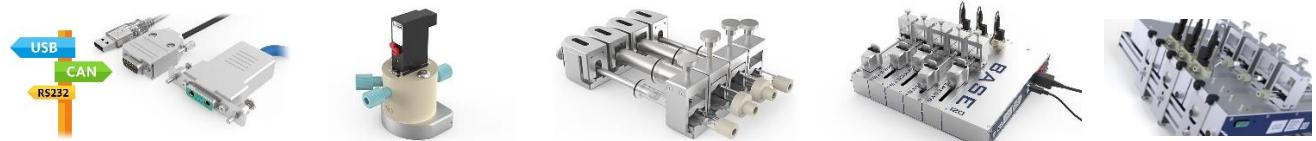


## NEMESYS LOW PRESSURE SYRINGE PUMP

### DESCRIPTION

The neMESYS pump doses liquids with extreme accuracy down into the nanoliter range. Special motors inside the pump move the syringe piston without vibration and thereby allow liquids to be delivered extremely smoothly. neMESYS follows a modular design concept and adapts to your needs. You can even combine multiple pumps. In this way your dosing system can grow along with your application. Versatile operation modes are provided by the intuitive control software, e.g. discrete volume injection, long-term continuous injection or custom injection task (script based).



### 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
250 µl	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* / FFFPM* / EPDM / FKM
Fluidic Port	1/4"-28 UNF (others on request)
Pressure Limitation	3 bar* / 6 bar / 10 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 %, non-condensing  
 Storage Humidity ..... 20 – 80 %, non-condensing

### 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 ..... 17 nm  
 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 res. (12 Pin) ..... 12 bit

\*default configuration