HygiaFlex

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.

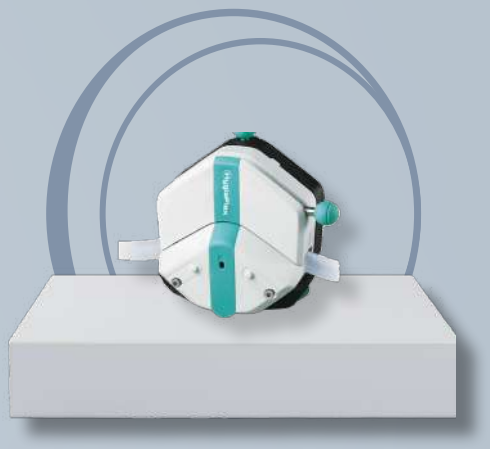
Hygiaflex products are widely used in research laboratory, bio-pharmaceuticals, food & beverage, fine chemical, environment, etc.



1. ABOUT US 02
2. NEW PRODUCTS 04
3. APPLICATION 05
4. PRODUCTS 07
OCM Fluid Solution 07
Compact Peristaltic Pump 13
HF-LabK1 13
HF-LabS3 14
HF-SK-HandyPump 15
HF-SP-MiniPump 16
Flow Rates Peristaltic Pump 17
HF-LabV Series/HF-V Series 17
HF-V6 Series (servo motor) 19
HF-Lab-IV Series 21
HF-LabN Series 22
HF-N6 Series (servo motor) 24
Dispensing Peristaltic Pump 25
HF-LabF Series/HF-F Series 25
HF-F6 Series (servo motor) 27
HF-IF3 Low Pulsation (servo motor) 29
Filling System 30
HF-KF 300 30
Split Type HF-CF600/HF-600 Plus 31
Split Type HF-CF350/HF-350 Plus (servo motor) 32
Integrated Type HF-DF600/HF-DF600 Plus 33
Integrated Type HF-DF600IV/HF-DF350 Plus (servo motor) 34
Basic Peristaltic Pump 38
HF-LabM Series 38
HF-M6 Series (servo motor) 39
HF-BT-N Series 40
Planetary Gear Industrial Pump 41
Explosion Proof Peristaltic Pump 42
HF-EX600 42
HF-QD600 43
Pump Head Flow Meter 44
Peristaltic Pump Tubing and Accessory 46

NEW GENERATION

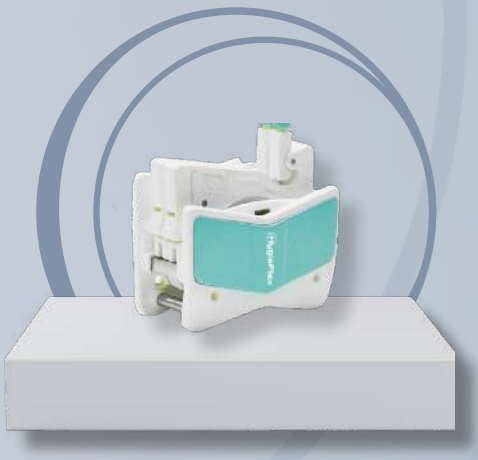




EASY LOAD TYPE PUMP HEAD

Features:

- The tube clamp linkpage 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 te 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

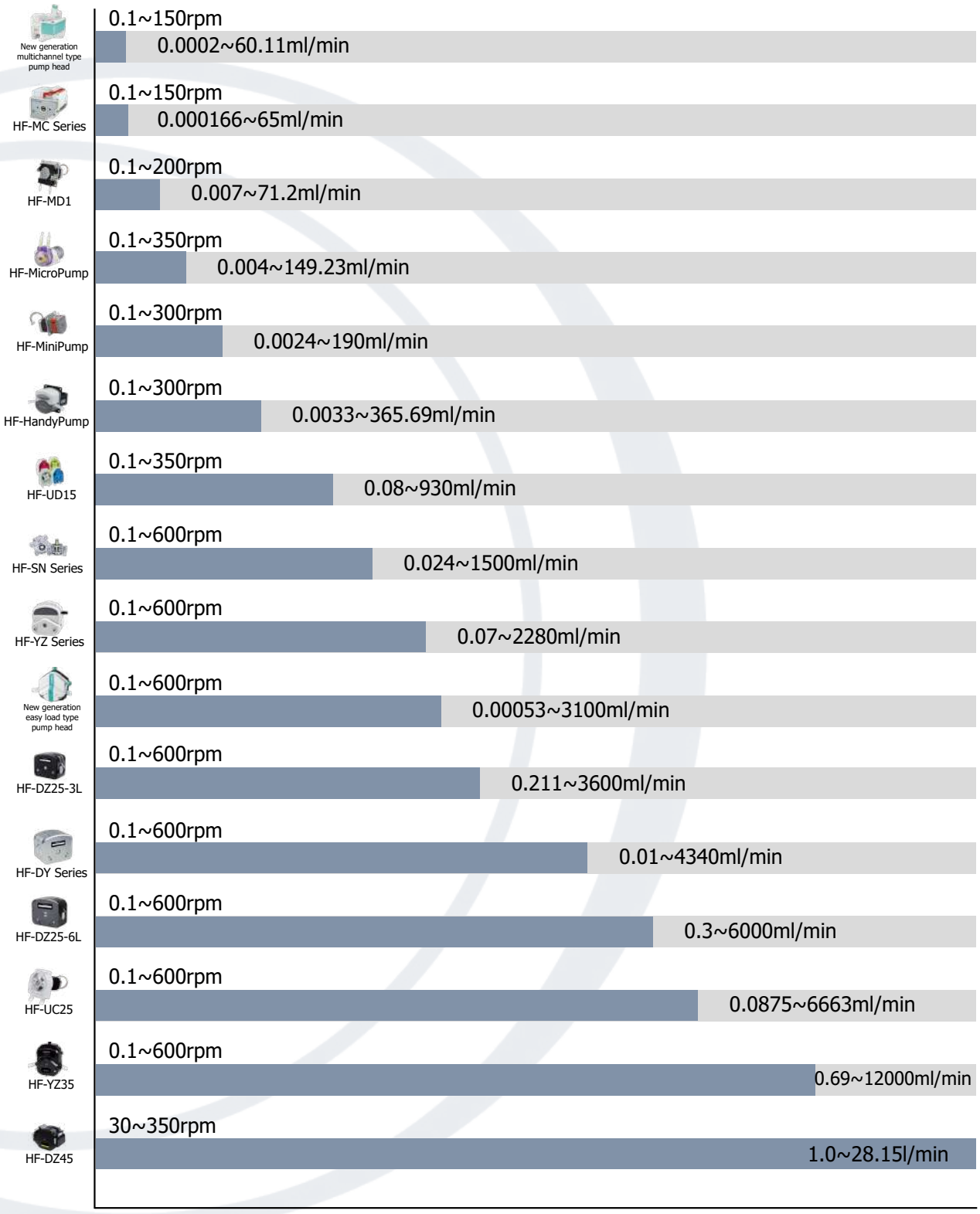


Repacking the kit



APPLICATION

PUMP HEAD FLOW RATE



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

Adding in order | Different flow rate | Different reagents | Complicated process

→ Various combinations

→ Time and labor costing | Error-prone

How to solve the problems?
OCM provides customized solutions for you

- Analyze problem
- Design solution
- Design OCM product

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 ±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





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.

