



Aurora's OEM products are designed specifically to integrate with your existing system.

Aurora carries a range of versatile OEM products such as specialized mechanical peristaltic pumps and syringe pumps. Designed specifically as an OEM product, our pumps have incorporated new technology and improvements in design as a result of feedback from our customers. Aurora aims to materialize your ideas to real solutions by taking into consideration system and software compatibility, customized modifications, and the integration of application-specific accessories.

Aurora's OEM Syringe Pumps can be used for a variety of analytical, industrial and life science applications. With low maintenance, rugged design, our OEM syringe pumps offer low cost solutions to your sophisticated dispensing applications.



Single Channel Syringe Pump

APPLICATIONS

- Genomics and proteomics research
- LC analysis / separation
- Sample injection
- General laboratory automation
- Compound analysis
- Elemental analysis
- Molecular and atomic spectroscopy

LIQUID HANDLING

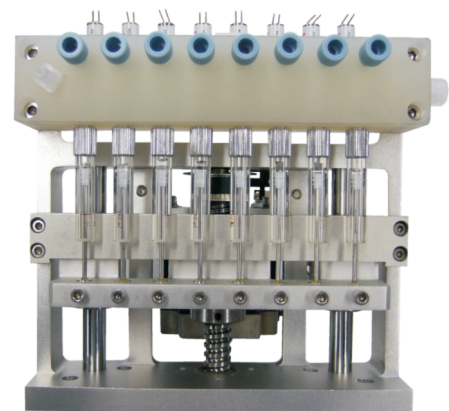
Aurora's OEM Syringe Pumps are highly integrated, self-contained modules utilizing state-of-the-art materials for accurate delivery of fluids. Total syringe volumes from 20 μ L to 1000 μ L are available with pump speeds ranging from 1 second to 20 minutes per full syringe stroke.

COMMUNICATION

Aurora's OEM Syringe Pump can communicate singly or in a multi-pump configuration through an RS-232 or Controlled Area Network (CAN) interface. Up to 12 pumps can be connected in the multi-pump configuration. Aurora's pumps support 9,600 baud for RS-232 and 100K for CAN. Pumps also Aurora's OEM Syringe Pumps are driven by a stepper motor with a - 1.8deg. step angle.

DESIGN

Aurora's OEM Syringe Pumps are compact, lightweight and practically maintenance free. It's anodized cast aluminum frame has two mounting holes on its face for easy access and panel mounting. Various interface programs are also available to help customers become operational quickly.



