

OEM Syringe Pumps NE-500 Starting at \$520

OEM Syringe Pump

NE-500: \$520

OEM Syringe Pump with Stall Detection

NE-501: \$575

High Pressure OEM Syringe Pump

NE-510: \$560

High Pressure OEM Syringe Pump with Stall Detection

NE-511: \$615

Double OEM Syringe Pump

NE-4500: \$650

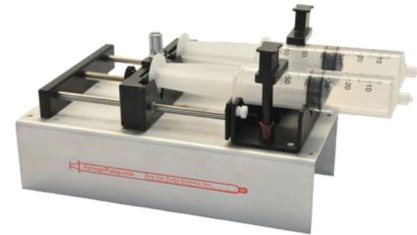
Double OEM Syringe Pump with Stall Detection

NE-4501: \$705

LONG CHASSIS VERSIONS: ADD \$15

BOTTOM COVER ASSEMBLY: OEM-BOTCOVER-ASSBLY: \$25

- Computer controllable: networkable up to 100 pumps
- Stand-alone operation: pre-program the pump with a dispensing program, then operate the pump from an attached Foot Switch, button, or I/O controller
- Add the OEM Starter Kit to run as a fully functional, stand-alone pump.
- Designed for OEM applications, this pump has the same mechanisms and electronics as the NE-1000 aside from the front panel controls.
- Operates from a computer or a foot switch
- Infusion and withdrawal
- Set a single pumping rate and/or dispensing volume
- Program up to 41 pumping phases that change pumping rates, set dispensing volumes, insert pauses, control and respond to external signals, sound the buzzer
- Network, control, and monitor up to 100 pumps with one computer
- Motor stall detection available
- Dispensing accuracy of $\pm 1\%$



For Custom Designed OEM Syringe Pumps please call or e-mail for a quote.



Custom Chassis, Firmware and Mechanical Design. You want it, we'll make it, **no matter how simple or complex**. When others say it can't be done, we say of course **it can be done**. The limits are endless to what we can create for you. We here at New Era have been designing pumps for over ten years for all types of OEM applications.

OEM Syringe Pump Accessories

OEM Starter & Net Kits



Model: OEM-STARTER

Price: \$30

- Allows user to interactively communicate to the pump with a computer
- Includes: power supply, Pump-to-PC network cable and user manual



Model: OEM-NET

Price: \$15

Power supply and secondary cable only. For use when networking two or more OEM NE-500 syringe pumps together. Must use the secondary cable in order to complete this application.

Foot Switch



Model: ADPT-FOOTSW-2

Price: \$35

- Start, stop, or send a signal to a pumping program
- Attach to any of the NE-1000 family pumps to allow remote operation
- Utilizes the TTL logic port on the pump
- Quick and simple setup