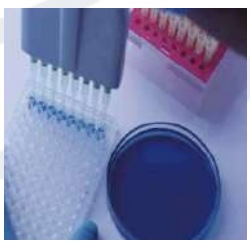
Features

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 shore 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

HF-PDS



Product Introduction

- 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.

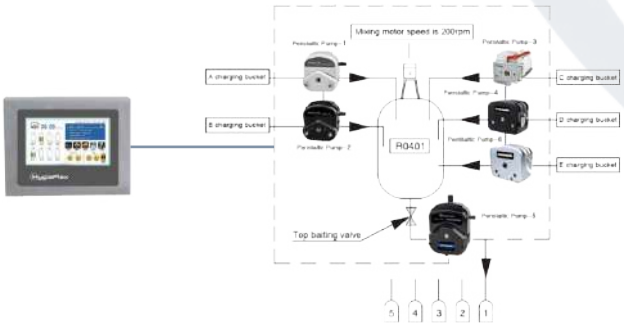
Four working modes

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

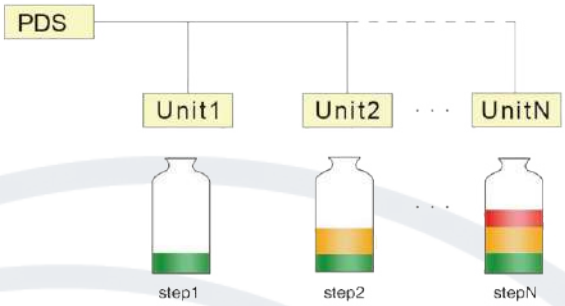
Technical Specifications			
Speed range	0.1~600rpm, also depend on pump head	Power supply	AC10-240V
Speed resolution	0.01rpm	Power consumption	15W
Back suction angle	0-360°	Controller dimension	240*221*111mm
Display	7 inch- industrial grade- true color LCD TFT screen	Controller weight	2.1kg
Control	Touch screen	Memory function	Storage the running parameters when power of
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.

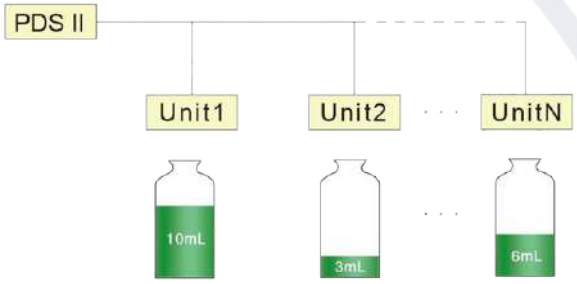


Application 2: PDSIV. One controller with 7 pump units, 4 HF-MiniPump and 3 HF-YZ1515x pump heads, for different liquid filling with different time sequence.



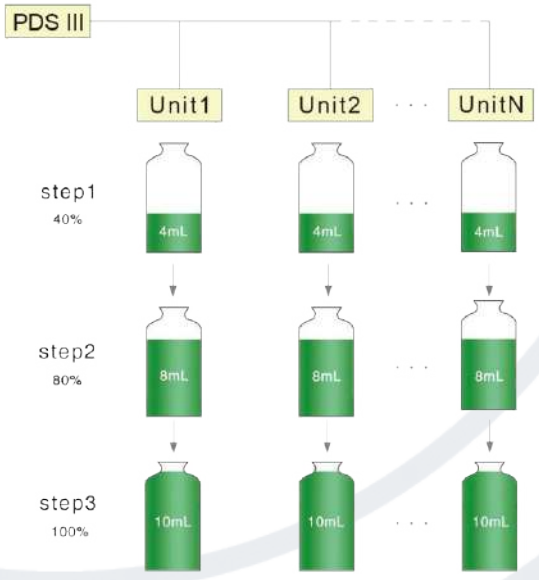
Logic working mode

In logic working mode, each unit working cooperatively. Filling or trasferring 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.



Independent working mode

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)

PDS IV

Comprehensive working mode

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

Product Introduction

HF-LabK1



- 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

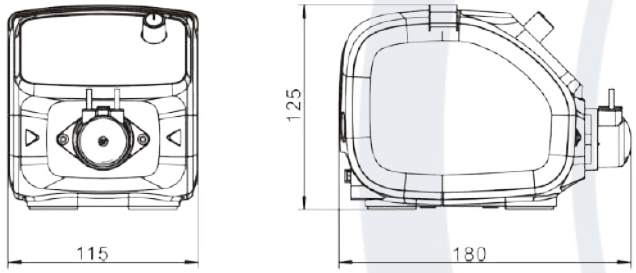
Product Features

- 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



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	0-40ºC
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



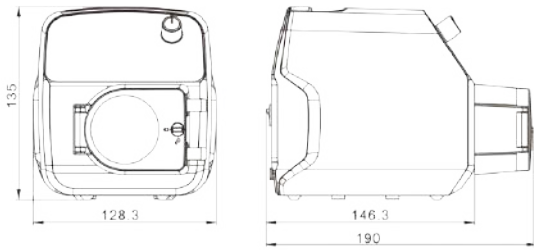
Product Introduction

- 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.

