

VEGAMET 381 Ex

SIL controller and display instrument for level sensors



Application area

The SIL controller VEGAMET 381 Ex powers the connected 4 ... 20 mA/HART sensor, processes and displays the measured values. The VEGAMET 381 Ex is ideal for simple control tasks in SIL and steam boiler applications. Comprehensive adjustment functions allow individual adaptations to the respective application.

Your benefit

- Transmitter power supply in Ex version via the 4 ... 20 mA sensor input
- Can be used in SIL and steam boiler applications thanks to two relay outputs for limit value monitoring
- Clearly readable LC display for digital and quasianalogue measured value indication

Function

The controller VEGAMET 381 Ex powers a 4 ... 20 mA sensor and processes its measured value. Through an adjustment on VEGAMET this measured value can be scaled individually and output to connected instruments via the current output. Beside the large indication there are two operating relays that serve as limit alarms for control tasks.

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

General data

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

Connection terminals

- Type of terminal Screw terminal
- Max. wire cross-section 1.5 mm² (AWG 16)

Operating voltage

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

Max. power consumption 12 VA, 4 W

Sensor input

Number of sensors 1 x 4 ... 20 mA

Type of input (switchable)

- mode active Sensor supply through VEGAMET 381 Ex
- mode passive Sensor has an own voltage supply

Deviation

- Accuracy ±20 µA (0.1 % of 20 mA)

Relay outputs

Quantity 2 x operating relay, 1 x fail safe relay

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

Quantity 1 x output

Range 0/4 ... 20 mA

Max. load 500 Ω

Indicators

Measured value indication

- LC display (45 x 45 mm) digital and quasianalogue indication

LED displays

- Status, operating voltage 1 x LED green
- Status fault signal 1 x LED red
- Status operating relay 2 x LED yellow
1/2

Ambient conditions

Ambient temperature -20 ... +60 °C (-4 ... +140 °F)

Electrical protective measures

Protection rating

- Wall, rail mounting IP20

- Front panel mounting IP40

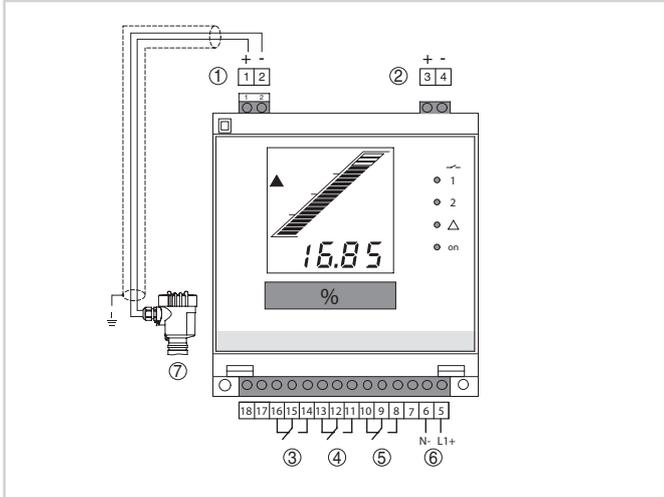
Protection class II

SIL qualification Optionally up to SIL2

Adjustment

VEGAMET 381 Ex is adjusted on the front via a clear LC display and a 16-step function switch as well as two keys.

Electrical connection

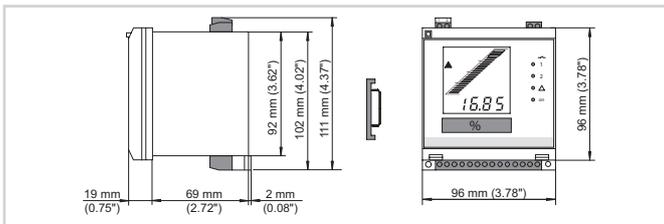


Connection VEGAMET 381 Ex

- 1 *Meas. data input/sensor power supply with sockets for VEGACONNECT*
- 2 *Current output*
- 3 *Fail safe relay*
- 4 *Relay 2*
- 5 *Relay 1*
- 6 *Voltage supply*

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

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".