

VEGACAP 27

Relay (DPDT)

Capacitive rod electrode for level detection



Application area

The VEGACAP 27 is an adjustment-free, capacitive point level switch for liquids. Typical applications are overflow and dry run protection for adhesive as well as conductive liquids. The probe operates in liquids with a dielectric constant from 1.5.

Your benefit

- Minimum time and cost expenditure thanks to simple setup without medium
- Exact switching point even with strong buildup
- Long lifetime and low maintenance requirement through robust mechanical 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 G1, 1 NPT; Clamp 1½" |
| Process pressure | -1 ... +63 bar (-100 ... +6300 kPa/-14.5 ... +914 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 or PFA 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 or Aluminium. They are available with protection ratings up to IP 67.

Electronics versions

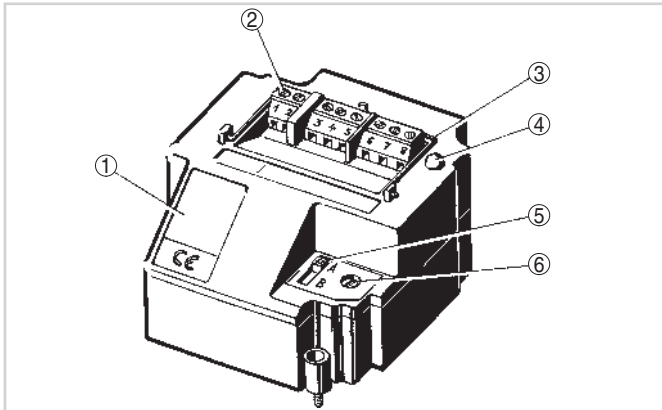
The instruments are available with a relay output (DPDT).

Approvals

The instruments are approved as overflow protection system according to the Water Resources Act (WRA). You can find detailed information on the existing approvals in the "configurator" on our homepage at www.vega.com/configurator.

Operation

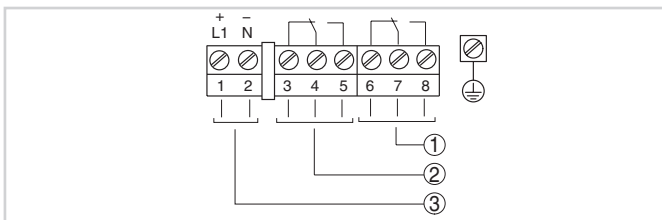
The mode and switching point of the level switch can be adjusted on the electronics module. A signal lamp shows the switching status of the instrument.



Oscillator with relay output

- 1 *Type label*
- 2 *Connection terminals*
- 3 *Tensile proving ring*
- 4 *Control lamp*
- 5 *DIL switch for mode adjustment*
- 6 *Potentiometer for switching point adaptation*

Electrical connection

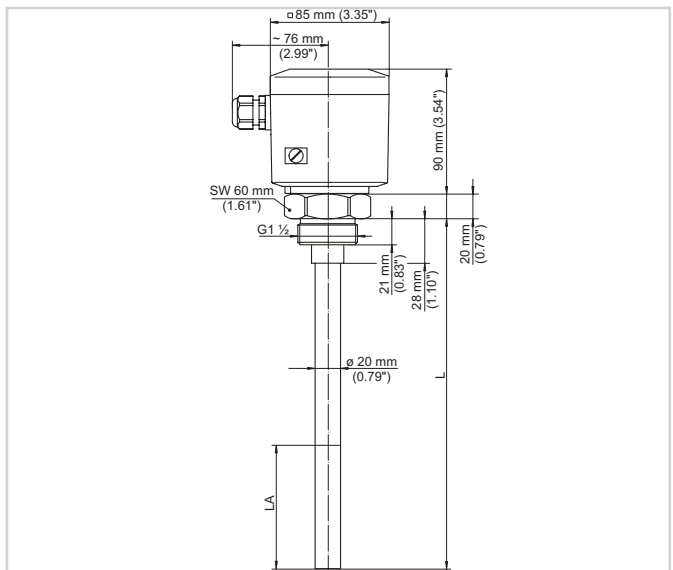


Wiring plan

- 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



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.