Dimension Drawing (Unit: mm)



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)
Speed resolution	0.1rpm			0-5V, 4.20mA (standard), 0-10V (optional)
Speed control	Digital knob		Power supply	DC24V/1A with power adapter
Control method	Mechanical keypad		Dimension	190x128.3x135mm(LxWxH)
Keypad lifetime	300,000 times		Weight	800g
Display	0.96" OLED display		Condition temperature	0-40ºC
IP rate	IP31		Relative humidity	<80%

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, Moodbus 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



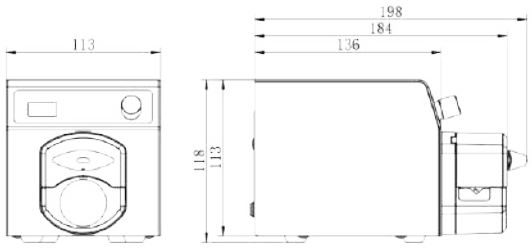
Model Number HF-SK-HandyPump

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℃
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



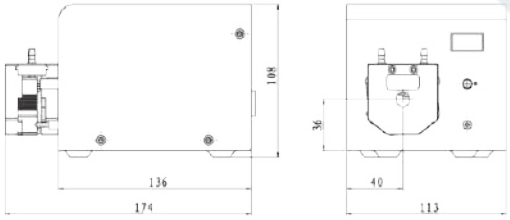
Product Introduction

- 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.

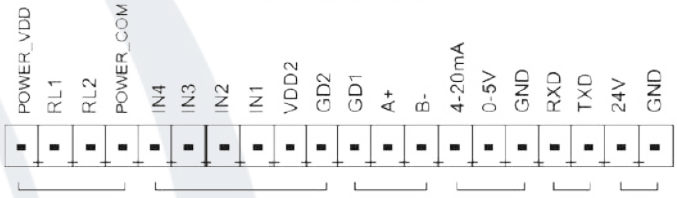
Model Number

HF-SP-MiniPump01, HF-SP-MiniPump02

Dimension Drawing (Unit: mm)



External Control Schematic Diagram



Technical Specifications			
Flow rate range	0.0024190 ml/min	Communication inrerface	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	0-40ºC
External control	Start/stop control (switch signal)	Relative humidity	<80%
	0-5V, 4-20mA(standard), 0-10V (optional)	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



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

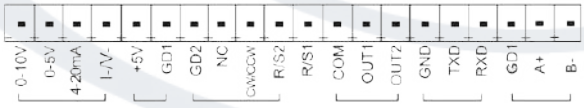


HF-V1, HF-V3, HF-V6

Laboratory
Industrial equipment supporting

- Industrial grade 4.3" true color LCD screen, touch screen control, both Chinese and English interface available.
- Dinamic 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

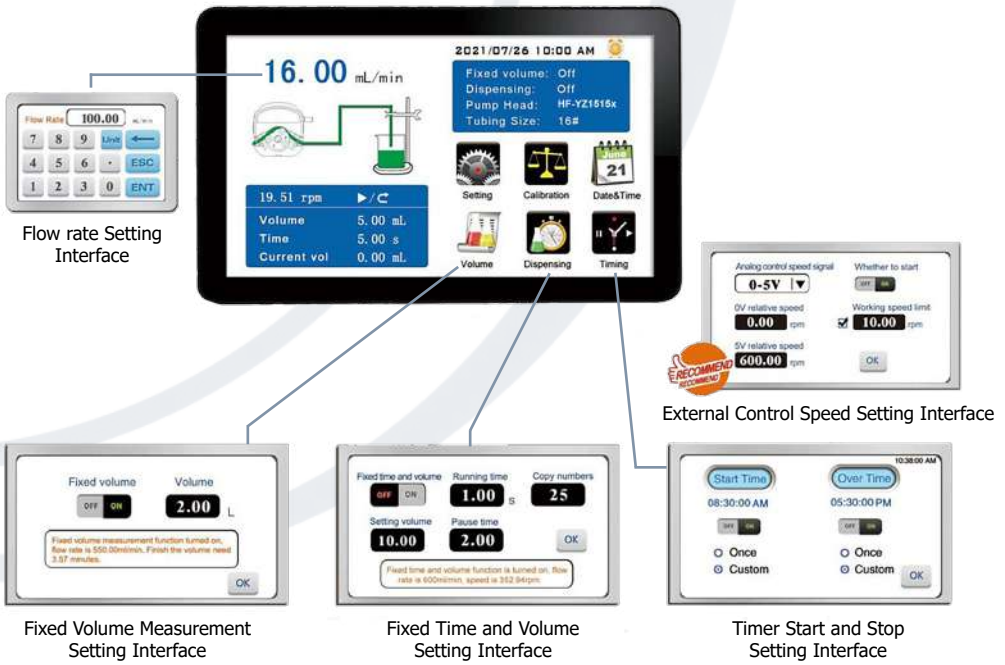


Technical Specifications

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%		
Back suction angle	0-360	Drive dimension (L×W×H)	HF-LabV Series: 261.4x157.3x236.9mm HF-V Series: 252x152x243mm
Outlet pressure	1bar(0.8-1.0mm wall thickness tubing) 1-2.7bar(1.6-2.4mm wall thickness tubing)	Drive weight	HF-LabV Series: 4.40kg HF-V series: 4.40kg
Motor type	Stepper motor		
Display	Industrial grade 4.3"LCD color display	Power consumption	<50W
Control method	Touch screen and Mechanical keypad	Condition temperature	0-40
Keypad lifetime	300,000 times	Relative humidity	<80%
External speed control signal	0-5V, 0.10V, 4-20mA for option	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~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 / Tubing		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	
		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



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

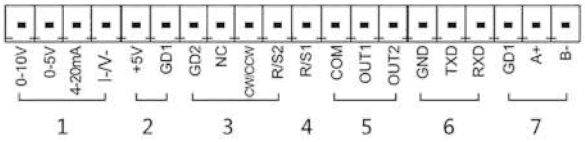
Technical Specifications			
Flow rate range	HF-V6-3L:0.211~3600ml/min	Start/stop, direction signal	Passive switch signal, such as foot pedal switch
	HF-V6-6L:0.03~6000ml/min		Active switch signal: 5V, 12V and 24V for option
	HF-V6-12L:0.00069~12l/min	Communication interface	RS232, RS485 support MODBUS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

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

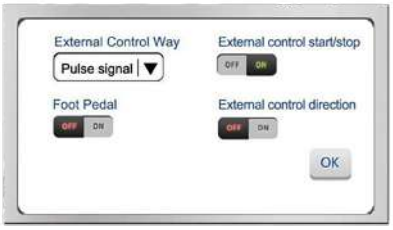
1. Analog signal input port: Choose the external control speed signal from the external control setting interface. Turn on the external control speed function, control the motor speed range through the analog signal.
2. Internal isolation 5VDC output.
3. External control start/stop, direction signal 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.

