HygiaFlex

PUMP HEAD & OEM

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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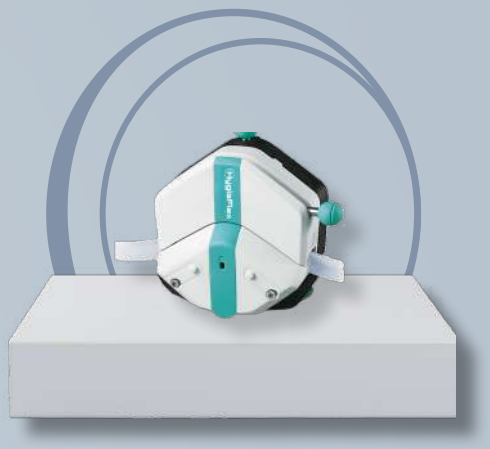
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NEW GENERATION

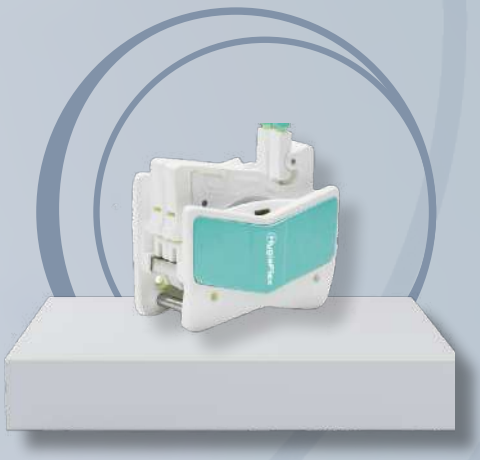


EASY LOAD TYPE PUMP HEAD



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.

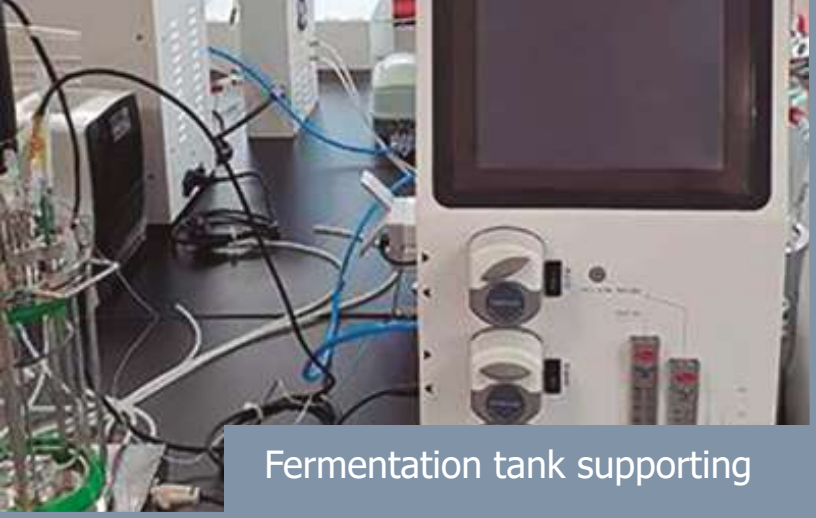


MULTICHANNEL TYPE PUMP HEAD



Features:

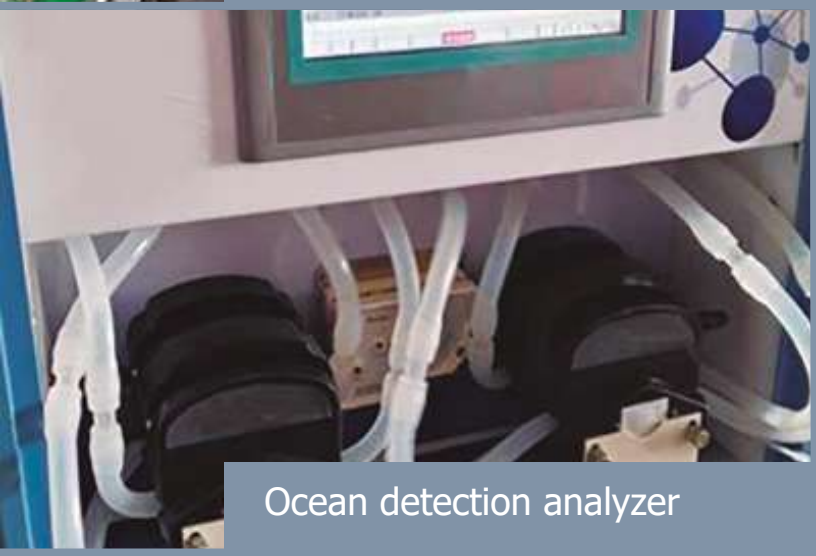
- The elastic positioning mechanism enables users remove and install cartridge with one hand.
- The elastic pressure tube design, effectively improving the flow rate accuracy between channels.
- The mute design of the roller assembly realizes low noise and high speed operation



Fermentation tank supporting



Online water quality analyzer



Ocean detection analyzer



Cosmetic filling



Analysis instrument supporting



Biochemical analysis equipment

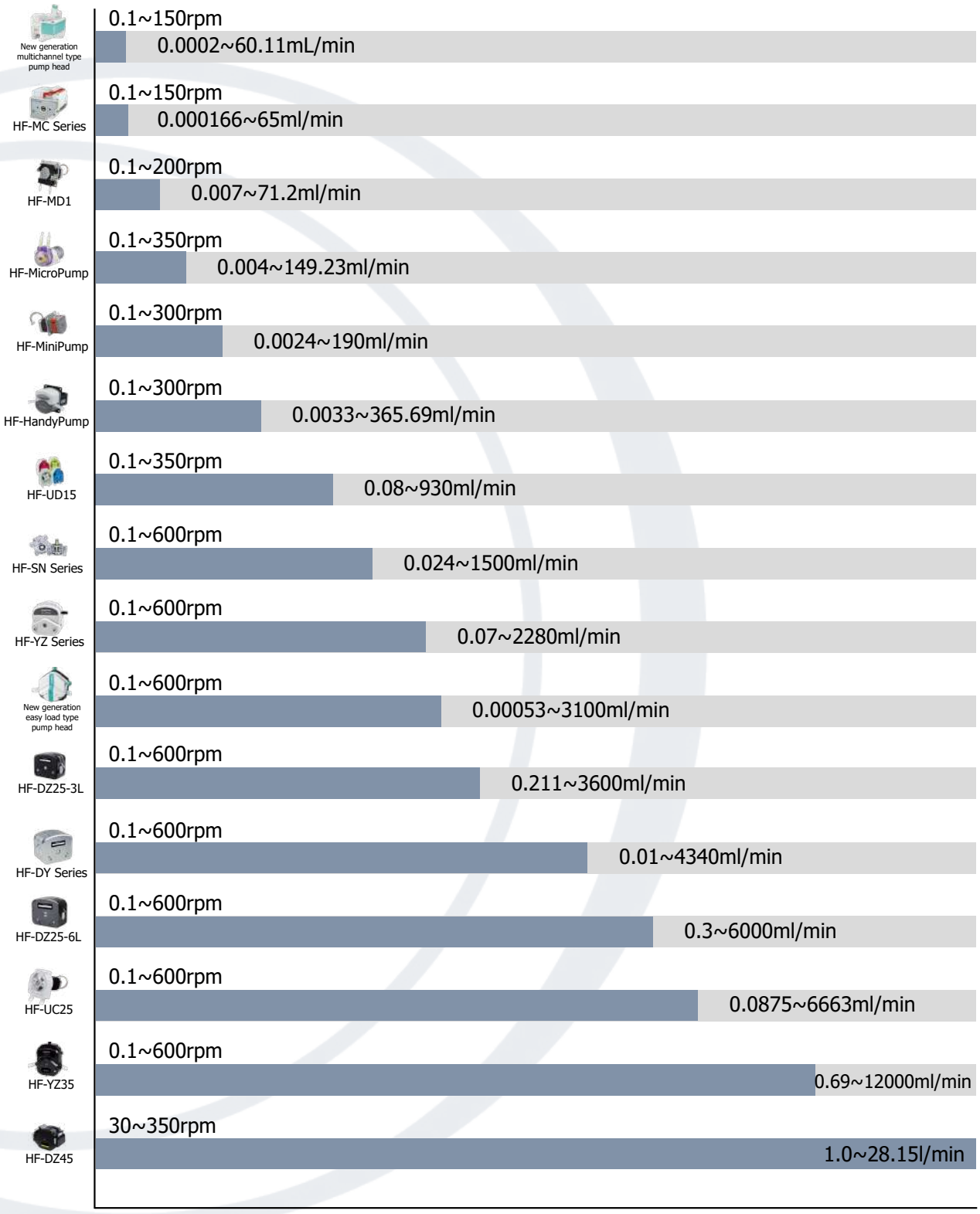


Analysis instrument supporting



Reagents dispensing

PUMP HEAD FLOW RATE



HF-Micropump

Model No



HF-MicroPump, Max flow rate: 0.004 ~149.23ml/min

Product Features

Beatiful appearance, compact size, variety colors to choose, OEM ideal choice, can be driven by stepper motor, DC motor. etc.

Industry Application

- Biochemical analyzer, support medical equipment.
- Plant protection drone

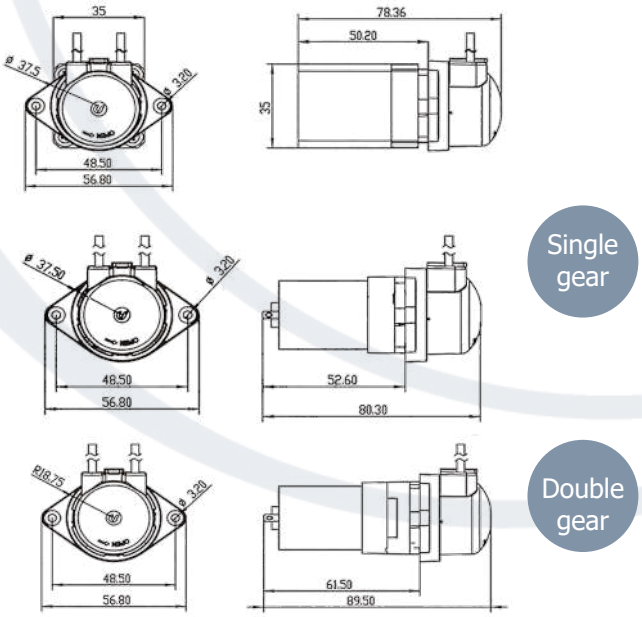
Pump Head Installation Procedure



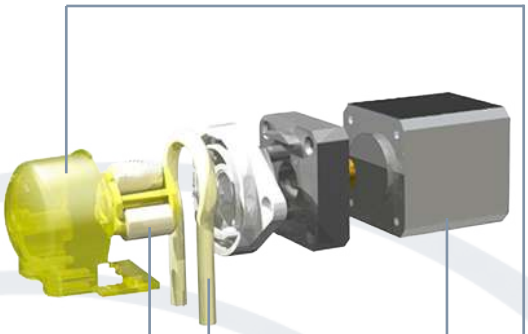




Dimension Drawing (Unit: mm)

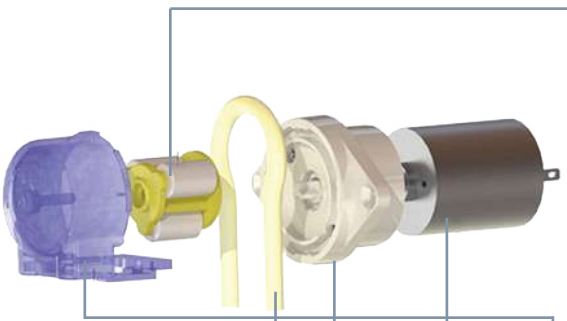


Stepper motor breakdown drawing



OEM- STB (Motor) B (Pump tubing material) 06 (Pump tubing size) Y (Pump head color) Y (Roller bracket color)

DC motor breakdown drawing



OEM- HA (Motor) B (Pump tubing material) 06 (Pump tubing size) 1 (Level of deceleration) P (Pump head color) Y (Roller bracket color)

Color selection



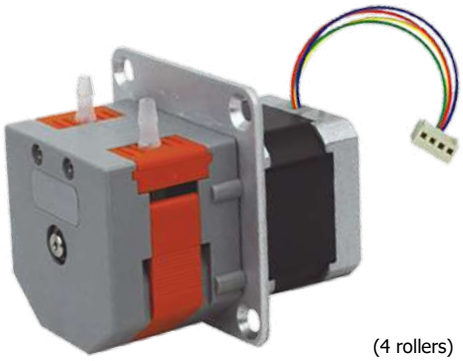
Pump head housing and roller bracket color					
Pump head color	Transparency	Green	Red	Yellow	Purple
	T	G	R	Y	P
Roller bracket color	White	Green	Red	Yellow	Blue
	W	G	R	Y	B

Flow model selection

Tubing No.			S04	S06	S10	S22	B04	B06	B10	B22
Tubing ID. (wall thickness 1mm)			1mm	2mm	3mm	4mm	1mm	2mm	3mm	4mm
Tubing material			Silicone tubing	Silicone tubing	Silicone tubing	Silicone tubing	BTP	BTP	BTP	BTP
Flow rate (ml/min)	24V Brush/Brushless HA/HD	Single gear	14.88	50.05	110.27	149.23	14.88	50.05	110.27	149.23
		Double gear	1.28	4.29	9.45	12.79	1.28	4.29	9.45	12.79
	12V Brush/Brushless HB/HE	Single gear	14.88	50.05	110.27	149.23	14.88	50.05	110.27	149.23
		Double gear	1.28	4.29	9.45	12.79	1.28	4.29	9.45	12.79
	6V Brush/Brushless HC/HF	Single gear	14.88	50.05	110.27	149.23	14.88	50.05	110.27	149.23
		Double gear	1.28	4.29	9.45	12.79	1.28	4.29	9.45	12.79
	35Stepper motor (350rpm)STB		14.88	50.05	110.27	149.23	14.88	50.05	110.27	149.23

HF-Minipump Series

Product Introduction



(4 rollers)

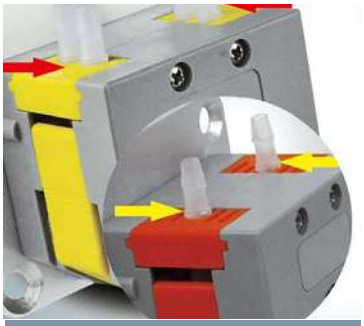
HF-Minipump series products which adopt compact and embedded design are more suitable for supporting a variety of instruments and equipments. Single and dual channel are optional. It accepts 8 kinds of tubing. Flow rates are 0.0024~190 ml/min. PahrMed BPT long-life tubing from French Saint-Gobain is intalled in internal part of pump head. Applicable motors for HFMinipump are stepper motor, DC motor, AC motor and others modes to drive with wide applications.

