

# VEGASWING 61

## NAMUR

### Vibrating level switch for liquids



#### Application area

The VEGASWING 61 is used as a universal vibrating level switch for all liquids. Independent of the mounting position, it detects reliably with millimetre accuracy the limit level. The instrument can be used as empty or full detector, as approved overflow protection, dry run protection or pump protection in vessels and pipelines. The VEGASWING 61 offers maximum reliability and safety in a wide application range.

#### Advantages

- Minimum time and cost expenditure thanks to simple setup without medium
- Precise and reliable function due to product-independent switching point
- Low maintenance costs

#### Function

The heart of the sensor is the piezo drive by which the tuning fork is energized to vibrate at its resonance frequency. When covered with medium, the frequency of the fork decreases. This frequency change is processed by the integrated electronics and converted into a switching command. With the tuning fork with only 40 mm length, the VEGASWING work reliably independent of the installation position in any liquid. Pressure, temperature, foam, viscosity and the composition of the liquid do not influence the switching accuracy.

#### Technical data

Process pressure	-1 ... +64 bar/-100 ... +6400 kPa (-14.5 ... +928 psig)
Process temperature	-50 ... +250 °C (-58 ... +482 °F)
Viscosity - dynamic	0.1 ... 10000 mPa s
Density	0.5 ... 2.5 g/cm <sup>3</sup> (0.018 ... 0.09 lbs/in <sup>3</sup> )
Ambient temperature on the housing	-40 ... +70 °C (-40 ... +158 °F)
Storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Hysteresis	approx. 2 mm (0.08 in) with vertical installation
Process fitting	Thread from G <sup>3</sup> / <sub>4</sub> A, <sup>3</sup> / <sub>4</sub> NPT flanges from DN 25, Clamp from 1", cone from DN 25, bolting from DN 25, hygienic fittings
Operating voltage	for connection to an amplifier according to NAMUR IEC 60947-5-6, approx. 8.2 V
Off-load voltage	U <sub>0</sub> approx. 8.2 V
Shortcircuit current	I <sub>U</sub> approx. 8.2 mA
Current consumption	
– Falling characteristics	≥ 2.2 mA uncovered/≤ 1 mA covered
– rising characteristics	≤ 1 mA uncovered/≥ 2.2 mA covered
– Fault message	≤ 1 mA
SIL qualification	up to SIL2

#### Materials

The wetted parts of the instrument are made of stainless steel 316L. The supplied process seal is made of Klingsil C-4400. You can find a complete overview of the available materials and seals in the "configurator" on our homepage under [www.vega.com/configurator](http://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

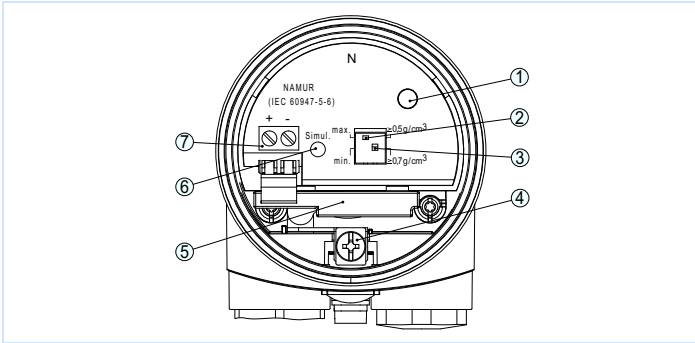
The instruments are available in different electronics versions. Apart from the versions with transistor output, contactless electronic switch and relay output, a two-wire version for connection to a signal conditioning instrument and a NAMUR version are also available.

#### Approvals

The instruments are suitable for use in hazardous areas and are approved, e.g. according to ATEX, FM, CSA and IEC. The instruments also have different ship approvals such as e.g. GL, LRS or ABS and are approved as overflow protection according to WHG. You can find detailed information on the existing approvals in the "configurator" on our homepage under [www.vega.com/configurator](http://www.vega.com/configurator).

## Operation

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



Electronics and connection compartment, single chamber housing

- 1 Control lamp
- 2 DIL switch for characteristics reversal
- 3 DIL switch for sensitivity adjustment
- 4 Ground terminal
- 5 Simulation key
- 6 Connection terminals

## Instrument selection

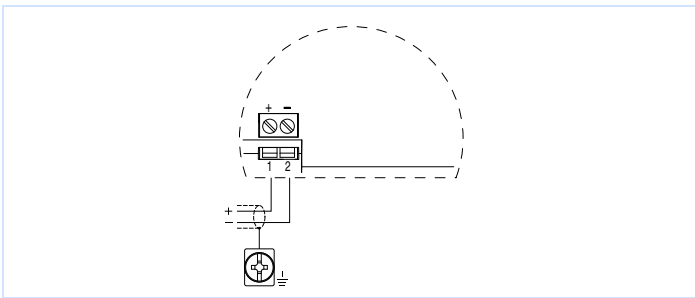
With the "finder" you can select the most suitable measuring principle for your application: [www.vega.com/finder](http://www.vega.com/finder).

You can find detailed information on the instrument versions in the "configurator" on our homepage under [www.vega.com/configurator](http://www.vega.com/configurator).

## Contact

You can find the VEGA agency serving your area on our homepage [www.vega.com](http://www.vega.com).

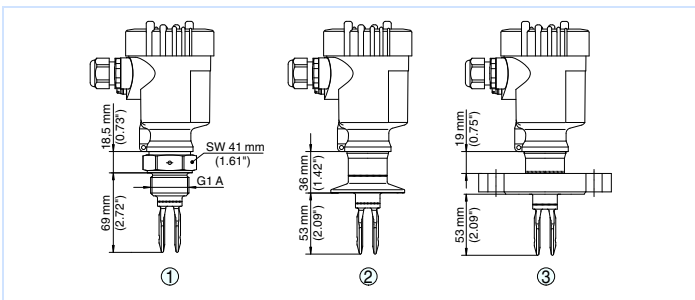
## Electrical connection



Wiring plan

You can find details on electrical connection in the instrument operating instructions on our homepage at [www.vega.com/downloads](http://www.vega.com/downloads).

## Dimensions



VEGASWING 61

- 1 Threaded version
- 2 Tri-Clamp version
- 3 Flange version

## Information

You can find further information about the VEGA product line on our homepage [www.vega.com](http://www.vega.com).

In the download section under [www.vega.com/downloads](http://www.vega.com/downloads) you'll find free operating instructions, product information, brochures, approval documents, instrument drawings and much, much more.