hz/60Hz (standard) AC 110V±10% 50Hz/60Hz (optional)
Flow rate accuracy	<0.5%	Drive dimension (L×W×H)	HF-LabV Series: 261.4x157.3x236.9mm HF-V Series: 252x152x243mm
Back suction angle	0-360	Drive weight	HF-LabV Series: 4.40kg HF-V series: 4.40kg
Outlet pressure	1bar(0.8-1.0mm wall thickness tubing) 1-2.7bar(1.6-2.4mm wall thickness tubing)	Power consumption	<50W
Motor type	Stepper motor	Condition temperature	0-40
Display	Industrial grade 4.3"LCD color display	Relative humidity	<80%
Control method	Touch screen and Mechanical keypad	IP rate	IP31
Keypad lifetime	300,000 times		
External speed control signal	0-5V, 0.10V, 4-20mA for option		

Product Composition and Flow Rate Range

Flow Rates Peristaltic Pump		Pump Head&Flow Rate (ml/min)			
		HF-YZ1515x	HF-YZ2515x	HF-MC1~MC12(10)	HF-MC1~MC12(6)
Drive&speed	Tubing	13#, 14#, 19#, 16# 25#, 17#, 18#	15#, 24#	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm	
HF-LabV1/V1	0.1-150rpm	0.007~570	0.17~435	0.000166-49 (working speed≤150rpm)	0.000185-65 (working speed≤150rpm)
HF-LabV3/V3	0.1-350rpm	0.007~1330	0.17~1015		
HF-LabV6/V6	0.1-600rpm	0.007~2280	0.17~1740		
Drive&speed		New generation HF-Easy Load Type Pump Head		New generation Multichannel Type Pump Head	
		HF-Easy Pump (1.60 mm wall thickness)	HF-Easy Pump (2.40 mm wall thickness)	8 rollers	
Drive&speed		13#, 14#, 19#, 16# 25#, 17#, 18#	15#, 24#, 35#, 36#	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm	
HF-LabV1/V1	0.1-150rpm	0.0053~645	0.18~775	0.0002-52 (working speed≤150rpm)	
HF-LabV3/V3	0.1-350rpm	0.0053~1505	0.18~1808		
HF-LabV6/V6	0.1-600rpm	0.0053~2580	0.18~3100		



HF-V6-12L
HF-V6-6L
HF-V6-3L

Product Features

- Large flow power rate, high precision, intelligent control of liquid transferring.
- Servo motor drive, accurate control, strong driving force.
- 304 stainless steel housing, the first choice for high level industrial sites.

Model Number

HF-V6-3L/HF-DZ25-3L
HF-V6-6L/HF-DZ25-6L
HF-V6-12L/HF-YZ35

Technical Specifications

Flow rate range	HF-V6-3L:0.211~3600ml/min HF-V6-6L:0.03~6000ml/min HF-V6-12L:0.00069~12l/min	Start/stop, direction signal	Passive switch signal, such as foot pedal switch Active switch signal: 5V, 12V and 24V for option
Speed range	0.1-600rpm	Output interface	Output motor working status (Open-Coleector Output)
Speed resolution	0.01rpm	Power supply	AC 220V±10% 50Hz/60Hz (standard) AC 120V±10% 50Hz/60Hz (optional)
Flow rate resolution	0.01ml	Communication interface	RS232, RS485 support MODBUS protocol (RTU mode)
Flow rate accuracy	<0.5%	Drive dimension	HF-V6-3L:223×152×231mm HF-V6-6L:283×192×274m HF-V6-12L:302×222×331m
Back suction angle	0-360	Drive weight	HF-V6-3L: 50.02KG; HF-V6-6L: 7.85kg; HF-V6-12L: 13.14kg
Outlet pressure	3bar	Power consumption	HF-V6-3L:<80W; HF-V6-6L: <180W; HF-V6-12L: <300W
Motor type	Servo motor	Environment temperature	0-40°C
Display	Industrial grade 1.3" color LCD display	Relative humidity	<80%
Control method	Touch screen and Mechanical keypad	IP rate	IP31
Keypad lifetime	300,000 times		
External speed control signal	0-5V, 0-10V, 4-20mA for option		

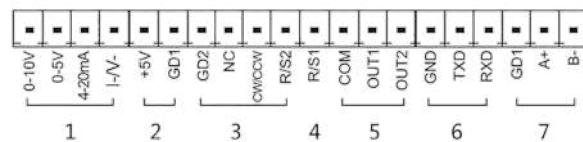
Product Composition and Flow Rate Range

Drive	Motor type	Pump Head	Tubing Size	Speed Range (rpm)	Flow Rate(mL/min)
HF-V6-3L	Servo Motor	HF-DZ25-3L	15#, 24#, 35#, 36#	0.1-600	0.211~3600
HF-V6-6L		HF-DZ25-6L	15#, 24#, 35#, 36#		0.3~6000
HF-V6-12L		HF-YZ35	26#, 73#, 82#		0.69~12000

HF-V Series peristaltic pump has various external control interface, can meet different equipment supporting requirements.

External control interface definition

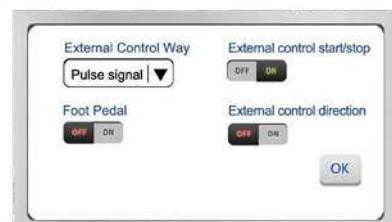
1. Analog signal input port: Choose the external control speed signal from the external control setting interface. Turn on the external control speed function, control the motor speed range through the analog signal.
2. Internal isolation 5VDC output.
3. External control start/stop, direction signal input port: active signal input.
4. R/S1 external control start/stop signal port: passive signal input.
5. Motor running status output port: output current running status of the motor.
6. RS232 communication interface: choose RS232 in communication setting interface, this port is effective.
7. RS485 communication interface: choose RS485 in communication setting interface, this port is effective.



HF-V Series peristaltic pump external control setting interface.

Choose external control start/stop, direction signal

1. Can respectively set external control start/stop or reversing switch whether effective or not.
2. Can choose control mode according to requirement: pulse mode or level model.
3. Can set the foot switch whether effective or not.
4. Can choose switch value signal's high level values according to customers' main control requirement: 5V (default), 12V, 24V.



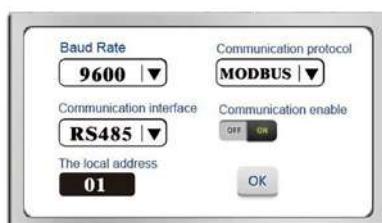
Programmable external control speed setting

1. Can choose analog signal source according to requirements: 0-5V, 0-10V, 4-20mA.
2. When the signal source is chosen, can choose maximum speed and minimum speed which corresponding to the signal source's maximum value and minimum value according to actual demand, to reach userdefined rotate speed range purpose.
3. Working speed limit is at the situation that the linear relation of analog quantity signal and rotating speed keeps invariant, set peristaltic pump's maximum working rotate speed. This setting can avoid production accident caused by sudden change of transfer fluid amount with the sudden change of external analog signal.

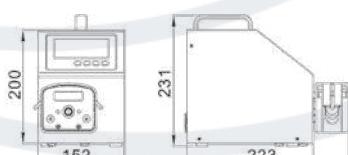


Communication setting

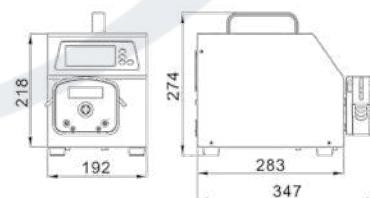
1. Support RS232 and RS485 interface, can be chosen in software interface.
2. Support various Baud rate: 2400bps, 4800bps, 9600bps, 19200 bps.
3. Can choose standard modbus communication protocol or Hygiaflex communication protocol to control, modbus communication protocol is suitable to match with industrial site HMI, PLC or other upper computer which support standard modbus communication protocol; Hygiaflex communication protocol is suitable to match with single chip micro computer or upper computer on computer programme.



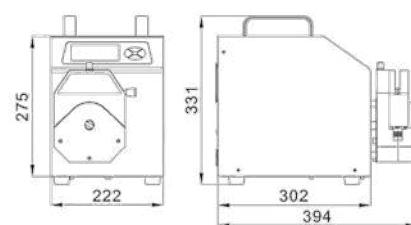
Dimension Drawing (Unit: mm)



HF-V6-3L



HF-V6-6L



HF-V6-12L

HF-LabV6-IV, HF-LabF6-IV, HF-LabN6-IV, HF-LabM6-IV



Features

- With ABS engineering plastic housing, streamlined body design.
- Servo motor control, more strong and precise.
- Large flow rate range with HF-UC25 pump head.