Features

- Attractive appearance, compact structure.
- Easy to operate and economical cost.
- Accept many kinds of motors to drive.
- Supply several colors of appearance, ideal for supporting analytical instruments.

Typical Application

- Discharge condensate water in the flue gases survey meter.
- Support biochemistry analytical instruments.



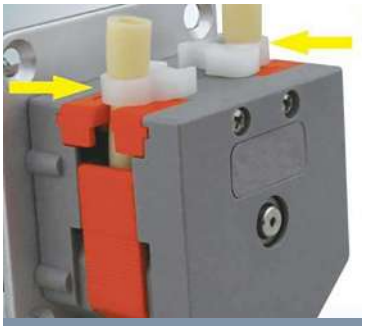
Connection type installation hose

Standard fast plug, convenient for external connection with different materials of the tube, flexible application, cost saving.



Soft tube connect to hard tube

Supporting conversion connector (soft tube transfer hard tube), connect directly with a variety of hard tubes.



Install hose without connector

1. Adopt special hygienic grade tube, the whole tube is installed.
2. No connection simplifies design to prevent leakage and pollution risk

Tubing Installation Procedure

A. Make the two tubing clamps align the slide way of pump head two sides.





B. Ensure that the tubing is in the middle of rollers, and push the clamps into the pump head.

C. Make the compression block align the upper slide way of pump head.



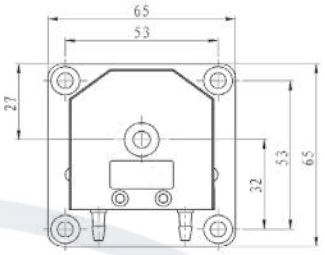


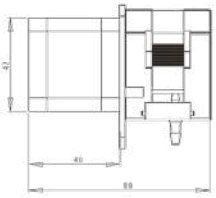
D. Press the compression block into the pump head, and ensure it fixed.

Dimension Drawing (Unit: mm)



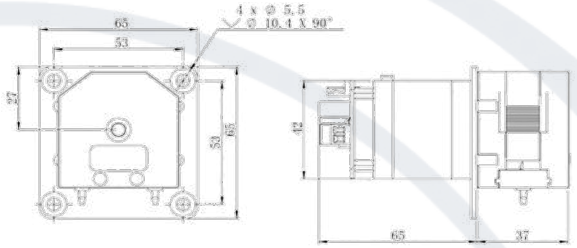
HF-OEM-B01





HF-OEM-B01	Technical Specifications
Speed range	0.1-300rpm
Flow rate range	190ml/min
Motor type	42 stepper motor
Motor phase number	2
Motor step angle	1.8°
Motor phase voltage	2.2V
Motor phase current	1.0A
Working environment	0-40ºC, 80%RH

HF-OEM-B02, HF-OEM-B039/HF-OEM-B40, HF-OEM-B022





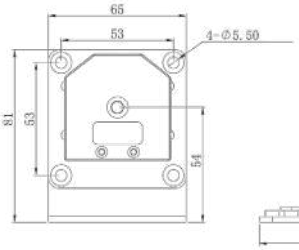
HF-OEM-B02 Technical Specification	
Speed range	0.1-300rpm
Flow rate range	0.0024-190ml/min
Speed control	Preset speed or serial port control
Subdivision settings	1/16
Motor type	42 stepper motor
Power supply	DC 24V, ≥48W
Working environment	0-40ºC, 80%RH

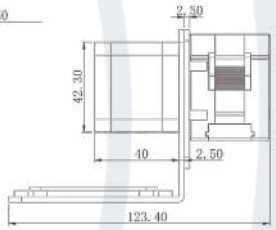
HF-OEM-B039/B040 Technical Specification	
Speed range	0.1-300rpm
Flow rate range	0.0024-190ml/min
Speed control	External input pulse frequency speed control
Subdivision settings	1/16(recommend), 1, 1/2, 1/4, 1/8, 1/32, 1/64, 1/128
Motor type	42 stepper motor
Power supply	DC 24V, ≥48W
Working environment	0-40ºC, 80%RH

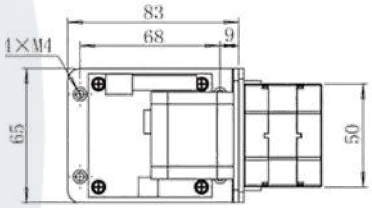
HF-OEM-B022 Technical Specification	
Speed range	0.1-300rpm
Flow rate range	0.0024-190ml/min
Speed control	Adjust speed by internal potentiometer
Subdivision settings	1/16
Motor type	42 stepper motor
Power supply	DC 24V, ≥48W
Working environment	0-40ºC, 80%RH



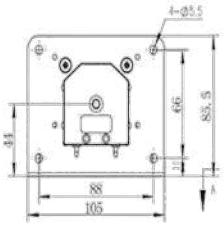
HF-OEM-B013

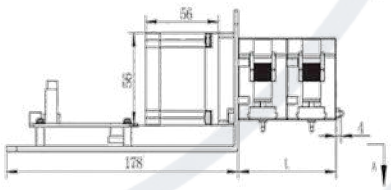


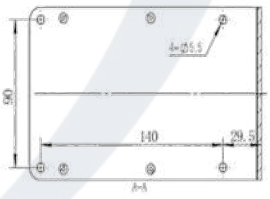




HF-OEM-B013 Technical Specifications			
Speed range	0.1-300rpm	Address setting	1-32
Flow rate range	0.0024-190ml/min	Motor type	42 stepper motor
Speed control	Communication control	Power supply	DC 24V, ≥48W
Communication interface	RS332, R485 interface modbus protocol, control start/stop, direction and speed	Working environment	0-40ºC, 80%RH









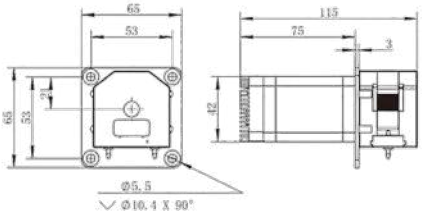
HF-OEM-B136, HF-OEM-B137

HF-OEM-B136 Technical Specifications	
Speed range	0.1-300rpm
Flow rate range	0.0024-190ml/min
Speed control	Preset speed and manual control
Control mode	External passive signal level (normally closed or open) mode; control the start/stop of direction
Display(optional)	0.96" OLED screen
Motor type	57 stepper motor
Power supply	DC 24V≥150W
Working environment	0-40ºC, 80%RH

HF-OEM-B137 Technical Specifications	
Speed range	0.1-300rpm
Flow rate range	0.0024-190ml/min
Speed control	Pulse frequency speed control
Logic input voltage	5V, 12V, 24V(default 5V)
Multiple segments	1/16 (recommended), 1, 1/2, 1/4, 1/8, 1/32, 1/64, 1/128
Motor type	57 stepper motor
Power supply	DC 24V≥150W
Working environment	0-40ºC, 80%RH

Dimension Drawing (Unit: mm)

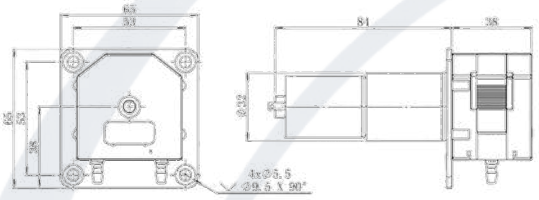




Model No.	HF-OEM-B047/HF-OEM-B048/HF-OEM-B049
Speed range	0.1-300 rpm
Flow rate range	0.0024-190ml/min
Outer control	Passive switch signal control start/stop and direction
Speed control	HF-OEM-047: External potentiometer speed control 0-5V HF-OEM-045: External potentiometer speed control 0-10V HF-OEM-046: External potentiometer speed control 4-20mA
Motor type	42 stepper motor
Power supply	DC24V≥48W
Working environment	0-40℃, 80%RH

HF-OEM-B047, HF-OEM-B048, HF-OEM-B049

Model No.	Motor Type	Power Supply	Motor Speed (rpm±10%)	Flow Rate (ml/min)
HF-OEM-MZ001	Φ37DC motor	DC12V/1.5A	170	≤107.67
HF-OEM-MZ004			300	≤190.00
HF-OEM-MZ104		DC24V/1.2A	20	≤12.67
HF-OEM-MZ107			100	≤61.98
HF-OEM-MZ108			160	≤101.33
HF-OEM-MZ111			300	≤190.00
HF-OEM-MZ304	Φ32 DC planetary gear motor	DC24V/1.2A	50	≤31.14
HF-OEM-MZ306			100	≤61.98



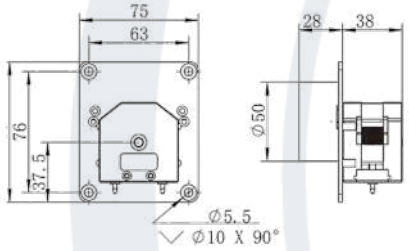
Note: HF-OEM-MZ306 outline dimension drawing



HF-OEM-MZ Series



HF-OEM-MJ Series



Model No.	Motor Type	Power Supply	Motor Speed (rpm±10%)	Direction
HF-OEM-MJ107	AC motor	AC220V	15.5/18.6	CCW

Note: In the rotation of speed,"/"represents the rotation speed in 50/60HZ.

Motor Speed (rpm)	Dual Channel Flow Rate (ml/min) and Tubing (1mm wall thickness)			
	ID1mm	ID2mm	ID2.5mm	ID3mm
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

Motor Speed (rpm)	Single Channel Flow Rate (ml/min) and Tubing (1.6mm wall thickness)				
	13# ID0.8mm	14# ID1.6mm	19# ID2.4mm	16# ID3.1mm	25# ID4.8mm
5	0.12	0.56	1.26	1.97	3.26
10	0.26	1.15	2.5	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-UD15

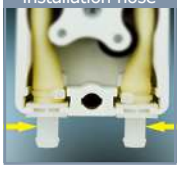


Product Introduction

PES material, transparent protecting cover, easily to observe the working situation of pump head and tubing at any time. Various of colors are available. There is water-proof groove in the pump head mounting side. Can use stepper motor, DC motor, AC motor and so on to drive.

Model No.	HF-OEM-UB01
Speed range	0.1-300rpm
Flow rate range	0.08-930ml/min
Motor type	42 stepper motor
Motor phase number	2
Motor step angle	1.8°
Motor phase voltage	2.2V
Motor phase current	1.0A
Working environment	0-40°C, 80%RH

Connection type installation hose

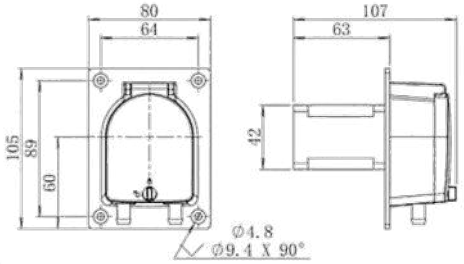


Standard fast plug joint, convenient for external and different materials of the hose, the application of flexibility, cost saving.

Install hose without connector



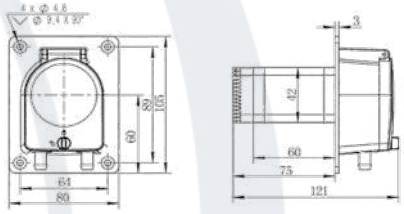
1. Adopt special hygienic grade tube, the whole tube is installed.
2. No connection simplifies design to prevent leakage and pollution risk.





