

VEGAMET 391

Controller and display instrument for level sensors



Application area

The VEGAMET 391 controller powers the connected 4 ... 20 mA/HART sensor, processes and displays the measured values. The VEGAMET 391 is ideal for simple control tasks in level, gauge and process pressure measurement as well as inventory management (VMI) and remote enquiry. Comprehensive adjustment functions allow individual adaptations to the respective application. In water/wastewater management, the instrument stands out with special functions such as pump switching, flow volume measurement, tendency functions and totalizer.

Your benefit

- Equal use of all pumps through integrated pump management
- Completely integrated functional unit for flow volume measurement
- Simple integration into the Intranet/Extranet via integrated web server

Function

The VEGAMET 391 controller powers any individual 4 ... 20 mA/HART sensor and processes its measured value. Through an adjustment on VEGAMET, this measured value can be individually scaled/linearised and transferred to connected instruments via the current output. Six operating relays are available as limit alarms.

Optional interfaces offer the possibility of remote enquiry of measured values. With the built-in webserver, the measured values can be made available in a network.

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

Series Instrument for mounting into front panel, switching cabinet or housing

Connection terminals

- Type of terminal Pluggable spring-loaded terminal with coding
- Max. wire cross-section 2.5 mm² (AWG 14)

Operating voltage non-Ex version

- Nominal voltage AC 24 ... 230 V (-15 %, +10 %) 50/60 Hz
- Nominal voltage DC 24 ... 230 V (-15 %, +10 %)

Operating voltage Ex version

- Nominal voltage AC 24 ... 230 V (-15 %, +10 %) 50/60 Hz
- Nominal voltage DC 24 ... 65 V (-15 %, +10 %)

Max. power consumption 12 VA; 6 W

Sensor input

Number of sensors 1 x 4 ... 20 mA (HART)

Type of input (selectable)

- Active input Sensor supply through VEGAMET 391
- Passive input Sensor has an own voltage supply

Measured value transmission (switchable with RS232/Ethernet interface option)

- 4 ... 20 mA analogue for 4 ... 20 mA sensors
- HART protocol digital for HART sensors

Deviation

- Accuracy ±20 µA (0.1 % of 20 mA)

Relay outputs

Quantity 6 x operating relay

Switching voltage min. 10 mV DC, max. 250 V AC/60 V DC

Switching current min. 10 µA DC, max. 3 A AC, 1 A DC

Breaking capacity min. 50 mW, max. 500 VA, max. 54 W DC

Current output

Range 0/4 ... 20 mA, 20 ... 0/4 mA

Max. load 500 Ω

USB interface

Plug connection Mini-B (4-pole)

USB specification 2.0 (Fullspeed)

Ethernet interface (optional)

Quantity 1 x, cannot be combined with RS232

Data transmission 10/100 MBit

RS232 interface (optional)

Quantity 1 x, cannot be combined with Ethernet

Indicators

Measured value indication

- Graphic-capable LC display, with lighting 65 x 32 mm, digital and quasianalogue display

LED displays

- Status, operating voltage 1 x LED green
- Status fault signal 1 x LED red
- Status operating relay 1 ... 6 6 x LED yellow

Ambient conditions

Ambient temperature

- Instrument in general -20 ... +60 °C (-4 ... +140 °F)

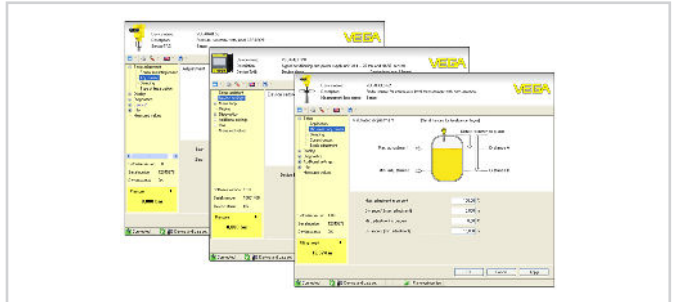
Electrical protective measures

Protection rating

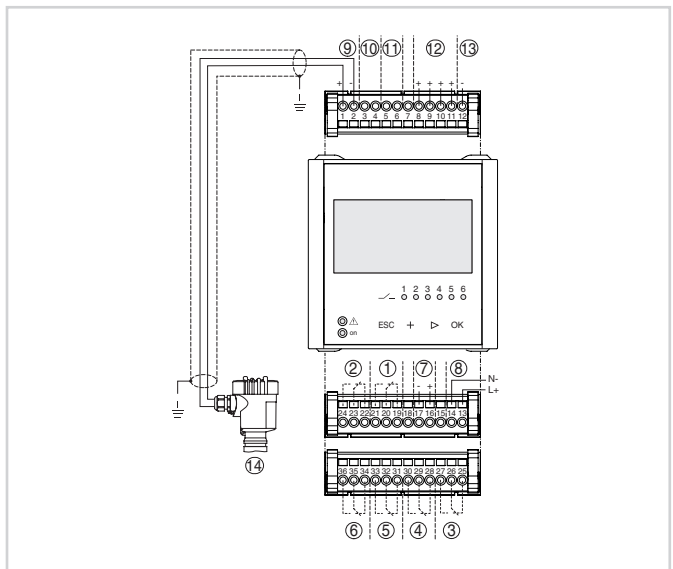
- Front IP65
- Instrument IP20

Adjustment

The adjustment of VEGAMET 391 is menu-driven via four keys in the front and a clear, graphic-capable LC display with background lighting. As an alternative, parameter adjustment of the instrument is also possible via the adjustment software PACTware and the respective DTM.



Electrical connection



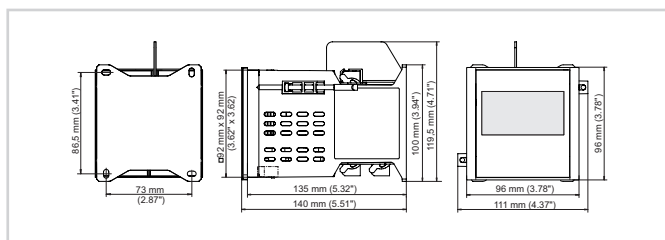
Connection VEGAMET 391 with two-wire sensor

- 1 Internal relay 1
- 2 Internal relay 2
- 3 Internal relay 3
- 4 Internal relay 4
- 5 Internal relay 5
- 6 Internal relay 6
- 7 4 ... 20 mA current output
- 8 Voltage supply of VEGAMET 391
- 9 Measurement data input with sensor supply (active input)
- 10 Connection for VEGACONNECT for sensor parameter adjustment
- 11 Measurement data input (passive input), not with Ex-ia version
- 12 Digital input 1 ... 4
- 13 Common ground for digital input 1 ... 4
- 14 4 ... 20 mA/HART sensor (two-wire version)

You can find details on electrical connection in the instrument operating instructions on our homepage at www.vega.com/downloads.

Specification sheet

Dimensions



Information

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

In the download section of our homepage you'll find operating instructions, product information, industry brochures and approval documents as well as device and adjustment software.

Contact

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