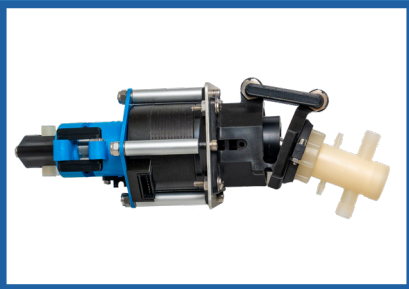


## TOP 10 F.A.Q.'S



### CONTACT US TODAY!

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# DUPLEX PUMP

## FOR METERING & MIXING

- 1. Q. Where are duplex pumps used?**

A. Duplex pumps are used in next-generation clinical IVD instruments and microfluidic chipsets for multiple applications including:

  - 9:1 ratio mixing
  - Flow Cell purge/sweep
  - Pipette priming and cleaning of fixed nozzles or probes
  - A+B dispensing for microwells
- 2. Q. Can you give an example of where the Duplex Pump is used in IVD applications?**

A. Fluid Metering's Duplex Pump sends air slugs + cleaning solution repeatability through a flow cell. It increases the efficacy of purge, allowing for the sweeping of various beads (silica or magnetic) ranging in 2-10 $\mu$ m diameter to pass through. By doing so, the Duplex Pump can increase the throughput of instrumentation by purging 5-10x faster than switching valve systems or other legacy methods like syringe pumps.
- 3. Q. How is the Duplex Pump impacted by shear?**

A. The Duplex Pump dispenses with low shear, making it a safe choice for sensitive bead types or cells in dispensing and metering applications.
- 4. Q. Do both sides of the Duplex Pump dispense at the same time?**

A. The Duplex Pump can either be set so that both sides of the pump dispense simultaneously (in-phase) or alternating (out-of-phase).
- 5. Q. Does each side of the Duplex Pump have different dispense volumes?**

A. Yes, the Duplex Pump can be customized on each side of the pump independently to meet your desired flow rates.
- 6. Q. Can a non-Fluid Metering stepper controller be used?**

A. Yes, as long as it's compatible with our unit. We always recommend to use our ICST02-2 stepper controller.
- 7. Q. What is the maximum speed of the Duplex Pump?**

A. The recommended max speed is 800 RPM. The stepper motor is rated for higher speeds but is not recommended to go above 800 RPM.
- 8. Q. Can the 2 pump heads be joined together to increase the flow rate?**

A. Yes, you will need a Y adapter used in the outlet side.
- 9. Q. Can the 2 pump heads run at different speeds?**

A. No, since the Duplex operates via 1 single motor, both heads will run at the same speed.
- 10. Q. Can the Duplex Pump be used to address 2 separate processes and requirements or can it be used to mix 2 separate chemicals, ratio mixing?**

A. Yes. Contact us with all your project details and specifications, so our engineering experts can ensure your requirements are met.



Fluid Metering's facility is certified to the ISO 9001:2015 international standard. Product components are manufactured to meet EU RoHS and REACH compliance requirements.