ELECTRO-OSMOTIC PUMP

(Under Development)

EOP-Driven Micro Pumping Unit IBP Series

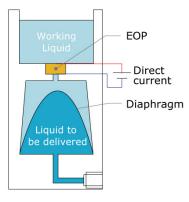




Features

- This pump is based on the electroendosmosis principle and some of its characteristic features are no pulsations, quiet operation, small size, light weight, low power consumption and high pressure.
- Linear control of flowrate through change in voltage.
- 1MPa discharge pressure may be achievable.
- May be driven by batterie (voltage step-up circuit is required)

Image of internal structure



This pumping unit uses Electroosmotic pump as the pressure source. As shown in the figure, the diaphragm is pressurized from the top by the working fluid and thus, the liquid to be delivered is pumped out. Suction is also possible by reversing the polarity of the applied voltage when ethanol is used as the working fluid. (Optional Feature)

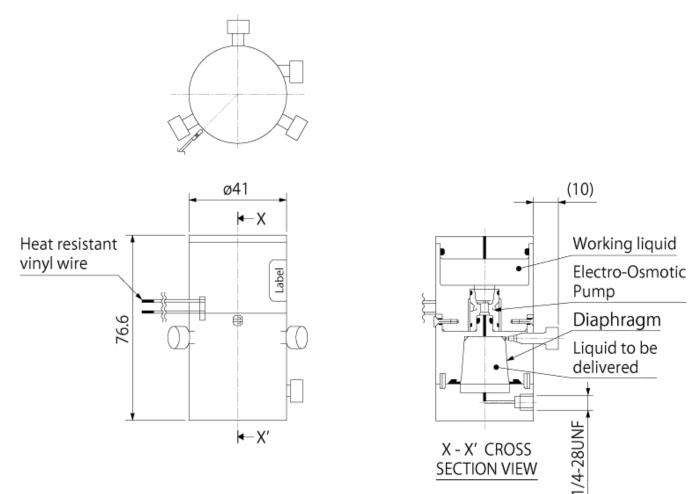
Specifications

Liquid for indirect drive/Working liquid	De-ionized Water
Wetted Materials	PEEK, Silicone
Flow Rate	10 µL/min
Discharge Pressure	200 kPa
Power Consumption	10 mW
Pump Capacity	5 mL
Weight	approx. 105 g (excluding liquid)

Note: These are the specifications when the operating voltage is 24VDC. Details including specifications may change without notification.

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Dimensions



Comparison of pulsations with syringe pump