USB TO RS-232 CONVERTER CABLE

MODEL: CBL-USB232

PRICE: \$10

****Not For Clinical Use On Humans****



NE-500 & NE-501 Programmable OEM Single Syringe Pumps

Max & Min Flow Rates

Syringe Manufacturer (all names ™)	Syringe (mL)	Inside Diameter (mm)	Maximum Rate (mL/hr)	Minimum Rate (µL/hr)	Maximum Rate (mL/min)				
B-D	1	4.699	53.07	0.73	0.884				
	3	8.585	177.1	2.434	2.952				
	5	11.99	345.5	4.748	5.758				
	10	14.43	500.4	6.876	8.341				
	20	19.05	872.2	11.99	14.53				
	30	21.59	1120	15.4	18.67				
	60	26.59	1699	23.35	28.32				
HSW Norm-Ject	1	4.69	52.86	0.727	0.881				
	3	9.65	223.8	3.076	3.73				
	5	12.45	372.5	5.119	6.209				
	10	15.9	607.6	8.349	10.12				
	20	20.05	966.2	13.28	16.1				
	30	22.9	1260	17.32	21				
	50	29.2	2049	28.16	34.15				
Monoject	1	5.74	79.18	1.088	1.319				
	3	8.941	192.1	2.64	3.202				
	6	12.7	387.6	5.326	6.46				
	12	15.72	593.9	8.161	9.899				
	20	20.12	972.9	13.37	16.21				
	35	23.52	1329	18.27	22.15				
	60	26.64	1705	23.44	28.42				
	140	38	3470	47.7	57.84				
Terumo	1	4.7	53.09	0.73	0.884				
	3	8.95	192.5	2.646	3.208				
	5	13	406.1	5.581	6.769				
	10	15.8	600	8.244	10				
	20	20.15	975.8	13.41	16.26				
	30	23.1	1282	17.63	21.37				
	60	29.7	2120	29.1	35.33				
Poulten & Graf (Glass)	1	6.7	107.8	1.483	1.798				
	2	8.91	190.8	2.622	3.18				
	3	9.06	197.2	2.711	3.288				
	5	11.75	331.8	4.559	5.53				
	10	14.67	517.2	7.107	8.62				
	20	19.62	925.2	12.72	15.42				
	30	22.69	1237	17.01	20.62				
	50	26.96	1746	24.01	29.11				
Steel Syringes	1	9.538	218.6	3.005	3.644				
	3	9.538	218.6	3.005	3.644				
	5	12.7	387.6	5.326	6.46				
	8	9.538	218.6	3.005	3.644				
	20	19.13	879.5	12.09	14.65				
	50	28.6	1965	27.01	32.76				
	Syringe (µL)	Inside Diameter (mm)	Maximum Rate (µL/hr)	Minimum Rate (µL/hr)	SGE Syringe (mL)	Inside Diameter (mm)	Maximum Rate (mL/hr)	Minimum Rate (µL/hr)	
SGE (Glass – Gas Tight)	5	0.343	282.7	0.004	0.25	2.303	12.74	0.176	
	10	0.485	565.3	0.008	0.5	3.257	25.49	0.351	
	25	0.728	1273	0.018	1	4.606	50.99	0.701	
	50	1.03	2549	0.036	2.5	7.284	127.5	1.752	
	100	1.457	5102	0.071	5	10.3	254.9	3.504	
Hamilton Microliter (Glass)	0.5	0.103	25.49	0.001	10	14.57	510.2	7.01	
	1	0.146	51.23	0.001	25	23.03	1274	17.52	
	2	0.206	101.9	0.002	50	27.5	1817	24.98	
	5	0.326	255.4	0.004	100	34.99	2942	40.43	

Specifications

<u>Model</u>	<u>Style</u>	<u>Stall Detection</u>	<u>Number of Syringes</u>	<u>Maximum Syringe Size</u>
NE-1000	Stand-Alone	Yes	1	60 mL; 140 mL partially filled
NE-500	OEM	No	1	60 mL; 140 mL with long chassis
NE-501	OEM	No	1	60 mL; 140 mL with long chassis

Mechanical

Motor type:	Step motor
Motor steps per revolution:	400
Motor to drive screw ratio:	15/28
Drive screw pitch:	20 revolutions/”
Micro-stepping:	1/8 to 1/2 depending on motor speed
Advance per step:	0.2126116 μ m to 0.8504464 μ m depending on motor speed
Dimensions:	8 3/4” x 5 3/4” x 4 1/2” (LxWxH) (Non-OEM versions) (22.86 cm x 14.605 cm x 11.43 cm)
Weight:	3.8 lbs. (1.63 kg)
Allen Wrench	3/32 Hex (Not all models)

Electrical

Power supply type:	External wall adapter, power source specific
Power supply output rating:	12V DC @ 1000 mA
Power connector:	2.1 mm, center positive, DC
Voltage at power connector:	12V DC at full load
Amperage:	750 mA at full load

Operational

Accuracy:	Within 1% error
Reproducibility:	Within 0.1% error
Maximum force:	45 lbs. at minimum speed, 18 lbs. at maximum speed
Syringe inside diameter range:	0.100 to 50.00 mm
Maximum speed:	5.100464828 cm/min
Minimum speed:	0.004204478 cm/hr
Maximum pumping rate:	1699 mL/hr with a B-D 60 mL syringe
Minimum pumping rate:	0.73 μ L/hr with a B-D 1 mL syringe
Number of Program Phases:	41
RS-232 pump network:	100 pumps maximum
RS-232 selectable baud rates:	300, 1200, 2400, 9600, 19200

