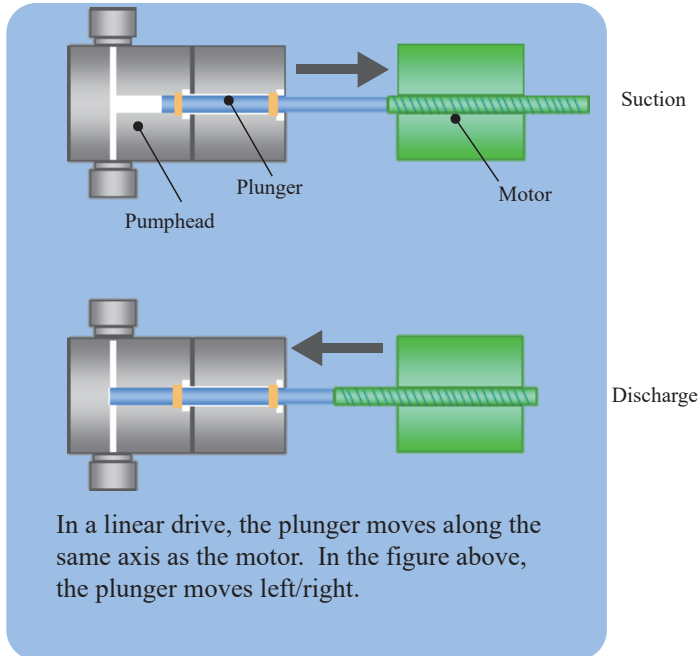


Plunger Pump Design and Features

FLOM Plunger Pumps come in two configurations: linear drive and cam drive.

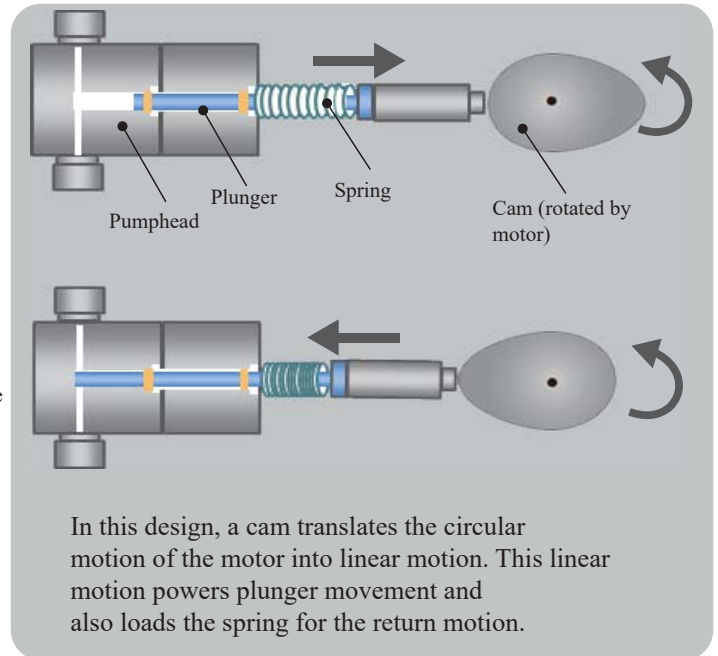
Linear Drive (UI Series)



Left and right pumpheads are independently controlled.

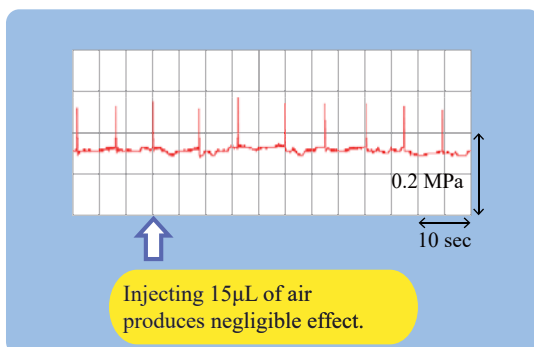
The plunger stroke is about 2.5 times longer than in a cam drive, producing much more powerful suction and discharge actions.

Cam Drive (KP, SP Series)

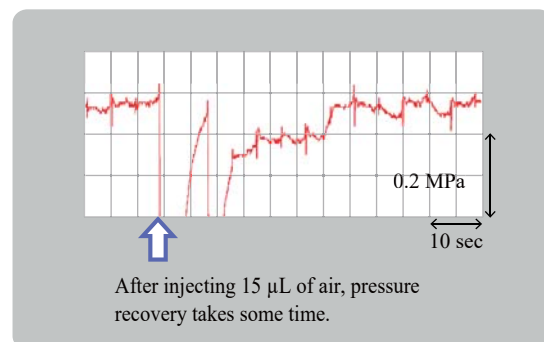


1 motor can be used to power 2 plungers in this case, but the cam's rotary action can cause the plungers to wobble up and down (thus there is a limit to stroke length).

