

SyriXus 500xv

High Pressure Syringe Pump

The 500xv is able to pump higher viscosity material by reducing the restriction within the pump, specially designed with 3/8" ports at a 45 degree angle. Ball valves are used for automating refill and continuous flow which clear easily.

Designed to pump high viscosity material

The 500xv syringe pump provides precise delivery of high viscosity material up to 204 mL/min. Pulse-less flow is delivered up to 5,000 psi (345 bar) for pumping thick materials.

Viscosity can be reduced by heating the pump chamber. A Temperature Control Jacket can be used to raise the temperature above ambient up to 100 °C. The High Temperature package allows the ability to heat up to 200 °C.

The SyriXus controller has backlit keypad and 4-line LCD display, 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 using driver for LabVIEW™ software, in addition to pump controller.

The 500xv 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.

NEW
HIGHER
PRESSURE
UP TO
5,000 PSI



SYRIXUS®

Applications:

- High viscosity materials
- Slurries
- Column packing
- Bio-fuels from pulp extracts

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

500xv Specifications

Pump Module:	500xv
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, typical at constant temperature
Optional Pressure Accuracy:	0.1% FS, typical at constant temperature
Wetted Materials (Standard):	Nitronic 50, Graphite filled PTFE, TFE, Hastelloy C-276, Inert Polymers
Plumbing Ports:	3/8" 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.)

500xv Options & Accessories

- 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

Ordering Information

500xv Pump Module, Nitronic	68-1240-829
SyriXus Controller Basic	68-1240-850
SyriXus 0-10V Controller	68-1240-851
SyriXus 4-20mA Controller	68-1240-852
LabView Driver	68-1247-134
10 ft. Extension Cable for SyriXus Controller.....	68-1020-210
Continuous Flow Ball Air Valves.....	60-1267-020
High Temperature, High Accuracy Package.....	60-1247-190
Temperature Control Jacket	68-1268-005

Specially designed with 3/8" ports at a 45 degree angle, ball valves are used for automating refill and continuous flow which clear easily.

