## **SyriXus 1000HLf Syringe Pump**

The Teledyne ISCO HLf-Series pumps give you the same accurate, predictable flow and pressure control as our standard SyriXus pumps, 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.

The 1000HLf 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.

Nitronic 50 Stainless Steel offers the better resistance and strength to standard 316 Stainless Steel. The annealed condition provides strength up to double that of 316 stainless-steel. In the high strength condition, Nitronic 50 can withstand high temperature and sub-zero environments allowing it to be used for critical applications. Nitronic 50 registers a 150 on the Brinell scale of hardness and an 80 on the Rockwell scale of hardness.

All pumps are installed with Standard (graphite impregnated PTFE) seals. Alternative seals are available on the Service Tab. Alternative seals will be included separate and installed by the user.

	68	31260016	Model 1000HLf Pump Module for Class I Div 2 Hazardous Locations. Cylinder holds up to 1 L and can pump from 0.001 to 408 mL/min and up to 2,000 psi (138	
			bar). Must operate with HLf Controller	
Valve Options				
	60	01247143	Continuous Flow Dual Air Valve Package for 1000HLf. Requires pressurized air source. No additional controller options required for air valve operation.	
	60	01247147	Single Air Valve Package for 1000HLf. Requires pressurized air source. No additional controller options required for air valve operation.	
	68	31247117	Manual Refill Valve Kit (1/4" valves) for Model 1000HLf	
	68	31247118	Manual Outlet Valve Kit (1/4" valves) for Model 1000HLf	
Controller Options				
	68	31260011	HLf Series Controller w/ 4-20mA outputs. Comes with 6 output cards. Built in control connections for Digital Inputs/Analog Inputs and Digital Outputs for remote pump control signals and Ethernet connection port. Compatible only with HLf pumps.	
	681	1260013	HLf Series Controller w/Ethernet & USB. Built in control connections for Digital Inputs/Analog Inputs and Digital Outputs for remote pump control signals and Ethernet connection port. Compatible only with HLf pumps.	
Other Accessories				
			Temperature Control Jacket for Model 1000D, 1000HLf and 1000x (water jacket	
	681247115		for temperature control for use with recirculating bath; bath not included).	
	681247134		LabVIEW pump tool kit for Windows with external driver. Includes source code and an executable example program for 4 pump operations. Must be used with	

		LabVIEW 15 and above. Operate with a D-Series or SyriXus controller with			
		software version 2.11.0003 and above.			
	681020210	10 ft. Extension Cable for all D-Series and SyriXus controllers			
Replacement Seals					
	601269039	1000 HL/HLF Standard Piston Seal Replacement Kit			
	601269027	1000 HL/HLF High Temperature Piston Seal Replacement Kit			
Periodic Maintenance Parts					
	601247093	1000D WRENCH PACKAGE			
	601244271	LUBRICATION KIT all models			