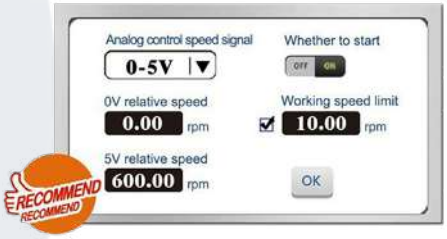
HF-V Series peristaltic pump external control setting interface.

Choose external control start/stop, direction signal



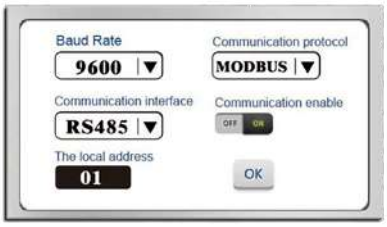
1. Can respectively set external control start/stop or reversing switch wether effective or not.
2. Can choose control mode according to requirement: pulse mode or level model.
3. Can set the foot switch whether effective or not.
4. Can choose switch value signal´s high level values according to customers´main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

Programmable external control speed setting



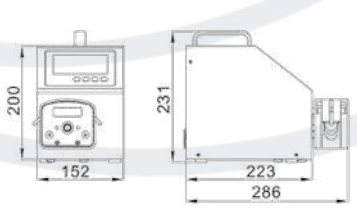
1. Can choose analog signal source according to requirements: 0-5V, 0-10V, 4-20mA.
2. When the signal source is chosen, can choose maximum speed and minimum speed which corresponding to the signal source´s maximum value and minimum value according to actual demand, to reach userdefined rotate speed range 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

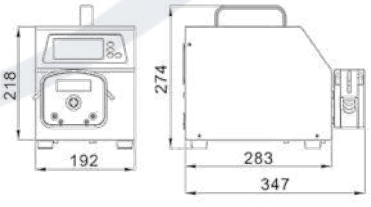


1. Support RS232 and RS485 interface, can be chosen in software interface.
2. Support various Baud rate: 2400bps, 4800bps, 9600bps, 19200 bps.
3. Can choose standard modbus communication protocol or Hygiaflex communication protocol to control, modbus communication protocol is suitable to match with industrial 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.

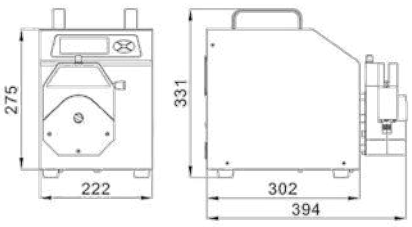
Dimension Drawing (Unit: mm)



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	261.4x15703x236.9mm
		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

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.

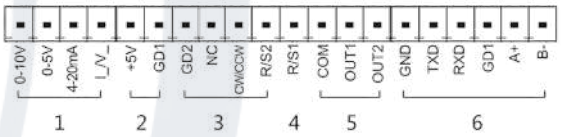
Features

- 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.

Model Number

HF-LabN1, HF-LabN3, HF-LabN6

HFLabN Series External Control Schematic Diagram





HF-LabN Series Interface and Keypad

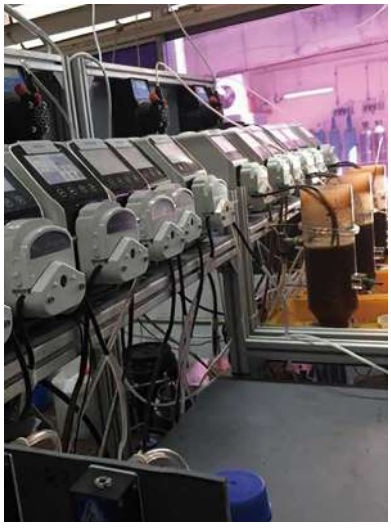
Technical Specifications

Flow rate range	HF-LabN1: 0.000166~775 ml/min HF-LabN3: 0.000166~1808 ml/min HF-LabN6: 0.000166~3100 ml/min	Start/stop, reversing signal	Passive switch signal, such as foot pedal Active switch signal: 5V, 12V, 24V for option
Speed resolution	0.1rpm	Communication interface	HF-RS232, HF-RS485 support Modbus protocol(RTU mode)
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 1.6~2.4mm wall thickneess tubing: 1~2.7bar	Power supply	AC 220V±10% 50Hz/60Hz (standard) 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	0-40ºC
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)
Drive&speed	Tubing	13#, 14#, 19#, 16# 25#, 17#, 18#	15#, 24#	Inner diameter: 0.13-3.17mm Wall thickness:0.8-1mm	
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		
		New Generation Easy Load Type Pump Head		New Generation Multichannel Type Pump Head	
Drive&speed	Tubing	HF-EasyPump (1.60 mm wall thickness)	HF-EasyPump (2.40 mm wall thickness)	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, virious 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%		
Speed resolution	0.1rpm	Motor type	Servo motor
Fixed time dispensing function	0.1s~9999h	Copy numbers	1-9999 times, setting '0' means unlimited
		Drive dimension (LxWxH)	HF-N6-3L: 223X152X230mm
Control method	Mechanical keypad+Rotary encoded switch		HF-N6-6L: 283X192X264mm
Display	3.2" high definition LCD screen		HF-N6-12L: 302X222X321mm
Start/stop, direction signal	Passive switch signal, such as foot pedal switch	Drive weight	HF-N6-3L: 5.06kg; HF-N6-6L: 7.88kg; HF-N6-12L: 13.01kg
	Active switch signal: 5V, 12V and 24V for option	Relative humidity	<80%
External speed control signal	0-5V, 0-10V, 4-20mA for option	Environment temperature	0-40°C
Output interface	Output motor working status (Open-Collector output)	IP rate	IP31
		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





Handling Dispenser

- Based on ergonomics engineering design
- Elegant appearance

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

Accesories



Filling Countersunk

Filling Noozle

Foot Pedal Switch

HF-F1, HF-F3, HF-F6



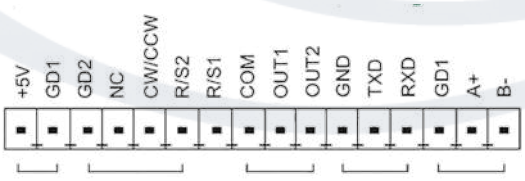
Features

- 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.

