![GLUDITEC — Glue & Dispensing Technology]

SER-300-GPP

Desktop Dispensing System for 300ml Cartridge Silicone Adhesive

The SER-300-GPP is a high-performance silicone dispensing system designed for 300ml silicone cartridges. It integrates GLUDITEC's SER Series Desktop Robot with a high-pressure valve and the precision GPP-300 pump, significantly boosting dispensing speed—up to 4 times faster compared to standard cartridges. This system is ideal for handling higher viscosity silicone adhesives and ensures consistent output. By utilizing the GPP or GSP Cartridge pump, air and moisture are effectively sealed out, enhancing durability and improving the overall product quality of sensitive silicone adhesives. The integrated cartridge pump ensures long-lasting, reliable performance in demanding applications.

FEATURES

- Can handle different package size of silicone adhesive from 85g to 330g by piston pump.

- Dispensing area from 200x200x100 mm to 600x500x100 mm

- Dot, Lines, Arc etc. and 3D dispensing path is available.

- 100 programs, 4000 points per program.

- A hand-held Teach Pendant is provided for simple and intuitive programming functions.

- Apply adhesives, cyanoacrylates, silicone, RTV, anaerobic resin, epoxy, UV cure formulations and many more fluids.

- Windows SRE software is available for CAD file input (optional).

OPTIONS

4-axis/ 5-axis

Multiple Heads

Dual Table

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DESKTOP ROBOT MAIN SPECIFICATIONS

Model	SER-200	SER-300	SER-400	SER-500
Working range (X/ Y/ Z) mm	200 x 200 x 50	300 x 300 x 100	400 x 400 x 100	500 x 500 x 100
Max. load Y/ Z Axis	5kg/ 3kg	11kg/ 6kg		
Speed X & Y/ Z (mm/sec)	500/350	800/350		
Repetitive Positioning Accuracy	±0.02mm/axis			
Program Capacity	Min. 100 group, 4000 points/group			
Data Storage Type	CF Card			
Byte	32 bit			
Program Display	LCD			
Motor System	Micro stepping motor			
Mode of transmission	Synchronous belt	X/Y Axis synchronous belt, Z Axis precision ball screw		
Interpolation Function	3 axis			
Teaching Method	Teach Pendant			
I/O Signals Port	8 Inputs/ 8 Outputs			
External Control Interface	RS232			
Power Supply	AC100 - 230V 300W			
Working Temperature	10 ~ 40°C			
Working Relative Humidity	20 ~ 90% no condensation			
Dimension (L x W x H) mm	385 x 380 x 500	485 x 505 x 610	585 x 610 x 610	785 x 700 x 610
Total weight	23kg	34kg	41kg	56kg

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GPP-300

Cartridge Piston Pump 300ml/330ml

The GSP-300 supply system utilizes a pressure pump to push the 300cc/330cc packaging rubber drum. The pressure maintains a constant material flow rate, which combined with the precise timing control of the on-off valve, ensures consistent dispensing volume and speed. This system is suitable for Silicone, Epoxy Resins, Greases, Thermally Conductive Gels, Thermally Conductive Silicones, Sausage Gels, and various medium to high-viscosity fluids.

FEATURES

- Direct use of 300cc/330cc silicone sleeve and sausage glue packaging for fixed amount dispensing.
- Suitable for dispensing high-viscosity glue ranging from 10,000-1,000,000.
- Uses mechanical extrusion to dispense glue due to the high viscosity of silicone, resulting in more accurate glue output. This method eliminates the residue of gas in the silicone that can occur with pneumatic pressure conveying methods.
- Compact design and easy operation. An external precision dispensing valve improves production capacity and dispensing quality.
- The pump head is equipped with a low-level glue alarm switch.

SPECIFICATION

Properties	GSP-300
External dimensions	L425 x W210 x H675 mm
Power	10W
Air Input	0.5 ~ 0.7 MPa
Cylinder thrust	50kg (at air pressure 0.5Mpa)
Track length	1500mm, customizable
Pumping method	Cylinder push + pressure pump self-priming
Glue packaging	300cc/ 330cc packing
Sealant material	PEEK/TEFLON/ Special rubber
Structural part material	Aluminum alloy anode/stainless steel
Applicable material viscosity	10,000 ~ 1,000,000 cps
Monitoring method	Closed-loop control of pressure sensors
Alarm alert	Lack of material alarm, abnormal pressure alarm

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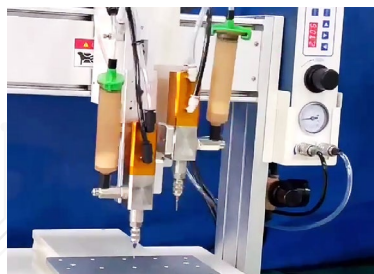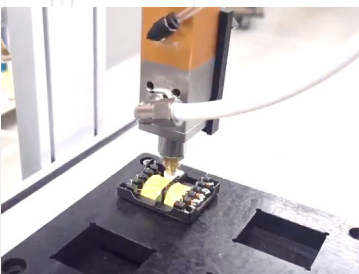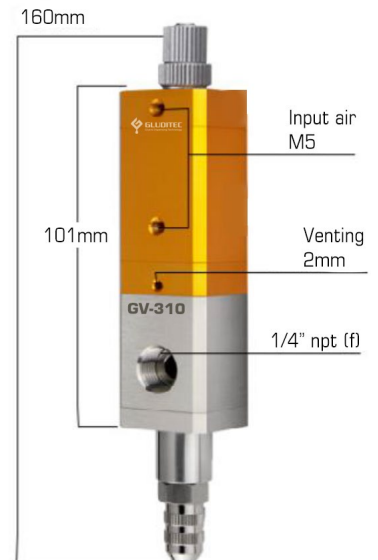
LIQUID CONTROL