Model Number

HF-LabV6-IV, HF-LabF6-IV, HF-LabN6-IV, HF-LabM6-IV

Typical Application

Mainly for laboratory

Product Composition and Flow Rate Range

Model	Pump Head	Speed Range(rpm)	Tubing Size	Flow Rate (ml/min)
HF-LabV6-IV	HF-UC25	0.1-600	15#, 24#, 35#, 36#	0.3423~6663
HF-LabF6-IV		1-600		3.423~6663
HF-LabN6-IV		0.1-600		0.3423~6663
HF-LabM6-IV		0.5-600		1.7115~6663

Technical Specifications

Outlet pressure	1.4~27bar	Power supply	AC 220V ±10% 50Hz/60Hz (standard)
Motor type	Servo motor		AC 110V ±10% 50Hz/60Hz (optional)
Communication interface	HF-LabV6-IV/HF-LabF6-IV/HF-LabN6-IV: RS232, RS485 support MODBUS protocol (RTU mode); HF-LabM-IV: RS232 (standard), Hygiaflex communication protocol; RS485 (optional), Modbus protocol (RTU mode)	Drive dimension	261.4x157.03x236.9mm
		Drive weight	4.40kg
		Power consumption	<80W
		Condition temperature	0-40°C
		Relative humidity	<80%
		IP rate	IP31

Drive	Model	Display	Operating mode	External control signal	Motor Status Output Interface
HF-LabV6-IV	Intelligent flow rate type	4.3"-industrial-true color LCD Screen	Touch screen + Mechanical keypad	External speed control signal: 0-5V, 0-10V, 4-20mA for option; Start/Stop: Passive switch signal, such as foot pedal; Active switch signal: 5V (standard), 12V, 24V (optional)	open-collector output
HF-LabF6-IV	Intelligent dispensing type	4.3"-industrial-true color LCD Screen	Touch screen + Mechanical keypad	Start/Stop: Passive switch signal, such as foot pedal; Active switch signal: 5V (standard), 12V, 24V (optional)	No
HF-LabN6-IV	Standard flow rate type	3.2"LCD Screen	Mechanical keypad	External speed control signal: 0-5V, 0-10V, 4-20mA for option; Start/Stop: Passive switch signal, such as foot pedal; Active switch signal: 5V (standard), 12V, 24V (optional)	No
HF-LabM6-IV	Standard type	3 digital LED	Mechanical keypad	External speed control signal: 0-5V (standard) 0-10V, 4-20mA (optional); Start/Stop: Passive switch signal, such as foot pedal; Active switch signal: 5V, 12V (optional), 24V (standard)	No

Flow Rates Peristaltic Pump

HygiaFlex

HF-LabN1, HF-LabN3, HF-LabN6



New generation Easy Load
Type Pump Head



HF-YZ Series



New generation Multichannel
Type Pump Head



HF-MC Series

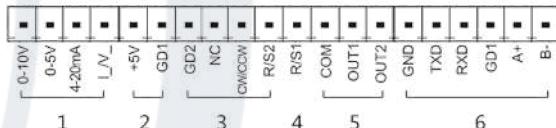
Typical Application

- ✓ Special for university laboratory and research institute.
- ✓ Ion chromatography and titrator.
- ✓ Pilot scale and industry production.

Features

- 3.2" color LCD screen display.
- Flow rate and motor speed display in same screen.
- Timing function, time range 0.1s-9999hours, can be used for simple dispensing function.

HFLabN Series External Control Schematic Diagram



Model Number

HF-LabN1, HF-LabN3, HF-LabN6



HF-LabN Series Interface and Keypad

PRODUCTS



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Technical Specifications			
Flow rate range	HF-LabN1: 0.000166~775 ml/min	Start/stop, reversing signal	Passive switch signal, such as foot pedal
	HF-LabN3: 0.000166~1808 ml/min		Active switch signal: 5V, 12V, 24V for option
Speed resolution	HF-LabN6: 0.000166~3100 ml/min	Communication interface	HF-RS232, HF-RS485 support Modbus protocol(RTU mode)
	0.1rpm		
Back suction angle	0-360°	Output interface	Output motor working status (Open-Collector output)
Testing time range	0.1 s-9999h		
Outlet pressure	0.8~1.0 mm wall thickness tubing: 1bar	Power supply	AC 220V±10% 50Hz/60Hz (standard)
	1.6~2.4mm wall thickness tubing: 1~2.7bar		AC 110V±10% 50Hz/60Hz (optional)
Display	3.2" high definition LCD screen	Drive dimension	261.4×157.3×236.9mm
Control method	Knob speed and Mechanical keypad	Drive weight	4.40 kg
Keypad lifetime	300,000 times	Power consumption	<50W
External speed control signal	0-5V, 0-10V, 4-20mA for option	Condition temperature	0-40°C
Relative humidity	<80%	IP rate	IP31

Product Composition and Flow Rate Range						
Flow Rates Peristaltic Pump		Pump head & Flow Rate (ml/min)				
		HF-YZ1515x	HF-YZ2515x	HF-MC1~HF-MC12(10)	HF-MC1~HF-MC12(6)	
Tubing	Drive&speed	13#, 14#, 19#, 16#	15#, 24#	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm		
		25#, 17#, 18#				
HF-LabN1	0.1-150rpm	0.007~570	0.17~435	0.000166~49 (working speed≤150rpm)	0.000185~65 working speed≤150rpm	
HF-LabN3	0.1-350rpm	0.007~1330	0.17~1015			
HF-LabN6	0.1-600rpm	0.007~2280	0.17~1740			
Tubing	Drive&speed	New Generation Easy Load Type Pump Head HF-EasyPump (1.60 mm wall thickness)		New Generation Multichannel Type Pump Head 8 rollers		
		13#, 14#, 19#, 16# 25#, 17#, 18#	15#, 24#, 35#, 36#	Inner diameter: 0.13-3.147mm Wall thickness: 0.8-1mm		
HF-LabN1	0.1-150rpm	0.0053~645	0.18~775	0.0002~52 (working speed≤150rpm)		
HF-LabN3	0.1-350rpm	0.0053~1505	0.18~1808			
HF-LabN6	0.1-600rpm	0.0053~2580	0.18~3100			

Application



HF-N6-12L

HF-N6-6L

HF-N6-3L



Features

- 3.2-inch LCD display.
- Ultra-quiet drive setting, precise control, small vibration and low noise.
- Imported button control, menu interface, convenient for users to set various parameters at any time.
- With timing dispensing function, various external control functions.

Model Number

HF-N6-3L/HF-DZ25-3L
HF-N6-6L/HF-DZ25-6L
HF-N6-12L/HF-YZ35

Technical Specifications

Flow rate range	HF-N6-3L: 0.211~3600ml/min	Power supply	AC 220V±10% 50Hz/60Hz (standard)
	HF-N6-6L: 0.3~6000ml/min		AC 110V±10% 50Hz/60Hz (optional)
	HF-N6-12L: 0.00069~12 l/min	Power consumption	HF-N6-3L:<80W; HF-N6-6L:<180W; HF-N6-12L:<300W
Speed range	0.1-600rpm	Communication interface	RS232,RS485 support MODBUS protocol (RTU mode)
Flow rate accuracy	<0.5%	Motor type	Servo motor
Speed resolution	0.1rpm	Copy numbers	1-9999 times, setting '0' means unlimited
Fixed time dispensing function	0.1s~9999h	Drive dimension (LxWxH)	HF-N6-3L: 223X152X230mm HF-N6-6L: 283X192X264mm HF-N6-12L: 302X222X321mm
Control method	Mechanical keypad+Rotary encoded switch	Drive weight	HF-N6-3L: 5.06kg; HF-N6-6L: 7.88kg; HF-N6-12L: 13.01kg
Display	3.2" high definition LCD screen	Relative humidity	<80%
Start/stop, direction signal	Passive switch signal, such as foot pedal switch Active switch signal: 5V, 12V and 24V for option	Environment temperature	0-40°C
External speed control signal	0-5V, 0-10V, 4-20mA for option	IP rate	IP31
Output interface	Output motor working status (Open-Collector output)	Back suction angle	0-360

Product Composition and Flow Rate Range

Drive	Motor Type	Pump head	Tubing Size	Speed Range(rpm)	Flow Rate(ml/min)
HF-N6-3L	Servo Motor	HF-DZ25-3L	15#, 24#, 35#, 36#	0.1-600	0.21~3600
HF-N6-6L		HF-DZ25-6L	15#, 24#, 35#, 36#		0.3~6000
HF-N6-12		HF-YZ35	26#, 73#, 82#		0.69~12000

HF-LabF1, HF-LabF3, HF-LabF6


- Medicine and chemical dispensing, such as oral liquid diagnostic reagents.
- Cosmetic dispensing, such as perfume, lip gloss.

Accesories

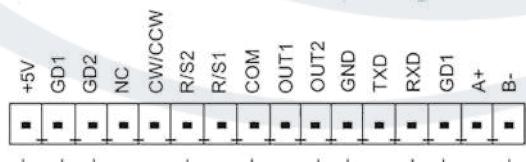
Features

- Imported 4.3" industrial grade color LCD screen display, with touch screen control.
- Can preset dispensing volume, dispensing time, pause time and copy numbers.
- With intelligent calibration function and online micro adjusting function.
- The pump can store 60 commonly used filling modes.
- Back suction angle setting, avoid liquid drop off when the pump stops working.
- New flow rate mode, can be used for continuous transferring.
- Can communicate with balance, closed-loop control.

HF-F1, HF-F3, HF-F6

Model Number

HF-F1, HF-F3, HF-F6

External Control Schematic Diagram


Dispensing Peristaltic Pump

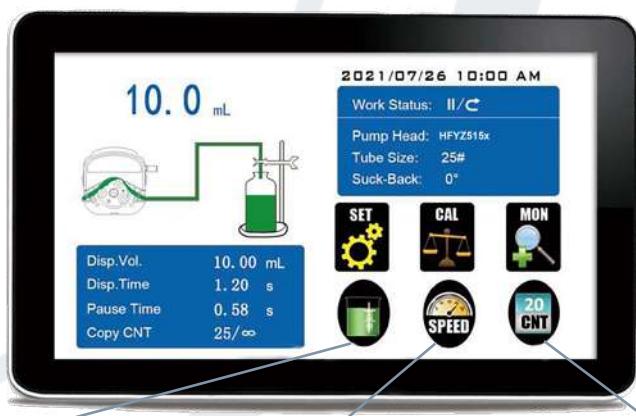


Technical Specifications

Flow rate range	HF-LabF1/F1: 0.00166~775ml/min HF-LabF3/F3: 0.00166~1808ml/min HF-LabF6/F6: 0.00166~3100ml/min	Start/Stop, direction signal	Passive switch signal, such as foot pedal switch; Active switch signal: 5V, 12V and 24V for option
Speed range	1-600rpm	Output interface	Output motor working status (Open-Collector output)
Speed resolution	0.01rpm	Communication interface	RS232, RS485 support Modbus protocol (RTU mode)
Dispensing volume range	0.1-9999.99ml	Power supply	AC 220V±10% 50Hz/60Hz (Standard) AC 110V±10% 50Hz/60Hz (Optional)
Dispensing volume resolution	0.01ml	Outlet pressure	1bar(0.8~1.0mm wall thickness tubing) 1~2.7bar(1.6~2.4mm wall thickness tubing)
Dispensing time	0.1-9999.99s	Drive dimension (L×W×H)	HF-LabF Series: 261.4X157.3X236.9mm HF-F Series: 212x152x243mm
Pause time	0.1-9999.99s	Drive weight	HF-LabF Series: 4.40kg HF-F Series: 4.20kg
Time resolution	0.01s	Power consumption	<50W
Copy numbers	1-9999 times, setting 0' means unlimited	Condition temperature	0-40 C°
Back suction angle	0-360	Relative humidity	<80%
Dispensing accuracy	<0.5%	IP rate	IP31
Motor type	Stepper motor		
Display	Industrial grade 4.3" color LCD display		
Control method	Touch screen and Mechanical keypad		
Keypad lifetime	300,000 times		

