



NEMESYS LOW PRESSURE SYRINGE PUMP

Description

The powerful and modular NEMESYS Low Pressure syringe pump is a pulsation-free dosing unit for high-precision dosing tasks of either single or multiple fluid streams in the range of milliliter down to picoliter.

Connect up to 8 of these pump modules to one BASE 120 module or up to 40 to one BASE 600! Each module comprises an automatic 3/2-way solenoid valve which enables automated refilling cycles or long term continuous flow operation.



Flow Performance

Syringe	Parameter			
	14:1* Gear Box		29:1 Gear Box	
	Flow Rate Min [nl/min]	Flow Rate Max [ml/min]	Flow Rate Min [nl/min]	Flow Rate Max [ml/min]
10 µl	0.012	0.06	0.006	0.03
250µl	0.290	1.58	0.143	0.76
1 ml	1.1	6.3	0.6	3.0
2.5 ml	2.9	15.8	1.4	7.6
5 ml	5.9	31.6	2.8	15.2
10 ml	11.8	63.3	5.7	30.5
50 ml	59.2	316.4	28.5	152.6

other volumes available on request

Valve Configuration

Materials	PEEK* / PCTFE, FFPM* / EPDM
Fluidic Port	¼"-28 UNF (others on request)
Pressure Limitation	3 bar* / 6 bar
Media Temperature	2 – 40 °C* / 0 – 50 °C

Mechanical Data

Weight 1.3 kg
 Dimensions (L x W x H)..... 310 x 47 x 56 mm

Environment

Operating Temperature..... 0 – 45 °C
 Storage Temperature..... -40 – 75 °C
 Operating Humidity..... 20 – 80 %, Noncondensing
 Storage Humidity..... 20 – 80 %, Noncondensing

Electrical Data

Peak Power Consumption..... 14.5 W
 Power Supply Voltage (Input)..... 24 V DC

Interfaces

CAN..... max. 1 Mbit/s
 RS232 max. 115200 bit/s

Module Performance

Max. Pusher Velocity..... 6 mm/s*
 Min. Pusher Velocity..... 1 nm/s*
 Min. Pusher Travel..... 3.5 mm
 Max. Linear Force..... 290 N / 65 lbs

Module Configuration

Gear Box Translation..... 14:1* / 29:1
 Syringe Holder (Syr. Diameter) 6–30* / 40 mm
 Optional I/O Port (12 Pin)..... 12 bit

*default configuration



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NOTES