NE-510 & NE-511

Programmable OEM Syringe Pumps Max and Min Flow Rates

Syringe Manufacturer (all names ™)	Syringe (mL)	Inside Diameter (mm)	Maximum Rate (mL/hr)	Minimum Rate (µL/hr)	Maximum Rate (mL/min)				
B-D	1	4.699	191.1	1.459	3.185				
	3	8.585	637.9	4.868	10.63				
	5	11.99	1244	9.495	20.74				
	10	14.43	1802	13.76	30.04				
	20	19.05	3141	23.97	52.35				
	30	21.59	4035	30.79	67.25				
HSW Norm-Ject	1	4.69	190.4	1.453	3.173				
	3	9.65	806.1	6.151	13.43				
	5	12.45	1341	10.24	22.36				
	10	15.9	2188	16.7	36.47				
	20	20.05	3479	26.55	57.99				
	30	22.9	4539	34.64	75.65				
Monoject	1	5.74	285.2	2.176	4.753				
	3	8.941	692	5.28	11.53				
	6	12.7	1396	10.66	23.26				
	12	15.72	2139	16.33	35.65				
	20	20.12	3504	26.74	58.4				
	35	23.52	4788	36.54	79.81				
Terumo	1	4.7	191.2	1.459	3.187				
	3	8.95	693.4	5.291	11.55				
	5	13	1462	11.17	24.38				
	10	15.8	2160	16.49	36.01				
	20	20.15	3514	26.82	58.57				
	30	23.1	4619	35.25	76.98				
Poulsen & Graf (Glass)	1	6.7	388.5	2.965	6.476				
	2	8.91	687.2	5.244	11.45				
	3	9.06	710.5	5.422	11.84				
	5	11.75	1195	9.119	19.91				
	10	14.67	1862	14.22	31.04				
	20	19.62	3332	25.43	55.53				
Steel Syringes	1	9.538	787.5	6.009	13.12				
	3	9.538	787.5	6.009	13.12				
	5	12.7	1396	10.66	23.26				
	8	9.538	787.5	6.009	13.12				
	20	19.13	3167	24.17	52.79				
	50	28.6	7080	54.03	118				
SGE (Glass – Gas Tight)	5	0.343	1018	0.008	0.25	2.303	45.91	0.351	
	10	0.485	2036	0.016	0.5	3.257	91.82	0.701	
	25	0.728	4587	0.036	1	4.606	183.6	1.402	
	50	1.03	9183	0.071	2.5	7.284	459.2	3.505	
	100	1.457	9999	0.141	5	10.3	918.3	7.007	
Hamilton Microliter (Glass)	0.5	0.103	91.83	0.001	10	14.57	1837	14.03	
	1	0.146	184.5	0.002	25	23.03	4591	35.03	
	2	0.206	367.3	0.003	50	27.5	6546	49.95	
	5	0.326	919.9	0.008	100	34.99	9999	80.86	

Specifications

<u>Model</u>	<u>Style</u>	<u>Stall Detection</u>	<u>Number of Syringes</u>	<u>Maximum Syringe Size</u>
NE-1010	Stand-Alone	Yes	1	60 mL; 140 mL partially filled
NE-510	OEM	No	1	60 mL; 140 mL with long chassis
NE-511	OEM	Yes	1	60 mL; 140 mL with long chassis

Mechanical

Motor type:	Step motor
Motor steps per revolution:	200
Motor to drive screw ratio:	15/28
Drive screw pitch:	20 revolutions/”
Micro-stepping:	1/8 to 1/2 depending on motor speed
Advance per step:	0.4252232 μ m to 1.700892857 μ m depending on motor speed
Dimensions:	8 3/4” x 5 3/4” x 4 1/2” (LxWxH) (Non-OEM versions) (22.86 cm x 14.605 cm x 11.43 cm)
Weight:	3.8 lbs. (1.63 kg)

Electrical

Power supply type:	External wall adapter, power source specific
Power supply output rating:	12V DC @ 1000 mA
Power connector:	2.1 mm, center positive, DC
Voltage at power connector:	12V DC at full load
Amperage:	1000 mA at full load

Operational

Accuracy:	Within 1% error
Reproducibility:	Within 0.1% error
Maximum force:	100 lbs. at minimum speed, 18 lbs. at maximum speed
Syringe inside diameter range:	0.100 to 50.00 mm
Maximum speed:	18.36964 cm/min
Minimum speed:	0.008409 cm/hr
Maximum pumping rate:	6120 mL/hr with a B-D 60 mL syringe
Minimum pumping rate:	1.459 μ L/hr with a B-D 1 mL syringe
Number of Program Phases:	41
RS-232 pump network:	100 pumps maximum
RS-232 selectable baud rates:	300, 1200, 2400, 9600, 19200