HF-OEM-UB02, HF-OEM-UB09/10, HF-OEM-UB016

Dimension Drawing (Unit: mm)

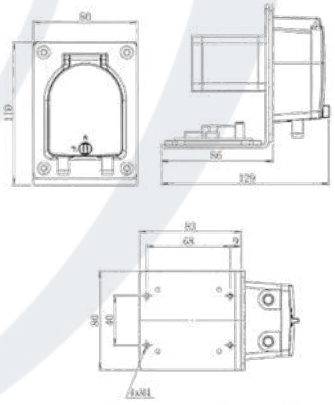


HF-OEM-UB02 Technical Specifications	
Speed range	0.1-300rpm
Flow rate range	0.0024-190ml/min
Speed control	Preset speed or serial port control
Subdivision settings	1/16
Motor type	42 stepper motor
Power supply	DC24V≥48W
Working environment	0-40°C, 80%RH

HF-OEM-UB09/UB10 Technical Specifications	
Speed range	0.1-300rpm
Flow rate range	0.0024-190ml/min
Speed control	External input pulse frequency speed control
Subdivision settings	1/16(recommend), 1, 1/2, 1/4, 1/8, 1/32, 1/64, 1/128
Motor type	42 stepper motor
Power supply	DC24V≥48W
Working environment	0-40°C, 80%RH

HF-OEM-UB16 Technical Specifications	
Speed range	0.1-300rpm
Flow rate range	0.0024-190ml/min
Speed control	Adjust speed by internal potentiometer
Subdivision settings	1/16
Motor type	42 stepper motor
Power supply	DC24V≥48W
Working environment	0-40°C, 80%RH

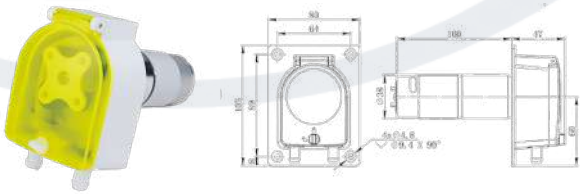
Model No.	HF-OEM-UB04
Speed range	0.1-350rpm
Flow rate range	0.08-930ml/min
Motor type	42 stepper motor
Speed control	Communication control
Address setting	1-32
Power supply	DC 24V≥48W
Communication interface	RS232, RS485 interface modbus protocol, control start/stop, direction and speed
Working environment	0-40°C, 80%RH





HF-OEM-UB04

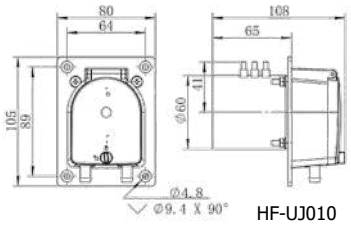
HF-OEM-UXZ Series



Model No.	Motor Type	Power Supply	Motor Speed (rpm±10%)	Flow Rate (ml/min)
HF-OEM-UXZ03	Φ37DC planetary gear motor	DC12V/5A	150	≤398
HF-OEM-UXZ06			350	≤930
HF-OEM-UXZ13		DC24V/4A	150	≤398
HF-OEM-UXZ16			350	≤930

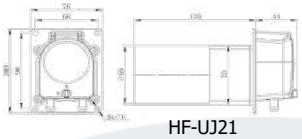
HF-OEM-UJ Series





HF-UJ010

Model No.	Motor Type	Power Supply	Motor Speed (rpm±10%)	Flow Rate (ml/min)
HF-OEM-UJ010	AC motor	AC220V	80	≤212
HF-OEM-UJ21	Φ70ACmotor	AC220V	350	≤930



HF-UJ21

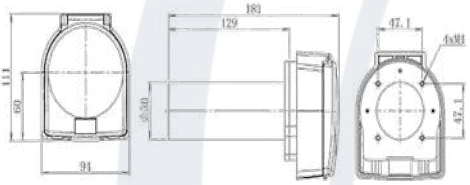
Experimental conditions: standard atmospheric pressure, room temperature at 20ºC, the liquid is pure water, no pressure, no suction and lift.
Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working enviroment, etc. This data is for reference only.

Model No.	Housing Material		Tubing		Speed Range(rpm)	Flow Rate(ml/min)	Weight(kg)
	Body	Protective cover	Tubing Sizes	IDxWall Thickness			
HF-UD15 (2 rollers)	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	

Product Introduction

HF-UC25, compact pump head, functional design, more practical. Transparent protective cover, can observe the working situation anytime; uncover signal output, stop working when uncover to ensure safety; running smoothly, low noise; support DC motor, brushless DC motor, stepper motor, servo motor and AC motor.

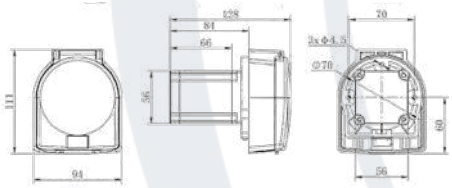




HF-OEM-UCXZ Series

DC motor Technical Specifications	
Model No.	HF-UCXZ00X series, HF-UCXZ10X series HF-UCXZ20X series, HF-UCXZ30X series
Motor type	Brush/Brushless DC planetary gear motor
Voltage	DC12V/DC24V
Speed(rpm)	300
Speed error	5≤ ±10
Working environment	0-40ºC, 80%RH





HF-OEM-B236

Step motor Technical Specifications	
Model No.	HF-OEM-B236
Motor type	57 stepper motor
Motor phase number	2
Motor step angle	1.8
Motor phase voltage	1.5V
Motor phase current	3A
Working environment	0-40ºC, 80%RH





HF-OEM-UCB001

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.

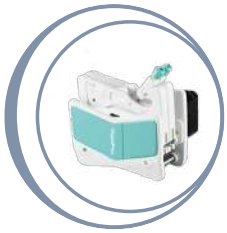
Servo motor Technical Specifications	
Model No.	HF-OEM-UCB001
Motor type	Step servo motor
Motor phase number	2
Motor step angle	1.8
Motor phase voltage	1.9V
Motor phase current	5A
Encoder power voltage	DC5V(±10%)
Encoder resolution	1000cpr
Working environment	0-40ºC, 80%RH

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







Typical Application

- Support blood sugar analytical device
- Support ammonian analytical instrument.

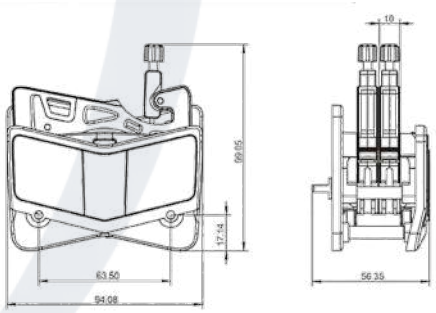
Note: Increasing or reducing one channel, the pump head size need to increase or reduce the thickness of one cartridge.

Product Introduction

- Brand new design, the functional design is more practical.
- The unique elastic positioning mechanism allows users to install and remove cartridge with one hand. Multichannel, small volume transferring.
- Elastic pressure tube design to extend the service life of the tube.
- Stepless adjustment of the tube pressure gap, effectively improving the accuracy between channels.
- 304 stainless steel roller assembly, including 6 rollers, 8 rollers, and 10 rollers structure, of which 8 rollers are designed with low noise and high speed, suitable for supporting various analytical instruments.

Products features

- The elastic positioning mechanism enables users remove and install cartridge with one hand.
- The elastic pressure tube design effectively extends the life of the tube.
- Stepless adjustment os the tube pressure gap, effectively imporving the flow accuracy between channels.
- The mute design os the roller assembly realizes low noise and high speed operation.





1. Easily press the elastic lock arm mechanism to open cartridge.



2. After the cartridge is disconnected, install the tube, the two adjacent tube stoppers determine a working position.



3. Press the cartridge to make the cartridge enter the working position.



4. Pull the pressing device to enter the pressure tube state.



5. Installation finished.

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.

New generation multichannel type pump head Technical Specifications									
Channel number	1	2	3	4	5	6	8	10	12
Cartridge material	POM/PVDF								
Rollers material	304/316 stainless steel material								
Rollers number	8 rollers								

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		

POM Material & PVDF Material



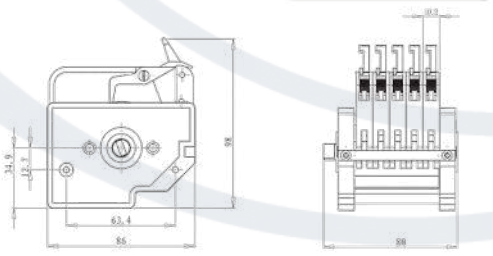
HF-MC Series

Product Introduction

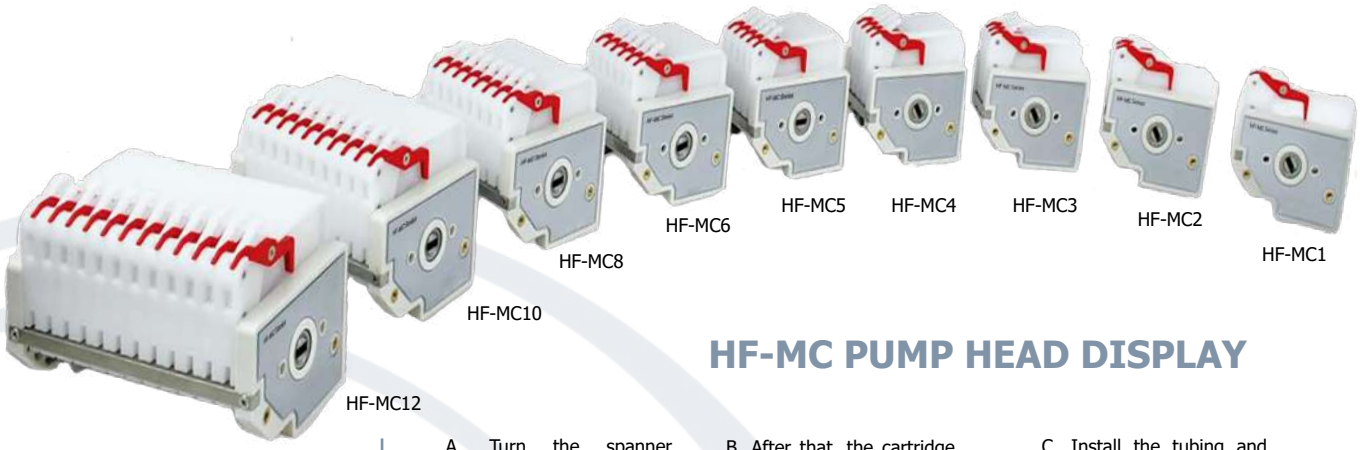
HF-MC Series new generation multichannel pump head with unique cam structure, make it much easier to operate. It is designed for small flow rates and multichannel transfer. Comparing with traditional DG pump head, it has particular cam design for micro adjustment occlusion, and also for opening the cartridge from the top. 304 stainless steel rollers assembly include two structures of 6 rollers and 10 rollers. Install silicone tubing and TYGON series imported tubing. It is widely used for supporting analytical instruments.

- Support blood sugar analytical device.
- Support ammoniam analytical instrument.

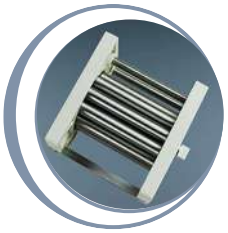
Dimension Drawing (Unit: mm)



Note: Increasing or reducing one channel, the pump head size need to increase or reduce the thickness os one cartridge.



HF-MC PUMP HEAD DISPLAY



A. Turn the spanner clockwise to take it off from the lever.



B. After that, the cartridge can be taken out lightly.



C. Install the tubing and confirm the working position between two adjacent clamps.



D. Embed the cartridge and press it lightly to reach the working position.



E. Turn the spanner counter-clockwise to make it reach the lever.



F. Multichannel pump heads and tubing drawing.



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.

