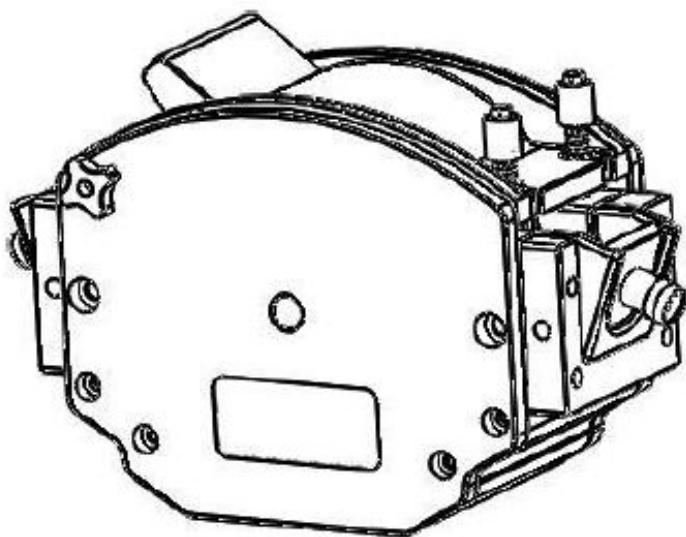


Manual of the SF45 serie



Precision Pump





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1 SF45 Pump Head Introduction

Planetary gear industrial pump head made from 6061 aluminum. Roller assembly made from 304 stainless steel. Four rollers design and spring pressure block can extend tubing lifetime and reduce the pulsation. Big flow rate, widely used in bio-medical, chemistry and environment protection.

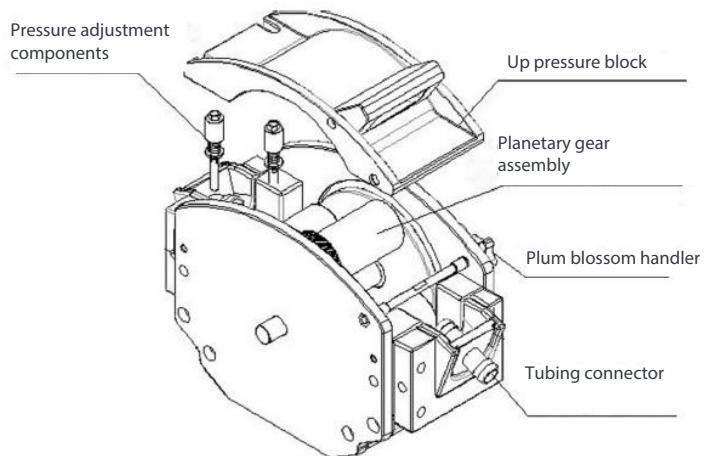
2 SF45 Pump Head Features

- Big flow rate, high pressure, suitable for high viscosity and high head delivery liquid.
- Planetary gear rollers, follower type rotor design, low friction, extend the rotor and tubing lifetime.
- Spring pressure block, pressure tubing gap is adjustable.

3 SF45 Technical Specification and Configuration

- **Speed range:** 37.5-350rpm
- **Flow rate range:** 1.0-28.15 l/min
- **Pump head material:** 6061 Aluminum, 304 stainless steel rollers
- **Tubing connector:** 88#, 92#
- **Drive connection type:** Coupling
- **Weight:** 30kg
- **Condition temperature:** 0-60°C
- **Tube pressure:** Intermittent 0.3Mpa, Continuous 0.25Mpa
- **Tube length:** 295mm

