ELECTROSPENSE

SMALL VOLUME LIQUID DISPENSING & METERING

1-800-356-4746

FEATURES AND BENEFITS

- repeatability to 0.1% CV
- · compact & lightweight pump/motor/base module
- displacement range of 0-109 μ l/stroke with low dead volume
- · versatile mounting capabilities
- · low liquid shear
- forward & reverse flow
- · clean in place capabilities
- dispense or meter operating modes
- · highly integrated microstepping drive
- advance current control for exceptional performance & smoothness
- closed loop control
- incremental drawback & selectable stopping position for high viscosity fluids
- · custom set parameters
- CE certified
- · one-year warranty

TYPICAL APPLICATIONS

- sterile filling & dosing
- · diagnostic reagent dispensing
- · contact lens dispensing
- · UV curable adhesive dispensing
- cyanoacrylate dispensing
- cell suspensions
- fragrance & flavor dispensing
- sub-microliter ejections
- mercury dosing
- electrolyte dispensing
- syringe, vial, needle & catheter coating
- · nutritional media additions
- · and many more



ElectroSpense 7cmW x 12cmH x 16cmD









IVEK Corporation's ElectroSpense pump offers outstanding accuracy and convenience for your dispensing requirements. The ElectroSpense combines the proven performance of IVEK's AP pump head and precision machined, ceramic pumps, with a Microspense Integrated Controller packaged inside the motor. This Integrated Controller saves space and eliminates the traditional cable and separate electronic enclosure. The ElectroSpense pump parameters are generated by IVEK's application team for your unique dispensing requirements. Once these parameters are optimized for fluidic performance, a program is developed and downloaded onto the integrated controller. A 24 VDC power source and a process signal are the only requirements for a simple, trouble free installation. The ElectroSpense can dispense 1µL through 109 µL with maximum flow rates of 130.8 mL/min. IVEK's new ElectroSpense pump is a reliable, accurate and economical solution for many applications, including: single and multiple channel dispensing, OEM applications, spraying applications and more.

CERAMIC PUMP MODULE FEATURES:

- positive displacement piston cylinder design made from minimum 99.5% alumina oxide (Al₂O₃)
 or zirconia (mgo partially stabilized TTZ)
- available in three sizes: "A" (0-109μl), "2A" (0-54μl), "3A" (0-27μl)
- case material: Tefzel (other material available on a custom basis)
- port connections: ¼ 28 UNF.2-B or 5/16 24 UNF.2-A
- wetted materials include ceramic, electromeric o-ring/sapphire or Teflon
- Teflon end seals are available for CIP applications

VOLUMETRIC OUTPUT FOR PUMP MODULES:

SIZE	MAXIMUM DISPLACEMENT PER STROKE
3A	27μΙ
2A	54µl
1A	109µl

IVEK's ceramic piston/cylinder modules are extremely hard and resist abrasion, resulting in a system that exhibits little to no wear even after hundreds of millions of cycles. In addition, the ceramics are compatible with most acids and bases. The natural crystalline structure of the ceramics displays zero porosity, which insures zero retention and carry-over of one biological fluid to the next.



piston/cylinder sets

PRECISION ENGINEERED FLUIDIC SOLUTIONS SINCE 1979

IVEK Corporation is committed to quality and customer support. Our product has always been relied upon for critical applications and our policy states customer satisfaction as the number one priority. As our customer you will experience exceptional performance and reliability for your most demanding applications. IVEK Corporation is ISO 9001 and ISO 13485 certified.