MC Technical Specifications									
Channel number	1	2	3	4	5	6	8	10	12
Cartridge material	POM/PVDF								
Rollers material	304/316 stainless steel material								
Rollers number	6 rollers, 10 rollers								

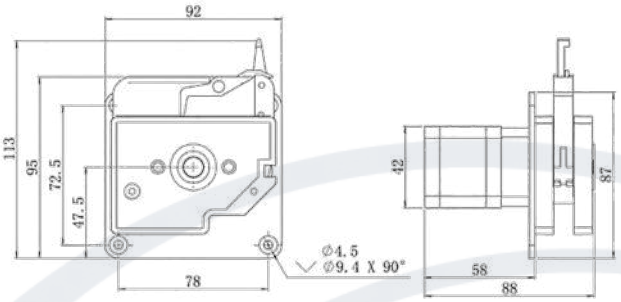
Tubing	Speed	Flow rate of pump head with 10 rollers (ml/min)	Flow rate of pump head with 6 rollers (ml/min)	Tubing maximum pressure (bar)	
				Continuous	Intermittent
1x1	0.1~150rpm	0.0046~6.90	0.0053~7.95	1	1
2x1		0.0156~23.40	0.021~31.35		
2.4x0.8		0.0212~31.80	0.0274~41.10		
3x1		0.0324~48.60	0.043~64.95		
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		
1.52x0.86		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		

HF-OEM-B09/MC1



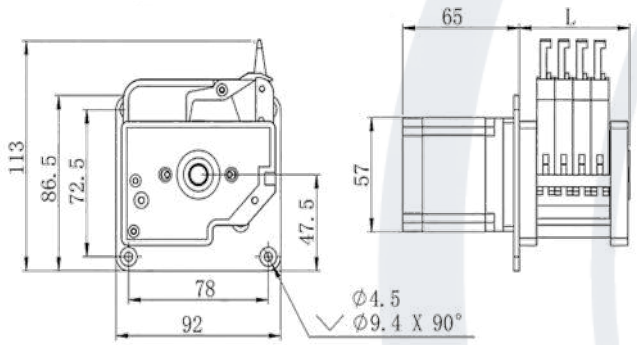
42 Stepper motor

Dimension Drawing (Unit: mm)



HF-OEM-UB09 Technical Specifications			
Speed range	0.1-150rpm	Motor step angle	1.8°
Flow rate range	0.00166-65ml/min	Motor phase voltage	2.2V
Motor type	42 stepper motor	Motor phase current	1.0A
Motor phase number	2	Working environment	0-40℃, 80%RH

Dimension Drawing (Unit: mm)



When the lenght os one channel is L=31mm, each additional channel L increases by 10.2mm, this picture shows 4 channels

HF-OEM-B130/MC



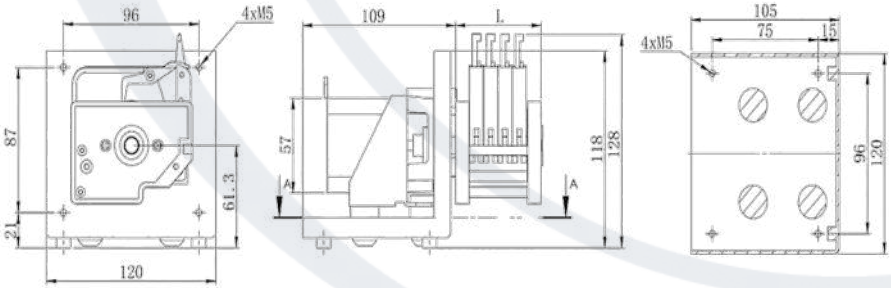
57 Stepper motor

HF-OEM-B130 Technical Specifications			
Speed range	0.1-150rpm	Motor step angle	1.8°
Flow rate range	0.00166-65ml/min	Motor phase voltage	3.3V
Motor type	57 stepper motor	Motor phase current	1.0A
Motor phase number	2	Working environment	0-40℃, 80%RH

Dimension Drawing (Unit: mm)

HF-OEM-B19/MC





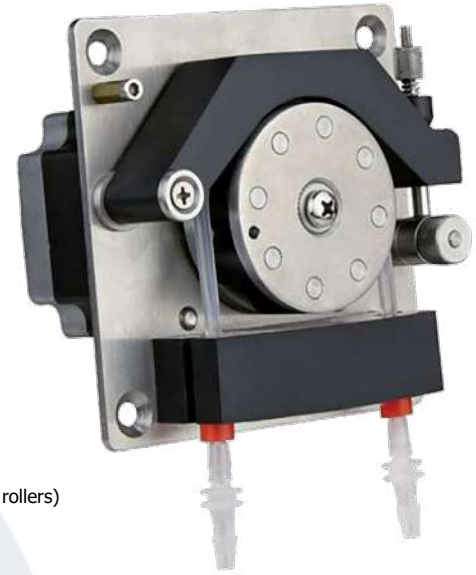
When the lenght os one channel is L=31mm, each additional channel L increases by 10.2mm, this picture shows 4 channels

HF-OEM-B19 Technical Specifications			
Speed range	0.1-150rpm	Motor step angle	1.8°
Flow rate range	0.00166-65ml/min	Motor phase voltage	3.3V
Motor type	57 stepper motor	Motor phase current	1.7A
Motor phase number	2	Working environment	0-40℃, 80%RH

Product Introduction

HF-MD1

Suitable for liquid transferring of small flow rate and multiple channels. Complete compression block design, can improve the accuracy among channels effectively; with the function of micro adjustment occlusion, to micro adjust the flow rate and outlet pressure. Eight rollers design, reduce the liquid pulsation; embedded design, very suitable for equipment supporting.

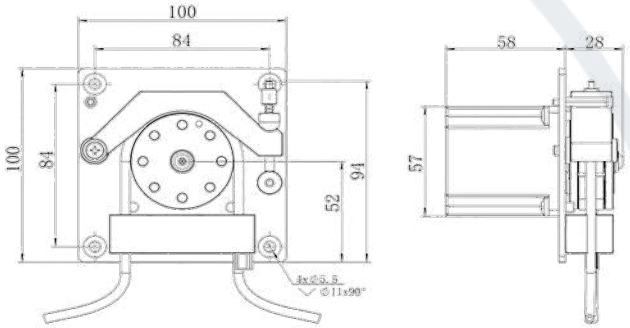


(8 rollers)

Model Number

HF-MD1

Dimension Drawing (Unit: mm)



Typical Application

- Support analytical instruments

Tubing installation Procedure



1. Turn the spanner clockwise.



2. Install tubing one by one, from inside to outside.



3. Tubing installation finished.



4. Turn spanner anticlockwise, locking the upper block, micro adjust the occlusion.

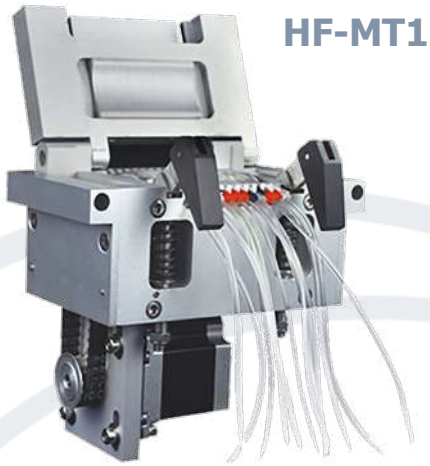
Experimental conditions: standard atmospheric pressure, room temperature at 20ºC, the liquid is pure water, no pressure, no suction and lift.
Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working enviroment, etc. This data is for reference only.

Technical Specifications								
Pump Head	Channel Number	Speed	Tubing	Flow Rate (0.1-300rpm)	Rollers Number	Rollers Material	Tubing Maximum Pressure (bar)	
HF-MD1	1	0.1-200 (rpm)	1x1	0.007-14 ml/min (each channel)	8 rollers	POM	Intermittent 1	Continuous 1
			2x1	0.0244-48.8 ml/min (each channel)				
			2.79x0.86	0.0356-71.2 ml/min (each channel)				

Product Introduction

The unique complete compression solve the big error problem between channels from traditional multichannel pump.

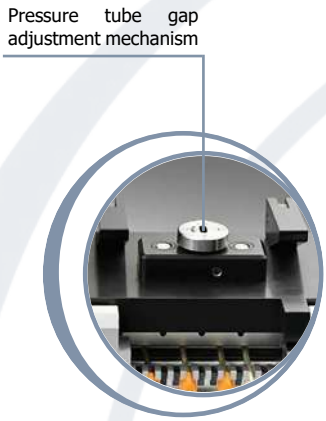
HF-MT12



Model Number HF-MT12



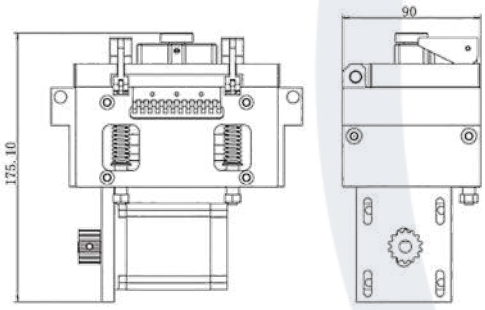
10 rollers

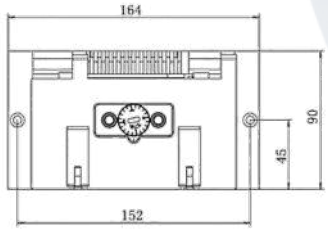


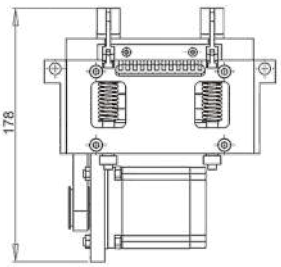
Typical Application

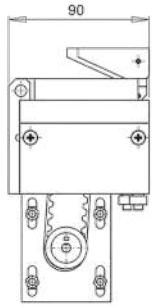
- Support chemistry analytical instruments

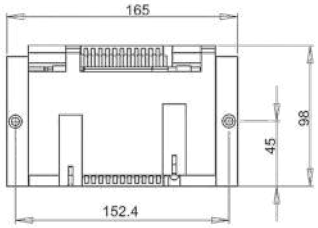
Dimension Drawing (Unit: mm)











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.

Technical Specifications

Model No.	Housing Material	Rollers Material	Channel Number	Rollers Number	Speed (rpm)	Tubing and Flow Rate Per Channnel (ml/min)				Tubing Maximum Pressure (bar)	
						0.51x0.9	1.02x0.86	2.06x0.86	2.54x0.86	Intermittent	Continuous
HF-MT12	Aluminum Alloy	304/316 stainless steel	12 channels	10 rollers	0.1~50	0.0016~0.84	0.005~2.50	0.015~7.5	0.020~10.5	2	1.5

New generation easy load type pump head



(3/6 rollers)

EasyPump Series





Single Channel

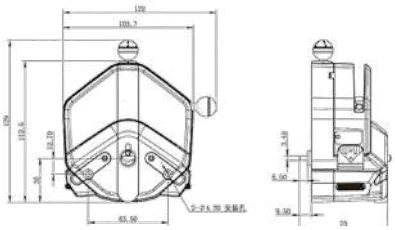


Dual Channels

Typical Application

- Support COD on-line monitor.
- Support anorectal therapeutic instrument.
- Support biofermentation cylinder.

Dimension Drawing (Unit: mm)



Product Introduction

- Brand new design, give you brand new experience! Not only the appearance is exquisite, but the functional design in more practical.
- The unique tube clamp linkage mechanism, with the opening process of the upper pressure block, the tube clamp automatically lifts, the user can easily install the tube. As the upper pressure block is closed, the tube clamp is automatically reset to fix the tube. At the same time,"the Trigger lever assist mechanism" assist the user in pressing the upperpressure block.
- The rubbing wheel mechanism can adjust the position of the lower tube clamp to fix different materials and diameter tube.
- Users can choose single or dual-channel pump heads. You can also choose a pump head with a fixed or adjustable tube pressure gap according to your requirements. The shell material of the pump head including two types: resistant to organic solvents and intolerant to organic solvents.

Products features

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

Tubing installation Procedure



1. Turn the knob anticlockwise 180º, open the upper block.



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



3. Turn the knob clockwise 180º, put the upper block back to original positio, fasten the tube.



4. Rubbing wheel adjustment.

Pump Head	Tubing	IDxWall thickness (mm)	ml/r	Flow Rate(ml/min) (0.1-600rpm)	Tubing MaximumPressure (bar)		Weight(kg)
					Intermittent	Continuous	
HF-EasyPump (Acceptable tubing of 1.6mm wall thickness)	13#	0.8x1.6	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#	6.4x1.6	3.333	0.333-2000	1.4	1	
	18#	7.9x1.6	4.3	0.430-2580	1	0.7	
HF-EasyPump (Acceptable tubing of 2.4mm 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			

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.

Product Features

- Beautiful appearance, compact size
- Flow rate range: 0.0033-365.39ml/min
- Front knob to open the pump head, save space.
- Automatic tubing retention makes tube loading easy and quick.
- Single and dual-channel head available.
- 5 different sizes tubing, to meet different flow rate requirements.

HF-HandyPump



(3 rollers)



Single Channel
HF-Handy Pump 01



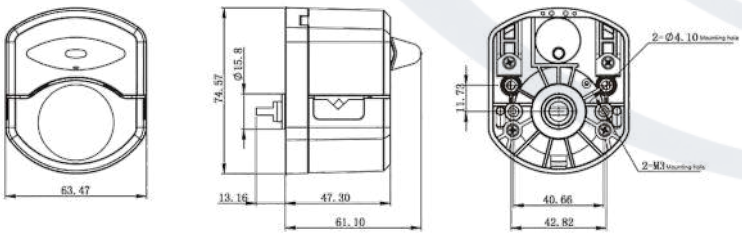
Dual Channel
HF-Handy Pump 02



HF-HandyPump-PPS



Dimension Drawing (Unit: mm)



Tubing installation Procedure



1. Turn the knob anticlockwise 180º, open the upper block.



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



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

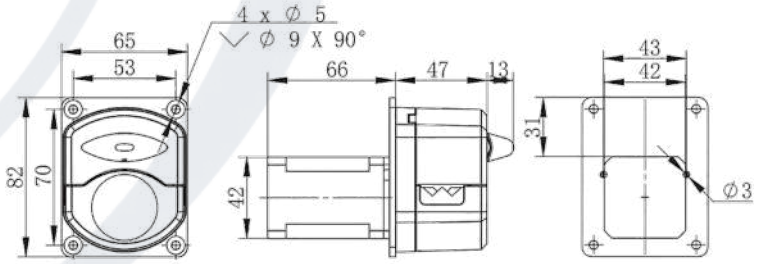
Pump Head	Channel number	Tubing	IDxWall thickness (mm)	ml/r	Speed(rpm)	Flow Rate(ml/min)	Weight(kg)
HF-HandyPump01	Single channel	13#	0.8x1.6	0.033	0.1~300	0.0033~10.03	0.224
		14#	1.6x1.6	0.187		0.0187~56.09	
		19#	2.4x1.6	0.371		0.0371~111.17	
		16#	3.1x1.6	0.636		0.0636~190.76	
		25#	4.8x1.6	1.219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