Product Composition and Flow Rate Range

Flow Rates Peristaltic Pump		Pump Head&Flow Rate (ml/min)			
		HF-YZ1515x	HF-YZ2515x	HF-MC1~HF-MC12(10)	HF-MC1~HF-MC12(6)
Drive&speed	Tubing	13#, 14#, 19#, 16# 25#, 17#, 18#	15#, 24#	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm	0.00166-49(working speed≤150rpm) 0.00185-65(working speed≤150rpm)
	HF-LabF1/F1	1-150rpm	0.07~570		
Drive&speed	HF-LabF3/F3	1-350rpm	0.07~1330	1.7~1015	0.002-52(working speed)≤150rpm)
	HF-LabF6/F6	1-600rpm	0.07~2280	1.7~1740	
Drive&speed	Tubing	New Generation Easy Load Type Pump Head HF-EasyPump (1.60 mm wall thickness)		New Generation Multichannel Type Pump Head 8 rollers	
	HF-LabF1/F1	13#, 14#, 19#, 16# 25#, 17#, 18#	15#, 24#, 35#, 36#	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm	0.002-52(working speed)≤150rpm)
HF-LabF3/F3	1-350rpm	0.053~1505	1.8~1808	0.002-52(working speed)≤150rpm)	
	HF-LabF6/F6	0.053~2580	1.8~3100		



Volume dispensing interface



Speed dispensing interface



Repeat numbers interface

PRODUCTS



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HF-F6-12L
HF-F6-6L
HF-F6-3L

Features

- Suitable for large flow rate, high efficiency, high precision filling.
- Servo motor drive, accurate control, strong driving force.
- 304 stainless steel drive housing can support the filling one.
- New floate rate mode, can be used for continuous transferring.
- Motor speed dispensing for viscous liquid.

Model Number

HF-F6-3L/HF-DZ25-3L
HF-F6-6L/HF-DZ25-6L
HF-F6-12L/HF-YZ35

Technical Specifications

Flow rate range	HF-F6-3L: 2.11~3600 ml/min HF-F6-6L: 3.0~6000 ml/min HF-F6-12L: 0.0069~12 l/min	Control method	Touch screen and Mechanical keypad Keypad lifetime 300,000 times
Speed range	1-600 rpm	Start/stop, direction signal	Passive switch signal, such as foot pedal switch Active switch signal: 5V, 12V and 24V for option
Speed resolution	0.01 rpm	Output interface	Output motor working status (Open-Collector output)
Dispensing volume range	0.1-9999.99 ml	Communication interface	RS232, RS485 support Modbus protocol (RTU mode)
Dispensing volume resolution	0.01 ml	Power supply	AC 220V±10% 50Hz/60Hz (Standard) AC 110V±10% 50Hz/60Hz (Optional)
Dispensing time	0.1-9999.99s	Drive dimension	HF-F6-3L: 223×152×231mm HF-F6-6L: 283×192×274mm HF-F6-12L: 302×222×331mm
Pause time	0.1-9999.99s	Drive weight	HF-F6-3L: 5.02kg; HF-F6-6L: 7.85kg; HF-F6-12L: 13.14kg;
Time resolution	0.01s	Power oonsumption	HF-F6-3L: <80W; HF-F6-6L: <180W; HF-F6-A2L: <300W
Copy numbers	1-9999 times, setting '0' means unlimited	Condition temperature	0-40°C
Back suction angle	0-360°	Relative humidity	<80%
Outlet pressure	3bar	IP rate	IP31
Dispensing accuracy	<±0.5%		
Motor type	Servo motor		
Display	Industrial grade 4.3" color LCD display		

Product Composition and Flow Rate Range

Drive	Motor Type	Pump Head	Tubing Size	Speed Range(rpm)	Flow Rate (ml/min)
HF-F6-3L	Servo Motor	HF-DZ25-3L	15#, 24#, 35#, 36#	1-600	2.11~3600
HF-F6-6L		HF-DZ25-6L	15#, 24#, 35#, 36#		3.0~6000
HF-F6-12L		HF-YZ35	26#, 73#, 82#		6.9~12000

Dispensing Peristaltic Pump



Experimental conditions: standard atmospheric pressure, room temperature at 20°C, the liquid is pure water, no pressure, no suction and lift.

Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working environment, etc. This data is for reference only.

HF-LabF6/F6 Filling Volume Reference Parameter (Media is water)

Drive	Pump Head	Tubing	Filling Volume (ml)	Filling Time (s)	Filling Accuracy (%)	Output pcs/min	Motor Speed (rpm)
HF-LabF6/F6	HF-YZ1515x HF-YZ2515x	13#	0.1	0.5	5ul	40	204.083
		13#	0.3	0.7	1.5	35	426.251
		13#	0.5	1	0.8	30	516.081
		13#	1	2	0.5	20	517.152
		14#	2	1	1	30	446.724
		14#	3	1.5	0.8	24	446.479
		19#	5	1.2	1	27	454.919
		16#	7	1	0.5	30	457.705
		25#/15#	10	1	1	30	303.426
		25#/15#	15	1	0.8	30	461.273
		25#/15#	20	1.2	0.5	27	518.945
		17#/24#	30	1.2	0.8	27	462.725
		17#/24#	50	2	0.5	20	461.595
		18#	80	2.5	0.5	17	427.274
		18#	100	3	0.5	15	446.583
		15#	16	1	0.5	30	443.540
		24#	30	1.2	1.0	27	454.877
		35#	150	4	0.6	12	447.940
		36#	200	4	0.6	12	481.802
HF-F6-6L	HF-DZ25-6L	15#	80	4	0.4	12	396.800
		24#	150	4	0.4	12	440.700
		35#	200	3.2	0.5	14	439.540
		36#	300	3.5	0.5	13	473.208
HF-F6-12L	HF-YZ35	26#	150	3	0.5	15	423.254
		73#	300	3	0.5	15	457.805
		82#	500	3	0.5	15	458.451

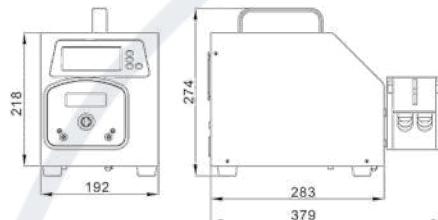
HF-F6 Series Filling Accuracy Reference Parameter (Media is water)

Drive	Pump Head	Tubing	Filling Volume	Filling Time	Actual Filling Volume (ml)										Filling Accuracy	
HF-F6-3L	HF-DZ25-3L	15#	16ml	1s	15.97	15.97	16.00	16.06	15.97	15.92	15.96	16.02	16.01	15.97	-0.50%	0.50%
					15.98	16.00	16.04	16.08	15.92	15.95	16.01	16.01	15.97	15.97		
		24#	30ml	1.2s	29.98	30.12	30.20	30.29	30.06	29.94	30.11	30.18	30.02	29.99	-0.20%	1.00%
					30.23	30.24	30.12	29.99	30.12	30.23	30.20	30.30	30.19	30.11		
		35#	150ml	4s	149.50	149.50	150.10	150.00	149.80	149.00	149.70	149.50	150.10	149.60	-0.15%	0.60%
					149.00	149.90	149.70	149.10	149.50	150.00	150.10	150.10	149.60	149.40		
HF-F6-6L	HF-DZ25-6L	36#	200ml	4s	199.70	200.30	200.10	200.30	200.00	200.00	200.70	200.80	200.70	200.40	-0.67%	0.07%
					200.30	200.00	200.30	200.80	200.90	200.70	200.80	200.40	200.50	200.20		
		15#	80ml	4s	80.2	80.0	80.3	80.2	80.1	80.1	80.2	80.1	80.2	80.1	-0.125%	0.375%
					80.1	79.9	80.1	79.9	80.0	80.1	19.9	80.1	80.1	80.0		
		24#	150ml	4s	149.9	150.2	150.0	150.1	150.0	150.3	150.0	150.1	150.3	150.0	-0.067%	0.200%
					149.9	150.1	150.0	150.0	150.1	150.0	150.1	149.9	150.2	150.2		
HF-F6-12L	HF-YZ35	35#	200ml	3.5s	199.7	199.9	200.2	200.2	200.2	199.6	199.8	199.8	200.1	199.9	-0.400%	0.100%
					199.5	199.2	199.5	199.9	199.5	199.3	199.8	199.3	199.6	199.9		
		36#	300ml	3.5s	300.4	300.1	300.3	300.3	300.4	300.1	300.3	300.4	300.6	300.2	-0.167%	0.200%
					300.2	300.0	300.1	300.2	300.2	299.9	299.5	300.5	300.5	300.6		
		26#	150ml	3s	149.3	150.3	149.6	150.2	150.5	150.1	150.5	150.1	150.5	150.0	-0.47%	0.33%
					150.4	149.9	150.4	150.0	150.3	149.8	150.3	149.9	150.4	150.0		
					299.9	299.8	300.0	300.1	300.4	300.2	300.4	300.4	300.6	300.5	-0.07%	0.27%
		73#	300ml	3s	300.8	300.6	300.5	300.5	300.5	300.6	300.7	300.5	300.6	300.6	-0.44%	0.38%
					500.0	497.8	499.7	498.3	498.4	499.5	498.2	499.7	499.2	498.4		

HF-IF3

Features

- Servo motor drive, high precision, low pulsation dispensing peristaltic pump.
- The low pulsation pump head is special for high precision filling. Through the phase difference between the two sets of rollers, make the fluid peaks and valleys complementary, the reduce the pulsation of the fluid.
- Adaptive pressure tubing space, extend the tubing lifetime effectively.
- Achieving high precision dispensing of micro flow rate.
- New flow rate mode, can be used for continuous transferring.

