

## VEGAMET 141

### Controller for a continuously measuring analogue level sensor



#### Application area

Controller VEGAMET 141 feeds the connected 4 ... 20 mA sensor, processes the measured values and displays them. The compact design is ideal for mounting on carrier rails in switching cabinets. A graphic display as well as a turn/push button for quick on-site control of the measuring point are also integrated.

It enables simple implementation of pump controls, flow measurements on open channels and weirs and totalizers. With the VEGAMET 141, limit values can be reliably monitored and relays can be switched, e.g. for an overflow protection according to WHG.

Due to its various possibilities it is suitable for many industrial branches as well as plant manufacturers.

#### Your benefit

- Simple control of the measuring point through graphic display, even in darkness
- Complex programming of control tasks is no longer necessary
- Simple and reliable commissioning and diagnosis of the measuring points via smartphone

#### Function

The VEGAMET 141 controller can power the connected sensor and process its measurement signals. The requested parameter is shown on the display and also output to the integrated current output for further processing. The measurement signal can thus be transferred to a remote display or a superordinate control system. Operating relays for control of pumps or other devices are also integrated.

#### Approvals

Worldwide approvals are available for VEGA instruments, e.g. for use in hazardous areas, on ships or in hygienic applications.

The technical data in the respective safety instructions are valid for approved instruments (e.g. with Ex approval). In some cases, these data can differ from the data listed herein.

You can find detailed information on the existing approvals with the appropriate product on our homepage.

#### Technical data

|                      |                                       |
|----------------------|---------------------------------------|
| Operating voltage    |                                       |
| – Nominal voltage AC | 100 ... 230 V (-15 %, +10 %) 50/60 Hz |
| – Nominal voltage DC | 24 ... 65 V (-15 %, +10 %)            |
| Power consumption    | max. 10 VA; 3 W                       |

#### Sensor input

|                             |                                   |
|-----------------------------|-----------------------------------|
| Number of sensors           | 1 x 4 ... 20 mA                   |
| Type of input (selectable)  |                                   |
| – Active input              | Sensor supply through VEGAMET 141 |
| – Passive input             | Sensor has an own voltage supply  |
| Measured value transmission |                                   |
| – 4 ... 20 mA               | analogue for 4 ... 20 mA sensors  |
| Terminal voltage            | 27 ... 22 V at 4 ... 20 mA        |

#### Relay output

|                   |                                                               |
|-------------------|---------------------------------------------------------------|
| Quantity          | 3 x operating relay, one can be configured as fail safe relay |
| Switching voltage | max. 250 V AC/60 V DC                                         |
| Switching current | max. 1 A AC (cos phi > 0.9), 1 A DC                           |
| Breaking capacity | min. 50 mW, max. 250 VA, max. 40 W DC (with U < 40 V DC)      |

#### Current output

|           |                              |
|-----------|------------------------------|
| Quantity  | 1 x output                   |
| Range     | 0/4 ... 20 mA, 20 ... 0/4 mA |
| Max. load | 500 Ω                        |

#### Bluetooth interface

|                    |                                                         |
|--------------------|---------------------------------------------------------|
| Bluetooth standard | Bluetooth 5.0 (downward compatible to Bluetooth 4.0 LE) |
|--------------------|---------------------------------------------------------|

#### Indicators

|                                             |                                               |
|---------------------------------------------|-----------------------------------------------|
| Measured value indication                   |                                               |
| – Graphic-capable LC display, with lighting | 25 x 20 mm, digital and quasianalogue display |
| Adjustment elements                         | Turn/Push button                              |

#### Ambient conditions

|                         |                                 |
|-------------------------|---------------------------------|
| Ambient temperature     |                                 |
| – Instrument in general | -20 ... +60 °C (-4 ... +140 °F) |

#### Electrical protective measures

|                   |                  |
|-------------------|------------------|
| Protection rating | IP20 (IEC 60529) |
|-------------------|------------------|

## Adjustment

The VEGAMET 141 has an integrated display and adjustment unit. In addition, the parameter adjustment of the device can be done via Bluetooth and corresponding adjustment tools.

### Adjustment via the display and adjustment unit

The adjustment is carried out menu-driven via a turn/push button and a clearly arranged, graphic-capable display with background lighting.

### Wireless adjustment via Bluetooth

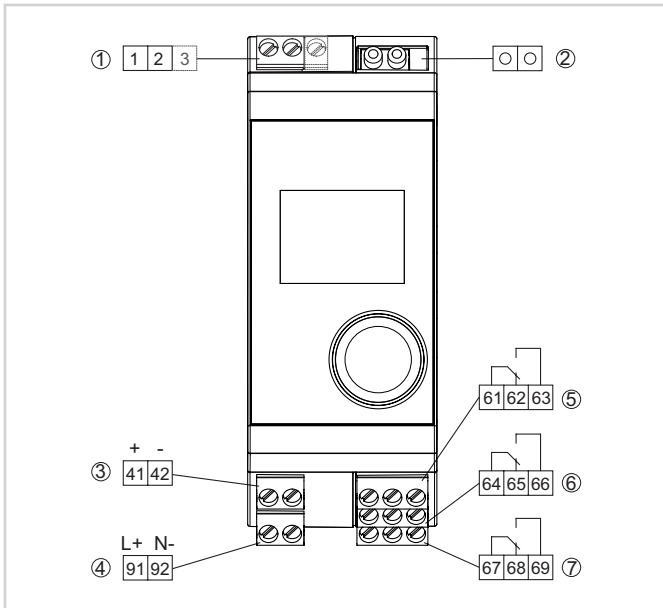
The integrated Bluetooth module enables wireless connection to smartphones/tablets (iOS/Android) or Windows PCs.

Operation is via a free app from the "Apple App Store", the "Google Play Store" or the "Baidu Store". Alternatively, adjustment can also be carried out via PACTware/DTM and a Windows PC.



Wireless connection to smartphone/tablet/notebook

## Electrical connection

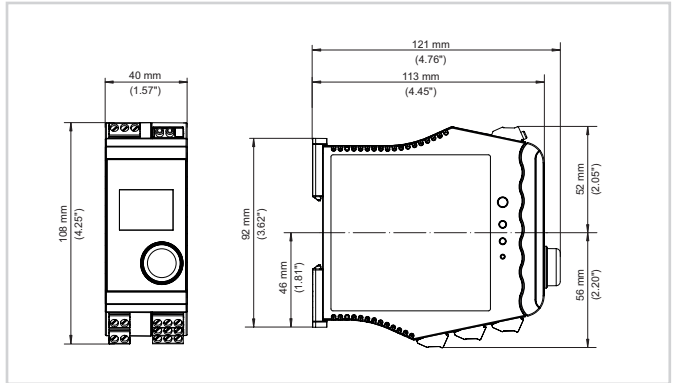


Wiring plan VEGAMET 141

- 1 Sensor input (active/passive)
- 2 HART sockets for sensor parameter adjustment
- 3 4 ... 20 mA current output
- 4 Voltage supply of the controller
- 5 Relay output 1
- 6 Relay output 2
- 7 Relay output 3

Details on the electrical connection can be found in the operating instructions of the device in the download area on our homepage.

## Dimensions



## Information

You can find further information on the VEGA product line on our homepage.

In the download section on our homepage you'll find operating instructions, product information, brochures, approval documents, instrument drawings and much, much more.

Software accessories such as the current device software and the appropriate operating software are also available there.

## Contact

You can find your personal contact person at VEGA on our homepage under "Contact".