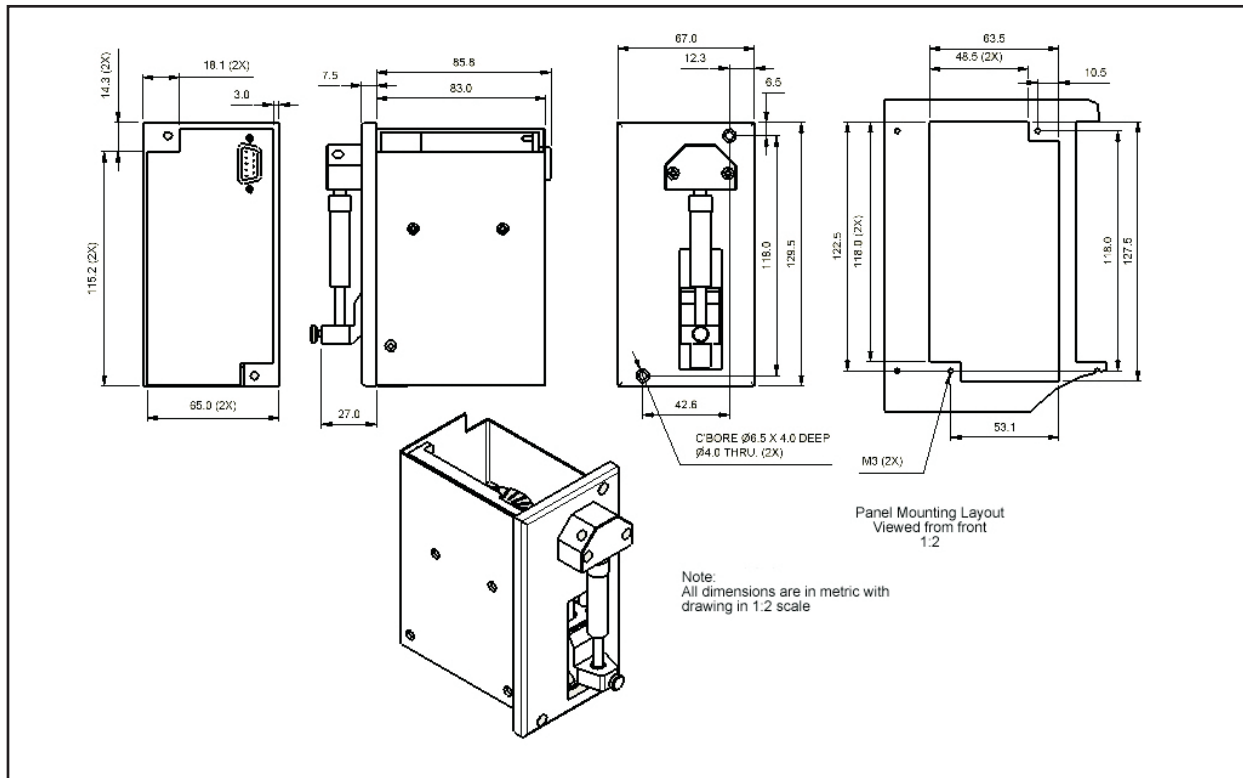
Eight Channel Syringe Pump

OEM

SPECIFICATIONS

No. of Channels	1 and 8 (4 and 12 channel customizable upon request)
Mechanism	Lead screw with encoder
Travel Range	30 mm
Syringe sizes	20 μ L, 50 μ L, 100 μ L, 200 μ L, and 1000 μ L
Fluid Contact Materials	UHMWPE Borosilicate Glass Teflon Tubing Buna O-ring
Pump Dimensions (W x D x H)	67 mm x 87.5 mm x 129.5 mm - Single Channel 152 mm x 120 mm x 141 mm - Eight Channel
Motor Dimensions	Ref. to figure below
Resolution	1, 000 to 25, 000 increments using microstep
Speed	1 sec to 20 min/full stroke based on syringe size and tubing
Precision	<0.5% CV for 100 μ l using 1000 μ l syringe <0.1% CV for 1000 μ l at full stroke
Accuracy	< +/- 1.0%
Power supply	24 VDC
Interface	RS-232 and CAN BUS
Baud Rate	9,600
Communications	Data Terminal or OEM protocol
Operating conditions	Temperature 15° - 40°C, Humidity 30 - 80% at 40°C
Safety and Regulatory Standard	ISO 9001/2000 quality system

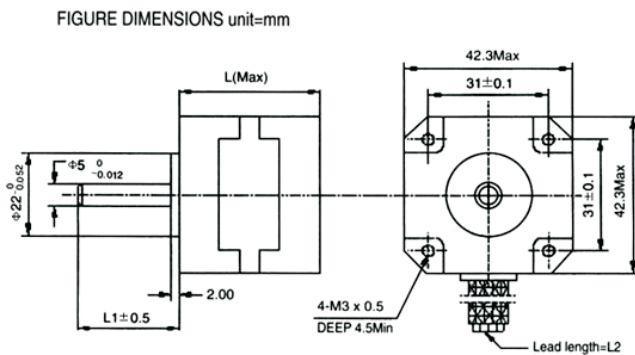
MECHANICAL DRAWING



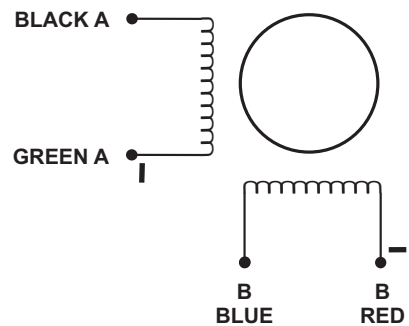
Syringe Pump Motor Specifications

Step Angle	1.8 deg
Ambient Temperature	-25°C - +40°C
Temperature Rise	85 K
Insulation Resistance	500V DC 100MΩ minimum
Insulation Class	B
Voltage	2.5 V
Current	1.7 A
Resistance	1.5 Ω
Inductance	3.2 mh
Holding Torque	4200 g.cm
Detent Torque	< 220 g.cm
Rotor Inertia	32 g.cm ²
Weight	0.24 kg
Dimensions	40 (H) x 24 (W) x 300 (L) mm

Motor Dimensions



Wiring Diagram



NOTE: Instrument specifications may change without notice as an ongoing effort of product improvement.

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