Model Number

HF-F1, HF-F3, HF-F6

External Control Schematic Diagram

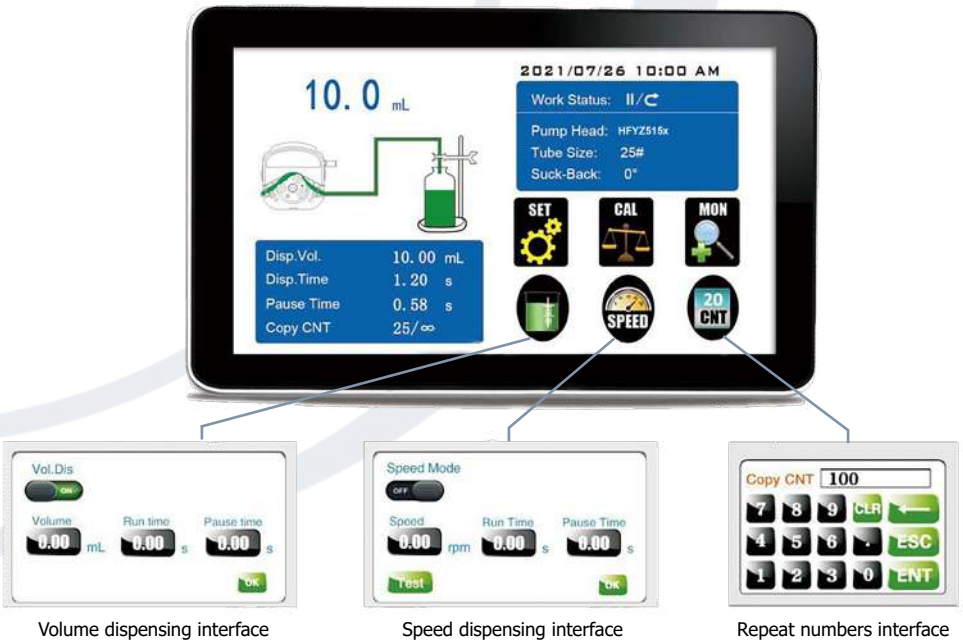


Technical Specifications

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)
Dispensing volume resolution	0.01ml		AC 110V±10% 50Hz/60Hz (Optional)
Dispensing time	0.1-9999.99s	Outlet pressure	1bar(0.8~1.0mm wall thickness tubing)
Pause time	0.1-9999.99s		1~2.7bar(1.6~2.4mm wall thickness tubing)
Time resolution	0.01s	Drive dimension (L×W×H)	HF-LabF Series: 261.4X157.3X236.9mm
Copy numbers	1-9999 times, setting 0' means unlimited		HF-F Series: 212x152x243mm
Back suction angle	0-360	Drive weight	HF-LabF Series: 4.40kg
Dispensing accuracy	<0.5%		HF-F Series: 4.20kg
Motor type	Stepper motor	Power consumption	<50W
Display	Industrial grade 4.3" color LCD display	Condition temperature	0-40 C°
Control method	Touch screen and Mechanical keypad	Relative humidity	<80%
Keypad lifetime	300,000 times	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)
Drive&speed / Tubing		13#, 14#, 19#, 16# 25#, 17#, 18#	15#, 24#	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm	
HF-LabF1/F1	1-150rpm	0.07~570	1.7~435	0.00166-49(working speed≤150rpm)	0.00185-65(working speed≤150rpm)
HF-LabF3/F3	1-350rpm	0.07~1330	1.7~1015		
HF-LabF6/F6	1-600rpm	0.07~2280	1.7~1740		
Drive&speed / Tubing		New Generation Easy Load Type Pump Head		New Generation Multichannel Type Pump Head	
		HF-EasyPump (1.60 mm wall thickness)	HF-EasyPump (2.40 mm wall thickness)	8 rollers	
		13#, 14#, 19#, 16# 25#, 17#, 18#	15#, 24#, 35#, 36#	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm	
HF-LabF1/F1	1-150rpm	0.053~645	1.8~775	0.002-52(working speed)≤150rpm)	
HF-LabF3/F3	1-350rpm	0.053~1505	1.8~1808		
HF-LabF6/F6	1-600rpm	0.053~2580	1.8~3100		



Volume dispensing interface | Speed dispensing interface | Repeat numbers interface



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

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

Experimental conditions: standard atmospheric pressure, room temperature at 20ºC, 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 enviroment, 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
HF-F6-3L	HF-Z25-3L	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		
		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		
HF-F6-6L	HF-DZ25-6L	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		
		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		
HF-F6-12L	HF-YZ35	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		
		73#	300ml	3s	299.9	299.8	300.0	300.1	300.4	300.2	300.4	300.4	300.6	300.5	-0.07%	0.27%
					300.8	300.6	300.5	300.5	300.5	300.6	300.7	300.5	300.6	300.6		
		82#	500ml	3s	500.0	497.8	499.7	498.3	498.4	499.5	498.2	499.7	499.2	498.4	-0.44%	0.38%
					499.5	498.3	501.5	501.9	500.0	501.8	501.1	500.5	501.6	499.6		

HF-IF3

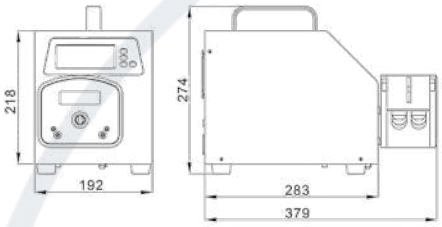


Features

- 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 20ºC, 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 enviroment, 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		

HF-KF300



The control unit



HF-KF300+ HF-MiniPump

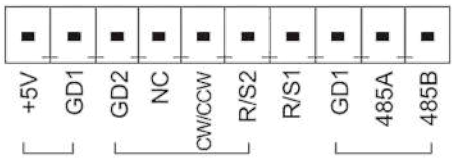
Typical Application

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

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.

External Control Schematic Diagram





HF-KF300+ HF-HandyPump

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		
Interval time	0.1-9999.99s		
Volume resolution	0.01ml	Output interface	Output motor working status (Open-collector output)
Time resolution	0.01s		
Copy numbers	1-9999 times, 0 represent unlimited	Communication interface	RS485 support Modbus protool (RTU mode)
Back suction angle	0-360°	Power supply	AC 220v±10%50Hx/60Hz (standard) AC 110v±10%50Hx/60Hz (optional)
Filling accuracy	<0.5%		
Filling units	1-32 units	Condition Temperature	0-40℃
Display	4.3"Industrial grade - color LCD display	Relative humidity	<80%
Keypad lifetime	300,000 times	IP rate	IP31

HF-CF600



Features

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

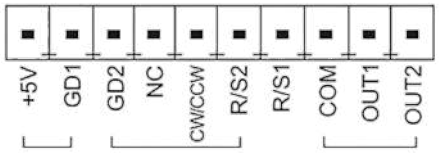
Model Number

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

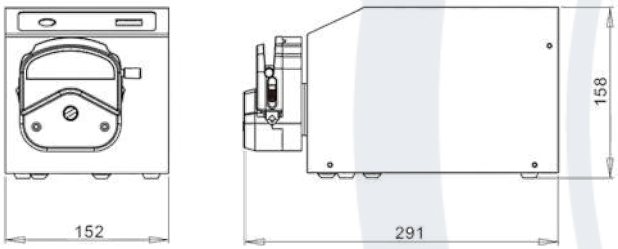
Typical Application

- Laboratory dispensing.
- Industry filling.

