

Low pressure series

Console drive module m_{zr}[®]-S06

Digital dispensing drive with remote control



- **compact chassis**
diecast small aluminum chassis, powder coated
- **easy handling**
local/remote operation via top control panel or rear external connectors
- **dosing software**
Windows[®] based software for all operating parameters
- **precision flow**
repeatability better 1 %
- **comfortable interfaces**
serial RS-232, analog 0-10 V
- **m_{zr}-pump inside**
low pressure series m_{zr}-2521, m_{zr}-2921 or m_{zr}-4622

The console drive module m_{zr}-S06 can be used for versatile dispensing tasks in the low flow range together with low pressure m_{zr}-pumps. The microcontroller based drive enables precise local pump control with a 10-turn potentiometer.

Speed and running time can be shown on the digital display. Alternatively the pump can be remotely controlled with an external analog 0–10 V signal or by a PC. To set all operating parameters including calibration, ramp, step, speed, dispense/pause

times and fluid directions a PC program is included. The high-quality stable diecast aluminum chassis is powder coated and offers a reliable protection of the control elements. A power supply 115/230 V AC is included.

Applications

- Laboratory
- Assembly

Technical data

Chassis	diecast aluminum chassis, powder coated
Speed adjusting	10-turn potentiometer
Drive speed range	100 – 6000 U/min (min. 1 U/min *)
Display	rpm or running time
Adaption of pump	pump mounted directly into the chassis
Drive	DC-motor with graphite brushes
Control	16-bit microcontroller
Voltage	24 V DC, DIN 45323 socket
Analog interface	0–10 V, DIN 45321 socket 5-poles
Serial interface	RS-232, SUB-D plug 9-poles
Memory	7936 bytes
Supply	external power supply 100 – 240 V AC
Protection class	IP 41
Measurements (L x W x H)	154 x 110 x 45 mm
Weight	approx. 630 g

Customized solutions on request.

* with accessories

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Operation

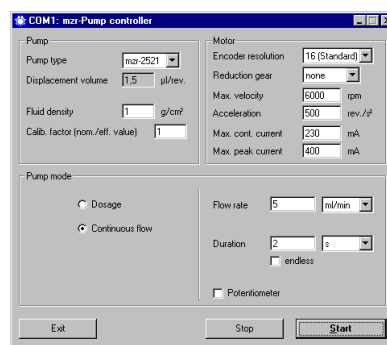
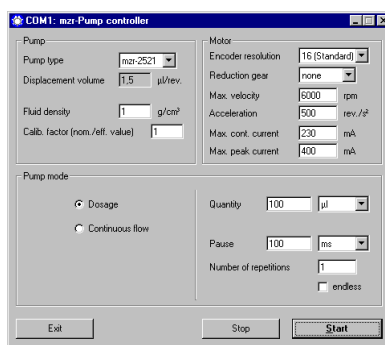


The top panel includes the on/off switch together with a fine tuning potentiometer for the manual flow control. A low pressure series pump is mounted inside the chassis.



A switch enables local or remote control via the top mounted potentiometer or the rear 0–10 V external signal or RS-232 for a PC.

Software



The included PC program »mizr-Pump controller« allows calibration, programming of volumes, flow rates, pause times, cycle numbers and dosage time and setting of drive parameters. Displacement volume and flow values can be selected for standard mizr-pumps. Simple dispensing tasks can be programmed.

Item number

67 05 01 00	Console drive module mizr-S06 (<i>without pump</i>) for pumps mizr-2521, mizr-2921 or mizr-4622, zero-modem cable, external power supply, software, »mizr-pump controller«
11 01 01 01	low pressure series pump mizr-2521, smallest dosage volume 0.25 µl, flow rate max. 9 ml/min, 0–1,5 bar, slip fittings
11 02 01 01	low pressure series pump mizr-2921, smallest dosage volume 0.5 µl, flow rate max. 18 ml/min, 0–3 bar, slip fittings
11 04 01 01	low pressure series pump mizr-4622, smallest dosage volume 2 µl, flow rate max. 72 ml/min, 0–5 bar, slip fittings

Accessories

Fluidic accessories
Reduction gear
Alternative drives

tubes, filters etc.
 reduces speed for small volume dispensing and the metering of more viscous liquid
 motor with digital encoder with 256 impulses/turn for higher uniformity and precision at low rotational speeds

Micro annular gear pumps (and housings) are protected by assigned patents: EP 852 674 B1, US 6,179,596, US 6,520,757 B1, DE 198 43 161. In the US, Europe and Japan are additional patents pending. »mizr« is a registered German trademark of HNP Mikrosysteme GmbH.