# VEGA

## **VEGATOR 122**

# Double channel signal conditioning instrument for level detection for 8/16 mA sensors



#### Application area

The VEGATOR 122 is a signal conditioning instrument for point level detection with the vibrating level switches VEGASWING, VEGAVIB and VEGAWAVE with electronics version "Two-wire 8/16 mA". Simple control functions can be realised with this combination. Typical applications are monitoring functions such as overflow or dry run protection.

## Your benefit

- Comprehensive monitoring detects shortcircuit and measuring line break as well as malfunctions in the sensor
- Simple and convenient function test via test keys for both channels (also for SIL and WHG)
- Simple mounting through carrier rail as well as detachable, coded terminals

#### Function

The VEGATOR 122 is a double channel instrument and is mainly used for point level detection, for example in conjunction with vibrating level switches. It transmits binary signals from the field. The signals can also come from a hazardous area. Level switches with 8/16 mA step signal can be connected to it. The signal circuit is monitored for line break and shortcircuit. An operating relay (output) per channel is available as limit value signaller for control tasks

#### **Technical data**

General data

Series Module unit for mounting on carrier rails

35 x 7.5 acc. to EN 50022/60715

Connection terminals

- Type of terminal Screw terminal

- Wire cross-section 0.25 mm<sup>2</sup> (AWG 23) ... 2.5 mm<sup>2</sup> (AWG 12)

Voltage supply

Operating voltage

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

- Nominal voltage DC 24 ... 65 V DC (-15 %, +10 %)

Max. power consumption 3 W (8 VA)

Sensor input

Quantity 2 x analogue

Input type Active (sensor power supply by VEGATOR

122)

Measured value transmis- Analogue 8/16 mA

sion

Switching threshold

On 12.1 mA
 Off 11.9 mA
 Tolerance ± 500 μA

Current limitation 23 mA (permanently short-circuit proof)

Terminal voltage  $18.2 \text{ V DC}, \pm 5 \%$ Internal resistance  $200 \Omega, \pm 1 \%$ Detection line break  $\leq 3.6 \text{ mA}$ Detection shortcircuit  $\geq 21 \text{ mA}$ 

Relay output

Quantity 2 x operating relay
Contact Floating spdt

Switching voltage min. 10 mV DC, max. 253 V AC/50 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

Switch-on/Switch-off delay

- Basic delay 150 ms,  $\pm$  10 % - Adjustable delay 2/6/8 s,  $\pm$  20 %

Ambient conditions

Ambient temperature at -20 ...

the installation site of the

instrument

-20 ... +60 °C (-4 ... +140 °F)

**Electrical protective measures** 

Protection rating IP 20 Overvoltage category (IEC 61010-1)

- up to 2000 m (6562 ft) I

above sea level

- up to 5000 m (16404 ft) II - Only with connected overvoltage

above sea level protection

– up to 5000 m (16404 ft)

above sea level

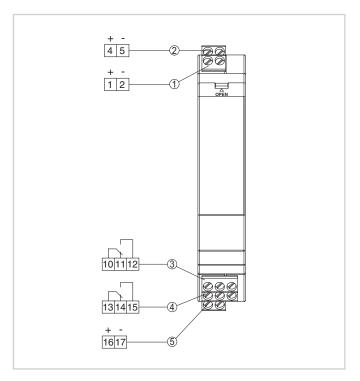
Degree of soiling 2

## **Approvals**

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



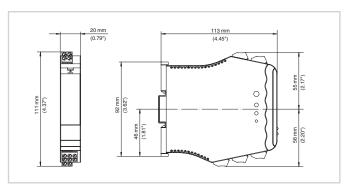
### **Electrical connection**



- 1 Sensor circuit, channel 1 (8/16 mA)
- 2 Sensor circuit, channel 2 (8/16 mA)
- 3 Relay output channel 1
- 4 Relay output channel 2
- 5 Voltage supply

You can find details on electrical connection in the instrument operating instructions on our homepage at <a href="https://www.vega.com/downloads">www.vega.com/downloads</a>.

## **Dimensions**



Dimensions VEGATOR 122

# Information

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

In the download section under <a href="www.vega.com">www.vega.com</a> 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  $\underline{\text{www.vega.com}}.$