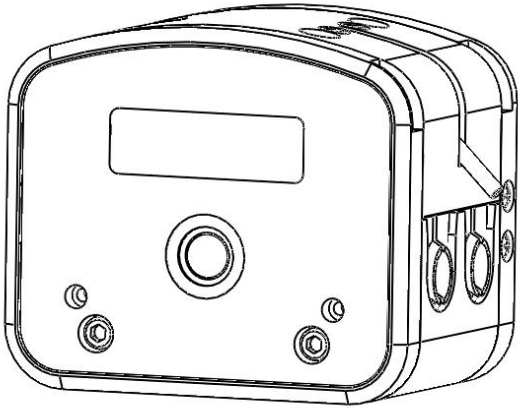


# Shenchen Precision Pump Manual of DY Pump Head





**Warning:**

- Tubing may have crack due to wear. It results in the overflow of fluid from tubing. In that time human body and instruments may be damaged. So user must check usually and change tubing in time.
- If the pump head inadvertently enters the water, use a soft cloth such as soft cotton cloth to wipe dry to prevent the pump head from being damaged.
- Every time you start the peristaltic pump , please be carefully checked whether the hose is damaged.
- Hose used for a period of time, the hose can be rotated 90 °, to extend the service life of the hose
- Long-term non-use, the hose should be released

## **Catalogue**

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1. Product Introduction

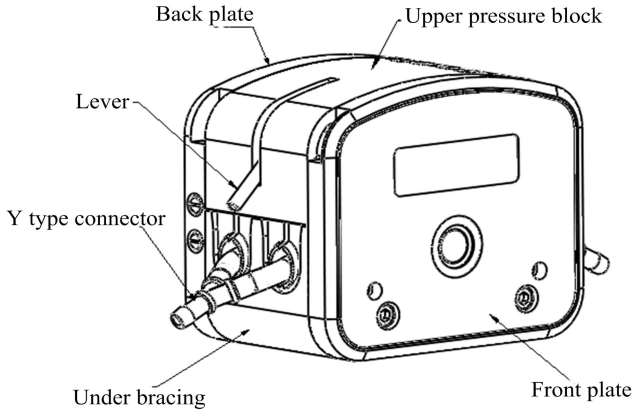
- DY series pump heads are low pulsation type pump heads. By the phase difference of two sets of rollers, the peaks and troughs of the fluid are complemented, which effectively reduces the pulsation of the fluid, thereby achieving high-precision liquid transmission.
- DY series pump head come with 304 stainless steel rollers, aluminium alloy housing. The elastic pressure block assembly with self-adaptive "pressure tube gap" function can effectively extend the service life of the tube.
- Pump head working speed is 0-350rpm.

2. Technical Specification

Model	Tubing		Flow rate ml/min (0.1-350rpm)	Weight (kg)
	Size	ID×Wall thickness (mm)		
DY15	13#	0.8*1.6	0.01-48	3.2
	14#	1.6×1.6	0.06-223	
	19#	2.4×1.6	0.13-448	
	16#	3.1×1.6	0.2-723	
	25#	4.8×1.6	0.47-1626	
	17#	6.4×1.6	0.64—2230	
	18#	7.9×1.6	0.95-3337	
DY25	15#	4.8×2.4	0.42-1480	3.2
	24#	6.4×2.4	0.76-2670	
	35#	7.9×2.4	1-3600	
	36#	9.6×2.4	1.24-4340	

Please note the difference between DY15 and DY25.




### 3. DY Series Pump Head Composition





### 4. Tubing Installation

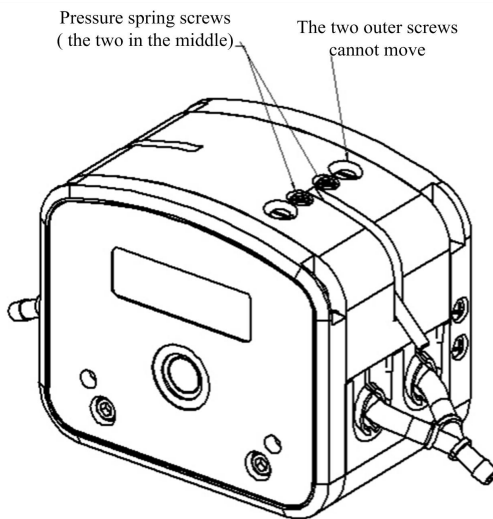
#### 4.1 Tubing Installation Besides 13# Tube

**Step1:** According to the tubing size, choose and change the corresponding pressure spring screws of upper pressure block.

