

# SyriXus 1000x

## High Pressure Syringe Pump

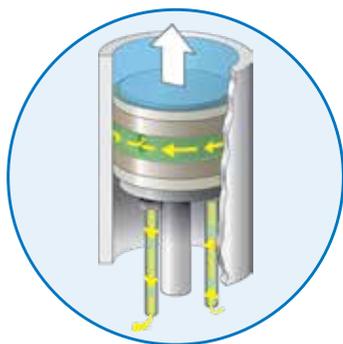
The 1000x syringe pump from Teledyne ISCO delivers accurate, repeatable flows of a wide variety of fluids. This model features 1 liter volume capacity, flow rates up to 408 mL/min, and pressures up to 2,000 psi (138 bar). Cylinder wash ports are standard to protect the seals from deposits.

*Largest available capacity in a single pump for big jobs with up to 1L delivery in a single fill.*

Options for corrosive fluids and high temperature operation make these pumps versatile for many applications. Programmable modes of operation include single pump constant flow or constant pressure for continuous processing, batch feeding, and dual-pump continuous flow for long term applications.

Teledyne ISCO SyriXus pumps handle a wide range of applications that are difficult or impossible with ordinary pumps and have very low operating costs. Typical maintenance is only once-a-year lubrication and seal replacement. Dual-syringe configurations provide stable, continuous flow with alternating delivery and refill. External control and monitoring are supported via serial communication and analog I/O.

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 click of the button.



*The 1000x includes a seal and cylinder wash feature that allows a rinse solution to be circulated between the seals. This protects the seals and cylinder walls against abrasion from salt or other material that may crystallize or precipitate from the solution in the pump.*



# SYRIXUS<sup>®</sup>

### Applications:

- Precision fluid addition in research and manufacturing processes
- Chemical/Reactant feed in chemical process development, catalyst evaluation, plastic formulation
- Single pump deliver up to 1L or unlimited volume with dual continuous flow

### Controller Features:

- Operating Modes
  - Constant flow or pressure with up to four pumps
  - Continuous flow or pressure with dual pump
- External Interface
  - RS232 serial interface
  - Analog voltage inputs
  - Digital inputs and output

## Ordering 1000x Specifications

<b>Pump Module:</b>	1000x
<b>Capacity:</b>	1015 mL
<b>Flow Range (mL/min):</b>	0.001 mL–408 mL/min*
<b>Flow Accuracy:</b>	+ 0.5% of setpoint, (Maximum 1.5 µL/min seal leakage)
<b>Displacement Resolution:</b>	25.38 nL/stop
<b>Pressure Range:</b>	10–2,000 psi (0.7–137.9 bar)
<b>Standard Pressure Accuracy:</b>	0.5% FS, typical at constant temperature
<b>Optional Pressure Accuracy:</b>	0.1% FS, typical at constant temperature
<b>Wetted Materials (Standard):</b>	Nitronic 50, Graphite filled PTFE, TFE, Hastelloy C-276, Inert Polymers
<b>Plumbing Ports:</b>	1/4" NPT
<b>Operating Temperature:</b>	5–40 °C Ambient
<b>Maximum Fluid Temperature:</b>	100 °C
<b>Power Required:</b>	100 Vac, 117 Vac, 234 Vac, 50/60 Hz (specify)
<b>Dimensions (H x W x D)</b>	40.3 x 10.7 x 18.4 in (102 x 27 x 47 cm)
<b>Weight:</b>	Pump unit— 84.9 lb (38.5 kg) Controller— 6.5 lb (3.0 kg)
<b>Standards Conformity:</b>	EN61326:2013, EN61010-1:2010 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.)

## 1000x Options & Accessories

- Temperature control jacket (i.e. cylinder cooling for filling with liquefied gas)
- High-temperature and high-accuracy pressure transducers optional (200 °C maximum, 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

1000x Pump Module, Nitronic.....	68-1240-825
SyriXus Controller Basic.....	68-1240-850
SyriXus 0–10 V Controller.....	68-1240-851
SyriXus 4–20 mA Controller.....	68-1240-852
LabView Driver.....	68-1247-134
10 ft. Extension Cable for SyriXus Controller.....	68-1020-210
Continuous Flow Air Valves.....	60-1267-016
Continuous Flow Electric Valves.....	60-1267-015
Single Air Valve.....	60-1267-017
Single Electric Valve.....	60-1267-011
Manual Refill and Outlet Package.....	60-1267-022
High Temperature Package.....	60-1247-190
Temperature Control Jacket.....	68-1247-115



Continuous  
Flow Air System