## SyriXus 500x Syringe Pump

The 500x syringe pump provides precise, predictable flow and pressure control at flow rates from sub-microliter up to 204 mL/min. Exceptional low-flow stability at up to 5,000 psi (345 bar) makes this the ideal pump for high pressure applications from deep well core analysis to a wide range of chemical applications.

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.

Hastelloy<sup>®</sup> is a nickel-molybdenum alloy. The inclusion of molybdenum makes Hastelloy<sup>®</sup> harder, stronger at high temperatures. Hastelloy<sup>®</sup> has outstanding resistance to highly oxidizing and reducing agents, making it a great choice for moderate to severe corrosive environments. It is commonly used for pipes and valves in the chemical processing and petrochemical industries. It is also used in nuclear reactors and chemical reactors and is excellent for pressure vessels and heat exchangers.

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.

	681240827	Model 500x Pump Nitronic 50 Module. Cylinder holds up to 507 mL and can pump from 0.001 to 204 mL/min and up to 5,000 psi (345 bar). Side mount transducer available - specify on the PO.	
	681240828	Model 500x Hastelloy Pump Module. Cylinder holds up to 507 mL and can pump from 0.001 to 204 mL/min and up to 5,000 psi (345 bar).	
Valve Options			
	601267014	Continuous Flow Dual Air Valve Package (1/8" valves) for SyriXus 500x and 260x pumps. Requires pressurized air source. No additional controller options required for air valve operation.	
	601267015	Continuous flow dual electric valve package (1/8" valves) for SyriXus 1000x, 500x and 260x. Electric Valve controller 681240854 required.	
	601267013	Single air valve (1/8" valve) auto-refill/outlet package for SyriXus 500x and 260x. Requires pressurized air source. No additional controller options required for air valve operation.	
	601267011	Single Electric Valve (1/8" valve) auto-refill/outlet package for SyriXus 1000x, 500x, and 260x. Electric Valve controller 681240854 required.	
	601267021	Manual refill and outlet package for SyriXus 500x and 260x	
Controller Options			
	681240850	Basic Controller for operation of up to 4 SyriXus pumps. Built in control connections for Digital Inputs/Analog Inputs and Digital Outputs for remote pump control signals and Ethernet connection port. Also operates legacy D-Series Pumps other than Hazardous location and 30D models.	

	681240854	Electric Valve Controller for SyriXus pumps. Configured to operate up to 2 pumps with electric valve packages. Built in control connections for Digital Inputs/Analog Inputs and Digital Outputs for remote pump control signals and Ethernet connection port. Also operates legacy D-Series Pumps other than Hazardous location, 65D and 30D models.		
	681240851	Basic Controller with 0-10V output. 6 cards installed. Operation of up to 4 SyriXus pumps. This controller also contains the standard input and output controls of the Basic controller. Also operates legacy D-Series Pumps other than Hazardous location and 30D models.		
	681240852	Basic Controller with 4-20mA output and input. 6 cards installed. Operation of up to 4 SyriXus pumps. This controller is modified to allow 4-20mA INPUT control on the 4 Digital Input connectors as well as the 4 Analog Input connectors. This controller also contains the standard input and output controls of the Basic controller. Also operates legacy D-Series Pumps other than Hazardous location and 30D models.		
Other Accessories				
	681268005	Temperature Control Jacket for Models 500x and 500xv pumps (water jacket for temperature control for use with recirculating bath; bath not included).		
	601247190	High Temperature/High Accuracy conversion kit. Upgrade SyriXus pumps to up to 200C and accuracy 0.1% of full scale (TB17). Compatible with 1000x, 500x, 500xv, 260x SyriXus pumps.		
	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				
	202909156	Standard Replacement Seal for 500X or 500D pumps, Graphite/PTFE.		
	202909356	High Temperature (50 to 200 C) seal for 500X or 500D pumps. Graphite/PTFE.		
	202909256	Low Pressure (2,000 psi max) Seal for 500X or 500D, Graphite/PTFE.		
	202909456	Aqueous seal for 500X or 500D. Ultra-high MW polyethylene (preferred for aqueous solutions).		
	202909157	Ultra-low Bypass Seal for 500X or 500D, Virgin PTFE. NOTE This is the only seal recommended for toxic volatiles such as NH3, HN03, H2S.		
Periodic Maintenance Parts				
	601247101	SyriXus WRENCH PACKAGE for use with 1000x, 500x, 500xv, 260x and 65x		
	601244271	LUBRICATION KIT all models		