

High performance series

Console drive module mzr[®]-S05

Digital dispensing drive with remote control



- **compact chassis**
diecast small aluminum chassis, powder coated
- **easy handling**
local/remote operation via front 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
- **microcontroller based drive**
EC-servomotor and digital control

The console drive module mzr-S05 can be used for versatile dispensing tasks in the low flow range together with all standard high performance mzr-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
- Packaging

Technical data

Chassis	diecast aluminum chassis, powder coated
Speed adjusting	10-turn potentiometer
Drive speed range	1 – 6000 rpm
Display	rpm or running time
Adaption of pump/pump head	pump head mzr-2900 and mzr-4600 are mounted directly onto the chassis. pump mzr-7205 and console module are connected with a remote controller cable.
Drive	EC-servomotor, 24 V DC, 44 W
Control	integrated 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 115/230 V AC
Protection class	IP 41
Measurements (L x W x H)	174 x 112 x 92 mm
Weight	approx. 1.5 kg

Subject to technical changes.

Contact

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Operation

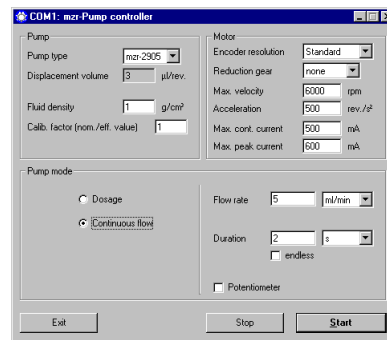
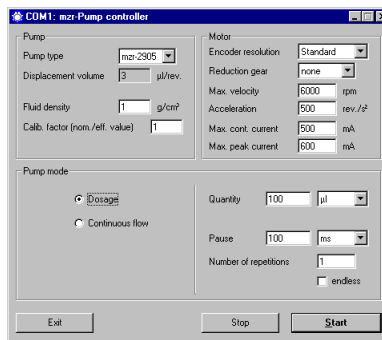


The front panel covers the on/off switch together with a fine tuning potentiometer for the manual flow control. Either a pump head is mounted on the drive or the panel hosts a connector for the pump connecting cable.



A switch enables local or remote control via the front potentiometer or the rear 0–10 V external signal or RS-232 for either PC or SPC.

Software



The included PC program »mzi-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 mzi-pumps. Simple dispensing tasks can be programmed.

Item number

67 05 02 00
10 01 01 00
10 02 01 00
67 05 02 01
10 03 01 05
10 03 01 06

Console drive module mzi-505 (*without pump head*) for pump heads mzi-2900 and mzi-4600, zero-modem cable, external power supply, software, »mzi-pump controller«
Pump head mzi-2900, high performance series, smallest dosage volume 0.5 µl, flow 0.003–18 ml/min, 0–30 bar (0–435 psi) with oil, fluid connection 1/4" -28 UNF
Pump head mzi-4600, high performance series, smallest dosage volume 2 µl, flow 0.012–72 ml/min, 0–50 bar (0–725 psi) with oil, fluid connection 1/4" -28 UNF
Console drive module mzi-505E (*without pump*) for pump mzi-7205, zero-modem cable, external power supply, software, »mzi-pump controller«
Pump mzi-7205, smallest dosage volume 5 µl, flow 0.048–288 ml/min, 0–40 bar (0–580 psi), fluid connection on the face M10 x 1.0
Pump mzi-7205, smallest dosage volume 5 µl, flow 0.048–288 ml/min, 0–40 bar (0–580 psi), lateral fluid connection 1/8" NPT internal thread

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. »mzi« is a registered German trademark of HNP Mikrosysteme GmbH.