Model Number HF-IF3
Dimension Drawing (Unit: mm)


Product Composition and Flow Rate Range								
Drive	Motor Type	Pump Head	Tubing				Speed Range (rpm)	Flow Rate (ml/min)
HF-IF3	Servo motor	HF-DY15	13#, 14#, 19#, 16#, 25#, 17#, 18#				1-350	0.1~3337
		HF-DY25	15# 24# 35# 36#					4.2~4340

Experimental conditions: standard atmospheric pressure, room temperature at 20°C, the liquid is pure water, no pressure, no suction and lift.

Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working environment, etc. This data is for reference only.

Filling Volume Reference Parameter (Media is water)

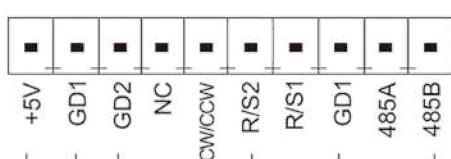
Tubing	Filling Volume	Filling Time	Actual Filling Volume (ml)										Filling Accuracy	
14#	0.5ml	0.5s	0.5003	0.5010	0.4982	0.5015	0.5015	0.5010	0.5014	0.5005	0.4981	0.4998	-0.37%	0.32%
			0.5025	0.4983	0.5024	0.5021	0.5020	0.5004	0.5005	0.4997	0.4977	0.5008		
14#	1ml	1s	1.0037	1.0000	1.0026	1.0003	1.0031	1.0015	1.0000	1.0007	1.0023	1.0035	-0.44%	0.42%
			1.0002	1.0020	0.9968	1.0010	0.9986	1.0026	1.0030	1.0029	1.0023	1.0017		
14#	2ml	1s	2.0020	2.0060	2.0039	2.0037	2.0047	1.9944	2.0062	2.0040	1.9951	2.0060	-0.58%	0.60%
			2.0036	1.9940	2.0024	2.0086	1.9946	2.0005	1.9951	2.0068	1.9971	1.9965		
19#	3ml	1s	3.0058	2.9935	3.0092	3.0008	2.9927	3.0072	3.0046	2.9914	3.0040	3.0000	-0.33%	0.31%
			2.9902	3.0048	3.0008	2.9919	2.9984	3.0012	3.0088	4.9915	2.9990	3.0051		
16#	5ml	1s	5.0215	4.9982	5.0145	5.0038	4.9864	5.0183	4.9962	5.0227	5.0158	4.9806	-0.39%	0.50%
			5.0248	5.0070	4.9861	5.0108	4.9995	5.0080	5.0044	4.9868	5.0231	4.9977		
25#	10ml	1s	10.02	10.04	10.00	9.98	10.02	10.03	10.04	10.04	10.01	9.99	-0.20%	0.40%
			10.00	10.02	10.02	10.04	9.99	9.98	10.00	10.04	10.02	10.03		
25#	15ml	1s	15.02	14.97	14.97	14.94	15.00	15.00	14.94	14.95	14.96	14.98	-0.47%	0.13%
			14.96	14.95	14.96	14.99	14.98	14.94	14.93	14.93	14.98	14.96		
17#	30ml	1s	29.92	30.01	29.99	29.91	29.83	29.86	29.91	29.91	29.91	29.89	-0.57%	0.20%
			29.88	29.96	30.03	30.06	30.02	30.02	30.06	29.96	29.96	29.83		
18#	100ml	2.5s	99.80	99.90	99.80	99.90	100.00	100.10	100.10	100.00	100.10	100.00	-0.20%	0.30%
			99.80	100.00	100.10	100.20	99.90	100.10	100.00	100.30	100.10	100.10		
15#	10ml	1s	9.97	10.01	9.96	9.98	10.01	9.96	9.97	9.99	9.96	9.96	-0.60%	0.10%
			10.00	9.94	9.97	10.00	9.96	9.97	10.00	10.00	10.01	9.97		
24#	30ml	1s	29.90	29.80	30.10	29.90	29.90	30.00	29.90	29.90	30.00	29.90	-0.67%	0.33%
			29.90	29.90	29.90	29.90	29.90	29.80	30.00	29.90	29.90	30.00		
35#	70ml	1.2s	69.80	69.90	69.90	69.90	69.70	70.10	70.00	69.70	69.90	69.90	-0.43%	0.43%
			69.90	70.10	70.00	69.90	70.30	69.70	70.10	69.70	69.70	69.90		
36#	100ml	2s	99.80	99.90	99.80	99.80	100.00	99.90	99.90	99.90	99.90	99.90	-0.20%	0.10%
			99.80	99.90	99.90	99.90	100.00	100.10	99.80	100.10	99.90	99.90		



Typical Application

- Laboratory liquid distribution.
- Diagnostic reagent components.
- Medium dispensing.

External Control Schematic Diagram



Features

- Integrated design, a controller can control 1-32 units.
- Compact structure, compact size, beautiful appearance and saving space.
- Suitable for high precision micro liquids filling in laboratory.



Technical Specifications

Speed range	1-300rpm	Control mode	Touch screen and Mechanical keypad
Filling volume	0.01-9999.99ml	Start/stop, direction signal	Passive switch signal, such as: foot pedal switch; Active switch signal, 5V, 12V, 24V for options
Dispensing time	0.1-9999.99s	Output interface	Output motor working status (Open-collector output)
Interval time	0.1-9999.99s	Communication interface	RS485 support Modbus protocol (RTU mode)
Volume resolution	0.01ml	Power supply	AC 220v±10%50Hz/60Hz (standard) AC 110v±10%50Hz/60Hz (optional)
Time resolution	0.01s	Condition Temperature	0-40°C
Copy numbers	1-9999 times, 0 represent unlimited	Relative humidity	<80%
Back suction angle	0-360°	IP rate	IP31
Filling accuracy	<0.5%		
Filling units	1-32 units		
Display	4.3"Industrial grade - color LCD display		
Keypad lifetime	300,000 times		

HF-CF600



Features

- Split design, adding or deleting filling units freely.
- One controller can control 1-16 filling units.
- Each filling unit can receive stop filling signal when bottle absent.
- You can check the working status of the filling units from controller.

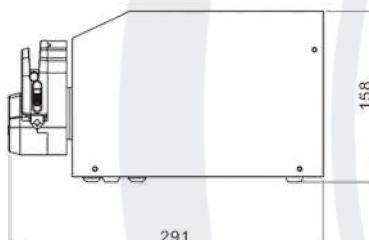
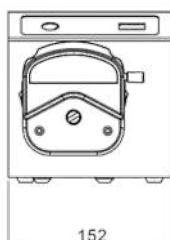
Model Number

HF-CF600, HF-CF600 Plus, HF-CF600II, HF-CF600II Plus

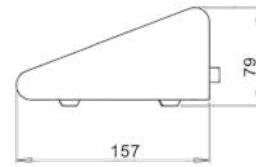
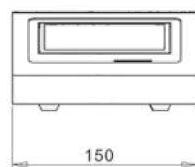
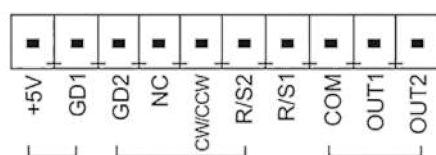
Typical Application

- Laboratory dispensing.
- Industry filling.

Dimension Drawing (Unit: mm)



External Control Schematic Diagram



Drive Dimension Drawing

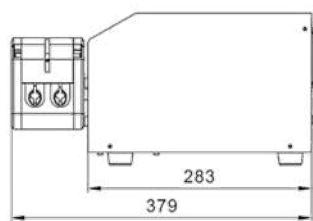
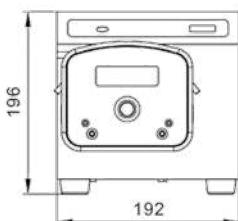
Controller Dimension Drawing



HF-CF350



Dimension Drawing (Unit: mm)



Drive Dimension Drawing

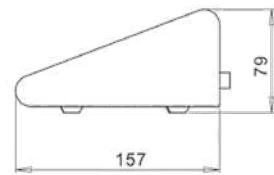
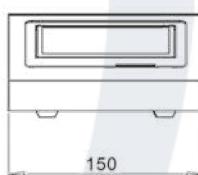
Control Unit



Filling Unit



Controller Dimension Drawing



The pump type suffixed with "Plus" support MODBUS communication protocol						
Drive	Pump Head	Flow Rate (ml/min)	Motor Type	Drive Dimension (LxWxH)	Power Consumption	Drive Weight
HF-CF600 HF-CF600Plus	HF-YZ1515x	0.07-2280	Stepper motor	237.4x152x158mm	Each unit<50W	4.2kg
	HF-YZ2515x	1.7-1740				
HF-CF600II HF-CF600PlusII	HF-DZ25-3L	2.11-3600	Stepper motor	237.4x152x158mm	Each unit<80W	4.95kg
	HF-DZ25-6L	3.0-6000				
HF-CF350 HF-CF350Plus	HF-DY15	0.1-3337	Servo motor	283x192x196mm	Each unit<180W	7.8kg
	HF-DY25	4.2-4340				
HF-CF600IV HF-CF600PlusIV	HF-YZ35	6.9-12000	Servo motor	310x228x248mm	Each unit<300W	11.9kg
	HF-YZ35-PPS					

HF-DF600



Features

- Integrated design, one controller can control 4 groups (total 16) filling units.
- It can support the production filling line, store 60 commonly used filling modes.
- Each filling unit can independently receive stop filling signal when bottle absent.

Model Number

HF-DF600, HF-DF600II, HF-DF600 Plus, HF-DF PlusII

HF-DF600 Plus



Features

Connected with HMI, PLC etc, industrial control system, one controller can control 8 groups (total 32) filling units. It can display the details of 16 filling units in the HMI, widely used in industrial control application.



