

SD300-PF25

High-precision Filling Pump (D73005-P250)

Product Specification and Manual

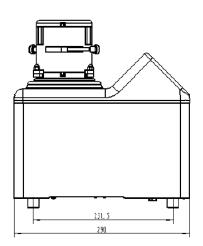


Overview

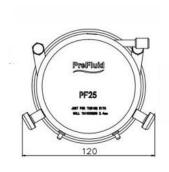
Product No.	D73005-P250
Standard Configuration	Drive SD300
	Pump head PF25
Model	SD300-PF25
Applicable Tube	1.6×2.4, 2.4×2.4, 3.1×2.4, 15#, 24#
Flowrate range	0.04-1,252 ml/min

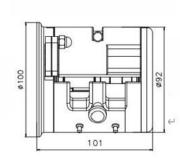
Dimensional Drawing





Pump Head Dimensional Drawing







Pump Head Features

- 1. All stainless steel
- 2. Compact structure, smooth appearance, easy to clean
- 3. Pump head running smoothly, low noise
- 4. Double roller staggered design, smooth flow rate, high filling accuracy
- 5. When the pump head is installed vertically, the upper press block is connected with the pump body by a connecting rod, and the replacement tube can be operated with one hand
- 6. Equipped with pre-friction system, tube wear is minimized



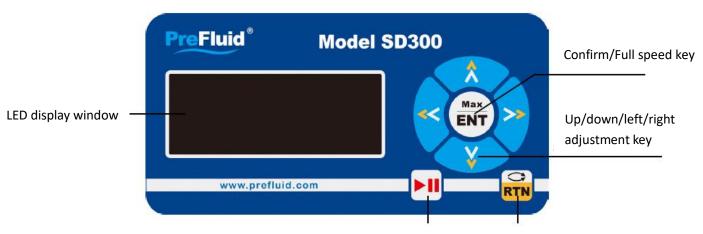
Technical Specifications

Model	SD300-PF25
Speed range	0.1-300 rpm
Resolution	0.1 rpm
Flow range	0.04-1,252 ml/min
Regulation mode	Buttons on the panel adjust the parameters, and the buzzer sounds
Driving mode	Dc brushless servo drive
Display mode	Large screen LCD window displays the working parameters and working status,
	English and Chinese menu is optional
External control ports	Dry contact signal control start, stop and turn; Analog signal (current 4~20mA)
	to control the speed
Communication mode	RS485 port, Modbus RTU protocol
Applicable power supply	AC220V±10% 50/60Hz
Power consumption	≤70W
Working environment	Ambient temperature 0~40°C, relative humidity <80%
Protection level	IP56
Enclosure	Die cast top with special spray
Dimension	180 mm x 311 mm x 290 mm

Rear Panel Description



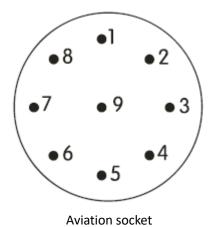
Control Panel Diagram



Start/stop key Return/direction key

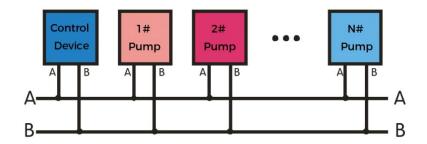


External Control Ports



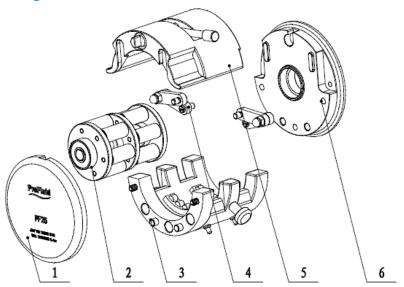
GND, ground F/R, direction control +12V, the external supply is less than 100mA lin, current and voltage input (4-20mA or 0-5V) A, RS485 communication A end B, RS485 communication B end REM, level control signal access to the entrance	1	+5V, the external supply is less than 100mA
 +12V, the external supply is less than 100mA lin, current and voltage input (4-20mA or 0-5V) A, RS485 communication A end B, RS485 communication B end REM, level control signal access to the entrance 	2	GND, ground
5 lin, current and voltage input (4-20mA or 0-5V) 6 A, RS485 communication A end 7 B, RS485 communication B end 8 REM, level control signal access to the entrance	3	F/R, direction control
6 A, RS485 communication A end 7 B, RS485 communication B end 8 REM, level control signal access to the entrance	4	+12V, the external supply is less than 100mA
7 B, RS485 communication B end 8 REM, level control signal access to the entrance	5	lin, current and voltage input (4-20mA or 0-5V)
8 REM, level control signal access to the entrance	6	A, RS485 communication A end
-	7	B, RS485 communication B end
9 S/S pulse control signal access to the entrance	8	REM, level control signal access to the entrance
5, 5, paide control signal access to the criticalice	9	S/S, pulse control signal access to the entrance

