

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	1799	9.977	29.99				
	3	8.585	6007	33.31	100.1				
	5	11.99	9999	64.96	195.3				
	10	14.43	9999	94.09	282.8				
	20	19.05	9999	164	493				
	30	21.59	9999	210.7	633.2				
	60	26.59	9999	319.5	960.5				
HSW Norm-Ject	1	4.69	1792	9.939	29.88				
	3	9.65	7590	42.08	126.5				
	5	12.45	9999	70.04	210.5				
	10	15.9	9999	114.3	343.4				
	20	20.05	9999	181.7	546.1				
	30	22.9	9999	237	712.4				
	50	29.2	9999	385.3	1158				
Monoject	1	5.74	2685	14.89	44.76				
	3	8.941	6516	36.13	108.6				
	6	12.7	9999	72.88	219.1				
	12	15.72	9999	111.7	335.7				
	20	20.12	9999	183	549.9				
	35	23.52	9999	250	751.5				
	60	26.64	9999	320.7	964.1				
	140	38	9999	653	1961				
Terumo	1	4.7	1800	9.982	30				
	3	8.95	6529	36.2	108.8				
	5	13	9999	76.37	229.5				
	10	15.8	9999	112.8	339.1				
	20	20.15	9999	183.5	551.5				
	30	23.1	9999	241.2	724.9				
	60	29.7	9999	399	1198				
Poulten & Graf (Glass)	1	6.7	3659	20.29	60.98				
	2	8.91	6471	35.88	107.8				
	3	9.06	6690	37.09	111.5				
	5	11.75	9999	62.39	187.5				
	10	14.67	9999	97.24	292.3				
	20	19.62	9999	174	522.9				
	30	22.69	9999	232.7	699.4				
Steel Syringes	1	9.538	7415	41.11	123.5				
	3	9.538	7415	41.11	123.5				
	5	12.7	9999	72.88	219.1				
	8	9.538	7415	41.11	123.5				
	20	19.13	9999	165.4	497.1				
	50	28.6	9999	369.6	1111				
		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	9589	0.054	0.25	2.303	432.3	2.397	
	10	0.485	9999	0.107	0.5	3.257	864.6	4.794	
	25	0.728	9999	0.24	1	4.606	1729	9.586	
	50	1.03	9999	0.48	2.5	7.284	4324	23.98	
	100	1.457	9999	0.96	5	10.3	8647	47.94	
Hamilton Microliter (Glass)	0.5	0.103	864.7	0.005	10	14.57	9999	95.92	
	1	0.146	1737	0.01	25	23.03	9999	239.7	
	2	0.206	3459	0.02	50	27.5	9999	341.8	
	5	0.326	8662	0.049	100	34.99	9999	553.2	

1. Specifications

1.1 Mechanical & Electrical

<u>Model</u>	<u>Style</u>	<u>Stall Detection</u>	<u>Number of Syringes</u>	<u>Maximum Syringe Size</u>
NE-1060	Stand-Alone	No	1	60 mL; 140 mL partially filled

Motor type: Step motor
Motor steps per revolution: 200
Motor to drive screw ratio: 44/15
Drive screw pitch: 16 revolutions/”
Micro-stepping: 1/8 to 1 depending on motor speed
Advance per step: 2.9104167µm to 23.283333 µm depending on motor speed

Power connector: 2.1 mm, center positive, DC
Voltage at power connector: 24V DC at full load
Amperage: 1000 mA at full load
Power supply type: External wall adapter, country and power source specific
Power supply output rating: 24V DC @ 1000 mA

Dimensions: 8 3/4” x 5 3/4” x 4 1/2” (LxWxH)
(22.86 cm x 14.605 cm x 11.43 cm)

Weight: 3.8 lbs. (1.63 kg)

1.2 Operational

Maximum force: 15 lbs. at minimum speed, 5 lbs. at maximum speed

Syringe inside diameter range: 0.100 to 50.00 mm
Maximum speed: 173.0477419 cm/min
Minimum speed: 0.05755463 cm/hr
Maximum pumping rate: 960.5 mL/min with a B-D 60 mL syringe
Minimum pumping rate: 9.977 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