

VEGASWING 66

Relay

Vibrating level switch for liquids under extreme process temperatures and pressures



Application area

The VEGASWING 66 is used as a universal vibrating level switch for all liquids. In compact version or with tube extension, it detects reliably with millimetre accuracy the limit level. The instrument can be used as empty or full detector in vessels, pipelines and steam generators. The VEGASWING 66 offers maximum reliability and safety in a wide process temperature and process pressure range.

Your benefit

- Minimum time and cost expenditure due 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 inductive 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 ... +160 bar/-100 ... +16000 kPa (-14.5 ... +2320 psig) |
| Process temperature | -196 ... +450 °C (-321 ... +842 °F) |
| Viscosity - dynamic | 0.1 ... 1000 mPa s |
| Density | 0.7 ... 2.5 g/cm ³ (0.025 ... 0.09 lbs/in ³); 0.47 ... 2.5 g/cm ³ (0.0163 ... 0.09 lbs/in ³) by switching over |
| Ambient temperature | -40 ... +70 °C (-40 ... +158 °F) |
| Hysteresis | approx. 2 mm (0.08 in) with vertical installation |
| Process fitting | Thread from G1, 1 NPT, flanges from DN 50, 1½" |
| 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. 5 A AC, 1 A DC |
| Breaking capacity | min. 50 mW, max. 1250 VA AC, 40 W DC |
| SIL qualification | Optionally up to SIL2 (with homogeneous redundancy up to SIL3) |

Materials

The wetted parts of the instrument are made of stainless steel 316L and Inconel 718.

You will find a complete overview of the available materials 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 and relay output, a two-wire version for connection to a signal conditioning instrument is available.

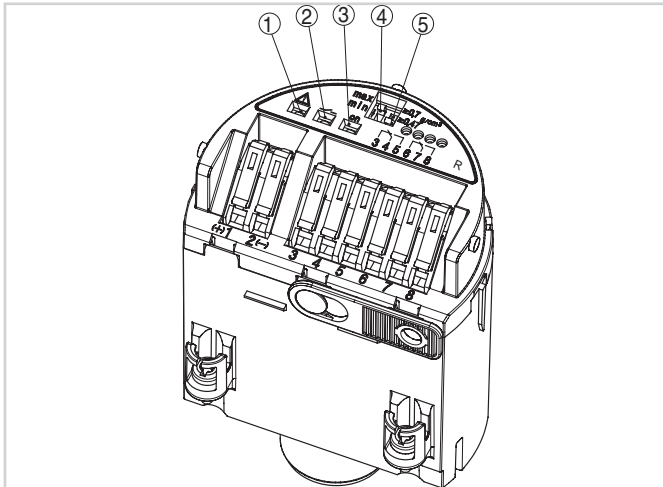
Approvals

The instruments are suitable for use in hazardous areas and are approved, e.g. according to ATEX, FM, CSA and IEC. The instruments also have different ship approvals such as e.g. GL, LRS or ABS and are approved as overfill protection according to WHG.

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

Operation

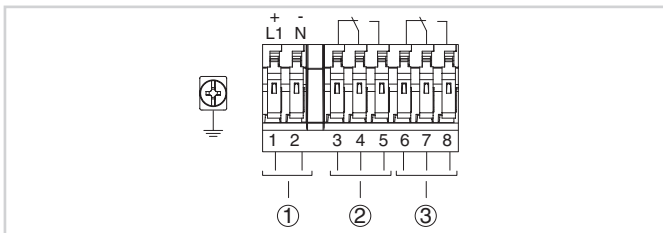
The mode and sensitivity of the level switch can be adjusted on the electronics module. Several signal lamps show the status of the instrument.



Oscillator - Relay output

- 1 Control lamp for fault indication (red)
- 2 Control lamp for indication of the switching status (yellow)
- 3 Signal lamp for indication of the operating status (green)
- 4 Mode switch for selecting the switching behaviour (min./max.)
- 5 DIL switch for sensitivity adjustment

Electrical connection

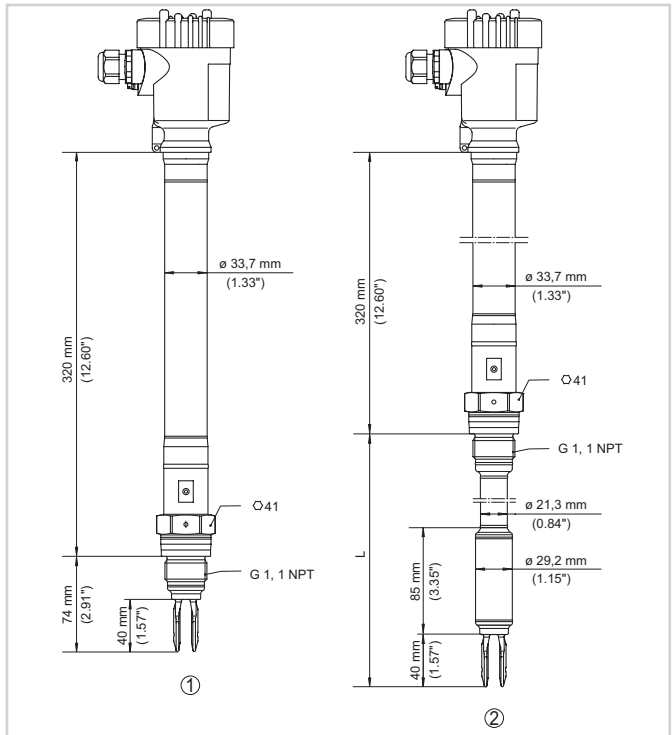


Wiring plan, single chamber housing

- 1 Voltage supply
- 2 Relay output SPDT
- 3 Relay output SPDT

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

Dimensions



VEGASWING 66

- 1 Compact version
- 2 Tube version
- L Sensor length

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.