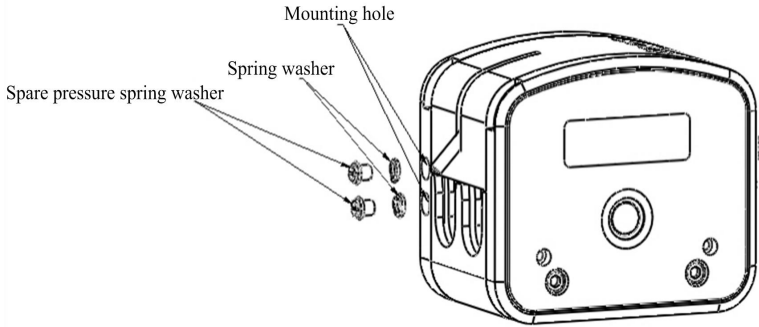
Pump Head	Name	Appearance	Tubing size
DY15	Flat head screw		14#, 19#
	Flat head Phillips screw		16#, 25#
	Round head Phillips screw		17#, 18#

<b>DY25</b>	Flat head screw		15#, 24#
	Round head Phillips screw		35#, 36#

**Note :** The screws for pressure spring are two screws in the middle, the outer screws can not move.



Pressure spring screws position

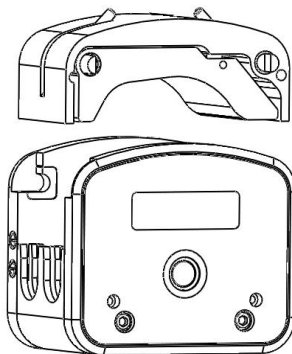


Spare pressure spring screws position

**Note:**

- ① When change the pressure spring screws of the upper pressure block, need to take off and install with the spring washer together. The installed screw must with one and only one spring washer.
- ② The replaced pressure spring screw from upper pressure block need to install on the pump head back plate in time to avoid lose.

**Step 2:** Move the lever to the upper position, take off the upper pressure block.

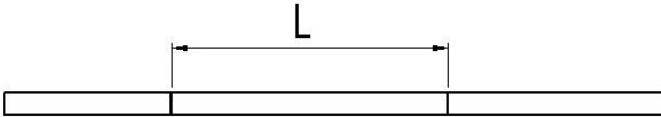


**Step 3:** Mark on the two tubing and install the tube clamp

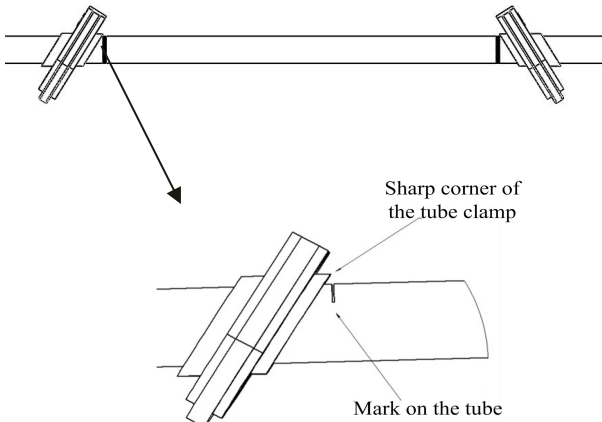
- (1) Tubing length: Between 220-300mm ( big size tubing use the bigger length )
- (2) Mark: Mark the tube according to the tubing size, mark length as show below(L):

Pump head	Tubing size	L (mm)
DY15	14#, 19#, 16#, 25#	122
	17#, 18#	125
DY25	15#, 24#	122
	35#, 36#	125

Mark diagram:



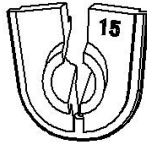
- (3) Install tube clamps: Install the four clamps, make the sharp corner of the clamp align with the mark line on the tube. (note clamp mounting direction).



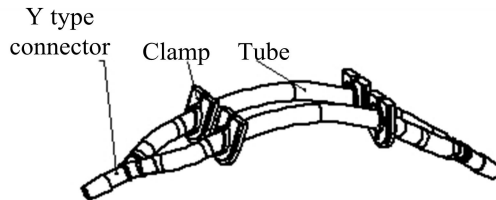


**Note:**

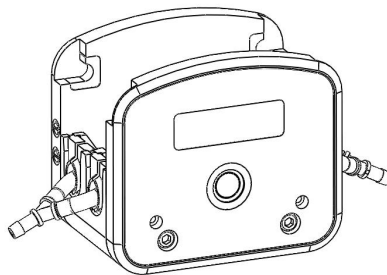
- ① Tubing size need to match with the clamp size (Clamp size as shown in the below picture.)
- ② 17# tubing match with 15# clamp, 18# tubing match with 24# clamp.



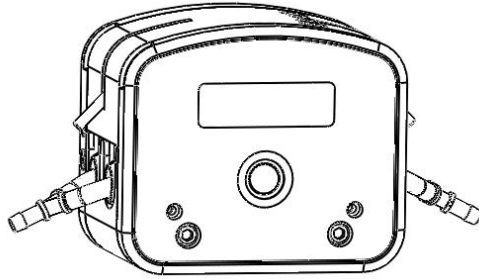
**Step 4:** Connect the two ends of both tube to Y type connectors.



**Step 5:** Install the tube clamps into the grooves of pump head under bracing. After installation, ensure that the lines on the tubes are aligned with the sharp corners of the tube clamps.



