VEGACAP 64

Relay (DPDT)
Capacitive rod electrode for level detection

Application area

The VEGACAP 64 point level sensor for non-abrasive liquids and bulk solids. The rod electrode is fully insulated and due to its construction it is suitable for viscous and adhesive products.

Your benefit

- Reduced number of cleaning cycles through measurement insensitive to buildup
- Reliable measurement with strong buildup through optimized design
- Long lifetime and low maintenance requirement through robust construction

Function

Sensor and vessel form the two electrodes of a capacitor. A capacitance change caused by a level change is evaluated by the integrated electronics and converted into a switching signal. The capacitive measuring principle has no special requirements in respect to installation and mounting.

Technical data

Sensor length	up to 4 m (13.12 ft)
Process fitting	Thread from G¾, ¾ NPT, flanges from DN 50, 2"
Process pressure	-1 … +64 bar/-100 … +6400 kPa (-14.5 … +928 psig)
Process temperature	-50 … +200 °C (-58 … +392 °F)
Ambient, storage and transport temperature	-40 … +80 °C (-40 … +176 °F)
Operating voltage	20 … 253 V AC, 50/60 Hz; 20 … 72 V DC
Power consumption	1 … 8 VA (AC), approximately 1.5 W (DC)
Switching voltage	min. 10 mV, max. 253 V AC, 253 V DC
Switching current	min. 10 µA, max. 3 A AC, 1 A DC
Breaking capacity	min. 50 mW, max. 750 VA AC, 54 W DC
Switching delay	0.7 s (on/off)

Materials

The wetted parts of the instrument are fully PTFE insulated.
You will find a complete overview of the available materials and seals in the "configurator" on our homepage at www.vega.com/configurator.

Housing versions

The housings are available in plastic, stainless steel or Aluminium. They are available with protection ratings up to IP 67.
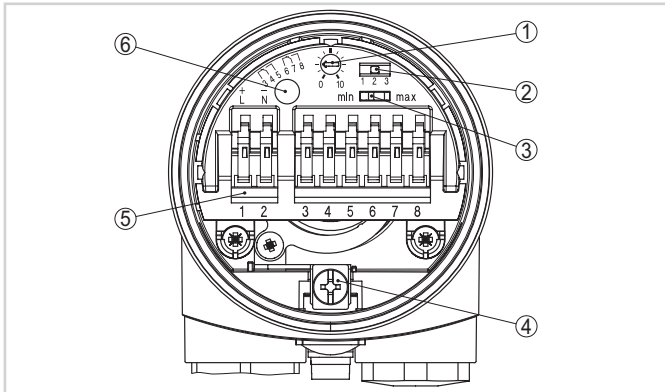
Electronics versions

The instruments are available in different electronics versions. Apart from the versions with transistor output, contactless electronic switch and relay output, a two-wire version for connection to a signal conditioning instrument is available.

Approvals

The instruments are suitable for use in hazardous areas and are approved e.g. according to ATEX and IEC. The instruments also have various ship approvals such as e.g. GL, LRS or ABS.
You can find detailed information at www.vega.com/downloads and "*Approvals*".
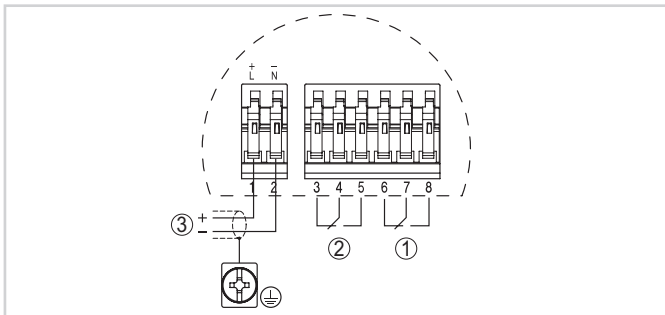
Operation

The mode and switching point of the level switch can be adjusted on the electronics module. A signal lamp shows the switching status of the instrument.

Oscillator with relay output

1   *Potentiometer for switching point adaptation*
2   *DIL switch for measuring range selection (with compensation button)*
3   *DIL switch for mode adjustment*
4   *Ground terminal*
5   *Connection terminals*
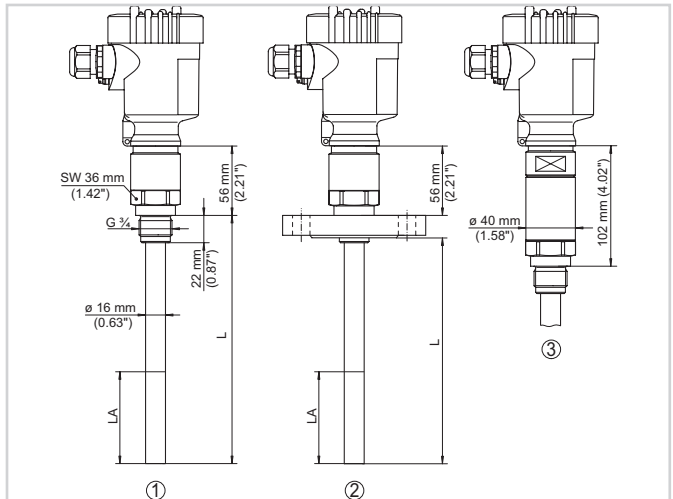6   *Control lamp*

Electrical connection

Wiring plan

1   *Relay output*
2   *Relay output*
3   *Voltage supply*

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

Dimensions

1   *Threaded version*
2   *Flange version*
3   *Threaded version with temperature adapter*
LA *Active length (50 … 200 mm)*

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.

Instrument selection

With the "*Finder*" at www.vega.com/finder and "*VEGA Tools*" you can select the most suitable measuring principle for your application.
You can find detailed information on the instrument versions in the "*Configurator*" at www.vega.com/configurator and "*VEGA Tools*".

Contact

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