

Product information

S-F10 · Controller



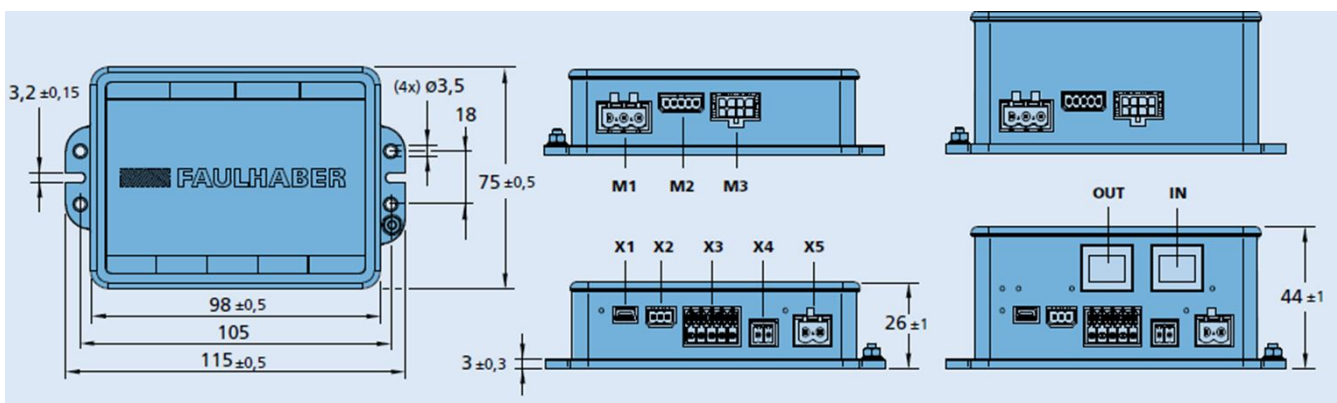
Description

The controller S-F10 is recommended for high requirements in control of discrete dosage and continuous delivery tasks in combination with mzs-pumps mzs-7208, mzs-7208X1, mzs-11508 and mzs-11558. The microcontroller allows speed and position control for highly accurate dosage. The compact design offers flexible installation. Process control link can be established via a RS-232, CANopen or EtherCAT interface. Motor speed or flow rate can be set either by analog inputs (± 10 V). Programs for dosage control can be saved in the memory.

Advantages

- Pump controller for discrete dosage and continuous delivery
- 4-Q-DC servo amplifier in compact housing
- Digital encoder regulator
- 2 analog inputs ± 10 V
- 3 digital inputs, opto-decoupled
- 2 digital outputs
- LED status indicator
- Cable set for mzs-pumps
- EEPROM memory
- Interface USB/RS-232, USB/CANopen, USB/RS-232/EtherCAT

Dimensions



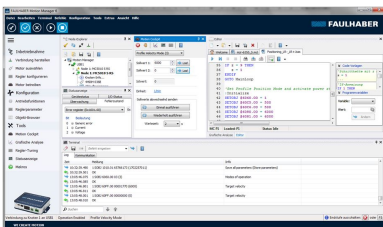
Technical data

Control	PI-controller, speed and position control
Supply voltage	48 V DC (0 – 50 V)
Backup supply voltage for logic	24 (12 – 50 V) V DC
Max. power output	480 W
Max. continuous output current	10 A
Max. peak output current	30 A (< 3 s)
Speed adjustment	1 – 6000 rpm
Voltage	terminal screw, 2 pole (Motor) terminal screw, 2 pole (Controller)
Pump connector	terminal screw 3-pols, Connector Hall sensors 5-pols, connector Encoder 8-pols
Analog inputs for motor speed	2, voltage signal ± 10 V
Digital inputs	3, TTL bzw. PLC
Digital outputs	2, max. UL / 0,7 A
Interface	USB / RS-232, CANopen, EtherCAT
Program memory	8 customized programs
Operating temperature range	-40 ... +85 °C (32 ... 104 °F)
Protection class	IP 20
Mounting	along the side or along the back
Dimensions (L x W x H)	approx. 115 x 75 x 26 (44) mm
Weight	approx. 230 (270) g

Notice

Even if single parameters are within the indicated performance range of technical data, certain parameter combinations may not be achievable. Single parameters may exceed their indicated performance range under adequate circumstances. For detailed evaluation please contact HNP Mikrosysteme. Actual performance may vary. Specifications are subject to change without notice. This document is subject to change without notice.

Software



All motor parameters for pump control can be set and saved with the software »Motion Manager 6« operating under Windows®. The program language is IEC-based. Dosage programs can easily be typed on a computer and transferred to the EEPROM. Several sample programs are supplied such as the triggering of different dosage programs with the internal digital inputs.

Patents and trademarks

Micro annular gear pumps (and housings) are protected by assigned patents: EP 1 354 135 B1; US 7,698,818 B2; DE 10 2011 001 041 B4; CN 103 348 141 B; US 10,012,220 B2; CN 103 732 921 B; US 9,404,492 B2; US 6,520,757 B1.

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