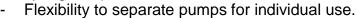


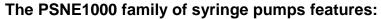
PSNE1000D Dual syringe pump Continuous infusion

Description:

- Two PSNE1000 Family of Pumps Syringe Pumps connected together
- The pumps are often used in dual-pump setups, possibly with check valves for continuous pumping or mixing so that one syringe dispenses while the other reloads.



 Additional models include: PSNE1010D, PSNE4000D, PSNE1600D/1800D and PSNE1002XD



- Built for automation
- Operates stand-alone or from a computer
- Infuses and withdraws
- Applications range from simple infusions to complex pumping programs
- Programmable preset protocols
- Program up to 41 pumping phases: change pumping rates, set dispensing volumes, insert pauses, control and respond to external signals, sound the buzzer.
- RS-232 and TTL logic control interfaces

Network, control, and monitor up to 100 pumps with one computer.

Worldwide power supplies available. Motor stall detection. Non-volatile memory of all parameters and programming. Upgradeable to the X and X2 advanced firmware versions for gradient pumping and increased program memory. Dispensing accuracy of +/-1%. Unlimited lifetime technical support. Two year warranty. Plus many, many more features!



Dual pump plumbing kit:

- For use with our continuous infusion system or dual infusion system
- Provides a dual check valve for two syringes, withdraw will pull fluid from a reservoir and infusion will output into a separate line
- The kit is pre-assembled, all you need to do is plug in the syringes
- Each dual check valve uses 6" of 1/8" tubing to connect to a Y connector, one for reservoir and one for output; each Y-connector has 5' of tubing

to make connections to your application. Two 60cc Terumo syringes are included.

Custom Applications

For specialized and OEM applications, contact us!

Custom modifications can be made to the mechanics and/or the firmware.

Cost effective, easy to use, fully programmable fluid handlers Visit our website for our full range of syringe pumps and accessories

www.syringepump.nl



Specifications

Mechanical & electrical

Syringe sizes: Up to 60 mL (140 mL partially filled)

Number of syringes:

Motor type: Step motor

Motor steps per revolution: 400

Micro-stepping: 1/8 to 1/2 depending on motor speed

Advance per step: 0.2126 µm to 0.8504 µm depending on motor

speed

Motor to drive screw ratio: 15/28

Drive screw pitch:

DC connector:

Voltage at DC connector:

Amperage:

20 revolutions/inch
2.1 mm, center positive
12V DC at full load
750 mA at full load

Power supply type: Unregulated linear external wall adapter,

country and power source

specific

Power supply output rating: 12V DC @ 800 mA

Dimensions: 22.86 cm x 14.605 cm x 11.43 cm

Weight: 1.63 kg
Allen wrench 3/32 hex

Operational

Maximum speed 5.1005 cm/min Minimum speed 0.004205 cm/hr

Maximum pumping rate 1699 mL/hr with a B-D 60 mL syringe Minimum pumping rate 0.73 µL/hr with a B-D 1 mL syringe

Maximum force 35 lbs. at minimum speed, 18 lbs. at maximum

speed

Number of program phases 41

RS-232 pump network 100 pumps maximum

PS-232 selectable baud rates 300, 1200, 2400, 9600, 19200

Syringe inside diameter range: 0.100 to 50.00 mm

Syringe munafacturer	Syringe (µL)	Inside diameter (mm)	Maximum rate (µL/hr)	Minimum rate (µL/hr)
SGE	5	0.343	209.2	0.004
(Gas tight)	10	0.485	418.3	0.008
	25	0.728	942.5	0.018
	50	1.03	1886	0.036
	100	1.457	3775	0.071
Hamilton	0.5	0.103	18.86	0.001
	1	0.146	37.91	0.001
	2	0.206	75.47	0.002
	5	0.326	189	0.004

Cost effective, easy to use, fully programmable fluid handlers Visit our website for our full range of syringe pumps and accessories



Syringe	Syringe	Inside	Maximum	Minimum	Maximum
munafacturer	(mL)	diameter	rate	rate (µL/hr)	rate
		(mm)	(mL/hr)		(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	1	4.69	52.86	0.727	0.881
Norm-Ject	3	9.65	223.8	3.076	3.73
	5	12.45	372.5	5.116	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	47.69	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 29.13	21.37
D 4	60	29.7	2120		35.33
Poulten	1	6.7	107.8	1.483	1.798
& Graf	2	8.91	190.8	2.622	3.18
(Glass)	<u>3</u>	9.06 11.75	197.2	2.711	3.288
	10	14.67	331.8 517.2	4.559 7.107	5.53 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	1	9.538	218.6	3.005	3.644
Steel	3	9.538	218.6	3.005	3.644
Symiges	5	12.7	387.6	5.326	6.46
	8	9.538	218.7	3.005	3.644
	20	19.13	879.5	12.09	14.65
	50	28.6	1965	27.01	32.76
SGE	0.25	2.303	9.432	0.176	0.157
(Gas tight)	0.25	3.257	18.86	0.176	0.137
(Odd tigrit)	1	4.606	37.73	0.701	0.629
	2.5	7.284	94.36	1.752	1.573
	5	10.3	188.6	3.504	3.143
	10	14.57	377.5	7.01	6.292
	25	23.03	943.2	17.52	15.72
	50	27.5	1344	24.98	22.4
	100	34.99	2177	40.43	36.28
	100	31.00	2111	10.10	00.20

Cost effective, easy to use, fully programmable fluid handlers Visit our website for our full range of syringe pumps and accessories

www.syringepump.nl