

SyriXus 500x

High Pressure Syringe Pump

The 500x 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 5,000 psi (345 bar) makes this the ideal pump for high pressure applications from deep well core analysis to a wide range of chemical applications.

Ideal for an all purpose pump covering a wide range of chemical feed and core flooding applications.

The SyriXus 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. Control the pump remotely with the separate controller or via remote control.

The 500x 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.

Hastelloy cylinders are available for chemical compatibility of corrosive solutions. Single and continuous valve packages are 100% Hastelloy for full compatibility.

Trust in the Teledyne ISCO SyriXus pumps for proven reliable design. Known for years of performance, it can delivery fluid or pressurized gas for long term experiments. Or hold pressure constant in the system at a simple button click.



SYRIXUS®

Applications:

- Precision fluid addition in research and manufacturing processes for flow chemistry
- Reactant feed in chemical process development, catalyst evaluation
- Plastic extrusion and formulation

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 serial interface
 - Analog voltage inputs
 - Digital inputs and output



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500x Specifications

Pump Module:	500x
Capacity:	507.38 mL
Flow Range (mL/min):	0.001 mL–204 mL/min*
Flow Accuracy:	+ 0.5% of setpoint, (Maximum 1.0 µL/min seal leakage)
Displacement Resolution:	31.71 nL/stop
Pressure Range:	10–5,000 psi (0.7–345 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
Maximum Fluid Temperature:	100 °C
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

*Maximum flow rate is dependent upon operating pressure. (See manual for additional information.)

500x Options & Accessories

- Hastelloy 276 cylinder for added corrosion resistance
- Temperature control jacket (i.e. cylinder cooling for filling with liquefied gas)
- High-temperature and High accuracy pressure transducers and seals up to 200 °C compatible (0.1% linear accuracy)
- Drivers for LabVIEW—National Instruments
- 4–20 mA inputs and outputs for flow rate and pressure control
- Hazardous Location Systems available

Ordering Information

500x Pump Module, Nitronic	68-1240-827
500x Pump Module, Hastelloy	68-1240-828
SyriXus Controller Basic	68-1240-850
SyriXus Electric Valve Controller	68-124-854
SyriXus 0–10 V Controller	68-1240-851
SyriXus 4–20 mA input/output	68-1240-852
Continuous Flow Air Valves	60-1267-014
Continuous Flow Electric Valves	60-1267-015
Single Air Valve	60-1267-013
Single Electric Valve	60-1267-011
Manual Refill and Outlet Package	60-1267-021
High Temperature Package	60-1247-190
Temperature Control Jacket	68-1268-005



Teledyne ISCO

P.O. Box 82531, Lincoln, Nebraska, 68501 USA
Toll-free: (800) 228-4373 • Phone: (402) 464-0231 • Fax: (402) 465-3091

teledyneisco.com



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