HF-DF600IV(servo motor control)**HF-DF350(servo motor control)****Product Introduction**

DF servo control series is integrated type intelligent filling system with high precision and low pulsation driven by servo motor. It is composed by control and integrated type filling units, each group have 4 filling units, total 16 filling units. This system uses imported 4.3" industrial grade true color display with touch screen control, can preset filling volume, filling time, pause time, copy numbers and back-suction angle. Dynamics display working status, filling data, setting parameter, system configuration display at the same screen; with intelligent calibration and online micro adjust function. Can connect foot pedal and receive switch signal, realize long-distance control. With motor working status output signal, can let other equipment real-time monitor the current filling status of peristaltic pump. This filling system uses servo motor, and high precision, low pulsation pump head to make the filling precision higher, up to 0.1%-0.6%, make the micro volume and big volume high precision filling come true.

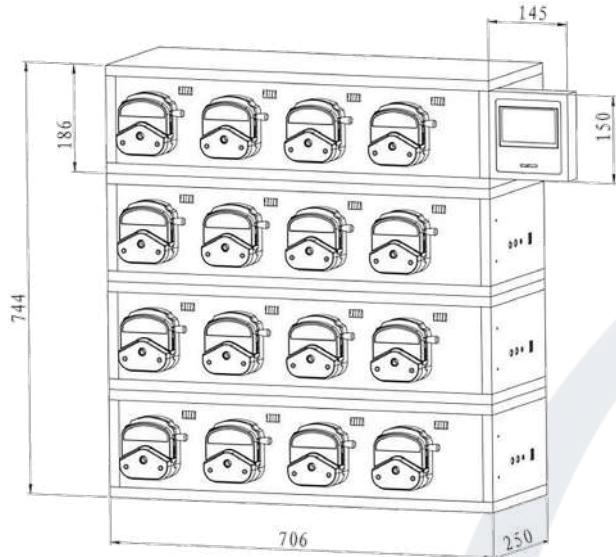
Model Number

HF-DF350
HF-DF600III
HF-DF600IV
HF-350Plus
HF-DF600PlusIII
HF-DF600Plus IV

Typical Application

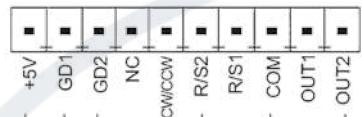
-  Pharmaceutical, health product filling, diagnostic reagent dispensing.
-  Food, beverage filling
-  Cosmetic filling.

Dimension Drawing (Unit: mm)

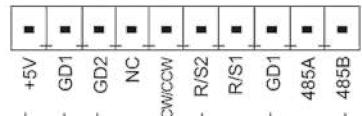


External Control Schematic Diagram

- HF-DF600 has filling status output signal, can be monitored by other equipments.
- HF-DF600Plus adopt standard MODBUS communication protocol, can be well connected with HMI to achieve logic control.



HF-DF600 External Control Schematic Diagram



HF-DF600Plus External Control Schematic Diagram

The pump type suffixed with "Plus" support MODBUS communication protocol

Drive	Pump Head	Flow Rate (ml/min)	Motor Type	Drive Dimension (LxWxH)	Power Consumption	Drive Weight
HF-DF600 HF-DF600Plus	HF-YZ1515x	0.07~2280	Stepper motor	706×250×186mm	Each Unit<50W	21.8kg
	HF-YZ2515x	1.7~1740				
HF-DF600II HF-DF600PlusII	HF-DZ25-3L	2.11-3600	Servo motor	706×250×186mm	Each Unit<80W	21.8kg
	HF-DZ25-6L	3.0-6000				
HF-DF600III HF-DF600PlusIII	HF-DY15	0.1-3337	Servo motor	910×290×212mm	Each Unit<180W	41.45kg
	HF-DY25	4.2-4340				
HF-DF600IV HF-DF600PlusIV	HF-YZ35	6.9-12000	Servo motor	1056×310×248mm	Each Unit<300W	58.6kg



Technical Specifications						
Speed range	HF-CF350/DF350	1-350 rpm	Display	4.3" industrial grade true color LCD screen		
	HF-CF350 Plus/HF-DF350 Plus	1-350 rpm	Control method	Touch screen and mechanical keypad		
	HF-CF600 Series	1-600 rpm	Keypad lifetime	300,000 times		
	HF-DF600 Series	1-600 rpm	Start/stop, direction signal	Passive switch signal, such as foot pedal switch Active switch signal: 5V, 12V, 24V for option		
Filling volume range	0.1-9999.99 ml					
Filling time range	0.5-9999.99s/HF-DF600Plus 0.19999.99s		Output interface	Output motor working status (Open-Collector output)		
Pause time range	0.5-9999.99s/HF-DF600Plus 0.19999.99s					
Filling volume resolution	0.01 ml		Power supply	AC 220V±10% 50Hz/60Hz (standard) AC 110V±10% 50Hz/60Hz (optional)		
Time resolution	0.01 s					
Copy numbers	1-9999, '0' means unlimited		Condition temperature	0-40°C		
Back suction angle	0-360		Relative humidity	<80%		
Filling accuracy	<0.5%		IP rate	IP31		
Product Composition and Flow Rate Range						
Drive	Pump Head	Pump Head Material	Tube Clamp Material	Tubing	(Motor Speed 1~600rpm) Flow Rate ml/min	
				Tubing Size	IDxWall Thickness	
HF-DF600 HF-CF600 HF-DF600Plus HF-CF600Plus	YZ1515x	PSF PPS		13"	0.8x1.6(mm)	0.07~42
				14"	1.6x1.6(mm)	0.27~162
				19"	2.4x1.6(mm)	0.55~330
				16"	3.1x1.6(mm)	0.82~492
				25"	4.8x1.6(mm)	1.7~1020
				17"	6.4x1.6(mm)	2.9~1740
				18"	7.9x1.6(mm)	3.8~2280
HF-DF600II HF-CF600II HF-DF600Plus II HF-CF600Plus II	HF-YZ2515x	PSF PPS		15"	4.8x2.4(mm)	1.7~1020
				24"	6.4x2.4(mm)	2.9~1740
				15"	4.8x2.4(mm)	2.11~1264
				24"	6.4x2.4(mm)	3.85~2310
				35"	7.9x2.4(mm)	5.08~3050
				36"	9.6x2.4(mm)	6~3600
				15"	4.8x2.4(mm)	3~1800
HF-DF600III HF-CF600III HF-DF600Plus III HF-CF600Plus III	HF-DZ25-6L	Aluminum alloy/PPS	PP	24"	6.42x2.4(mm)	5.5~3300
				35"	7.9x2.4(mm)	8~4800
				36"	9.6x2.4(mm)	10~6000
				15"	4.8x2.4(mm)	6.9~4200
HF-DF600IV HF-CF600IV HF-DF600Plus IV HF-CF600Plus IV	HF-YZ35-PPS	PPS	PP	26"	6.4x3.3(mm)	12.3~7400
				73"	9.6x3.3(mm)	20~12000
				82"	12.7x3.3(mm)	0.1~48
Drive	Pump Head	Pump Head Material	Tube Clamp Material	Tubing	(Motor Speed 1~350rpm) Flow Rate ml/min	
				Tubing Size	IDxWall Thickness	
HF-DF350 HF-CF350 HF-DF350Plus HF-CF350Plus	HF-DY15	Aluminum alloy	PP	13"	0.8x1.6(mm)	0.6~223
				14"	1.6x1.6(mm)	1.3~448
				19"	2.4x1.6(mm)	2~723
				16"	3.1x1.6(mm)	4.7~1626
				25"	4.8x1.6(mm)	6.4~2230
				17"	6.4x1.6(mm)	9.5~3337
				18"	7.9x1.6(mm)	4.2~1480
HF-DY25	HF-DY25	Aluminum alloy	PP	15"	4.8x2.4(mm)	7.6~2670
				24"	6.4x2.4(mm)	10~3600
				35"	7.9x2.4(mm)	12.4~4340
				36"	9.6x2.4(mm)	0.1~48

Filling Volume Reference (Media is water)

Drive	Pump Head	Tubing	Filling Volume (ml)	Filling Time (s)	Accuracy ($\pm\%$)	Output (pcs/min)	Motor Speed (rpm)
HF-DF600 HF-CF600 HF-DF600Plus HF-CF600Plus	HF-YZ1515x HF-YZ2515x	13"	0.1	0.5	$\pm 5\text{ul}$	40	204.083
		13"	0.3	0.7	1.5	35	426.251
		13"	0.5	1	0.8	30	516.081
		13"	1	2	0.5	20	517.152
		14"	2	1	1	30	446.724
		14"	3	1.5	0.8	24	446.479
		19"	5	1.2	1	27	454.919
		16"	7	1	0.5	30	457.705
		25#/15#	10	1	1	30	303.426
		25#/15#	15	1	0.8	30	461.273
		25#/15#	20	1.2	0.5	27	518.945
		17#/24#	30	1.2	0.8	27	462.725
		17#/24#	50	2	0.5	20	461.595
		18"	80	2.5	0.5	17	427.274
		18"	100	3	0.5	15	446.583
HF-DF600II HF-CF600II HF-DF600PlusII HF-CF600PlusII	HF-DZ25-3L	15"	16	1	0.5	30	454.976
		24"	30	1.2	0.5	27	389.610
		35"	150	4	0.5	12	442.913
		36"	200	4	0.5	12	500.000
HF-DF350 HF-CF350 HF-DF350Plus HF-CF350Plus	HF-DY15	14"	0.5	0.5	0.3	60	94.1915
		14"	1	1	0.4	30	94.1915
		14"	2	1	0.6	30	188.383
		19"	3	1	0.3	30	140.625
		16"	5	1	0.5	30	145.278
	HF-DY25	25"	10	1	0.3	30	129.143
		25"	15	1	0.4	30	193.715
		17"	30	1	0.4	30	282.530
		18"	100	2.5	0.3	17	251.730
		15"	10	1	0.3	30	141.911
		24"	30	1	0.5	30	235.972
		35"	70	1.2	0.4	27	340.466
		36"	100	2	0.2	20	241.935
HF-DF600III HF-CF600III HF-DF600PlusIII HF-CF600PlusIII	HF-DZ25-6L	15"	80	4	0.4	12	400.000
		24"	150	4	0.4	12	409.090
		35"	200	3.2	0.5	14	468.750
		36"	300	3.5	0.5	13	514.285
HF-DF600IV HF-CF600IV HF-DF600PlusIV	HF-YZ35-PPS	26"	150	3	0.5	15	428.570
		73"	300	3	0.5	15	486.499
		82"	500	3	0.5	15	500.000

Basic Peristaltic Pump

HygiaFlex



**HF-LabM1,
HF-LabM3,
HF-LabM6**

Model Number

HF-LabM1, HF-LabM3, HF-LabM6

Features

- 3 digital LED display motor speed, mechanical keypad control.
- Timing function, the time range of 0.5-999 seconds can be used as a simple dispensing.
- Support RS232 and RS485 communication, Modbusprotocol .



