

## Product information

### S-KB-4 · Controller



#### Description

The controller S-KB-4 is recommended for continuous flow control in combination with micro annular gear pump mzs-7241. The 2-Q-DC servo amplifier enables to control the constancy of flow rate via motor speed using the hall sensors of the brushless DC-motor. Speed can be adjusted with an external voltage signal (0 ... 10 V).

#### Advantages

- Pump controller for continuous delivery
- Good value 2-Q-DC servo amplifier
- For brushless DC-motor with digital hall sensors
- Compact aluminum housing
- Speed set with external voltage signal or external potentiometer
- Current delimiter
- Screw terminal for plug-in of mzs-pump

## Technical data

|                                |   |
|--------------------------------|---|
| Controller                     | PI regulator for motor speed  |
| Supply voltage                 | 24 V DC (5 – 28 V)  |
| Max. continuous output current | 4A  |
| Max. peak output current       | 6 A   |
| Velocity range                 | 500 - 6,000 rpm   |
| Voltage                        | screw terminal  |
| Pump connector                 | screw terminal  |
| Input for motor speed »U_in«   | voltage signal 0 ... 10 V; external potentiometer 10 k?             |
| Direction input »DIR«          | Right direction: low (0 ... 1 V); left direction: high (4 V ... UB) |
| Error output »FG«              | Open collector max. UB / 15 mA; no Error: high level                |
| Operating temperature range    | 0 ... +60 °C (+140 °F)  |
| Protection class               | IP 20   |
| Dimensions (L x W x H)         | approx. 65 x 58 x 22 mm   |
| Weight                         | approx. 160 g   |
| Remarks                        | Subject to technical changes.                                       |

### 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.

## 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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