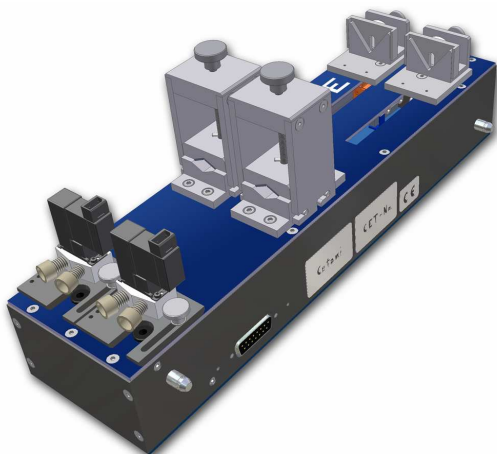


NEMESYS DOUBLE

High Precision Syringe Pump

Features

The DOUBLE-module – two independent dosing units offer the same dosing performance like two SINGLE-modules but at less space and costs. Connect up to 6 of these pulsation-free high-precision dosing units to a STARTER-module or up to 16 units to a BASE-module.



Mechanical Data

Weight2,7 kg
Dimensions (L x B x H) 310 x 94 x 126 mm

Electrical Data

Power Supply Voltage9 – 24 VDC
Dosing Unit Current typical at 24 VDC0,6 A
Dosing Unit Current peak at 24 VDC1,2 A

Environment

Operating Temperature-10°C to 45°C
Storage Temperature-40°C to 45°C
Operating Humidity20% to 80%, non-condens.
Storage Humidity20% to 80%, non-condens.

Interfaces

CANmax. 1 Mbit / s
RS-232max. 115200 bit/s

Configuration

Gear14,1 (optional 1 / 23,7 / 29,2)
3-Way-Valvesoptional
Syringes outer diameter6 to 30 mm
Syringes stroke62 mm
Drives1 or 2 independent drives

Valve

Body materialPEEK
Seal materialFFPM (EPDM, FPM)
Temperature media10 to +40°C
Viscositymax. 20 mm²/s
Internal Volume< 13 µl
OrificeDN 0.6 mm or 1,35 mm
Port connectionFlange, UNF 1/4"-28

Dosing Performance

Gear	1,0	14,1*	23,7	29,2
Pusher Velocity min (nm/s)	833,33	59,26	35,20	28,58
Pusher Velocity max (mm/s)	16,67	5,93	3,52	2,86
Smallest step (µm)	0,488	0,035	0,021	0,017
Step Rate min. (step/sec)	1,71	1,71	1,71	1,71
Pusher Force max. (N)	25	290	290	290
Syringe 0,5 µl / 60 mm stroke				
Flow Rate min (pl/s)	6,944	0,494	0,293	0,238
Flow Rate pulsation-free min (nl/s)	0,139	0,010	0,006	0,005
Flow Rate max (µl/s)	0,139	0,049	0,029	0,024
Dosing Vol. min (nl) = 10 steps	0,041	0,003	0,002	0,001
Syringe 100 µl / 60 mm stroke				
Flow Rate min (nl/s)	1,389	0,099	0,059	0,048
Flow Rate pulsation-free min (nl/s)	27,778	1,975	1,173	0,953
Flow Rate max (µl/s)	27,778	9,877	5,866	4,763
Dosing Vol. min (nl) = 10 steps	8,138	0,579	0,344	0,279
Syringe 25 ml / 60 mm stroke				
Flow Rate min (µl/s)	0,347	0,025	0,015	0,012
Flow Rate pulsation-free min (µl/s)	6,944	0,494	0,293	0,238
Flow Rate max (ml/s)	6,944	2,469	1,467	1,191
Dosing Vol. min (µl) = 10 steps	2,035	0,145	0,086	0,070

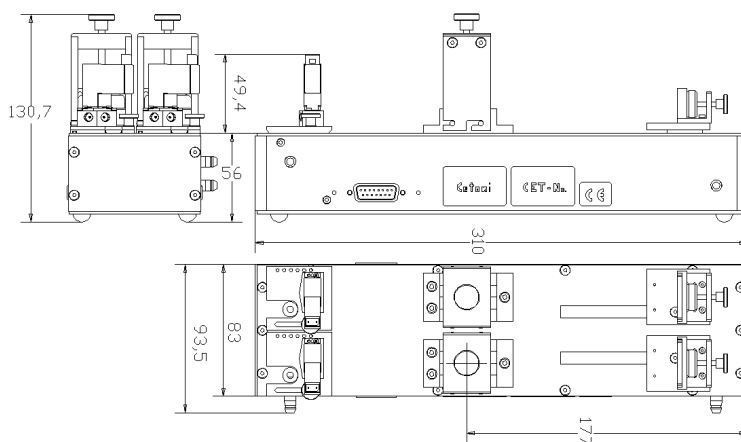
*standard configuration

Valve options

Orifice	Working Pressure (max)	Materials
DN 0.60 mm*	3 bar	FFPM / EPDM / FPM
DN 1.35 mm	1 bar	FFPM / EPDM / FPM

* standard configuration

Mechanical Drawing



2008-07-22

cetoni GmbH Phone: +49 36602 338 0
Am Wiesenring 6 Fax: +49 36602 338 11
07554 Korbussen Email: info@cetoni.de
Germany www.cetoni.de