New generation Easy Load
Type Pump Head



HF-YZ Series



New generation Multichannel
Type Pump Head



HF-MC Series

Typical Application

- University laboratory.
- Supporting ion chromatography and titrator.

Technical Specifications

Flow rate range	HF-LabM1: 0.000829~775 ml/min HF-LabM3: 0.000829~1808 ml/min HF-LabM6: 0.000829~3100 ml/min	Start/stop direction signal	Passive switch signal, such as foot pedal switch; Active switch signal: 24V default
Speed resolution	0.1rpm when the speed is 0-100rpm, 1rpm when the speed is 100-600rpm.	Communication interface	RS485(optional), Modbus protocol(RTU mode) RS232(standard), Hygieflex communication protocol;
Testing time range	0.5s-999s	Power supply	AC 220V±10%, 50Hz/60Hz (standard) AC 110V±10%, 50Hz/60Hz (optional)
Outlet pressure	1bar (0.8-1.0mm wall thickness tubing) 1-2.7bar (1.6-2.4mm wall thickness tubing)	Drive dimension	261.4×157.3×236.9mm (L×W×H)
Display	3 digital LED	Drive weight	4.40 kg
Control method	Mechanical keypad	Power consumption	<50W
Keypad lifetime	300,000 times	Condition temperature	0-40°C
External speed control signal	0-5V(standard), 4-20mA, 0-10V (optional)	Relative humidity	<80%
		IP rate	IP31

Product Composition and Flow Rate Range

Flow Rates Peristaltic Pump		Pump Head&Flow Rate(ml/min)			
Drive&speed	Tubing	HF-YZ1515x	HF-YZ2515x	HF-MC1~HF-MC12(10)	HF-MC1~HF-MC12(6)
		13#, 14#, 19#, 16# 25#, 17#, 18#	15#, 24#	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm	
HF-LabM1	0.5-150 rpm	0.035~570	0.85~435		
HF-LabM3	0.5-350 rpm	0.035~1330	0.85~1015	0.000829~49(working speed≤150rpm)	0.000925~65(working speed≤150rpm)
HF-LabM6	0.5-600 rpm	0.035~2280	0.85~1740		
Drive&speed		New Generation Easy Load Type Pump Head HF-EasyPump (1.60 mm wall thickness)		New Generation Multichannel Type Pump Head 8 rollers	
Drive&speed	Tubing	13#, 14#, 19#, 16# 25#, 17#, 18#	15#, 24#, 35#, 36#	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm	
				0.001~52(working speed≤150rpm)	
HF-LabM1	0.5-150 rpm	0.0267~645	0.90~775		
HF-LabM3	0.5-350 rpm	0.0267~1505	0.90~1808		
HF-LabM6	0.5-600 rpm	0.0267~2580	0.90~3100		

HF-M6-12L
HF-M6-6L
HF-M6-3L

Features

- Servo motor drive, powerful and maintenance-free.
- 3 digital LED display motor speed, rotary encoded switch control.
- Suitable for industrial sites, transfer liquid with large flow and high precision.

Model Number

HF-M6-3L/HF-DZ25-3L
HF-M6-6L/HF-DZ25-6L
HF-M6-12L/HF-YZ35

Technical Specifications

Flow rate range	HF-M6-3L: 0.21~3600 ml/min HF-M6-6L: 0.3~6000 ml/min HF-M6-12L: 0.00069~12 l/min	Start/stop direction signal	Passive switch signal, such as foot pedal Active switch signal: 24V default
Speed resolution	0.1-600 rpm	Communication interface	RS232(standard), Hygialflex-N232 Communication protocol; RS485(optional), Modbus protocol(RTU mode)
Speed range	0-100rpm, 0.1rpm; 100-600rpm, 1rpm.	Power supply	AC 220V±10% 50Hz/60Hz (standard) AC 110V±10% 50Hz/60Hz (optional)
Flow rate accuracy	<±0.5%	Drive dimension (L×W×H)	HF-M6-3L: 223×152×199mm HF-M6-6L: 283×192×274mm HF-M6-12L: 302×222×331mm
Motor type	Servo motor	Drive weight	HF-M6-3L: 5.02kg; M6-6L: 7.85kg HF-M6-12L: 13.14kg
Display	3 digital LED	Power consumption	HF-M6-3L: <80W; M6-6L: <180W HF-M6-12L: <300W
Control method	Mechanical keypad	Condition temperature	0-40°C
Keypad lifetime	300,000 times	Relative humidity	<80%
Speed control	Rotary encoded switch		
External speed control signal	0-5V(standard), 0.10V, 4-220mA(optional)		
IP rate	IP31		

Product Composition and Flow Rate Range

Drive	Motor Type	Pump Head	Tubing Size	Speed Range (rpm)	Flow Rate (ml/min)
HF-M6-3L	Servo Motor	HF-DZ25-3L	15 [#] , 24 [#] , 35 [#] , 36 [#]	0.1-600	0.211~3600
HF-M6-6L		HF-DZ25-6L	15 [#] , 24 [#] , 35 [#] , 36 [#]		0.3~6000
HF-M6-12L		HF-YZ35	26 [#] , 73 [#] , 82 [#]		0.69~12000

HF-BT100N, HF-BT300N, HF-BT600N**Features**

- Plastic coated metal housing, compact structure.
- Timing function, the time range of 0.5-999s, can be used for simple dispense.

RS232, RS485 Communication Interface.

- Support Hygiaflex communication protocol or standard.
- Modbus communication protocol (RTU mode).

Model Number

HF-BT100N, HF-BT300N, HF-BT600N

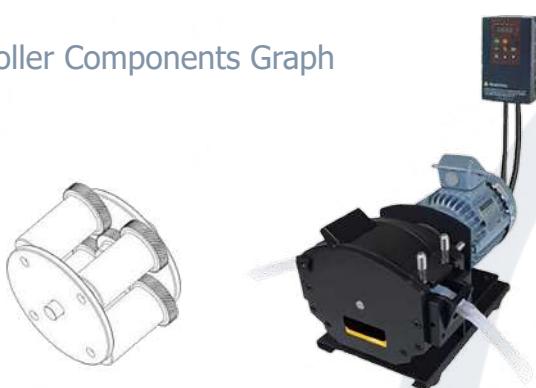
Technical Specifications			
Flow rate range	HF-BT100N: 0.000829~570 ml/min HF-BT300N: 0.000829~1330 ml/min HF-BT600N: 0.000829~2280 ml/min	Start/stop, reversing signal	Passive switch signal, such as foot pedal Active switch signal: 5V, 12V, 24V for option
Speed resolution	0-100rpm, 0.1rpm 100-600rpm, 1rpm	Communication interface	RS232(standard), Hygiaflex-N232 Communication protocol; RS485(optional), Modbus protocol(RTU mode)
Testing time range	0.5 s-999s	Power supply	AC 220V±10% 50Hz/60Hz (standard) AC 110V±10% 50Hz/60Hz (optional)
Display	LED Display	Drive dimension	183×131×194mm
Control method	Mechanical keypad	Drive weight	4.20 kg
Keypad lifetime	300,000 times	Power consumption	<50W
External speed control signal	0-5V(standard), 0-10V, 4-20mA(optional)	Condition temperature	0-40°C
Relative humidity	<80%	IP rate	IP31

Product Composition and Flow Rate Range					
Standard Peristaltic Pump		Pump Head&Flow Rate (ml/min)			
Drive & speed	Tubing	HF-YZ1515x	HF-YZ2515x	HF-MC1~HF-MC12(10)	HF-MC1~HF-MC12(6)
HF-BT100N	0.5-150rpm	13#, 14#, 19#, 16#, 25#, 17#, 18#	0.035~570	0.85~435	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm
HF-BT300N	0.5-350rpm	0.035~1330	0.85~1015	0.000829-49(suggestion working speed≤150rpm)	0.000925-65(suggestion working speed≤150rpm)
HF-BT600N	0.5-600rpm	0.035~2280	0.85~1740		

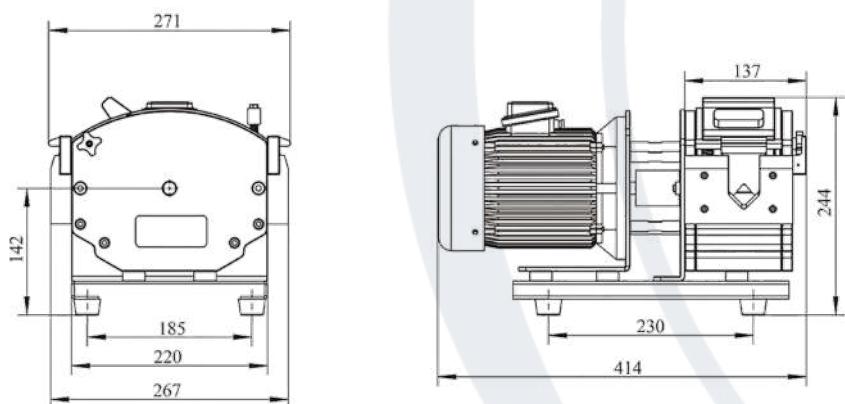
Product Introduction

HF-J25 peristaltic pump head used aluminum alloy shell, 304 stainless steel rollers, long lifetime, corrosion resistance; big flow rate, high pressure, suitable for transfer high viscosity and high lift liquid; Driven by AC motor, can use frequency adapter to adjust speed and flow rate, can also connect with PLC, IPC and computers.