Easy Load Pump Head Series HF-HandyPump 01 HF-HandyPump 02

HF-OEM-HYB001 (42-60 stepper motor)

Dimension Drawing (Unit: mm)



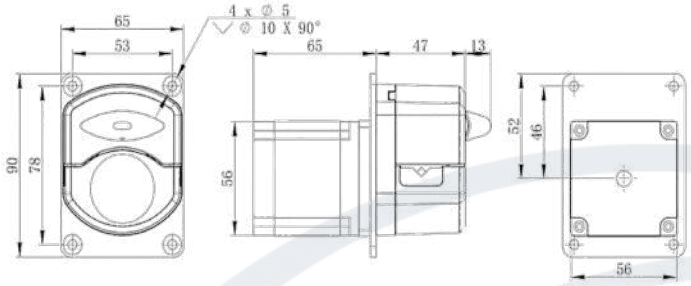


HF-OEM-HYB001 Technical Specifications			
Speed range	0.1-300rpm	Motor step angle	1.8°
Flow rate range	0.0033-365.69ml/min	Motor phase voltage	3.6V
Motor type	42 stepper motor	Motor phase current	1.7A
Motor phase number	2	Working environment	0-40ºC, 80%RH

HF-OEM-HYB101 (57 Stepper motor)



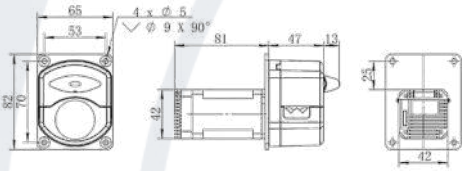
Dimension Drawing (Unit: mm)



HF-OEM-HYB101 Technical Specifications			
Speed range	0.1-300rpm	Motor step angle	1.8°
Flow rate range	0.0033-365.69ml/min	Motor phase voltage	3.3V
Motor type	57 stepper motor	Motor phase current	3.0A
Motor phase number	2	Working environment	0-40ºC, 80%RH

Model No.	HF-OEM-HYB003/004/005
Speed range	0.1-300rpm
Flow rate range	0.0033-365.69ml/min
Outer control	Passive switch signal control start/stop and direction
Speed control	HF-OEM-HYB003: External potentiometer speed control 4-20mA HF-OEM-HYB004: External potentiometer speed control 0-5V HF-OEM-HYB004: External potentiometer speed control 0-10V
Motor type	42 stepper motor
Power supply	DC 24V≥48W
Working enviroment	0-40ºC, 80%RH

Dimension Drawing (Unit: mm)





HF-OEM-HYB006 (Stepper motor)

HF-OEM-HYB006/007 Technical Specifications	
Speed range	0.1-300rpm
Flow rate range	0.0033-365.69ml/min
Speed control	External input pulse frequency speed control
Subdivision settings	1/16(recommend), 1, 1/2, 1/4, 1/8, 1/32, 1/64, 1/128
Motor type	42 stepper motor
Power supply	DC 24V≥48W
Working enviroment	0-40ºC, 80%RH

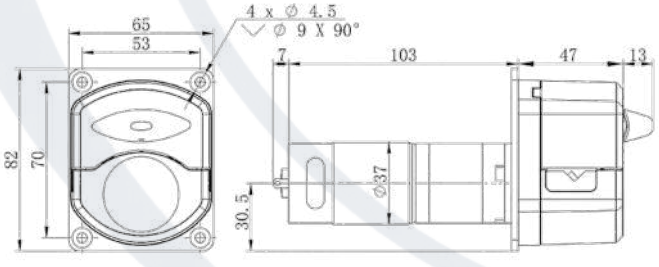
HF-OEM-HYB009 Technical Specifications	
Speed range	0.1-300rpm
Flow rate range	0.0024-190ml/min
Speed control	Preset speed or serial port control
Subdivision settings	1/16
Motor type	42 stepper motor
Power supply	DC 24V≥48W
Working enviroment	0-40ºC, 80%RH

HF-OEM-HYB010 Technical Specifications	
Speed range	0.1-300rpm
Flow rate range	0.0024-190ml/min
Speed control	Adjust speed by internal potentiometer
Subdivision settings	1/16
Motor type	42 stepper motor
Power supply	DC 24V≥48W
Working enviroment	0-40ºC, 80%RH

HF-OEM-HYXZ Series (DC planetary gear motor)

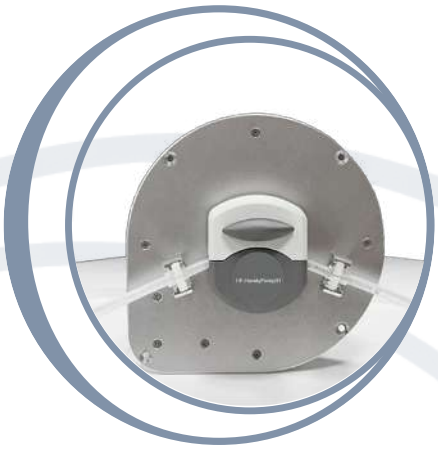


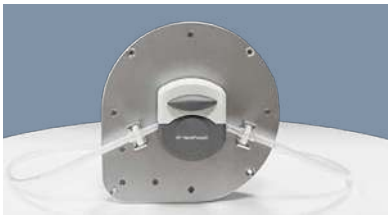
Dimension Drawing (Unit: mm)

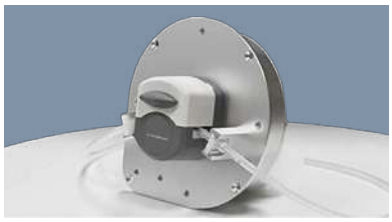


HF-OEM-Z series Technical Specifications						
Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-HYXZ001	37DC planetary gear motor	DC24V/4A	30	100	≤±10%	0-40ºC, 80%RH
HF-OEM-HYXZ002				200		
HF-OEM-HYXZ003				300		
HF-OEM-HYXZ101	37DC planetary gear motor	DC12V/5A		100		
HF-OEM-HYXZ102				200		
HF-OEM-HYXZ103				300		

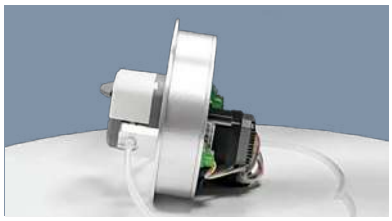
HF-AUD-I-HandyPump









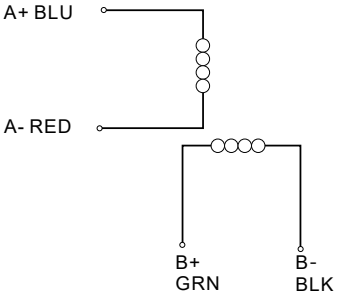


Product Introduction

HF-AUD-I/Handy Pump with compact and embedded design, can be used to automatically open and closet he upper pressure block on the pump head. The device can open the upper pressure block on pump head to release the tubing when the pump stops running, extending the service life of the tubing. The tubing clamp can be fixedly installed, to adapt the upper block automatic open function. It is suitable for supporting various instruments.

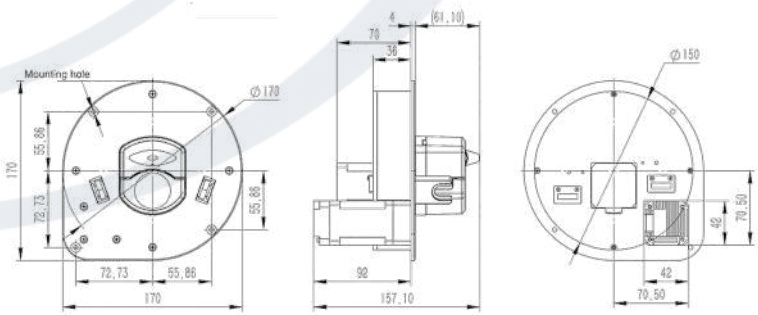
Product Features

1. The upper block open automatically when the pump head stop running, extend the tubing Service life.
2. The upper block closes automatically before the Pumps start working.
3. Open and close upper block time 5 seconds.
4. Can read open/close status, convenient to support equipment.



Motor Specification	
Step angle	1.8°
Phase	2
Phase current	1.7A
Phase voltage	3.6V
Speed range	0.1-300rpm
Power supply	DC 24V≥48W
Logic input voltage	DC5V
Working enviroment	0-40ºC, 80%RH

Dimension Drawing (Unit: mm)



Product Introduction

HF-YZ Series

Change the tubing easily and rapidly; automatic tubing retention; accept 9 sizes tubing to meet different flow rates requests. Two kinds of material housing for customers' selection. PSF (polysulphone material): white, exquisite appearance, good rigidity, high precision, usually used in research laboratory and supporting analytical device. PPS (polyphenylene sulfide material): black, resist organic solvent corrosion, high precision and rigidity, assembly with 304 stainless steel material resisit corrosion with long lifetime.

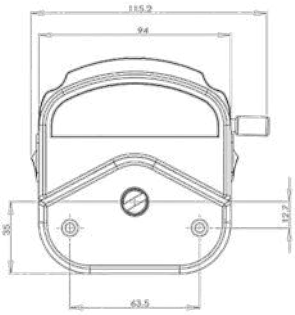


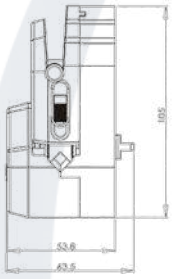

3 rollers


6 rollers



Dimension Drawing (Unit: mm)





Model Number HF-YZ1515x, HF-YZ2515x

Typical Application

- Support COD on-line monitor.
- Support anorectal therapeutic instrument.
- Support biofermentation cylinder.



HF-YZ Series pump head has wide application, and is usually used together with many kinds of analytical instruments. According to the different technical requests, it can adopt different motors to drive, such as stepper motor, DC motor, synchronous motor, AC gear motor, etc. Stack up several pumps heads can increase the flow rates.

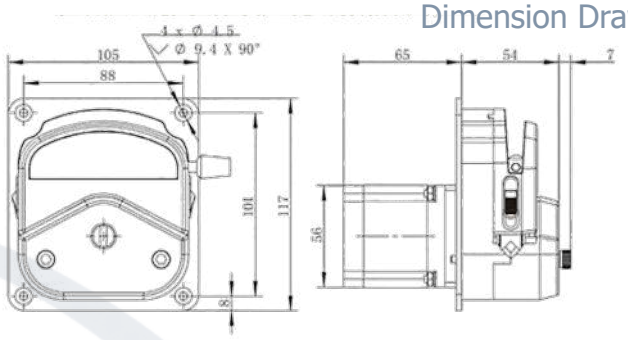
Experimental conditions: standard atmospheric pressure, room temperature at 20ºC, the liquid is pure water, no pressure, no suction and lift.
Note: Actually, it is affected by many factors such as transmission medium, inlet and outlet pressure, hose material and error, working enviroment, etc. This data is for reference only.

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-OEM-B130/YZ

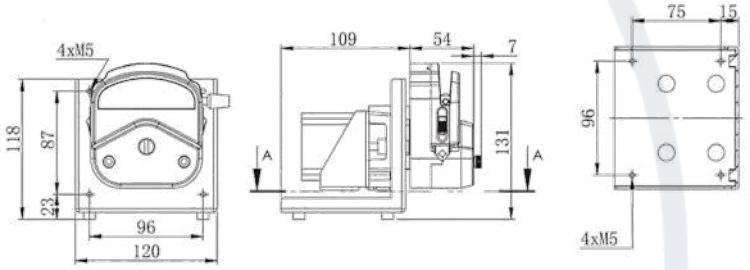


Dimension Drawing (Unit: mm)



HF-OEM-B130 series Technical Specifications			
Speed range	0.1-350rpm	Motor step angle	1.8°
Flow rate range	0.007-1330ml/min	Motor phase voltage	3.3V
Motor type	57 stepper motor	Motor phase current	3.0A
Motor phase number	2	Working environment	0-40ºC, 80%RH

Dimension Drawing (Unit: mm)



HF-OEM-B19/YZ

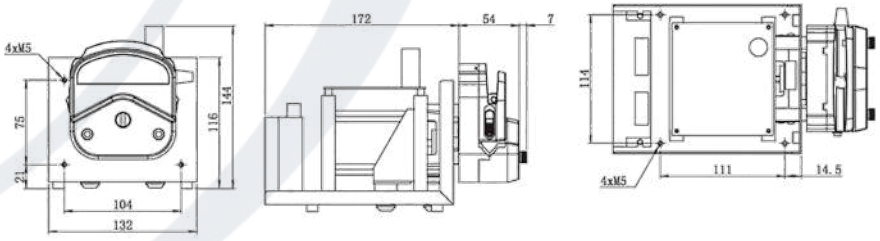


HF-OEM-B19 series Technical Specifications			
Speed range	0.1-350 rpm	Motor step angle	1.8°
Flow rate range	0.007-1330ml/min	Motor phase voltage	3.3V
Motor type	57 stepper motor	Motor phase current	3.0A
Motor phase number	2	Working environment	0-40ºC, 80%RH

HF-OEM-B242/B243/B244/YZ



Dimension Drawing (Unit: mm)