NE-4500 & NE-4501

Programmable OEM Syringe Pumps Max and Min Flow Rates

Syringe Manufacturer (all names TM)	Syringe (mL)	Inside Diameter (mm)	Maximum Rate (mL/hr)	Minimum Rate (µL/hr)	Maximum Rate (mL/min)			
B-D	1	4.699	188.1	1.436	3.135			
	3	8.585	627.9	4.791	10.46			
	5	11.99	1224	9.345	20.41			
	10	14.43	1774	13.54	29.56			
	20	19.05	3091	23.59	51.53			
	30	21.59	3971	30.3	66.19			
	60	26.59	6023	45.96	100.3			
HSW Norm-Ject	1	4.69	187.4	1.43	3.123			
	3	9.65	793.4	6.054	13.22			
	5	12.45	1320	10.08	22.01			
	10	15.9	2153	16.44	35.89			
	20	20.05	3425	26.14	57.08			
	30	22.9	4468	34.09	74.46			
	50	29.2	7264	55.43	121			
Monoject	1	5.74	280.7	2.142	4.678			
	3	8.941	681.1	5.197	11.35			
	6	12.7	1374	10.49	22.9			
	12	15.72	2105	16.07	35.09			
	20	20.12	3449	26.32	57.48			
	35	23.52	4713	35.96	78.55			
	60	26.64	6046	46.14	100.7			
	140	38	9999	93.87	205			
Terumo	1	4.7	188.2	1.436	3.136			
	3	8.95	682.4	5.207	11.37			
	5	13	1439	10.99	23.99			
	10	15.8	2126	16.23	35.44			
	20	20.15	3459	26.4	57.65			
	30	23.1	4546	34.69	75.77			
	60	29.7	7515	57.34	125.2			
Poulten & Graf (Glass)	1	6.7	382.4	2.919	6.374			
	2	8.91	676.3	5.161	11.27			
	3	9.06	699.3	5.336	11.65			
	5	11.75	1176	8.975	19.6			
	10	14.67	1833	13.99	30.56			
	20	19.62	3279	25.03	54.66			
	30	22.69	4386	33.47	73.1			
	50	26.96	6192	47.25	103.2			
Steel Syringes	1	9.538	775.1	5.914	12.91			
	3	9.538	775.1	5.914	12.91			
	5	12.7	1374	10.49	22.9			
	8	9.538	775.1	5.914	12.91			
	20	19.13	3118	23.79	51.96			
	50	28.6	6969	53.18	116.1			
SGE (Glass – Gas Tight)	5	0.343	1002	0.008	0.25	2.303	45.18	0.345
	10	0.485	2004	0.016	0.5	3.257	90.38	0.69
	25	0.728	4515	0.035	1	4.606	180.7	1.38
	50	1.03	9039	0.069	2.5	7.284	452	3.449
	100	1.457	9999	0.138	5	10.3	903.9	6.897
Hamilton Microliter (Glass)	0.5	0.103	90.39	0.001	10	14.57	1808	13.8
	1	0.146	181.6	0.002	25	23.03	4518	34.48
	2	0.206	361.5	0.003	50	27.5	6443	49.16
	5	0.326	905.4	0.007	100	34.99	9999	79.59

Specifications

<u>Model</u>	<u>Style</u>	<u>Stall Detection</u>	<u>Number of Syringes</u>	<u>Maximum Syringe Size</u>
NE-4000	Stand-Alone	Yes	2	60 mL; 140 mL partially filled
NE-4500	OEM	No	2	60 mL; 140 mL with long chassis
NE-4501	OEM	Yes	2	60 mL; 140 mL with long chassis

Mechanical

Motor type:	Step motor
Motor steps per revolution:	200
Motor to drive screw ratio:	15/28
Drive screw pitch:	20.32 revolutions/”
Micro-stepping:	1/8 to 1/2 depending on motor speed
Advance per step:	0.41852679 µm to 1.67410714 µm depending on motor speed
Dimensions:	8 3/4” x 5 3/4” x 4 1/2” (LxWxH) (Non-OEM versions) (22.86 cm x 14.605 cm x 11.43 cm)
Weight:	3.8 lbs. (1.63 kg)

Electrical

Power supply type:	External wall adapter, power source specific
Power supply output rating:	12V DC @ 1000 mA
Power connector:	2.1 mm, center positive, DC
Voltage at power connector:	12V DC at full load
Amperage:	1000 mA at full load

Operational

Accuracy:	Within 1% error
Reproducibility:	Within 0.1% error
Maximum force:	100 lbs. at minimum speed, 18 lbs. at maximum speed
Syringe inside diameter range:	0.100 to 50.00 mm
Maximum speed:	18.08035714 cm/min
Minimum speed:	0.008276531 cm/hr
Maximum pumping rate:	6023 mL/hr with a B-D 60 mL syringe
Minimum pumping rate:	1.436 µL/hr with a B-D 1 mL syringe
Number of Program Phases:	41
RS-232 pump network:	100 pumps maximum
RS-232 selectable baud rates:	300, 1200, 2400, 9600, 19200