

260HL_f

Hazardous Location Syringe Pump

The Teledyne ISCO HL_f-Series pumps give you the same accurate, predictable flow and pressure control as our standard D-Series, while conforming to safety standards for use in UL Class I, Division 2, Groups A B C & D, T4 environments. The hazardous location rating is achieved through internal design modifications including the use of brushless DC motors. This approach eliminates the need for purge boxes or other additional safety devices.

517 bar (7,500 psi) approved by UL for Class I, Division 2 Environments

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

The HL_f 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.

Chemical Compatibility

Wetted materials have been tested for compatibility with the following fluids.

- ethane
- butane
- diesel fuel
- isopropanol
- benzene
- ethylene
- butadiene
- jet fuel
- acetone
- ethylbenzene
- propane
- hexane
- ammonia
- acetonitrile
- propylene
- gasoline
- methanol
- heptane
- isobutylene
- methane



Applications:

- Metering and dispensing in experiments and pilot plants where explosive conditions may occur
- Precision fluid addition in research and manufacturing processes
- Chemical/Reactant feed in chemical process development, catalyst evaluation, plastic formulation
- Accurate metering of liquefied gases

Controller Features:

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

260HL_f Specifications

Pump Module:	260HL _f
Capacity:	266 mL
Flow Range (mL/min):	1.0 µL–107 mL/min*
Flow Accuracy:	+ 0.5% of setpoint, (Maximum 0.5 µL/min seal leakage)
Displacement Resolution:	6.65 nL/stop
Pressure Range:	10–7,500 psi (0.7–517 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, Gold, Titanium
Plumbing Ports:	1/8" Valco
Operating Temperature:	5–40 °C Ambient
Power Required:	100 Vac, 117 Vac, 234 Vac, 50/60 Hz (specify)
Dimensions (H x W x D)	39.8 x 10.7 x 18.4 in (101 x 27 x 47 cm)
Weight:	Pump unit—72.3 lb (32.8 kg) Controller—6.5 lb (3.0 kg)
Standards Conformity:	UL 61010-1, ANSI/ISA 12.12.01-2012, CSA C22.2 No. 1010 and No. 213-M1987

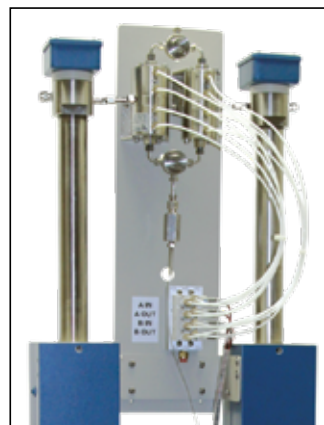
* Maximum flow rate is dependent upon operating pressure.
(See manual for additional information.)

260HL_f Options & Accessories

- Temperature control jacket (i.e. cylinder cooling for filling with liquefied gas)
- Drivers for LabVIEW—National Instruments
- 4-20 mA inputs and outputs for flow rate and pressure control

Ordering Information

260HL _f Pump Module, Nitronic.....	68-1260-015
HL _f Series Controller, Basic	68-1260-013
HL _f Series Controller with 4-20mA (only).....	68-1260-011
Continuous Flow Air Valves, Nitronic.....	60-1247-141
Single Air Valve, Nitronic	60-1247-156
Manual Refill Kit.....	68-1247-077
Manual Outlet Kit.....	68-1247-078
260HL _f High Temperature Package.....	60-5364-418
High Accuracy Package.....	60-5364-486
Temperature Control Jacket	68-1247-047



HL_f Continuous Flow System