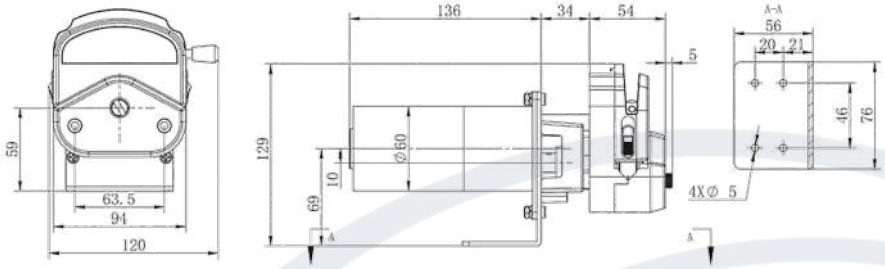


HF-OEM-B242/B243/B244 Technical Specifications			
Motor type	Stepper motor	Function type	HF-OEM-B242, Flow rate type
Display	Industrial grade 4.3" LCD color display		HF-OEM-B243, Dispensing type
Control method	Touch screen and Mechanical keypad		HF-OEM-B244, Multichannel filling type
Speed range	≤600rpm	Working enviroment	0-40ºC, 80%RH
Max. flow rate	2280ml/min		

HF-OEM-Z109/YZ(DC motor)

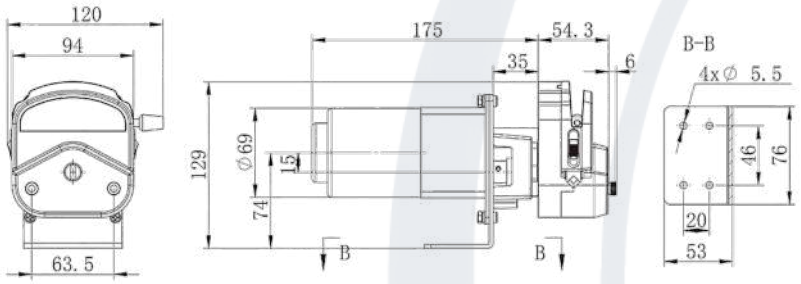


Dimension Drawing (Unit: mm)



HF-OEM-UZ109 Technical Specifications						
Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-Z109	DC geared motor	DC12V/2A	15	600	≤10%	0-40ºC, 80%RH

Dimension Drawing (Unit: mm)



HF-OEM-J013/YZ(AC motor)

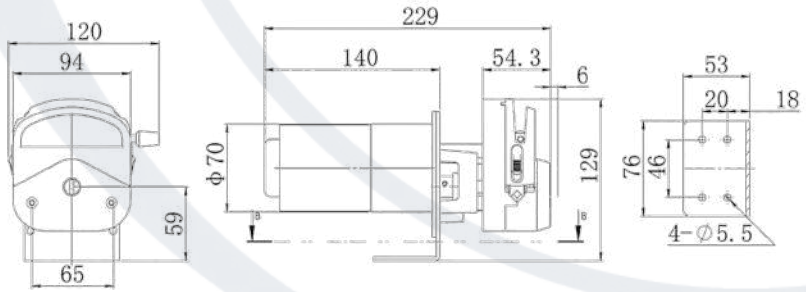


HF-OEM-J13 Technical Specifications						
Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-J013	AC geared motor	AC220V(standard), AC110V(optional)	15	417	≤10%	0-40ºC, 80%RH

HF-OEM-JT03/YZ(AC speed motor)



Dimension Drawing (Unit: mm)



HF-OEM-J03 Technical Specifications						
Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-JT03	AC speed motor	AC220V(standard), AC110V(optional)	15	30-300	≤10%	0-40ºC, 80%RH

Product Introduction

HF-YZ35 pump head with aluminium alloy or PPS housing material. 304 stainless steel rollers assembly achieve high precision transferring liquid. Adaptive tubing cartridge structure makes it more easy to load the tubing.



1. Fix the tubing; lower the tubing shaking during working; improve the stability and accuracy of flow rate.
2. Prevent the tubing wear, extend the tubing lifetime.

Model Number HF-YZ35-PPS, HF-YZ35 (Aluminum Alloy)



26#



73#



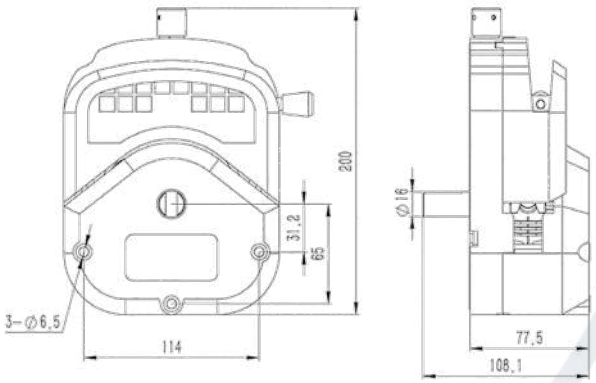
82#

HF-YZ35 Series

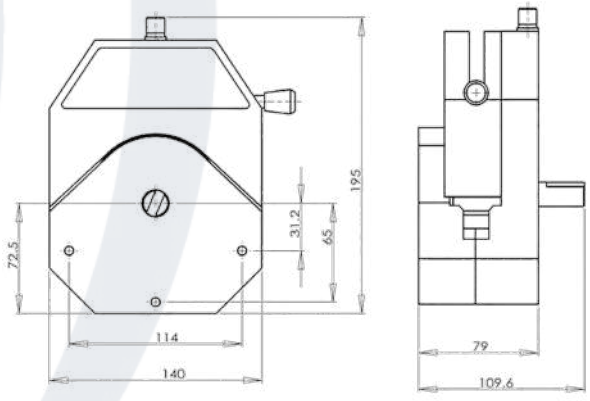




3 rollers



HF-YZ35-PPS



HF-YZ35-Aluminum Alloy

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.

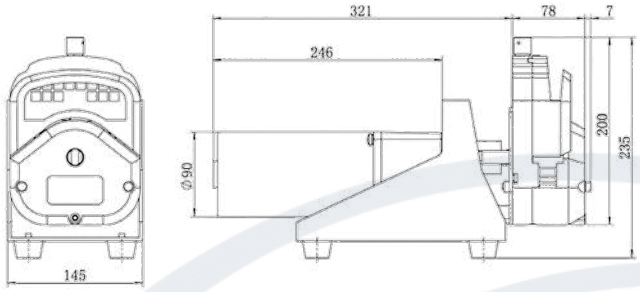
Technical Specifications

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-OEM-Z501/YZ35

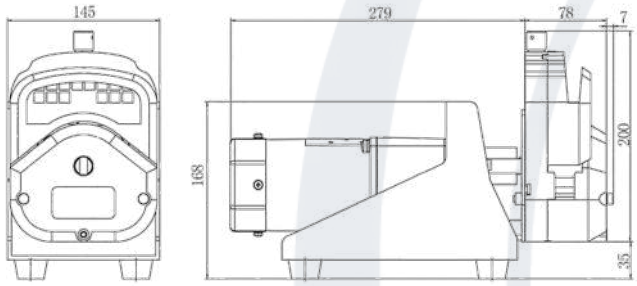


Dimension Drawing (Unit: mm)



HF-OEM-Z501 Technical Specifications						
Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-Z501	DC geared motor	DC24V/16A	250	600	≤10%	0-40ºC, 80%RH

Dimension Drawing (Unit: mm)



HF-OEM-J401/YZ35

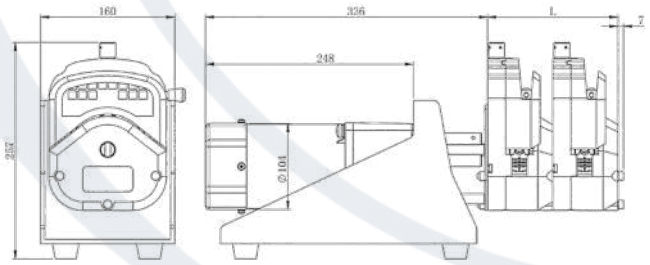


HF-OEM-J401 Technical Specifications						
Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-J401	AC geared motor	AC220V(standard)AC110V(optional)	120	450	≤10%	0-40ºC, 80%RH

HF-OEM-JT501/YZ35



Dimension Drawing (Unit: mm)



HF-OEM-JT501 Technical Specifications						
Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-JT501	AC speed motor	AC220V(standard)AC110V(optional)	200	45-450	≤10%	0-40ºC, 80%RH

Product Introduction

HF-SN Series

Standard pump head with compact structure, exquisite appearance, fixed occlusion and stable running. Can stack several pump heads, and support various equipment.



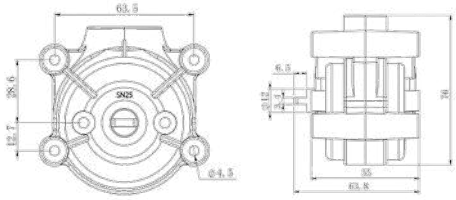
3 rollers

Model Number HF-SN25, HF-SN15-14, HF-SN15-16

Typical Application

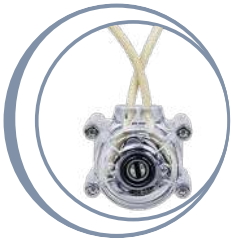
- Use the ice cream machine and coffee making machine.
- Support COD on-line monitor

Dimension Drawing (Unit: mm)



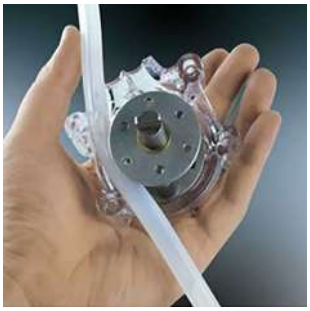


HF-SN15-14



HF-SN15-16

Tubing Installation Procedure



A. Disassemble the pump head and press the tubing on the rollers.



B. Make the tubing go around the rollers one cycle, and merge it on the exit.



C. Tighten the tubing aptly, and load the other half pump head body.

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.

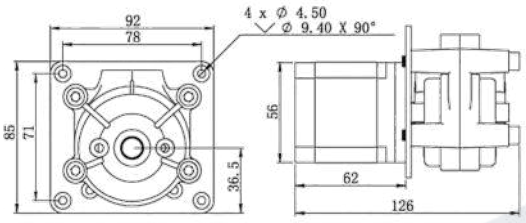
Technical Specifications

Model No.	Housing Material	Rollers Material	Tubing		Flow Rate(ml/min) (0.1-600rpm)	Weight(kg)
			Tubing sizes	IDxWall thickness		
HF-SN15-14	PC	304 stainless steel	14#	1.6x1.6(mm)	0.024~144	0.20
HF-SN15-16			16#	3.1x1.6(mm)	0.088~528	
HF-SN25			24#	6.4x2.4(mm)	0.25~1500	

HF-OEM-B130/SN Series



Dimension Drawing (Unit: mm)

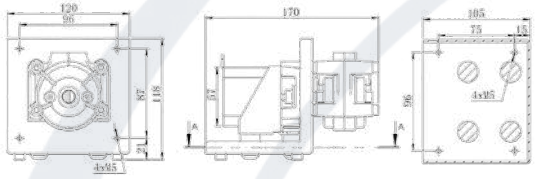


Model No.	HF-OEM-B130
Speed range	0.1-350rpm
Flow rate range	0.024-875ml/min
Motor type	57 stepper motor
Motor phase number	2
Motor step angle	1.8
Motor phase voltage	3.3V
Motor phase current	3.0A
Working environment	0-40ºC, 80%RH

HF-OEM-B19/SN Series

Model No.	HF-OEM-B19
Speed range	0.1-350rpm
Flow rate range	0.024-875ml/min
Motor type	57 stepper motor
Motor phase number	2
Motor step angle	1.8
Motor phase voltage	3.3V
Motor phase current	3.0A
Working environment	0-40ºC, 80%RH

Dimension Drawing (Unit: mm)

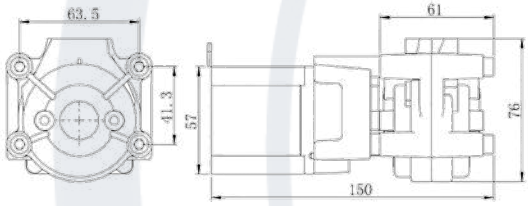




HF-OEM-B11/SN Series



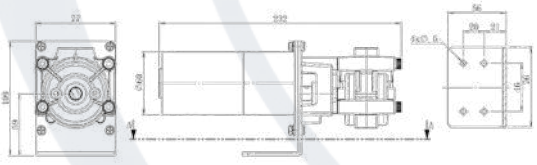
Dimension Drawing (Unit: mm)



Model No.	HF-OEM-B11
Speed range	0.1-350rpm
Flow rate range	0.024-875ml/min
Motor type	57 stepper motor
Motor phase number	2
Motor step angle	1.8
Motor phase voltage	3.3V
Motor phase current	3.0A
Working environment	0-40ºC, 80%RH

Model No.	HF-OEM-Z109
Mix.flow rate	1500ml/min
Motor type	DC geared motor
Voltage	DC12V/2A
Power	15W
Speed	600rpm
Speed error	≤10%
Working environment	0-40ºC, 80%RH

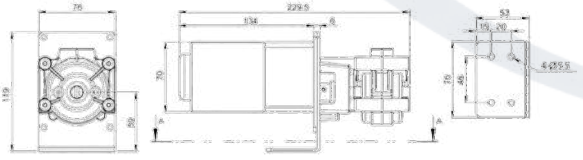
Dimension Drawing (Unit: mm)





HF-OEM-Z109 (DC motor)/SN Series

Dimension Drawing (Unit: mm)



Model No.	HF-OEM-JT03
Flow rate	7.2-750ml/min
Motor type	AC speed motor
Voltage	AC220V(standard) DC110V(optional)
Power	15W
Speed	600rpm
Speed error	≤10%
Working environment	0-40ºC, 80%RH



HF-OEM-JT03 (AC motor)/SN Series

Product Introduction

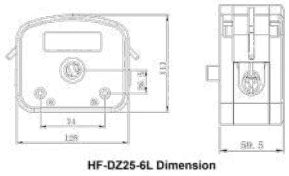
HF-DZ25 Series

Easy operation, change tube rapidly. The house material is PPS (polyphenylene sulfite). 304 stainless steel rollers. HF-DZ25 pump head use 2.4mm wall thickness tube, the flow rate is range is 0.211-6000ml/min. This pump head is suitable for high viscous liquid which include granule and floc. It also suitable for high pressure request. New cartridge structure design, can use the special connector, connect low cost tubing outside the pump head to save cost; also can use flexible tube clamp, meet hygiene requirement.

