

# ISCO 500D Syringe Pump



**Brand:**  
**Product Code:** isco-500d  
**Availability:** Call for availability

## Description

The 500D syringe pump provides precise, predictable flow and pressure control at flow rates from sub-microliter up to 204 mL/ min. Exceptional low-flow stability at up to 3,750 psi (259 bar) makes this the ideal pump for high pressure applications from deep well core analysis to a wide range of chemical applications.

The D-series controller has a keypad and LCD, as well as built-in and optional interfaces for computer control and other devices.

Programming is easy and flexible, with instant access to menu screens even when the pump is running. This allows you to change operating parameters on the fly. An optional extension cable lets you locate the controller up to 15 meters (50 feet) from the pump. The 500D pump module has a single-ratio drive train with auto-lubricating gears for long life and low maintenance. Special fittings are used to prevent leaks and ensure safety at maximum pressure.

Wetted materials are compatible with most aqueous and organic liquids, corrosive solutions, heated fluids, liquefied gases, viscous fluids, or slurries and pastes.

## Applications

- Precision fluid addition in research and manufacturing processes
- Chemical/Reactant feed in chemical process development, catalyst evaluation, plastic formulation
- Accurate metering of liquefied gases

## Standard Controller Features

- Operating Modes
  - Constant flow or pressure with up to four pumps
  - Gradient LC programming
  - Flow or pressure programming with a single pump
  - Continuous flow or pressure with dual pump
- External Interface
  - RS232/485 serial interface
  - Analog voltage inputs
  - Digital inputs and output

## Specifications

- Capacity: 507.38 mL
- Flow Range

(mL/min): 0.001 µL–204 mL/min

- Flow Accuracy: + 0.5% of setpoint, (Maximum 1.0 µL/min seal leakage)
- Displacement Resolution: 31.71 nL/stop
- Pressure Range: 10–3,750 psi (0.7–258.6 bar)
- Standard Pressure Accuracy: 0.5% FS
- Optional Pressure Accuracy: 0.1% FS
- Wetted Materials (Standard): Nitronic 50, Graphite filled PTFE, TFE, Hastelloy C-276, Inert Polymers
- Plumbing Ports: 1/8" NPT
- Operating Temperature: 5 - 40°C Ambient
- Power Required: 100 VAC, 117 VAC, 234 VAC, 50/60 Hz (specify)
- Dimensions (H x W x D): 102 x 27 x 47 cm (40.3 x 10.7 x 18.4 in)
- Weight: Pump unit - 73.3 lb (33.3 kg) Controller - 6.5 lb (3.0 kg)
- Standards Conformity: EN61326:2013, EN61010-1:2010 Compliant to the European Machinery Directive 2006/42/EC and the European Pressure Equipment Directive (PED) 2014/68/EU