Roller Components Graph



Dimension Drawing (Unit: mm)



HF-J25



Typical Application

- Bio-medical
- Chemical industry
- Environmental protection



HF-DZ45-I

HF-DZ45-II

Product Composition and Flow Rate Range

Pump Head	Power Supply	Power	Speed (rpm)	Tubing		Flow Rate (l/min)	Pressure(bar)		Weight
				Size	ID*Wall thickness (mm)		Continuous	Intermittent	
HF-DZ45	AC380V/50Hz	370W	37.5-350	88#	12.7*4.8	1.0-14.3	2.5	3	30kg
			37.5-270	92#	25.4*4.8	3.68-28.15			

HF-EXP600/HF-YZ35



Stainless steel housing

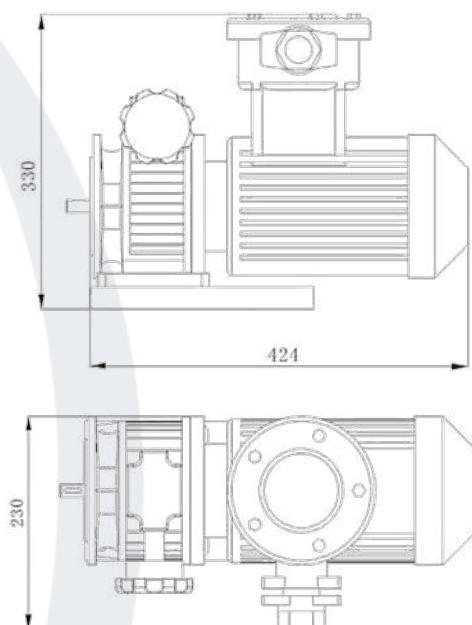
Frequency converter



Features

- Driven by explosion-proof motor, the power is strong. Stepless speed regulation, reversible inversion.
- IP rate: IP55. Explosion-proof grade: ExdIIBT4 Gb.
- Suitable for inflammable and explosive industrial sites.

Dimension Drawing (Unit: mm)



Technical Specifications

Speed range	180-600 rpm	Condition temperature	0~40°C
Speed control	Manual stepless speed regulation/ Inverter speed regulation	Relative humidity	<80%
Voltage	3 phase 380V(standard) 3 phase 220V(optional)	Explosion-proof grade	ExdIIBT4 Gb, ExdIICt4
Drive weight	30kg	IP rate	IP55
		Drive dimension (L x W x H)	424x230x330(mm)

Product Composition and Flow Rate Range

Drive	Speed	Pump Head	Tubing Size	Flow Rate (ml/min)
EXP600	180-600rpm	HF-YZ1515x	13#, 14#, 19#, 16#, 25#, 17#, 18#	12.6~2280
		HF-YZ2515x	15#, 24#	306~1740
		HF-YZ35	26#, 73#, 82#	1242~12000
		HF-DZ3L	15#, 24#, 35#, 36#	379.8~3600
		HF-DZ6L	15#, 24#, 35#, 36#	540~6000
		HF-SN15	14#, 16#	43.2~528
		HF-SN25	24#	450~1500

HF-QD600


Features

- Pneumatic motor driver, gas driving, explosion-proof and safe.
- Stepless speed regulation, manual control flow valve.
- Start/stop, direction, overload protection functions.



New generation Easy Load Type Pump Head



HF-YZ Series



New generation Multichannel Type Pump Head

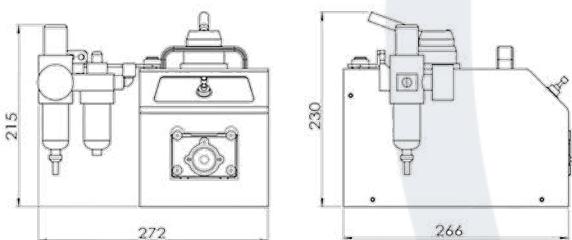


HF-DZ25-3L

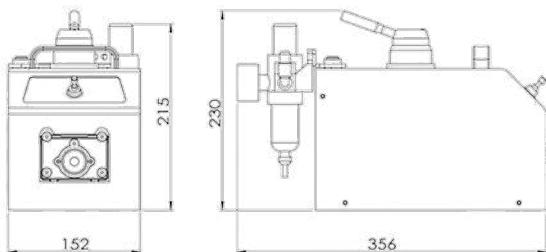
- Barometer, convenient for users to check the pressure value.
- Suitable for inflammable, explosive industrial sites.

Dimension Drawing (Unit: mm)

Working status dimension drawing



Non-working status dimension drawing



Technical Specifications

Speed range	60~600rpm	Drive dimension (L x W x H)	Working: 266x272x230mm Non-working: 356x152x230mm
Display	Display air pressure	Drive weight	4.10kg
Speed control	stepless speed regulation (by adjusting the flow valve)	Condition temperature	0-40°C
Control function	Start/stop, reversing (gas reversing valve control)	Relative humidity	<80%
Working air pressure	1-4bar	IP rate	IP31
Gas consumption	4l/sec		

Product Composition and Flow Rate Range

Peristaltic Pump		Pump Head&Flow Rate(ml/min)			
		HF-YZ1515x	HF-YZ2515x	HF-MC1~HF-MC12(10)	HF-DZ25-3L
Drive&Speed	Tubing	13#, 14#, 19#, 16# 25#, 17#, 18#	15# 24#	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm	5#, 24#, 35#, 36#
HF-QD600	60-600rpm	5~2280	100~1740	0.111-65	120~3600

HF-MiniPump Technical Specifications					
Pump Head	Tube Size	IDxWall Thickness (mm)	Speed (rpm)	Flow Rate (ml/min)	
HF-MiniPump01	13"	1.8x1.6	0.1~300	0.0024-8.28	
	14"	1.6x1.6		0.0112-33.88	
	19"	2.4x1.6		0.0252-77.23	
	16"	3.1x1.6		0.0394-114.31	
	25"	4.8x1.6		0.0652-190.00	
HF-MiniPump02	-	1x1	0.1~300	0.005-15.01	
		2x1		0.018-54.63	
		2.5x1		0.0256-76.84	
		3x1		0.0356-108.39	

HF-UD15 Technical Specifications							
Model No.	Housing Material		Tubing		Speed Range (rpm)	Flow Rate (ml/min)	Weight (kg)
	Body	Protective cover	Tubing Sizes	IDxWall Thickness			
HF-UD15	PSF	Transparent PC	16"	3.1x1.6(mm)	0.1~350	0.08~280	0.12
			25"	4.8x1.6(mm)		0.16~580	
			17"	6.4x1.6(mm)		0.26~930	

HF-UC25 Technical Specifications							
Model No.	Housing Material		Tubing		Speed Range (rpm)	Flow Rate (ml/min)	Weight (kg)
	Base	Protective cover	Tubing Sizes	IDxWall(mm)			
HF-UC25	PSF	PC	15"	4.8x2.4	0.1-600	0.3423~2054	1.39
			24"	6.4x2.4		0.5033~3020	
			35"	7.9x2.4		0.8588~5153	
			36"	9.6x2.4		1.1105~6663	

New Generation Multichannel Type Pump Head Technical Specifications						
Tubing	Speed	Flow rate of pump head with 8 rollers (ml/min)			Tubing maximum pressure (bar)	
		Continuous	Intermittent			
1x1	0.1~150rpm	0.0049~7.38				
2x1		0.0200~30.02				
2.4x0.8		0.0273~41.02				
3x1		0.0345~51.79				
0.13x0.86		0.0002~0.25				
0.19x0.86		0.0003~0.28				
0.25x0.86		0.0004~0.57				
0.51x0.86		0.0016~2.42			1	1
0.89x0.86		0.0046~6.84				
1.14x0.86		0.0074~11.12				
1.42x0.86		0.0107~16.1				
2.06x0.86		0.0206~30.95				
2.79x0.86		0.0329~49.39				

HF-MC Technical Specifications						
Tubing	Speed	Flow rate of pump head with 10 rollers (ml/min)		Flow rate of pump head with 6 rollers (ml/min)		Tubing maximum pressure (bar)
		Continuous	Intermittent	Continuous	Intermittent	
1x1	0.1~150rpm	0.0046~6.90		0.0053~7.95		
2x1		0.0156~23.40		0.021~31.35		
2.4x0.8		0.0212~31.80		0.0274~41.10		
3x1		0.0324~48.60		0.043~64.95		
0.13x0.86		0.00016~0.24		0.000185~0.277		
0.19x0.86		0.0002~0.27		0.0003~0.420		
0.25x0.86		0.0003~0.480		0.0005~0.720		
0.51x0.86		0.0014~2.10		0.0020~3.0		
0.89x0.86		0.0039~5.85		0.0057~8.55		
1.14x0.86		0.0066~9.90		0.0090~13.5		
1.42x0.86		0.0093~13.95		0.0133~19.95		
2.06x0.86		0.015~22.50		0.0250~37.5		
2.79x0.86		0.024~35.85		0.037~55.50		



Pump Head Flow Meter

New Generation HF-Easy Load Type Pump Head Technical Specifications								
Pump head	Tubing	IDxWall thickness (mm)	ml/r	Flow Rate (ml/min) (0.1-600rpm)	Tubing Max. Pressure (bar)		Weight (kg)	
					Intermittent	Continuous		
HF-EasyPump (1.6 mm wall thickness)	13"	0.81x1.6	0.053	0.0053-32	2.7	1.7	0.6	
	14"	1.6x1.6	0.27	0.027-162				
	19"	2.4x1.6	0.55	0.055-330				
	16"	3.1x1.6	0.933	0.093-560				
	25"	4.8x1.6	1.967	0.197-1180	2.4	1.4		
	17"	6.41x1.6	3.333	0.333-2000	1.4	1		
	18"	7.91x1.6	4.3	0.430-2580	1	0.7		
HF-EasyPump (2.4 mm wall thickness)	15"	4.8x2.4	1.8	0.180-1080	2.7	1.7		
	24"	6.4x2.4	2.733	0.273-1640				
	35"	7.9x2.4	3.833	0.383-2300				
	36"	9.6x2.4	5.167	0.517-3100	2.4	1.4		