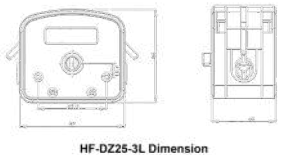


(3 rollers)

Dimension Drawing (Unit: mm)



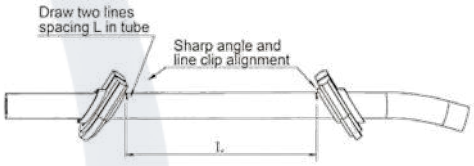
HF-DZ25-6L Dimension



HF-DZ25-3L Dimension

Model Number

HF-DZ25-3L, HF-DZ25-6L (Aluminum Alloy) PPS



Tubing Clamp
HF-DZ25-6L: the tubing lenght is 125mm between both tubing clamps.
HF-DZ25-3L: the tubing length is 90mm between both tubing clamps.

Tubing Installation Procedure



1. Lift both side levers, take off the upper block.



2. Put the tubing with cartridge or connector into pump housing.



3. Install the upper block, put down the levers to lock the block.

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.

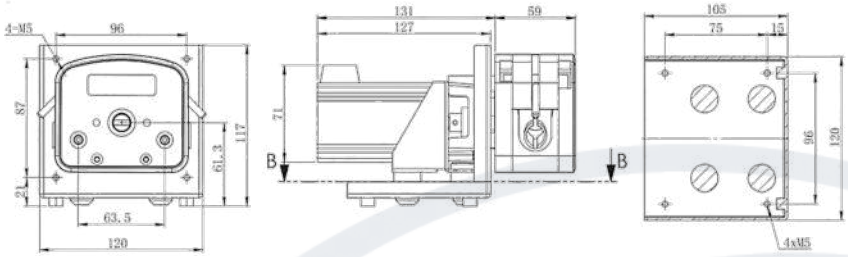
Technical Specifications

Model No.	Housing Material	Tubing clamp Material	Tubing		Flow rate (ml/min) (0.1-600rpm)	Weight(kg)
			Tubing Sizes	IDxWall Thickness		
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	
HFDZ25-3L	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	

HF-OEM-8501/HF-DZ25-3L (servo motor)

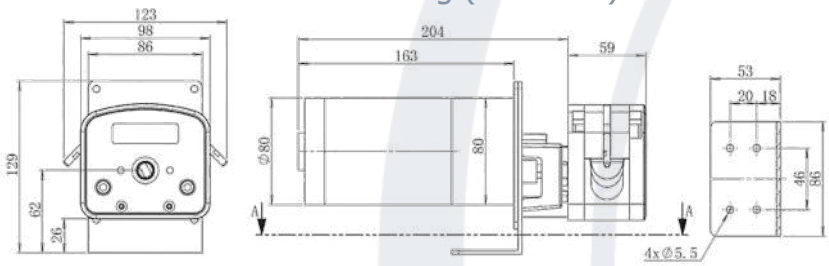


Dimension Drawing (Unit: mm)



HF-OEM-B19 Technical Specifications			
Speed range	0.1-600rpm	External control start and stop	Switch signal (default 5V)
Speed control	Digital knob(Optional)	External control speed	0-5, 4-20mA(standard), 0-10V(optional)
Display	OLED(Optional)	Comunication interface	RS485(Modbus) protocol, RTU(mode)
Control method	Toggle switch control start and stop direction (optional)	Motor type	Servo motor
		Voltage	DC24V/1A(mainboard),DC36V/3A(driver)

Dimension Drawing (Unit: mm)



HF-OEM-Z402/HF-DZ25-3L (DC motor)

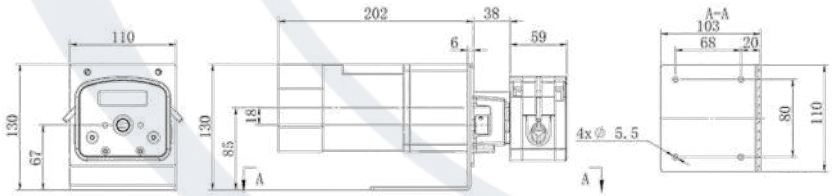


HF-OEM-Z402 Technical Specifications						
Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-Z402	DC geared motor	DC24V/2.5A	40	600	≤10%	0-40ºC, 80%RH

HF-OEM-JT12/HF-DZ25-3L (AC speed motor)



Dimension Drawing (Unit: mm)



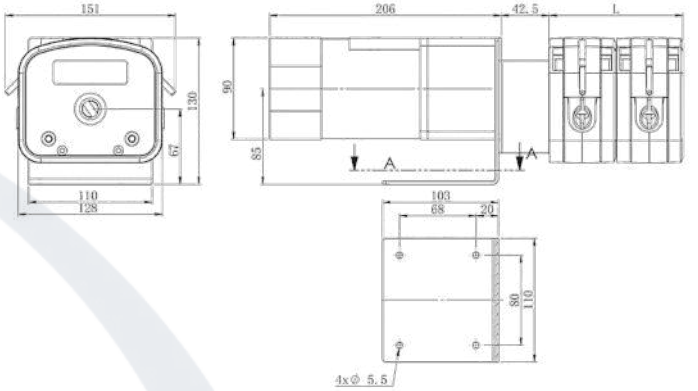
HF-OEM-JT12 Technical Specifications						
Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-JT12	AC speed motor	AC220V(standard), AC110V(optional)	60	43-430	≤10%	0-40ºC, 80%RH

HF-OEM-J402/HF-DZ25-6L (AC motor)



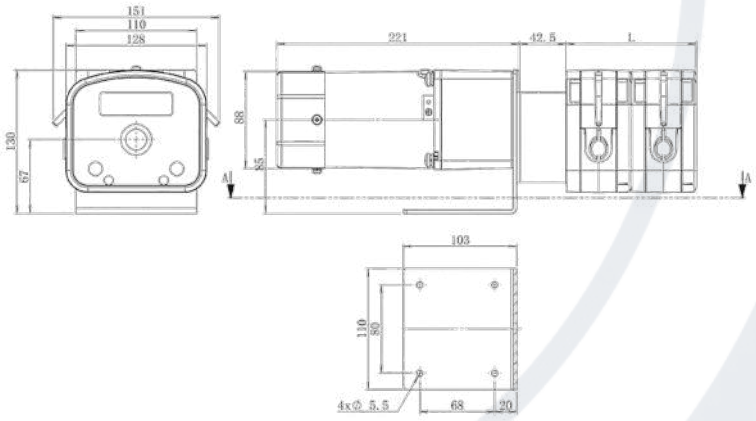
Dimension Drawing (Unit: mm)

Number of pump heads	L/mm
1	59.5
2	119



HF-OEM-J402 Technical Specifications						
Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-J402	AC motor	AC220V(standard), AC110V(optional)	120	450	≤10%	0-40ºC, 80%RH

Dimension Drawing (Unit: mm)



HF-OEM-J407/HF-DZ25-6L (AC speed motor)



HF-OEM-JT407Technical Specifications						
Model No.	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-JT407	AC motor	AC220V(standard), AC110V(optional)	120	45-450	≤10%	0-40ºC, 80%RH

HF-DY Series

Product Introduction



(2*6 rollers)

The "low pulsation" pump head is specialized for high precision filing. Through the phase difference between the two sets of rollers, make the pulse crest and trough complementary, reducing the fluid pulsation effectively, reach high precision liquid transferring.

Model Number

HF-DY15, HF-DY25

Typical Application

High precision dosing micro liquid.

Tubing Installation Procedure



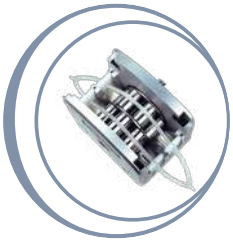
1. Lift both side levers, take off the upper block.



2. Put the tubing with tubing clamp into pump housing.

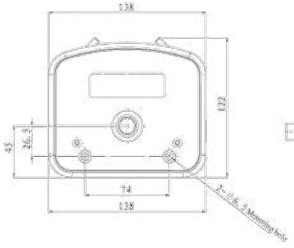


3. Install the upper block, put down the levers to lock the block.



DC Motor OEM

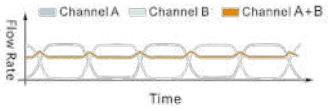
Dimension Drawing (Unit: mm)



"Y" connector and tubing cartridge schematic diagram. The tubing lenght is 125mm between two cartridges.



Pulsation Reduction Schematic Diagram



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.

Technical Specifications

Model No.	Housing Material	Tubing Clamp Material	Tubing		Flow rate (ml/min) (0.1-350rpm)	Weight (kg)
			Tubing Sizes	IDxWall Thickness		
HF-DY15	Aluminum alloy	PP	13#	0.8x1.6(mm)	0.01~48	3.2
			14#	1.6x1.6(mm)	0.06~223	
			19#	2.4x1.6(mm)	0.13~448	
			16#	3.1x1.6(mm)	0.2~723	
			25#	4.8x1.6(mm)	0.47~1626	
			17#	6.4x1.6(mm)	0.64~2230	
			18#	7.9x1.6(mm)	0.95~3337	
HF-DY25	Aluminum alloy	PP	15#	4.8x2.4(mm)	0.42~1480	
			24#	6.4x2.4(mm)	0.76~2670	
			35#	7.9x2.4(mm)	1~3600	
			36#	9.6x2.4(mm)	1.24~4340	

DC Motor OEM

HF-OEM-Z Series							
Model No.	Pump head	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-Z109	HF-YZ1515x, HF-YZ2515x, HF-MC Series HF-SN Series	Φ60 DC motor	DC12V/2A	15	600	±10%	0-40ºC, 80%RH
HF-OEM-Z205		Φ70 DC motor	DC12V/3.5A	25	300		
HF-OEM-Z208		Φ70 DC motor	DC12V/3.5A	25	600		
HF-OEM-Z216		Φ70 DC motor	DC12V/2A	25	450		
HF-OEM-Z218		Φ70 DC motor	DC12V/2A	25	600		
HF-OEM-Z402	HF-DZ25-3L	Φ80 DC motor	DC12V/2.5A	40	600		
HF-OEM-Z501	HF-YZ35	Φ90 DC motor	DC12V/16A	250	600		
HF-OEM-Z502		Φ90 DC motor		250	600		
HF-OEM-Z503		Φ90 DC motor		250	240		
HF-OEM-Z506	HF-DZ25-6L	Φ90 DC motor	DC12V/16A	250	350		
HF-OEM-Z504		Φ90 DC motor		120	600		
HF-OEM-Z505		Φ90 DC motor		120	460		

AC Motor OEM

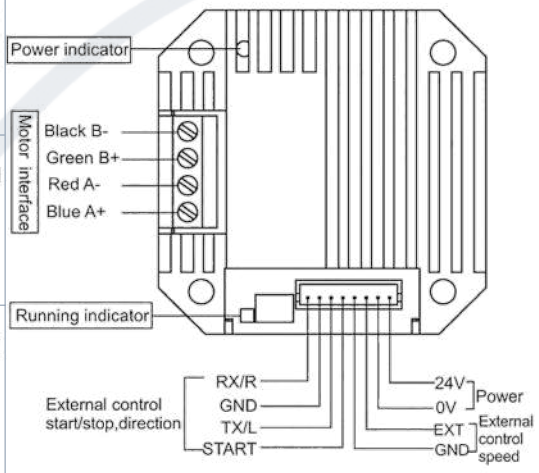
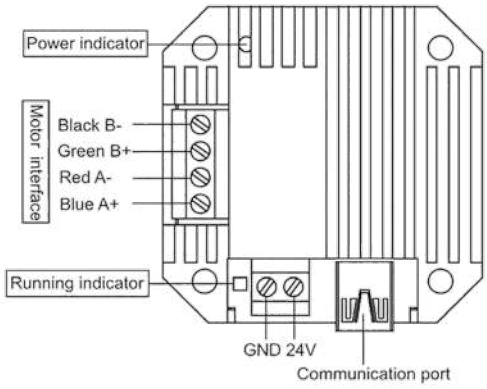
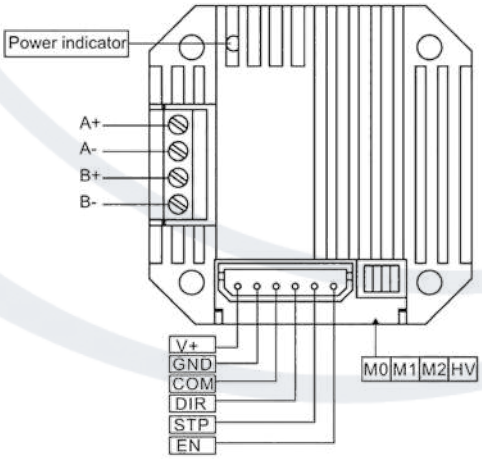
HF-OEM-J Series							
Model No.	Pump head	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-J013	HF-YZ1515x, HF-YZ2515x, HF-MC Series HF-SN Series	Φ70 DC motor	AC220V(standard), AC110V(optional)	15	417	±10%	0-40ºC, 80%RH
HF-OEM-J022		Φ90 DC motor		60	430		
HF-OEM-J024		3 phase AC motor		400	430		
HF-OEM-J026		3 phase AC motor		400	430		
HF-OEM-J027		3 phase AC motor		400	70		
HF-OEM-J402	HF-DZ25-6L	Φ90 DC motor		120	450		
HF-OEM-J401	HF-YZ35	Φ90 DC motor		120	450		