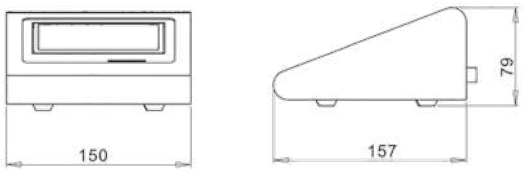
External Control Schematic Diagram



Dimension Drawing (Unit: mm)



Drive Dimension Drawing



Controller Dimension Drawing



Control Unit

Filling Unit 1 Filling Unit 2 Filling Unit 16

HF-CF350



Features

- Servo motor drive, precision control.
- Split type design, space-saving, easy installation.
- Use low pulsation pump head to reduce the pulsation of the fluid effectively.
- Suitable for micro volume hign precision filling.

Model Number

HF-CF350, HF-CF350 Plus, HF-CF600III
HF-CF600 PlusIII, HF-CF600IV, HF-CF PlusIV

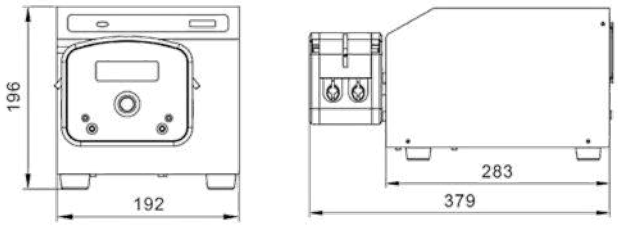


Control Unit

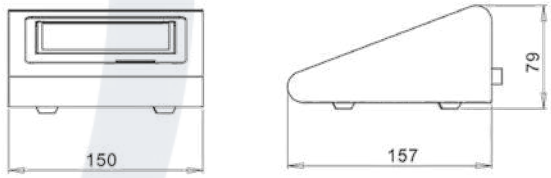


Filling Unit

Dimension Drawing (Unit: mm)



Drive Dimension Drawing



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-CF600III HF-CF600PlusIII	HF-DZ25-6L	3.0-6000	Servo motor	283x192x196mm	Each unit<180W	7.8kg
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 HF-YZ35-PPS	6.9-12000	Servo motor	310x228x248mm	Each unit<300W	11.9kg

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

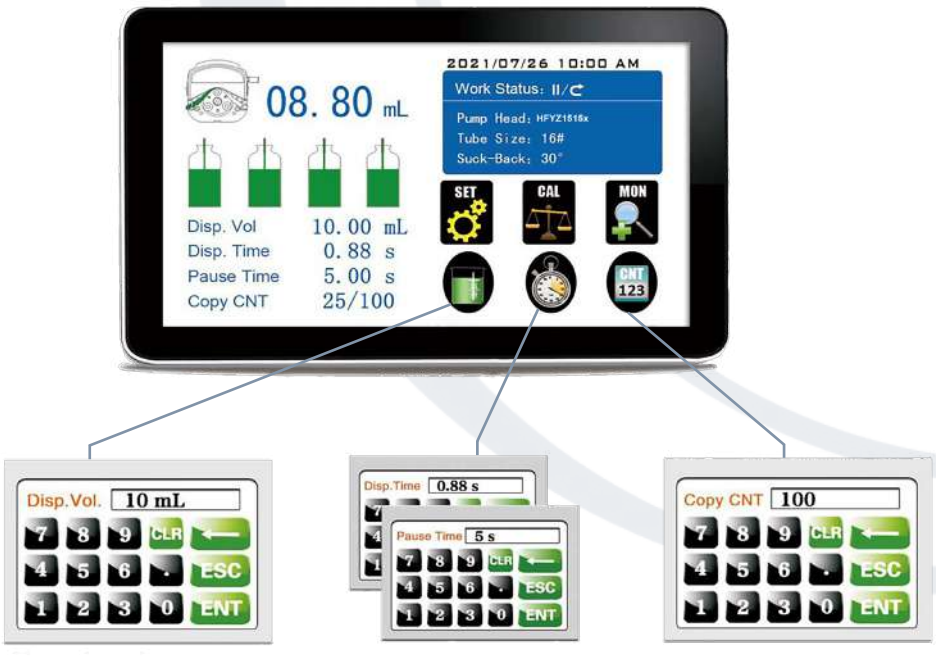
HF-DF600, HF-DF600II, HF-DF600 Plus, HF-DF PlusII

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 hace 4 fillings units, total 16 fillings units. This system use imported 4.3” industrial grade true color display with touch screen control, can preset filling volume, fillling 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 realtime monitor the current filling status of peristaltic pump. This filling system use 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.

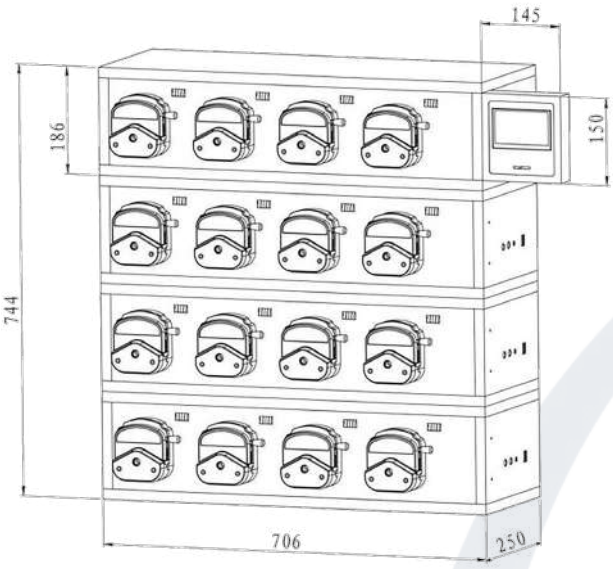
Model Number

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

Typical Application

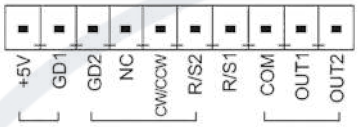
- Pharmaceutical, health product filling, diagnostic reagent dispensing.
- Food, beverage filling
- Cosmetic filling.

