

Teledyne Isco Syringe Pumps

Model 65D Syringe Pump

20,000 psi For High Pressure Applications



The 65D syringe pump provides precise, predictable flow and pressure control at flow rates from sub-microliter to 25 ml/min. Exceptional low-flow stability at up to 20,000 psi makes this the ideal pump for high pressure applications from deep well core analysis to multi-dimensional capillary LC using small-bore packed capillary columns.

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 50 feet from the pump.

The 65D 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

- High-pressure experiments requiring precision control
- Proteomics research using nanobore capillary packed columns
- Rock core analyses for hydrocarbon recovery studies in deep-well reservoirs
- Reactant feed in chemical process development, catalyst evaluation, plastic formation

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 outputs



65D Specifications

Pump Module:	65D
Capacity:	67.97 mL
Flow Range (mL/min):	0.00001 - 25 mL/min
Flow Accuracy:	± 0.3% of setpoint, (Maximum 0.25 µl/min seal leakage)
Displacement Resolution:	2.5 nl/step
Motor Stability:	± 0.001% per year
Pressure Range:	0.7 - 1,390 bar (10 - 20,000 psi)
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:	1/4" Autoclave Engineers, type F250C
Operating Temperature:	5 - 40° C Ambient
Power Required:	100 VAC, 117 VAC, 234 VAC, 50/60 Hz (specify)
Dimensions (H x W x D)	103 cm x 27 cm x 45 cm (40.6" x 10.7" x 17.9")
Weight:	Pump unit - 33.2 kg, Controller - 2.96 kg
Standards Conformity:	EN1010-1, EN61326:1998, UL6101A-1, CSA 1010

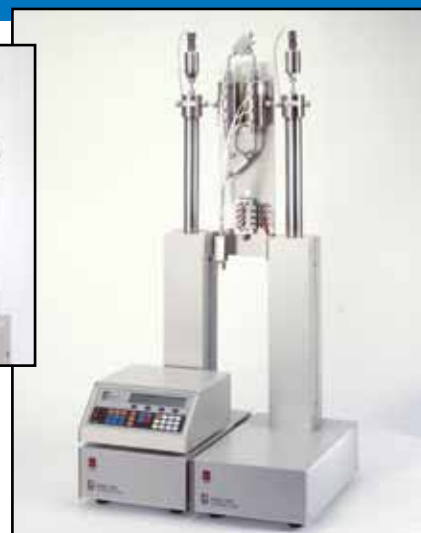
Teledyne Isco is continually improving its products and reserves the right to change specifications without notice.

65D Options & Accessories

- Hastelloy 276 cylinder for added corrosion resistance
- Temperature control jacket (i.e. cylinder cooling for filling with liquefied gas)
- High-temperature pressure transducers (0.1% linear accuracy)
- High-precision pressure transducers (0.1% linear accuracy)
- Drivers for LabVIEW - National Instruments
- 4-20 mA input for flow rate and pressure control



A65D
Continuous
Flow System



65D Ordering Information

A65D (continuous flow system)	67-9000-237
65D Pump Module (only)	68-1240-063
65D Series Controller (only)	68-1240-064
65D Syringe Pump (includes controller).....	67-9000-231