GV-310 Dispensing Valve

GV-310 dispensing valve features an innovative upward closing mechanism that allows for the simultaneous suction and breaking of glue when dispensing stops. This design minimizes residual glue on the needle head, preventing issues like leakage and wire drawing during dispensing. The valve body is made of anodized aluminum alloy, with a sealing material made of the latest tetrafluoro material. Additionally, all parts that come into contact with the adhesive are made of corrosion-resistant materials.

- Ideal for thick and sticky adhesives like grease, silicone gel, epoxy resin, yellow glue, and solder paste. Compatible with various needle types and pressure tanks.

- Can be integrated with multiple dispensing valves on an automated system to significantly boost productivity, cut down on labor time, and minimize material usage.

Properties	Value
Size	35 x 35 x 160 mm
Weight	580g
Viscosity range	1,000 ~ 100,000 cps
Maximum number of cycles	300 times/min
Input Air Pressure	<10kg
Inlet size	1/4"ntp (f)
Inner diameter of rubber outlet	2.5mm
Minimum output volume	0.01ml
Material of driving part	Stainless Steel
Material of fluid port	Stainless Steel

160mm

101mm

Input air M5

Venting 2mm

1/4" npt (f)

GV-310

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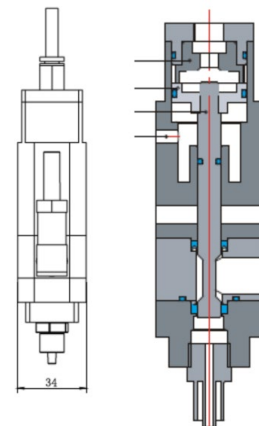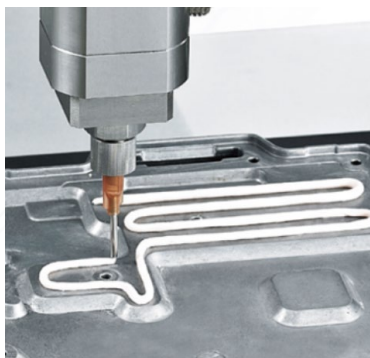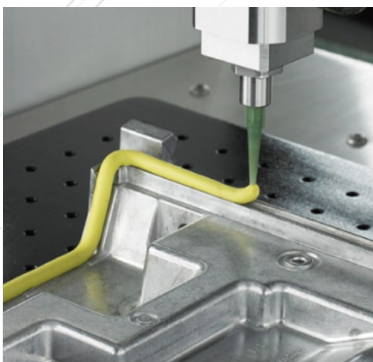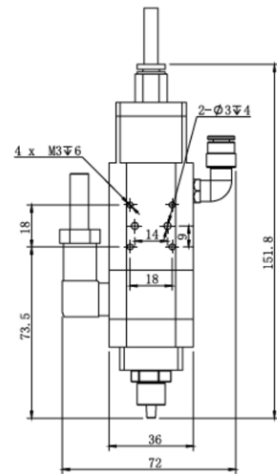
LIQUID CONTROL

GV-480 Dispensing Valve

GV-480 is a high-pressure dispensing valve designed to dispense high-viscosity fluids such as silicones, RTVs, sealants, pastes, and greases. GV-480 high-pressure valve provides a snap-release shut-off after dispensing, creating a such-back effect that prevents any dripping.

- Adjustable back suction, clean broken glue
- Head and tail glue volume is controllable
- All stainless steel structure, strong and durable
- Dual air path design, quick break
- Simple Maintenance

Properties	Value
Size	34 x 34 x 151.8 mm
Weight	880g
Viscosity range	10,000 ~ 1,000,000 cps
Quantity of material per min	5L/min
Maximum number of cycles	400 times/min
Min. driving pressure	70 psi
Max. driving pressure	3000 psi
Material of driving part	Stainless Steel
Material of fluid port	Stainless Steel
Material of firing pin	Cemented carbide

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LIQUID CONTROL

GC-832V Valve Controller

GC-832V controller is a fast, convenient way to adjust valve open time in increments as small as 0.001 seconds, right at the dispensing station. The result is exceptional process control without time-consuming programming or mechanical adjustments that require the production line to be shut down.

- Microprocessor - based control
- Time digital display from 0.001~99.99
- Cycle: 0.05%
- Unique TEACH function
- Memory for time recorder

Properties	Value
Dimension	215 x 225 x 90mm
Weight	1.87kg
Air input	0.5 ~ 0.9 bar
Air output	0.01 ~ 0.8 bar
Repeat Tolerance	±0.1%
Min. volume	0.005ml
Speed	>600 cycles/min
Dispense time	0.001 ~ 99.99 sec +/-0.1%
Voltage	110V/220V±10% 50Hz
Power Comsumption	< 15W