

Model: NE-300 Single Syringe Pump
Maximum and Minimum Flow Rates

Mfgr.	Syringe (cc)	ID (mm)	Max Rate	Min Rate	Max Rate			
B-D	1	4,699	39,27	0,73	0,6545			
	3	8,585	131	2,434	2,184			
	5	11,99	255,6	4,748	4,261			
	10	14,43	370,3	6,876	6,172			
	20	19,05	645,4	11,99	10,75			
	30	21,59	829	15,4	13,81			
HSW Norm-Ject	60	26,59	1257	23,35	20,95			
	1	4,69	39,11	0,727	0,6519			
	3	9,65	165,6	3,076	2,76			
	5	12,45	275,6	5,119	4,954			
	10	15,9	449,6	8,349	7,493			
	20	20,05	714,9	13,28	11,91			
Monoject	30	22,9	932,6	17,32	15,54			
	50	29,2	1516	28,16	25,27			
	1	5,74	58,59	1,088	0,9766			
	3	8,941	142,1	2,64	2,369			
	6	12,7	286,8	5,326	4,78			
	12	15,72	439,4	8,161	7,324			
Terumo	20	20,12	719,9	13,37	11,99			
	35	23,52	983,8	18,27	16,39			
	60	26,64	1262	23,44	21,03			
	140	38,00	2568	47,69	42,8			
	1	4,7	39,28	0,73	0,6547			
	3	8,95	142,4	2,646	2,374			
Air-Tite	5	13	300,5	5,581	5,009			
	10	15,8	443,9	8,244	7,399			
	20	20,15	722,1	13,41	12,03			
	30	23,1	949	17,63	15,81			
	60	29,7	1568	29,13	26,14			
	10	15,9	449,6	8,349	7,493			
Cadence	20	20,25	729,2	13,55	12,15			
	30	22,5	900,3	16,72	15			
	50	29	1495	27,78	24,92			
		8,91	141,1	2,622	2,353			
SGE (Glass - Gas Tight)	3	8,91	141,1	2,622	2,353			
	5	11,71	243,8	4,528	4,064			
	10	14,65	381,7	7,088	6,361			
	20	19,56	680,4	12,64	11,34			
	30	22,7	916,4	17,02	15,27			
	50	28,02	1396	25,93	23,27			
	Syringe (µl)	ID (mm)	Max Rate	Min Rate	SGE Syringe	ID (mm)	Max Rate	Min Rate
Hamilton Micro-litre (Glass)	5	0,343	209,2	0,004	0,25	2,303	9,432	0,176
	10	0,485	418,3	0,008	0,5	3,257	18,86	0,351
	25	0,728	942,5	0,018	1	4,606	37,73	0,701
	50	1,03	1886	0,036	2,5	7,284	94,36	1,752
	100	1,457	3775	0,071	5	10,3	188,6	3,504
Hamilton Micro-litre (Glass)	0,5	0,103	18,86	0,001	10	14,57	377,5	7,01
	1	0,146	37,91	0,001	25	23,03	943,2	17,52
	2	0,206	75,47	0,002	50	27,5	1344	24,98
	5	0,326	189	0,004	100	34,99	2177	40,43

Specifications

Mechanical & Electrical

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

Number of syringes: 1

Motor type: Step motor

Motor steps per revolution: 400

Microstepping: 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: 20 revolutions/”

DC connector: 2.1 mm, center positive

Voltage at DC connector: 12V DC at full load

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

Weight: 3.6 lbs. (1.63 kg)

Allen Wrench 3/32 Hex

Operational

Maximum speed: 3.7742 cm/min

Minimum speed: 0.004205 cm/hr

Maximum pumping rate: 1257 ml/hr with a B-D 60 cc syringe

Minimum pumping rate: 0.73 μL /hr with a B-D 1 cc syringe

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

Syringe inside diameter range: 0.100 to 50.00 mm