

VEGAMET 381 Ex

Signal conditioning and display instrument for level sensors



Application area

The VEGAMET 381 Ex signal conditioning instrument 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 all industries with Ex 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
- Versatile use through two relay outputs for control of pumps and stirrers, etc.
- Clearly readable LC display for digital and quasianalogue measured value indication

Function

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

Technical 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 mm ² (AWG 16)
Operating voltage	20 ... 253 V AC, 50/60 Hz, 20 ... 253 V DC
Max. power consumption	12 VA, 4 W

Sensor input

Number of sensors	1 x 4 ... 20 mA
Type of input (switchable)	
– mode active	Sensor is powered by VEGAMET 381 Ex
– mode passive	Sensor has an own power 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
– Max. indicating range	-9999 ... 9999
LED displays	
– Status, operating voltage	1 x LED green
– Status, fault signal	1 x LED red
– Status operating relay 1/2	2 x LED yellow

Ambient conditions

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

Protection rating	
– Wall, rail mounting	IP 20
– Front panel mounting	IP 40

SIL qualification

SIL qualification	Optionally up to SIL2
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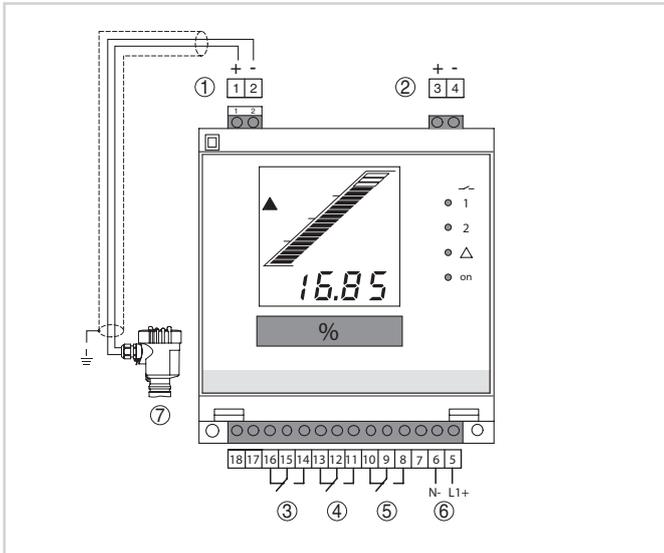
Approvals

You can find detailed information on the existing approvals in the "configurator" on our homepage at www.vega.com/configurator.

Operation

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

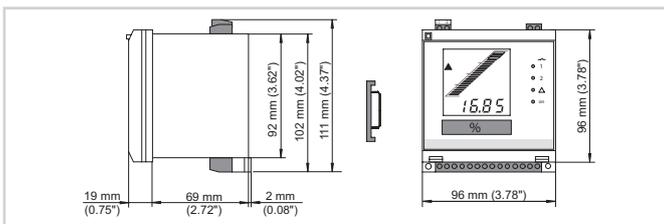


Connection VEGAMET 381 Ex

- 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 www.vega.com.

In the download section under www.vega.com/downloads you'll find free operating instructions, product information, brochures, approval documents, instrument drawings and much, much more.

Contact

You can find the VEGA agency serving your area on our homepage www.vega.com.