

VEGACAP 67

Transistor (NPN/PNP)

Capacitive high temperature probe for level detection



Application area

The VEGACAP 67 is a point level sensor for bulk solids. The probe is designed for high temperature applications.

Your benefit

- Universal use in bulk solids through wide temperature range
- Long lifetime and low maintenance requirement through robust mechanical construction
- High flexibility through shortenable probe

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	
– Rod version	up to 6 m (19.69 ft)
– Cable version	up to 40 m (131.23 ft)
Process fitting	Thread from G1½, 1½ NPT, flanges from DN 50, 2"
Process pressure	-1 ... +16 bar/-100 ... +1600 kPa (-14.5 ... +232 psig)
Process temperature	-50 ... +400 °C (-58 ... +752 °F)
Ambient, storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Operating voltage	10 ... 55 V DC
Power consumption	max. 0.5 W
Load current	< 400 mA
Voltage loss	< 1 V
Switching voltage	< 55 V DC
Blocking current	< 10 µA
Switching delay	0.7 s (on/off)

Materials

The wetted parts of the instrument are made of stainless steel. The probe insulation is made of ceramic. 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

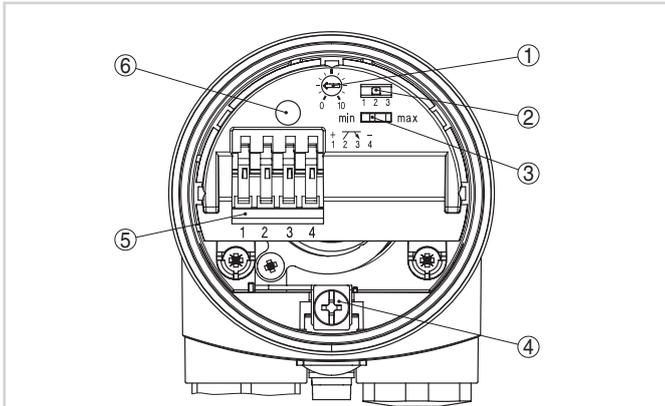
The instruments are available in different electronics versions. Apart from the versions with transistor output, contactless electronic switch and relay output, a two-wire version for connection to a signal conditioning instrument is available.

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

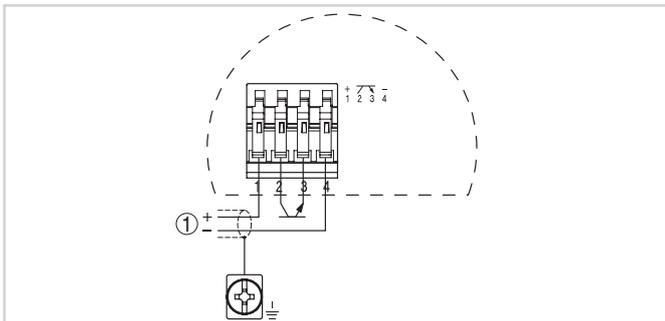
The mode and switching point of the level switch can be adjusted on the electronics module. A signal lamp shows the switching status of the instrument.



Oscillator - Transistor 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

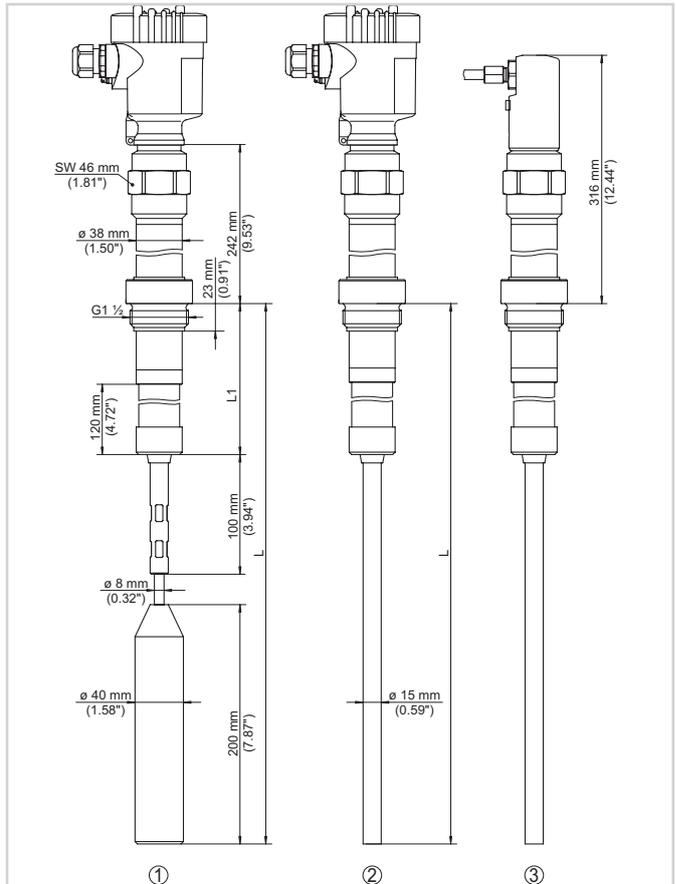


Wiring plan

- 1 Voltage supply

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

Dimensions



- 1 Cable version 300° C (572° F)
- 2 Rod version 300° C (572° F)
- 3 Version 400° C (752° F)

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.