Dimension Drawing (Unit: mm)

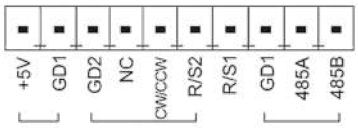


External Control Schematic Diagram

- 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-DF600III HF-DF600PlusIII	HF-DZ25-6L	3.0-6000	Servo motor	910×290×212mm	Each Unit<180W	41.45kg
HF-DF350 HF-DF350Plus	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
Filling volume range	0.1-9999.99 ml			Active switch signal: 5V, 12V, 24V for option
Filling time range	0.5-9999.99s/HF-DF600Plus 0.19999.99s		Output interface	Output motor working status
Pause time range	0.5-9999.99s/HF-DF600Plus 0.19999.99s			(Open-Collector output)
Filling volume resolution	0.01 ml		Power supply	AC 220V±10% 50Hz/60Hz (standard)
Time resolution	0.01 s			AC 110V±10% 50Hz/60Hz (optional)
Copy numbers	1-9999,'0' means unlimited		Condition temperature	0-40ºC
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-YZ2515x	PSF PPS	———	15#	4.8x2.4(mm)	1.7~1020
				24#	6.4x2.4(mm)	2.9~1740
HF-DF600II HF-CF600II HF-DF600Plus II HF-CF600Plus II	HF-DZ25-3L	Aluminum alloy/PPS	PP	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
HF-DF600III HF-CF600III HF-DF600Plus III HF-CF600PlusIII	HF-DZ25-6L	Aluminum alloy/PPS	PP	15#	4.8x2.4(mm)	3~1800
				24#	6.42x2.4(mm)	5.5~3300
				35#	7.9x2.4(mm)	8~4800
				36#	9.6x2.4(mm)	10~6000
HF-DF600IV HF-CF600IV HF-DF600PlusIV HF-CF600PlusIV	HF-YZ35-PPS	PPS	PP	26#	6.4x3.3(mm)	6.9~4200
				73#	9.6x3.3(mm)	12.3~7400
				82#	12.7x3.3(mm)	20~12000

Drive	Pump Head	Pump Head Material	Tube Clamp Material	Tubing		(Motor Speed1~350rpm) 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)	0.1~48
				14#	1.6x1.6(mm)	0.6~223
				19#	2.4x1.6(mm)	1.3~448
				16#	3.1x1.6(mm)	2~723
				25#	4.8x1.6(mm)	4.7~1626
				17#	6.4x1.6(mm)	6.4~2230
				18#	7.9x1.6(mm)	9.5~3337
	HF-DY25	Aluminum alloy	PP	15#	4.8x2.4(mm)	4.2~1480
				24#	6.4x2.4(mm)	7.6~2670
				35#	7.9x2.4(mm)	10~3600
				36#	9.6x2.4(mm)	12.4~4340

Filling Volume Reference (Media is water)							
Drive	Pump Head	Tubing	Filling Volume (ml)	Filling Time (s)	Accuracy (±%)	Output (pcs/min)	Motor Speed (rpm)
HF-DF600 HF-CF600 HF-DF600Plus HF-CF600Plus	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
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
		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
	HF-DY25	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



HF-LabM1, HF-LabM3, HF-LabM6



New generation Easy Load Type Pump Head



HF-YZ Series



New generation Multichannel Type Pump Head



HF-MC Series

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 .

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), Hygiaflex 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	0-40ºC
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)			
		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	
HF-LabM1	0.5-150 rpm	0.035~570	0.85~435	0.000829-49(working speed≤150rpm)	0.000925-65(working speed≤150rpm)
HF-LabM3	0.5-350 rpm	0.035~1330	0.85~1015		
HF-LabM6	0.5-600 rpm	0.035~2280	0.85~1740		
Drive&speed	Tubing	New Generation Easy Load Type Pump Head		New Generation Multichannel Type Pump Head	
		HF-EasyPump (1.60 mm wall thickness)	HF-EasyPump (2.40 mm wall thickness)	8 rollers	
		13#, 14#, 19#, 16# 25#, 17#, 18#	15#, 24#, 35#, 36#	Inner diameter: 0.13-3.17mm Wall thickness: 0.8-1mm	
HF-LabM1	0.5-150 rpm	0.0267~645	0.90~775	0.001-52(working speed≤150rpm)	
HF-LabM3	0.5-350 rpm	0.0267~1505	0.90~1808		
HF-LabM6	0.5-600 rpm	0.0267~2580	0.90~3100		



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),Hygiaflex-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		
Display	3 digital LED		
Control method	Mechanical keypad	Drive weight	HF-M6-3L: 5.02kg; M6-6L: 7.85kg HF-M6-12L: 13.14kg
Keypad lifetime	300,000 times		
Speed control	Rotary encoded switch	Power consumption	HF-M6-3L: <80W; M6-6L:<180W HF-M6-12L: <300W
External speed control signal	0-5V(standard), 0.10V, 4-220mA(optional)		
		Condition temperature	0-40ºC
IP rate	IP31	Relative humidity	<80%

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	Start/stop, reversing signal	Passive switch signal, such as foot pedal
	HF-BT300N: 0.000829~1330 ml/min		Active switch signal: 5V, 12V, 24V for option
	HF-BT600N: 0.000829~2280 ml/min	Communication interface	RS232(standard),Hygiaflex-N232 Communication protocol; RS485(optional), Modbus protocol(RTU mode)
Speed resolution	0-100rpm, 0.1rpm	Power supply	AC 220V±10% 50Hz/60Hz (standard)
	100-600rpm, 1rpm		AC 110V±10% 50Hz/60Hz (optional)
Testing time range	0.5 s-999s		
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	0-40ºC
		IP rate	IP31
Relative humidity	<80%		

Product Composition and Flow Rate Range					
Standard 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	
HF-BT100N	0.5-150rpm	0.035~570	0.85~435	0.000829-49(suggestion working speed≤150rpm)	0.000925-65(suggestion working speed≤150rpm)
HF-BT300N	0.5-350rpm	0.035~1330	0.85~1015		
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.