4 SF45 Pump Head Composition

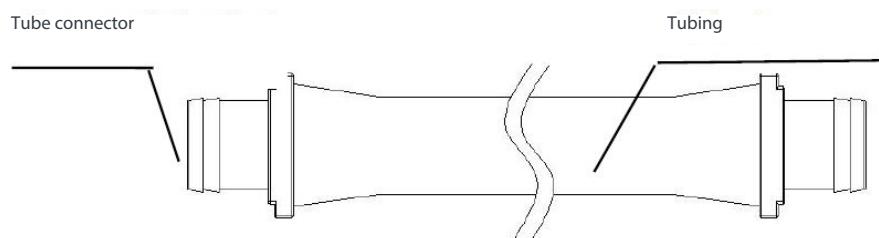




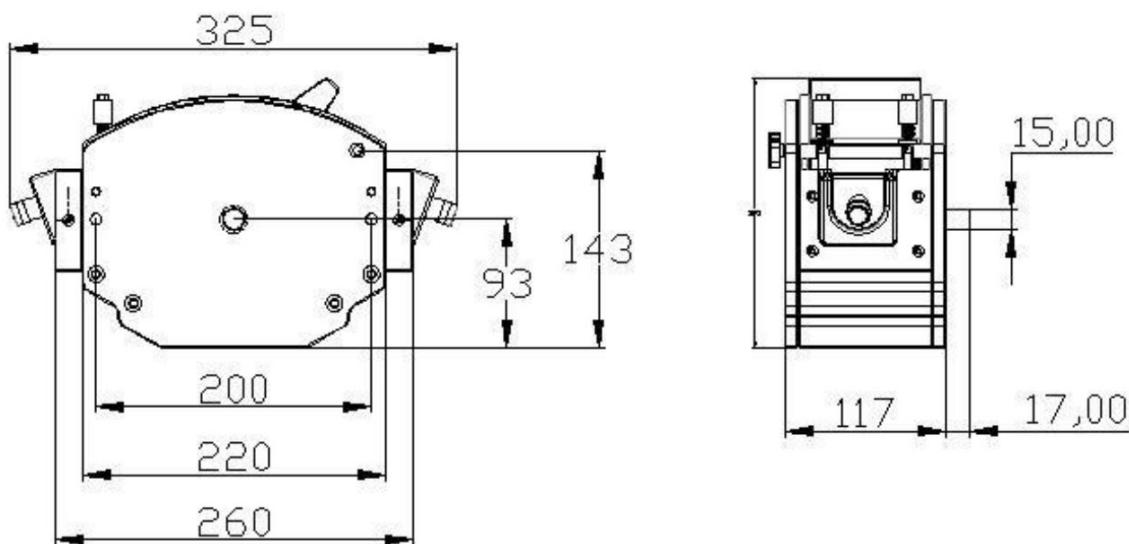
5 Tubing Installation

- **Step 1:** Rotate the plum blossom handler, take off the screws
- **Step 2:** Take off the pressure adjustment components, uplift the up pressure block.
Note: Make sure the tube in straight line
- **Step 3:** Input the tubing and connector into the pump head, ensure the tubing is smooth on the rollers, can not be twist.
Note the direction of tubing connector, as shown below
- **Step 4:** Install the up pressure block and into proper place
- **Step 5:** Pressure adjustment, testing the pressure by the rotary knob of pressure adjustment components, suggesting pressure range 0.1-0.2Mpa

Tubing cartridge and connector



6 Pump Head Dimension (Unit:mm)



7 SF45 Flow Rate Range

Technical Specifications

Model	Tube Size	MI/Rev	Flow Rate (ml/min)	Flow Rate L/H	Max. Pressure (Intermittent)	Bar (Continuous)	Power KW	Speed RPM
M-SF45_950	#88	40,85	9701,88	582,11	3	2,5	0,25	237,5
M-SF45_950	#92	104,25	24759,38	1485,56			0,37	362,5
M-SF45_1430	#88	40,85	14808,13	888,49				
M-SF45_1430	#92	104,25	37790,63	2267,44				

8 Maintenance

- When the pump is not working, loosen the tubing, avoid the tubing get plastic deformation because of long time pressure
- Keep the pump head rollers clean and dry. If the rollers is not clean, it will increase the tubing wearing, shorten the tubing life and make the rollers damage very soon
- The pump head can not resist organic solvents and high corrosive liquid
- The pump head planetary gear set need to use lubricating oil

9 Warranty and After Sales Service

We support **one years** warranty (do not include tubing). During the warranty, the pump is damaged by wrong operation or man-made sabotage, our company do not responsible for warranty. If the product out of warranty, we only charge cost for the replacement parts and shipping cost.



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