Wiring of Multiple Pumps



As shown in the above figure, pin 6 (A) and pin 7 (B) of the external control port can be connected to :1 \leq N < 99

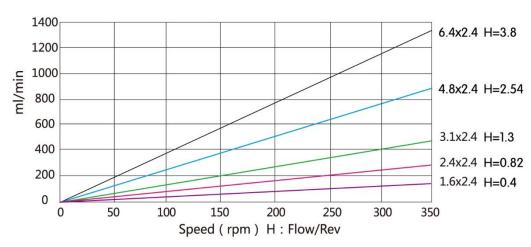
PF25 Decomposition Diagram





6	Rear baffle	1	SUS304		
5	Upper block assembly	1			
4	Connecting rod assembly	1			
3	Connecting base	1			
2	Roller assembly	1			
1	Front baffle	1	SUS304		
Item	Name	Qty	Material	Specification	Note

PF25 Flow Curve



Filling Hose Selection Recommendation Table

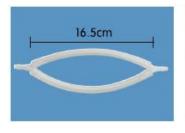
Filling volume	Recommended speed (RPM)	Applicable tube	Filling time	Precision	
0.5 ml	150 -250	ф1.6x2.4	0.5 S	≤ ±1%	
1 ml	150 -250	ф1.6x2.4	0.7 S		
2 ml	150 -250	Ф2.4х2.4	0.6 S	≤ +0.5%	
5 ml	150 -250	Ф3.1х2.4	1.0 S		
10 ml	150 -250	Ф4.8х2.4	1.0 S		

0.7s is the recommended filling time

Filling precision: Taking the filling volume 2 ml and 5 ml as example, test for >20 times consecutively

Test results: the flow error is within 1%

Tube Installation Method

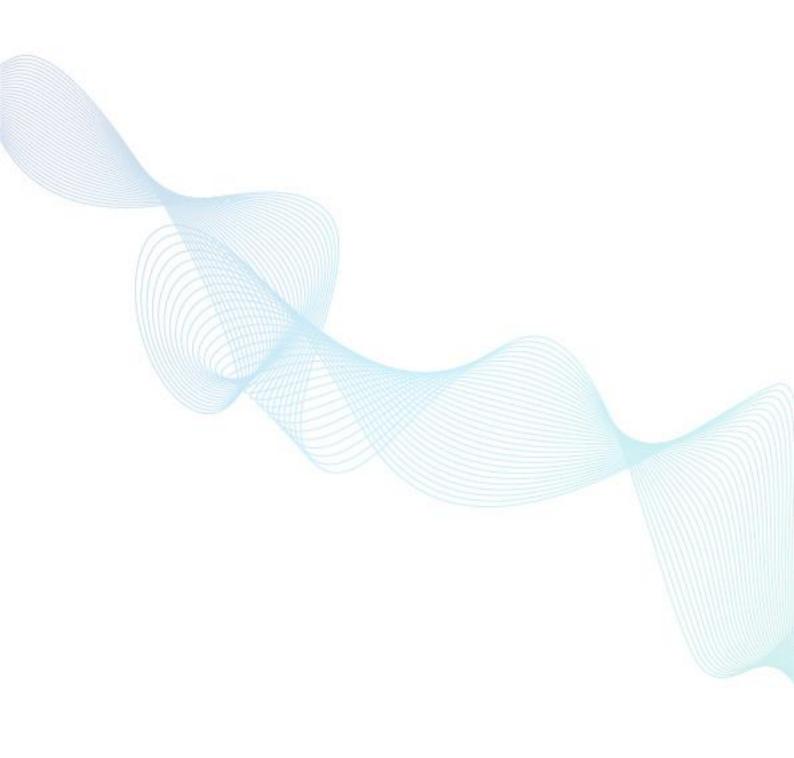












Duoning Biotechnology Group

- marketing@duoningblo.com
- www.duoningbio.com/en
- 6/F manulife place 348kwun tong road ki, HongKong, PRC.

