IZS30-1A

MICROFLUIDIC TRANSFER Industrial Syringe Pump CHONRY 创锐



CHONRY 创锐

IZS30-1A

MICROFLUIDIC TRANSFER

Industrial Syringe Pump

Applied to bacterial culture, sampling detection, biological analysis, microfluidic chipAutomated pick chromosome analysis, DNA sequencing, etc.

Max flow :5mL/min



IZS30-1A

IZS30-1A is an industrial syringe pump independently developed by Chuangrui Pump Industry. It is driven by stepper motor and ground ball screw transmission piston. It provides a variety of sample injectors to choose from, suitable for different work requirements, original imported parts, durable Corrosion durable, long life, good anti-interference, suitable for industrial environment, provide RS232, RS485 communication control, support OEM customization.

High precision transmission

Driven by stepper motor, ground ball screw drive piston to ensure continuous and stable highprecision transmission.

Smart operation

Provide anti-collision alarm, error report, photoelectric encoder out-of-step detection and other functions.

Safe and reliable

Excellent electromagnetic compatibility and anti-interference, safer and more reliable operation, suitable for industrial environment.



Multiple injectors

Various types of syringes can be replaced, with a wide range of linear speeds and diverse applications.

Small size

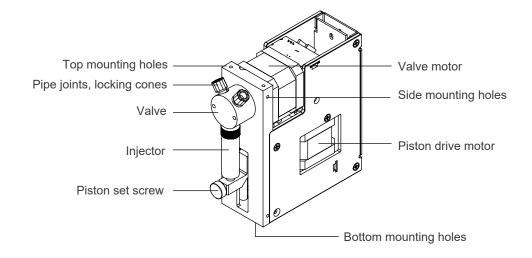
Open integration, small size, easy matching, support OEM customization.

Original imported

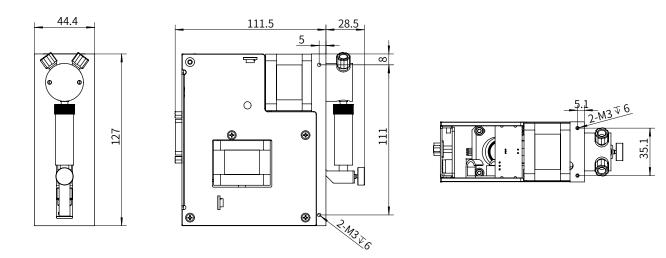
The sampler, valve body and other wetted parts are imported with original, corrosion-resistant and durable, long service life.

| ·Piston | | |
|--------------------------------------|---|----------------|
| Working principle | Stepper motor drive, ball screw drive, rotary encoder to monitor displacement, with 0-bit detection | |
| Rated stroke | 30mm corresponds to 3000 steps | |
| Linear speed range | 50µm/sec – 5mm/sec (ie: 20 minutes slower for full stroke; 1.2 seconds faster for full stroke) | |
| Control resolution | 1 step or 0.01mm | |
| Stroke control accuracy | When the stroke is greater than or equal to 30%, the error is less than or equal to 5‰ | |
| Piston driving force | Maximum driving force ≥ 7kg; secondary driving force ≥ 3kg | |
| Injector type | 50µl 100µl 250µl 500µl 1ml 2.5ml 5ml | |
| Applicable valve | | |
| Valve type | 3 Port 120º Valve | |
| Transposition time | Transposition time of two adjacent ports≤250ms | |
| Valve drive | Stepper motor drive, photoelectric encoder feedback position, out-of-step monitoring | |
| Valve material | Spool: Teflon Body: Teflon | |
| Valve interface | Tubing fitting: 1/4-28 thread fitting; Injector fitting: 1/4-28 thread fitting | |
| External control interface | <u> </u> | |
| Communication Interface | RS485 communication interface, communication rate: 9600 baud rate/38400 baud rate optional | |
| | RS232 communication interface, communication rate: 9600 baud rate/38400 baud rate optional | |
| External input interface | 2 external TTL inputs with isolation; used to control start-stop after pause | |
| External output interface | 3 external TTL outputs with isolation | |
| Device address dial interface | The device address can be set externally through the BCD dial | |
| Parameter jumper selection interface | Reserve 6 external jumper selection parameters (valve selection, communication rate selection, communication mode selection) | |
| Software function | | |
| Initialization command series | Complete the initialization state of valve and piston through various commands | |
| Parameter setting command series | Complete the setting of parameters such as speed, start slope, relative 0 point position, dead zone volume, etc. through different commands | |
| Valve Control Command Series | Complete movement of various valve positions | |
| Piston Control Command Series | Accurate displacement of the piston by different commands | |
| Control command series | Single, repeated, and delayed execution of single commands, combined command sequences, and store command sequences through different commands; as well as suspending and terminating tasks, etc. | |
| Report command series | Through various commands, the valve position, piston position, piston driving force, piston speed and other states of the equipment can be monitored in real time | |
| Equipment dimensions | High | 127mm |
| | Width | 44.4mm |
| | Depth | 140mm |
| Power Requirements | Voltage | 24V DC |
| | Current | ≥1.5A |
| Work environment requirements | Temperature | 10°C -40°C |
| | Humidity | 20%-95% at 40℃ |

Schematic diagram of structure and function



Dimensions



(Unit: mm)

CHONRY 创锐

Baoding Chuangrui Precision Pump Co.,Ltd.

Address: NO.369 of HuiYang Street , Baoding 071000,Hebei , China Mobile: +86 15633705132 Website: http://www.crpump.com Email: support@crpump.com