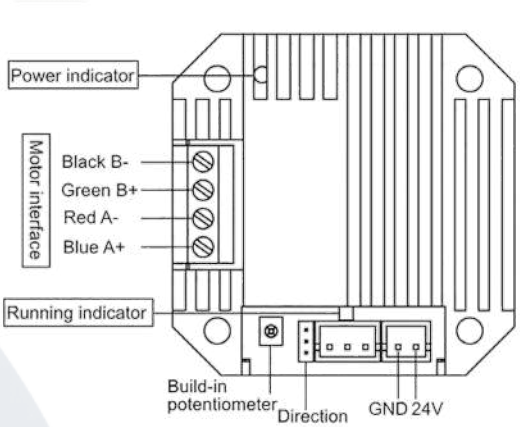
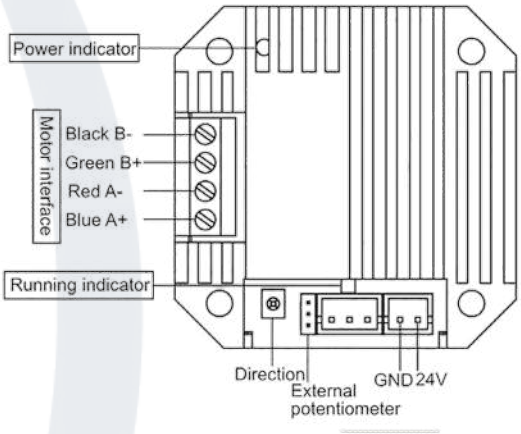
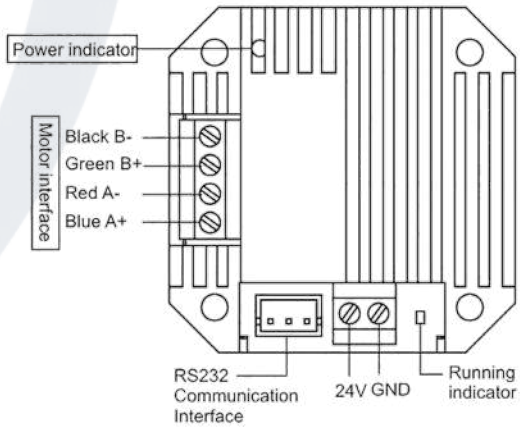
HF-OEM-JT Series							
Model No.	Pump head	Motor type	Power supply	Power(W)	Speed(rpm)	Speed error	Working environment
HF-OEM-JT03	HF-YZ1515x, HF-YZ2515x, HF-MC Series HF-SN Series	Φ70 DC motor	AC220V(standard), AC110V(optional)	15	30-300	±10%	0-40ºC, 80%RH
HF-OEM-JT08		Φ90 DC motor		25	43-430		
HF-OEM-JT12		Φ90 DC motor		60	43-430		
HF-OEM-JT402		Φ90 DC motor		60	45-450		
HF-OEM-JT406		Φ90 DC motor		120	45-450		
HF-OEM-JT407	HF-DZ25-6L	Φ90 DC motor		120	45-450		
HF-OEM-JT501	HF-YZ35	Φ104 DC motor		200	45-450		
HF-OEM-JT502		Φ104 DC motor		200	45-450		

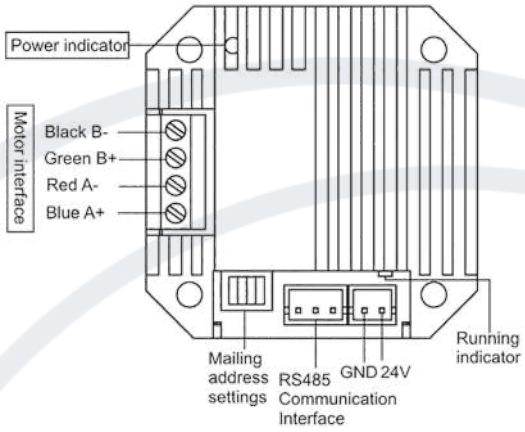
Tubing & Flow Rate		
Pump Head	Tubing	Flow Rate (ml/min)
HF-YZ1515x	13#, 14#, 19#, 16#, 25#, 17#, 18#	<2280
HF-YZ2515x	15#, 24#	<740
HF-MC	ID: 0.13-3.17mm Wall Thickness: 0.8-1mm	<65
HF-SN Series	14#, 16#, 24#	<1500
HF-DZ25-3L	15#, 24#, 35#, 36#	<3600
HF-DZ25-6L	15#, 24#, 35#, 36#	<6000
HF-YZ35	26#, 73#, 82#	<12000

Integrated Drive Module (42 stepper motor)

Technical Specifications			
Suitable motor	35 stepper motor, 42-40 and 2-60 stepper motor	Output motor current	0.5-1.6A
		Power supply	DC24V, ≥ 48W
Speed range	0.1-300rpm	Working environment	0-40ºC, 80%RH

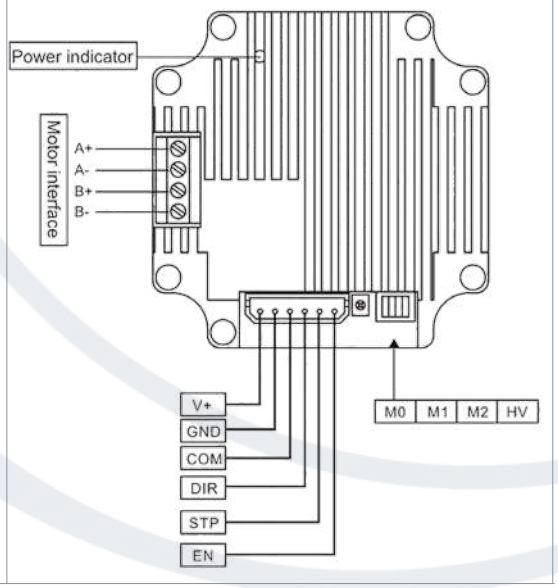
Product	Model No.	Functions	Wiring Diagram
 HF-M42/0-5V,0-10V, 4-20mA	HF-M42/0-5V	Start/stop control: Passive switch signal control start/stop Speed control: External input analog signal 0-5V	
	HF-M42/0-10V	Start/stop control: Passive switch signal control start/stop Speed control: External input analog signal 0-10V	
	HF-M42/4-20mA	Start/stop control: Passive switch signal control start/stop Speed control: External input analog signal 4-20mA	
 HF-M42/USB	HF-M42/USB	Speed control: Preset speed or adjust the speed through USBcommunication port. Subdivision setting: 1/16 Built-in EEPROM can save the setting speed.	
 HF-M42/P	HF-M42/P	Speed control: External input pulse frequency Subdivision setting: 1/16(recommend), 1, 1/2, 1/4, 1/8, 1/32 Logic input voltage: 3.3V-5V or 12V-24V	

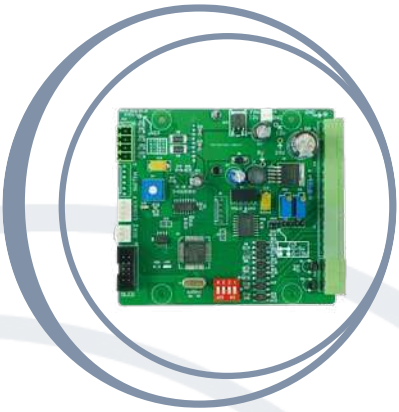
Product	Model No.	Functions	Wiring Diagram
 HF-M42/RP, M42RP/A	HF-M42RP	Speed control: Built-in potentiometer control speed Subdivision setting: 1/16	
	HF-M42RP-A	Speed control: External potentiometer control speed Subdivision setting: 1/16	
 HF-M42/RS232	HF-M42/RS232	Speed control: RS232(Modbus protocol) Subdivision setting: 1/16 Built-in EEPROM can save the setting speed	

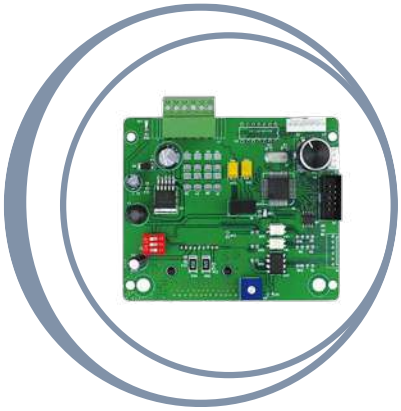
Product	Model No.	Functions	Wiring Diagram
 HF-M42/RS485	HF-M42/RS485	Speed control: RS485(Modbus protocol) Subdivision setting: 1/16 Built-in EEPROM can save the setting speed	

Integrated Drive Module (57 stepper motor)

Technical Specifications			
Suitable motor	57 stepper motor	Output motor current	2-4.5A
		Power supply	DC24V, ≥ 150W
Speed range	0.1-600rpm	Working environment	0-40ºC, 80%RH

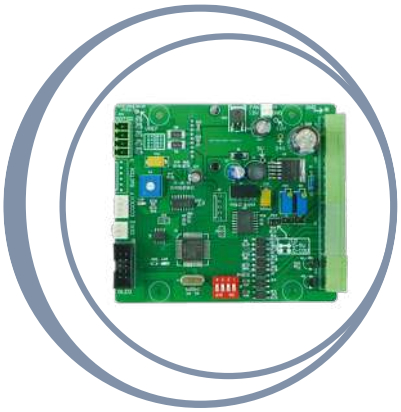
Product	Model No.	Functions	Wiring Diagram
 HF-M57P	HF-M57P	Speed control: External input pulse frequency speed control Subdivision setting: 1/16 (recommend), 1, 1/2, 1/4, 1/8, 1/32, 1/64, 1/128 connection: 12V~24V (M57P) Common anode connection: 3.3V~5V or 12V~24V (M57PY)	

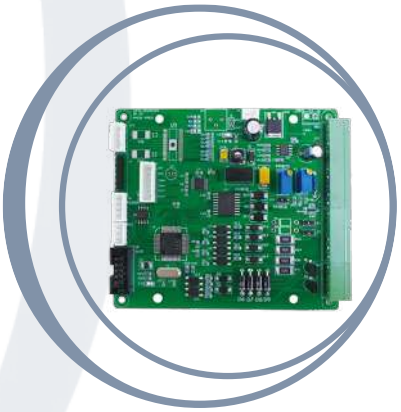




HF-PD03 Main board technical specification	
Speed range	0.1-350 rpm
Speed control	Pulse frequency speed control
Logic input voltage	5V, 12V, 24V(default 5V)
Multiple segments	1/16(recommend)1, 1/2, 1/4, 1/8, 1/32, 1/64, 1/128
Input voltage	DC 24V
Power	<60W
Dimension(L*W)	98.48x82.68mm

HF-PD07 Main board technical specification	
Speed range	0.1-350 rpm
Display(optional)	0.96” OLED screen
Speed control	Preset speed or manual control
Control mode	External passive signal level (normally closed or open) mode; control the start/stop and direction
Input voltage	DC24V
Power	<60W
Dimension (L*W)	98.48x82.68mm





HF-PMD17 Mainboard technical specification	
Speed range	0.1-350rpm(optional)
Flow rate range	0.000067-1330ml/min
Speed resolution	0.1rpm
Display	0.96” OLED screen(optional)
Speed control	Preset speed or membrane keypad speed control(optional)
Control mode	Digital knob and toggle switch
External control	Start/stop;Active switch signal: 5V (standard)
Communication interface	RS485 support Modbus protocol (RTU mode)
External control speed	0-5V, 4-20mA(standard), 0-10V(optional)
Motor type	57 stepper motor
Input voltage	DC 24V
Power	<60W

HF-PM29 Mainboard technical specification	
Speed range	0.1-600rpm(optional)
Speed resolution	0.1rpm
Display(optional)	OLED screen(optional)
Control mode	Membrane keypad/toggle switch
Speed control(optional)	Preset speed or membrane keypad speed control(optional)
External control speed	0-5V, 4-20mA(standard), 0-10V(optional)
Communication interface	RS485 support Modbus protocol (RTU mode)
External control	Start/stop, change direction signal; Active switch signal 5V(standard)
Motor type	57 stepper motor
Voltage	DC24V≥48W
Working environment	0-40ºC, 80%RH

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 alkali 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

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