HF-J25



Roller Components Graph

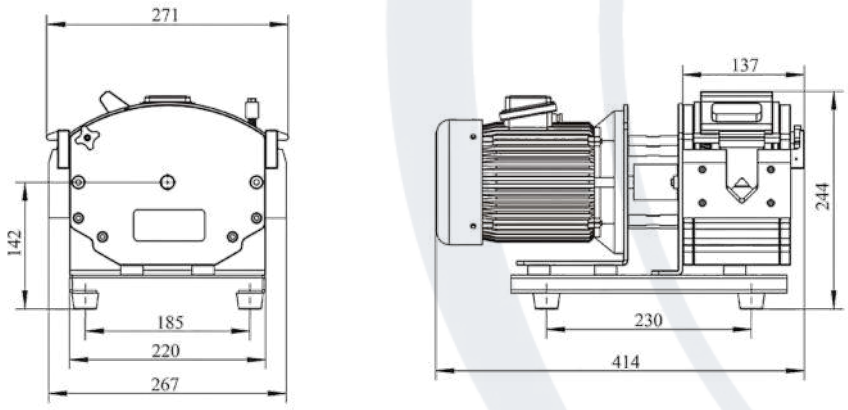




Typical Application

- Bio-medical
- Chemical industry
- Environmental protection

Dimension Drawing (Unit: mm)





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



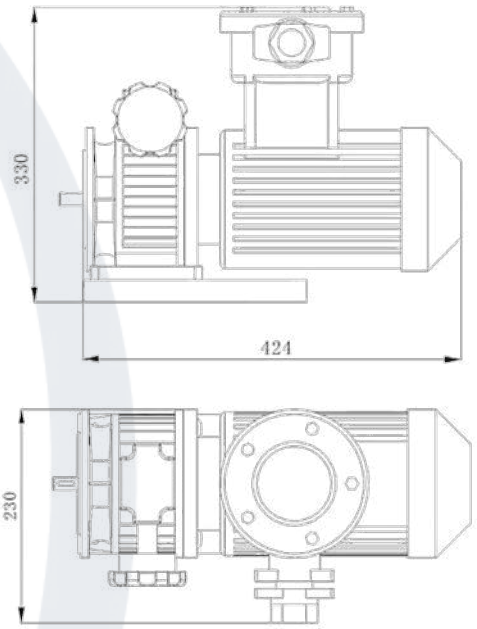
Frequency converter



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%
		Explosion-proof grade	ExdIIBT4 Gb, ExdIICT4
Voltage	3 phase 380V(standard)	IP rate	IP55
	3 phase 220V(optional)	Drive dimension (L x W x H)	424x230x330(mm)
Drive weight	30kg		

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





New generation Easy Load Type Pump Head



HF-YZ Series



New generation Multichannel Type Pump Head



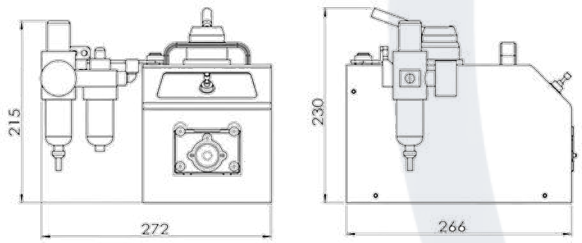
HF-DZ25-3L

Features

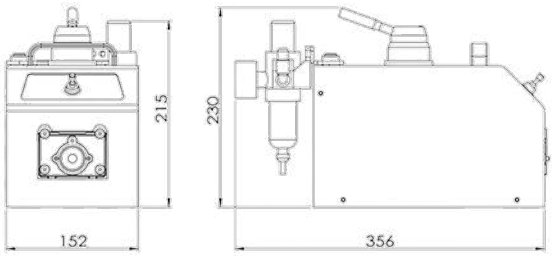
- Pneumatic motor driver, gas driving, explosion-proof and safe.
- Stepless speed regulation, manual control flow valve.
- Start/stop, direction, overload protection functions.
- Barometer, convenient for users to check the pressure value.
- Suitable for inflammable, explosive industrial sites.

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
Display	Display air pressure		Non-working: 356x152x230mm
Speed control	stepless speed regulation (by adjusting the flow salve)	Drive weight	4.10kg
		Condition temperature	0-40ºC
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#	4.8×2.4	0.1-600	0.3423~2054	1.39
			24#	6.4×2.4		0.5033~3020	
			35#	7.9×2.4		0.8588~5153	
			36#	9.6×2.4		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	1	1
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		
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
1x1	0.1~150rpm	0.0046~6.90	0.0053~7.95	1	1
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		

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	2.4	1.4	
	36#	9.6x2.4	5.167	0.517-3100			

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		

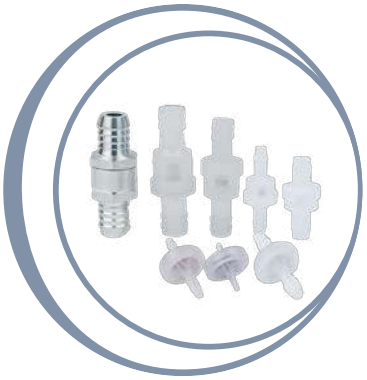
HF-DZ25 Series Technical Specifications

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

water proof





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: 0-60º

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.

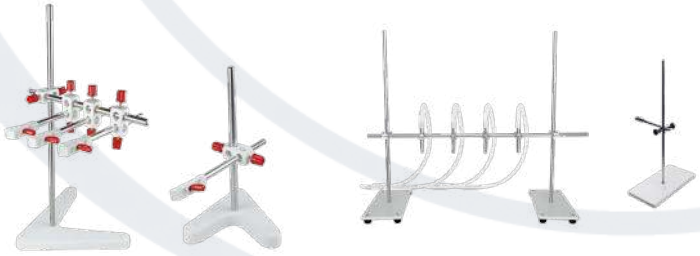


I. Benchtop Tubing Cutter



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 ~ 238ºC.

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	1.6							2.4			
	inch	1/16							3/32			
Inside diameter	mm	0.8	1.6	2.4	3.1	4.8	6.4	7.9	4.8	6.4	7.9	9.6
	inch	1/32	1/16	3/32	1/8	3/16	1/4	5/16	3/16	1/4	5/16	3/8
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	3.3			6.3		4.8	
	inch	1/8			1/4		3/16	
Inside diameter	mm	6.4	9.6	12.7	9.5	19	12.7	25.4
	inch	1/4	3/8	1/2	3/8	3/14	1/2	1
Maximum pressure (bar)	Continuous	2			2.5			
	Intermittent	2.7			3			



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. Gidziñskiego 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

HygiaFlex