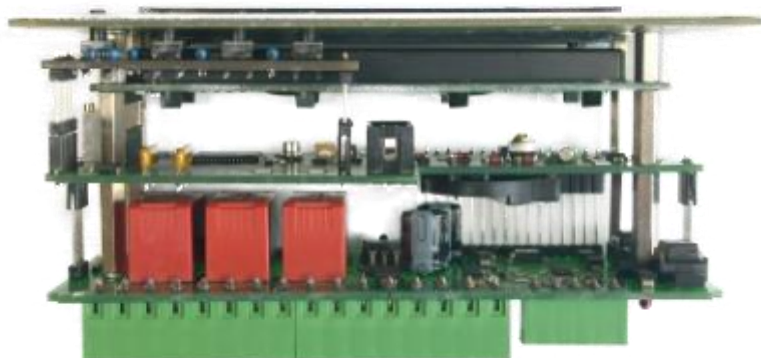


VELOMAT

MESSELEKTRONIK GmbH



Mini Controller VKS-0120



Mini Controller VKS-0120



The controller VKS-0120.01 is designed for measurement and evaluation of sensor signals with current output.

The internal microcontroller processes the measured current signal and represents the physical value with its unit (e.g. kg, Nm) on the display.

The sensor signal can be filtered digitally. The filter frequency is adjustable in a wide range.

The device works as a threefold comparator. Switching threshold and functions of the relays can be set by 4 buttons.

The current output maps the calculated value onto a 4 ... 20mA signal range. In doing so the characteristic line can be corrected or only a window of the input signal can be represented.

The device is applicable as a data logger where the signal can be recorded initiated by a trigger event and read out over the USB interface later on. Alternatively the signal can be logged permanently in a defined interval.

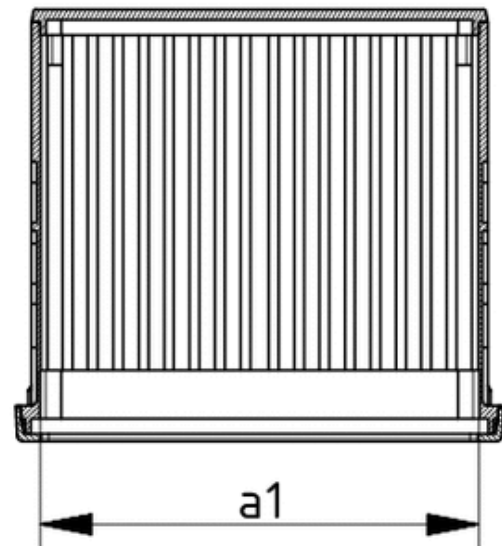
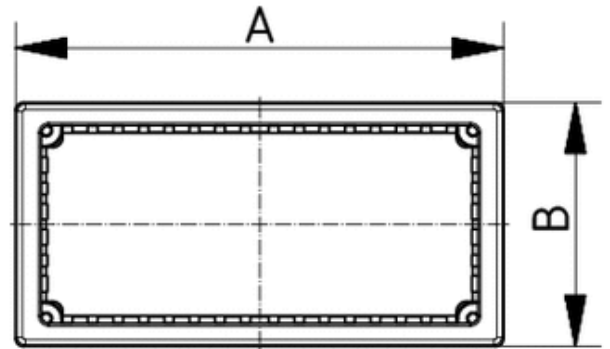
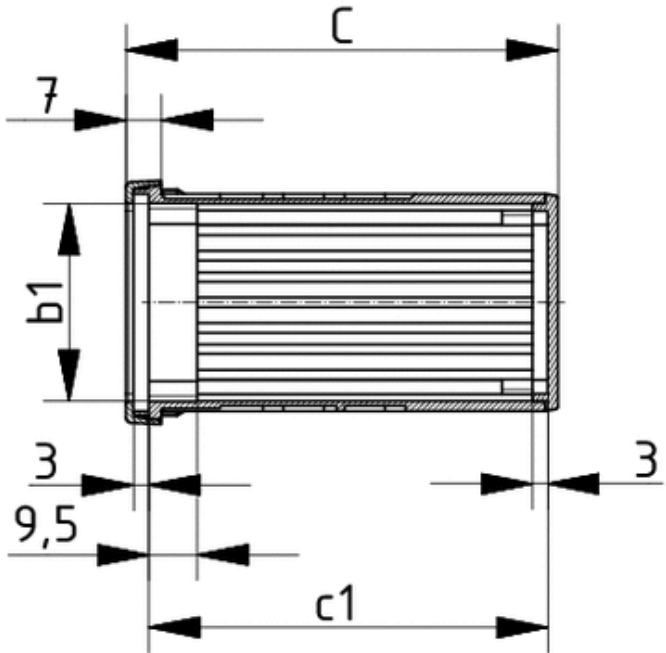
Technical Data

| | |
|----------------------|--|
| Power supply: | 24 V DC |
| Current consumption: | max. 300 mA |
| Current input: | Supply 20 V DC 4 ... 20 mA (Load resistance 240 Ω @ 5 V) 16 Bit AD-converter Calibration check available |
| Current output: | 4 ... 20 mA 12 Bit resolution Load resistance 0 ... 500 Ω |
| Relay: | 8 A @ 250 V |
| Display: | LCD 2 x 20 with backlight |
| Communication: | SD-card / USB-connection (optional) |
| Housing: | 145 x 75 mm x 70 mm Suitable for installation in switch cabinets |
| Temperature range: | 0 ... 60 °C |

| <u>Sensor connection X1</u> | | | |
|-----------------------------|--------|-------------------|----------------------------|
| Contact | Signal | Description | Colour VELOMAT Standard |
| 1 | Ub | Power supply | Brown |
| 2 | GND | Ground | Green |
| 3 | Im | Current input | Yellow |
| 4 | CC | Calibration check | White |
| 5 | SH | Screen | Blue |

| <u>Connection terminal X2</u> | | |
|-------------------------------|--------|-----------------------------------|
| Contact | Signal | Description |
| 1 | Im | Current output |
| 2 | GND | Ground |
| 3 | DT | DAC Test (current output = 20 mA) |
| 4 | GND | Ground |
| 5 | U | Supply voltage |
| 6 | GND | Ground |
| 7 | CC | Calibration check signal |
| 8 | GND | Ground |
| 9 | AK1 | Normally open contact relay 1 |
| 10 | MK1 | Middle contact relay 1 |
| 11 | AK2 | Normally open contact relay 2 |
| 12 | RK2 | Normally closed contact relay 2 |
| 13 | MK2 | Middle contact relay 2 |
| 14 | AK3 | Normally open contact relay 3 |
| 15 | RK3 | Normally closed contact relay 3 |
| 16 | MK3 | Middle contact relay 3 |

Installation



Z-2603255

| | |
|----|----------|
| A | 144 mm |
| B | 72 mm |
| C | 64 mm |
| a1 | 131,5 mm |
| b1 | 61,5 mm |
| c1 | 56 mm |