HF-Handy Pump Technical Specifications

Pump head	Channel number	Tubing	IDxWall thickness (mm)	ml/r	Speed (rpm)	Flow Rate (ml/min)	Weight (kg)
HF-HandyPump01	Single channel	13"	0.8x1.6	0.033	0.1~300	0.0033~10.03	0.224
		14"	1.6x1.6	0.187		0.0187~56.09	
		19"	2.4x1.6	0.371		0.0371~111.17	
		16"	3.1x1.6	0.636		0.0636~190.76	
		25"	4.8x1.6	1.219		0.1219~365.69	
HF-HandyPump02	Dual channel	13"	0.8x1.6	0.033	0.1~300	0.0033~10.03	0.224
		14"	1.6x1.6	0.187		0.0187~56.09	
		19"	2.4x1.6	0.371		0.0371~111.17	
		16"	3.1x1.6	0.636		0.0636~190.76	

HF-YZ Series Technical Specifications

Pump head	Tubing	IDxWall thickness (mm)	ml/r	Flow Rate (ml/min) (0.1-600rpm)	Tubing Max. Pressure (bar)		Material/Weight(kg)	
					Intermittent	Continuous	PSF	PPS
HF-YZ1515x	13"	0.8x1.6	0.07	0.007~42	2.7	1.7	0.40 (3 rollers)	0.46 (3 rollers)
	14"	1.6x1.6	0.27	0.027~162				
	19"	2.4x1.6	0.55	0.055~330				
	16"	3.1x1.6	0.82	0.082~492				
	25"	4.8x1.6	1.7	0.17~1020	2.4	1.4	0.44 (6 rollers)	0.50 (6 rollers)
	17"	6.4x1.6	2.9	0.29~1740	1.4	1		
	18"	7.9x1.6	3.8	0.38~2280	1	0.7		
HF-YZ2515x	15"	4.8x2.4	1.7	0.17~1020	2.7	1.7	0.40 (3 rollers)	0.46 (3 rollers)
	24"	6.4x2.4	2.9	0.29~1740				

HF-YZ35 Technical Specifications

Pump head	Tubing	IDxWall thickness (mm)	ml/r	Flow Rate (ml/min) (0.1-600rpm)	Tubing Max. Pressure (bar)		Material/Weight(kg)	
					Intermittent	Continuous	Aluminum alloy	PPS
HF-YZ35	26"	6.4x3.3	6.9	0.69~4200	2.7	2	4.36	1.50
	73"	9.6x3.3	12.3	1.23~7400				
	82"	12.7x3.3	20	2~12000	1.4	1		

HF-DZ25 Series Technical Specifications

Model No.	Housing Material	Tubing Clamp Material	Tubing		Flow Rate (ml/min) (0.1-600rpm)	Weight (kg)
			Tubing Sizes	IDxWall thickness (mm)		
HF-DZ25-6L	Aluminum alloy/PPS	PP	15"	4.8x2.4(mm)	0.3~1800	1.86/0.86
			24"	6.4x2.4(mm)	0.55~3300	
			35"	7.9x2.4(mm)	0.8~4800	
			36"	9.6x2.4(mm)	1~6000	
HF-DZ25-3L	PPS	PP	15"	4.8x2.4(mm)	0.211~1264	0.5
			24"	6.4x2.4(mm)	0.385~2310	
			35"	7.9x2.4(mm)	0.508~3050	
			36"	9.6x2.4(mm)	0.6~3600	

A. Filling Nozzle

Name	Material	Picture
Closing filling nozzle	SS316	
Reducer closing filling nozzle	SS316	
Flat filling nozzle	SS304/316	
Flat filling nozzle PTFE	PTFE	

B. One way Checkvalve



Avoid liquid drop off after filling and transferring.

C. Filling Countersunk



Name	Material	Tube
Counter sunk	304/316 stainless steel	13°, 14°, 19°, 16°, 25°, 17°, 18°, 15°, 24°, 35°, 36°, 26°, 73°, 82°

Used for the output of tube, preventing the tube floating or absorbing the wall of container.

D. Handling Dispenser

Connect to peristaltic pump external control interface, with start/stop and full speed control, can realize transferring and dispensing function. Power supply and working indicator, show the dispenser working status. With hanging hole, can be hang up when do not use.



Filling nozzle and tubing cap			
Filling nozzle size	13#	14#	19#
Inner diameter	3mm	3.5mm	4.5mm
Picture			
Filling nozzle size	16#	15/25#	17/24#
Inner diameter	5mm	7mm	9mm
Picture			
Tubing size	17#	18#	Plum blossom cap
Inner diameter	9.6mm	11.1mm	
Picture			

E. Foot Pedal Switch



Control the pump start/stop with foot pedal switch.

F. Tube connector



a. Straight tube connector



b. "Y" tube connector



c. Tee tube connector



d. Reducer tube connector



e. "L" tube connector



f. Flexible/hard tube connector

G. PH Controller



Work with peristaltic pump, can control the liquid PH value, add acid or alkall automatically. Function:

1. Liquid: Acid- Base Solutions
2. PH value: 0-14PH
3. Set up target PH value
4. Add acid or alkali liquid automically
5. Control: RS485, 4-20mA
6. Power supply: DC24V (AC220V for option)
7. Suitable temperature: 0-60°

H. 5V Sensor

When applied in the dispensing line, it can detect weather there is filling bottle in the production line. When the bottle approach the sensor side, the switch action will be made without any mechanical contact or pressure, thereby providing filling control order to the pump. In the same way, when no filling bottle is detected, the stop filling control order is provided to the pump.



I. Benchtop Tubing Cutter



Stainless steel blade, makes right-angle cuts in several sizes of plastic tubing.

J. Support Stand



The multiple filling stand is suitable for more than 2 channels filling. It can hold 2-8 filling nozzles. We can customize the suitable one according to your request.

Silicon Tubing

-  Platinum-Cured Silicone Tubing.
-  Slightly clarity, smooth surface, low protein binding levels, fewer potential leachable.
-  Ideal for pharmaceutical and biotechnology use, suitable temperature range -51 ~ 238°C.

Micro Flow Rate Tubing										
Tubing Size	0.13x0.86	0.5x0.86	0.86x0.86	1.52x0.86	2.06x0.86	2.79x0.86	1x1	2x1	3x1	2.4x0.8
Tubing cross sections (1:1)	●	●	●	●	●	○	●	●	○	○
Wall Thickness (mm)				0.86				1.0		0.8
Inside diameter (mm)	0.13	0.5	0.86	1.52	2.06	2.79	1.0	2.0	3.0	2.4
Maximum pressure (bar)	Continuous				1					
	Intermittent				1					

Basic Flow Rate Tubing											
Tubing Size	13"	14"	19"	16"	25"	17"	18"	15"	24"	35"	36"
Tubing cross sections (1:1)	●	●	●	●	●	○	○	○	○	○	○
Wall Thickness	mm inch				1.6 1/16					2.4 3/32	
Inside diameter	mm inch	0.8 1/32	1.6 1/16	2.4 3/32	3.1 1/8	4.8 3/16	6.4 1/4	7.9 5/16	4.8 3/16	6.4 1/4	7.9 5/16
Maximum pressure (bar)	Continuous		1.7		1.4	1	0.7		1.7		1.4
	Intermittent		2.7		2.4	1.4	1		2.7		2.4

Industrial Tubing							
Tubing Size	26"	73"	82"	86"	90"	88"	92"
Tubing cross sections (1:1)							
Wall Thickness	mm inch		3.3 1/8		6.3 1/4		4.8 3/16
Inside diameter	mm inch	6.4 1/4	9.6 3/8	12.7 1/2	9.5 3/8	19 3/14	12.7 1/2
Maximum pressure (bar)	Continuous		2		2.5		
	Intermittent		2.7		3		



Notes





SPAIN

PoL. Ind. La Sendilla, Avda. Las Palmeras, 18. Naves A-7-8-9, 28350, Ciempozuelos (Madrid)
T: (+34) 918 757 656
tdfmadrid@tecnicafluidos.es

PORTUGAL

Quinta do Lago. Estr. de Pinteus, Armazen 24, 2660-196 San Antao Do Tojal (Portugal)
T: (+35) 1 219 737 580
geral@hidromethos.pt

SWITZERLAND

Hammerstrasse 174, 4057 Basel (Switzerland)
T: (+41) 61 666 69 00
info@tdf-schweiz.ch

ROMANIA

Str. Hagi Moscu Maria, no. 5. Sector 1, Bucuresti
T: (+40) 213 136 305 - (+40) 746 896 540
office@tdfpompe.ro

GERMANY

Am Werloh 27-29, 42389 Wuppertal (Deutschland)
T: +49 202 2999417
r.salz@tdf-deutschland.de

POLAND

ul. Gidzińskiego 4, 02-293 Warszawa (Poland)
T: (+48) (22) 743 60 77
info@tajfunpoland.pl

CZECH REPUBLIC

Novosedlická 1582. 415 01 Teplice, Czechia.
T: 420 725 141 848
info@tdfczech.cz

ARGENTINA

Tandil, 5930, C1440AVX, CABA (Argentina)
T: (+54) 11 4635 0745
info@tecnicadefluidos.com

BOLIVIA

Calle Ballivian Nº 1456, Edificio Cervantes 2do Mzz - Ofic. 2, La Paz (Bolivia)
T: (+591) (2) 2145194
bolivia@tecnicadefluidos.com

PARAGUAY

Ruta Transchaco Km. 14,5 - Nº 689 - Piso 2 - Of. A - Esq. Av. General Garay, Asunción (Paraguay)
T: (+595) 21 328 2601
paraguay@tecnicadefluidos.com

URUGUAY

Julio Cesar 1636 - Esq. 4 de Julio, Montevideo (Uruguay)
T: (+598) 2 623 0427
uruguay@tecnicadefluidos.com