

VEGATOR 112

Double channel signal conditioning instrument for level detection for NAMUR sensors



Application area

The VEGATOR 112 is a signal conditioning instrument for point level detection with the vibrating level switches VEGASWING, VEGAIVB and VEGAWAVE with electronics version according to NAMUR (IEC 60947-5-6). 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 line monitoring 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 112 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 according to DIN EN 60947-5-6 (NAMUR) 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 mm² (AWG 23) ... 2.5 mm² (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 2 W (8 VA)

Sensor input

Quantity 2 x NAMUR
Input type Active (sensor power supply by VEGATOR 112)

Measured value transmission Analogue 1.2/2.1 mA

Switching threshold

- On 1.5 mA
- Off 1.7 mA
- Tolerance ± 100 µA

Current limitation Through internal resistance

Terminal voltage 8.2 V DC, ± 5 %

Internal resistance 1 kΩ, ± 1 %

Detection line break ≤ 0.05 mA

Detection shortcircuit ≥ 6.8 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 100 ms

Ambient conditions

Ambient temperature at the installation site of the instrument -20 ... +60 °C (-4 ... +140 °F)

Electrical protective measures

Protection rating IP 20

Overvoltage category (IEC 61010-1)

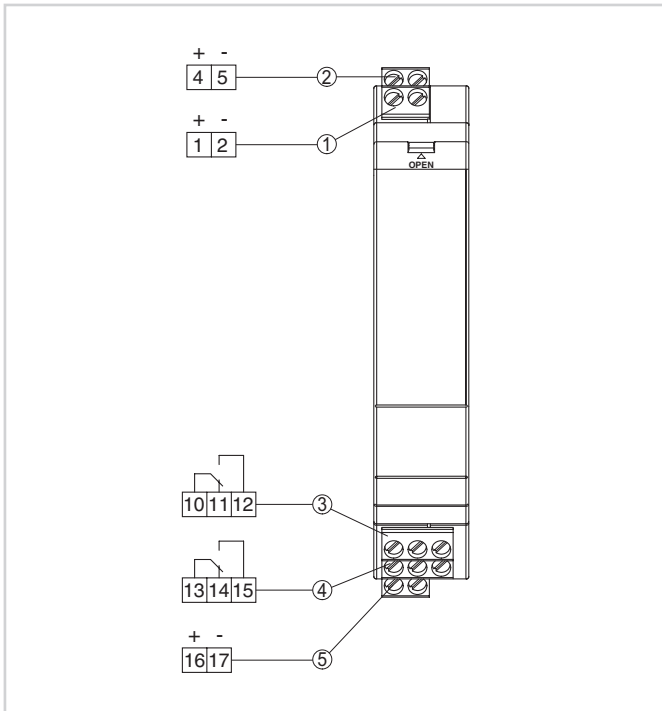
- up to 2000 m (6562 ft) II above sea level
- up to 5000 m (16404 ft) II - Only with connected overvoltage protection above sea level
- up to 5000 m (16404 ft) I above sea level

Degree of soiling 2

Approvals

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

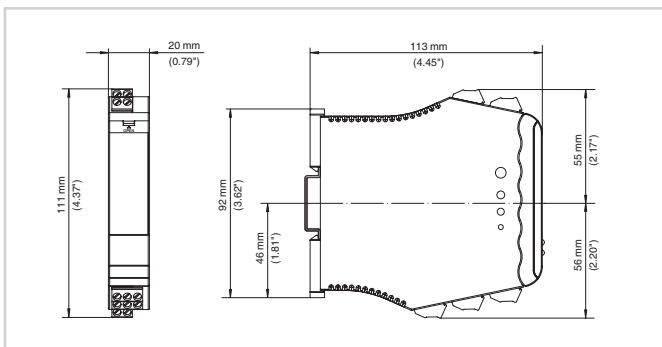
Electrical connection



- 1 Sensor circuit, channel 1 (1.2/2.1 mA)
- 2 Sensor circuit, channel 2 (1.2/2.1 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 www.vega.com/downloads.

Dimensions



Dimensions VEGATOR 112

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 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.