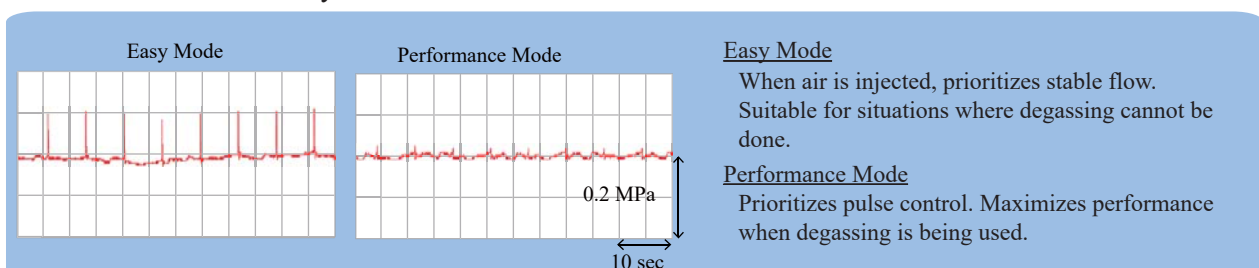
• Response to air injection



✦ Since right and left pumpheads are controlled separately, their output is stable even with the injection of air.



• UI-22 Series Flow Stability



Intelligent Pump
UI-22-110SIntelligent Pump
UI-22-110PIntelligent Pump
UI-22-110D

Linear Motor Pulse Control Intelligent Pump

Intelligent Pump UI-22 Series

Combines high precision flow and ease of use

Features

- ☐ Pulses reduced to absolute minimum making low flow rate pumping possible
- ☐ Bubble problems greatly reduced
- ☐ Long life plunger seal
- ☐ Upper and lower pressure limiters
- ☐ Space-saving compact design
- ☐ Control with RS232C protocol
- ☐ Choose SUS, PEEK, or PCTFE to fit your solvent

Product name	Intelligent Pump					
Part number	UI-22-110S	UI-22-110P	UI-22-110D	UI-22-410S	UI-22-410P	UI-22-410D
Pumphead material	SUS	PEEK	PCTFE	SUS	PEEK	PCTFE
Max pressure*1	35 MPa (5075 psi)	20 MPa (2900 psi)	2 MPa (290 psi)	5 MPa (725 psi)	5 MPa (725 psi)	2 MPa (290 psi)
Flow rate range*2	0.001 - 9.999 mL/min			0.01 - 99.99 mL/min		
Flow per stroke	80 μL			708 μL		
Plunger stroke	10 mm					
Flow accuracy	< 0.3 %					
Features	Active pulse reduction, upper/lower pressure limiters					
Pressure accuracy	< 5 %					
Wetted materials	SUS: Sapphire, Ruby, PTFE, PCTFE, PFA, FFKM, HDPE, PEEK, SUS					
	PEEK: Sapphire, Ruby, PTFE, PCTFE, PFA, ETFE, FFKM, HDPE, PEEK					
	PCTFE: Sapphire, Ruby, PTFE, PCTFE, PFA, ETFE, FFKM					
Remote control	Input: PUMP ON / OFF, Output: Error signal					
Communication	RS232C, RS485 (between FLOM devices)					
Dimensions	144 (H) × 105 (W) × 240 (D) mm, excluding protuberances					
Weight	Approx. 5.6 kg					
Power	AC100 - 240 V (50 / 60 Hz) MAX140 VA					
Order Code	SLP-P509	SLP-P514	SLP-P517	SLP-P511	SLP-P516	SLP-P510

*1: Maximum pressure is only sustained intermittently.

*2: Maximum output is not sustainable over long periods of time.

Auto Back Pressure Regulator for the UI-22 Series

Auto BPR BP-11 Series**Automatic Pressure Regulation****Features**

- ☐ Provide consistent pressure by tracking variable pump pressure in real time
- ☐ UI Series provides stable flow, BP-11 maintains set pressure

Auto BPR
BP-11S

Product name	Auto BPR	
Part number	BP-11S	BP-11D
Wetted materials	SUS, PFA	PCTFE, PFA
Path diameter	0.6 mm	
Pressure range	0.10 - 5.00 MPa (14.5 - 725 psi)	
Flow rate range	0.1 - 100 mL/min	
Pressure range*1	0.5 - 5.00 MPa (72.5 - 725 psi)	
Pressure accuracy	±0.1 MPa (±14.5 psi)	
Pressure signal range	uses pressure signal from UI-22 [DC1 - 5V]	
Communication	RS232C, RS485 (START-IN, READY-OUT)	
Dimensions	144 (H) × 79 (W) × 240 (D) mm, excluding protuberances	
Weight	Approx. 2.7 kg	
Power	AC100 - 240 V (50 / 60 Hz) MAX 70 VA	
Order Code	SBP-F012	SBP-F019

*1: Using distilled water or methanol, pressure 0.5~5.0MPa / flow rate 0.1~50.0mL/min are controllable.

※: please contact us if you need flow rates outside 0.1~50.0mL/min.