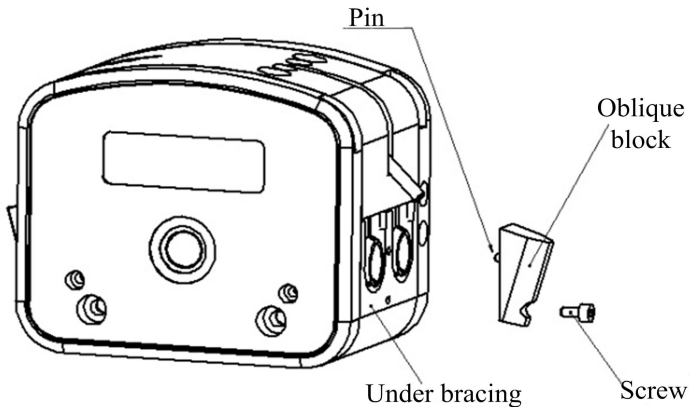
**Step 6:** Install the upper pressure block, pull the lever down to the end.



**Note:** Please note the direction of the upper pressure block when install it. After calibration, when the upper pressure block is removed and install again, the direction of the upper pressure block must be same as before. For example: Before take off the upper pressure block, the pressure spring screws are on the right-hand side; when reinstall, make sure the pressure spring screws are still on the right-hand side.

#### 4.2 Tubing Installation of 13# Tube

**Step1:** When use 13# tubing, please install the oblique block on the under bracing of each side of the pump head.

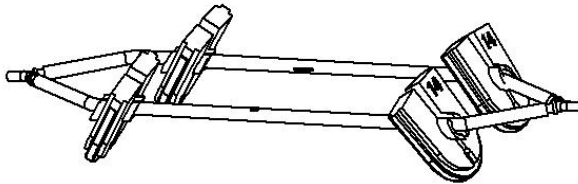


**Step2:** Cut 2 pieces 13# tubing, the length is 175mm.

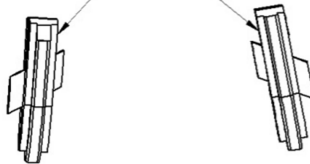


**Step3:** Install 2 pieces Y type connector on the ends of the tubing, please insert it as fasten as possible to avoid falling off.

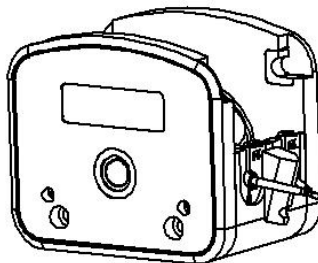
**Step4:** Install the 14# clamps on the tubing (the clamps don't have fasten function), please pay attention to the direction of the clamp.



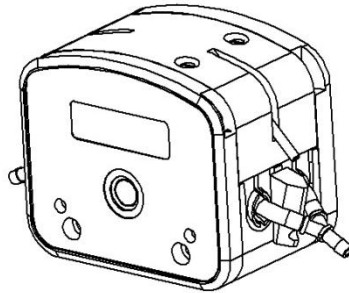
This side face to face



**Step5:** Install the tube clamps into the grooves of pump head under bracing. After installation, ensure that the lines on the tubes are aligned with the sharp corners of the tube clamps.



**Step6:** Install the upper pressure block, pull the lever down to the end.



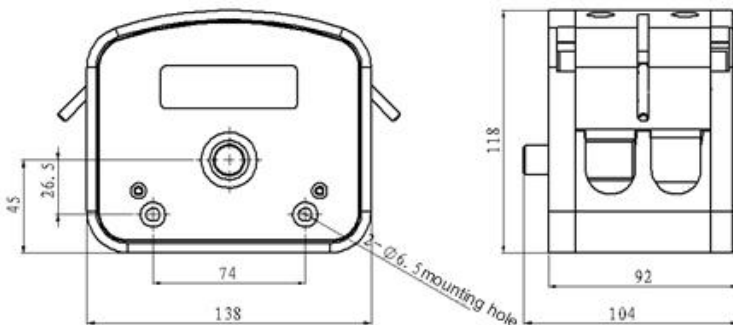
**Note:** The oblique block is not standard accessories for DY series pump head, if need to use 13# tube, please inform sales people before order.

### 5. Pump Head Installation

Insert the pump head shaft into the pump drive coupling, and at the same time, align the two special screws with the mounting holes of the drive and tighten the screws.

**Note:** Users better to use the same force to fasten the screw, and don't make it too tight, to prevent the noise from under bracing transformation.

### 6. Dimension Drawing (Unit:mm)





## **7. Maintenance**

- When pump is not working, please loose the cartridges of pressing the tubing for avoiding changing the shape of tubing because of longtime extrusion.
- Keep the rollers of pump head clean and dry, otherwise it can quicken the tubing wearing, reduce the useful life of tubing and lead the rollers to damage in earlier.
- Pump head can not resist super corrosive liquid. Please pay attention to it when it is using.



## **8. Warranty and After Sales Service**

We support 1 year warranty for the pump head (not including tubing). In the warranty, the products are damaged because of users' wrong operation or other human damages, our company do not responsibility for warranty. Beyond the warranty, we only charge the cost of maintenance. Refer to all maintenance including in and beyond the warranty, we do not bear any freight charges because of maintenance.



MADE IN CHINA

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