

VEGAVIB 61

NAMUR

Vibrating level switch for granulated bulk solids



Application area

VEGA VIB 61 is used as a level switch in granular and coarse-grained bulk solids. The VEGA VIB 61 detects reliably and accurately when the min. or max. level is reached. The smooth surface of the vibrating rod, without corners and edges, avoids jamming of the bulk solid and is easy to clean.

Your benefit

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

Function

The vibrating rod of VEGA VIB 61 is energized by a piezo drive to vibrate at its resonance frequency. If the medium covers the vibrating rod, the amplitude is damped. The electronics detects this change and converts it into a switching command. A reliable function in granulated bulk solids is ensured by the ideal rod design.

Technical data

Process pressure	-1 ... +16 bar/-100 ... +1600 kPa (-14.5 ... +232 psig)
Process temperature	-50 ... +250 °C (-58 ... +482 °F)
Density	> 0.02 g/cm ³ (0.0007 lbs/in ³)
Ambient temperature on the housing	-40 ... +80 °C (-40 ... +176 °F)
Storage and transport temperature	-40 ... +80 °C (-40 ... +176 °F)
Hysteresis	approx. 2 mm (0.08 in) with vertical installation
Process fitting	Threads from G1, 1 NPT, flanges from DN 32, 1½", hygienic fittings
Operating voltage	for connection to an amplifier according to NAMUR IEC 60947-5-6, approx. 8.2 V
Off-load voltage	U ₀ approx. 8.2 V
Short-circuit current	I ₀ approx. 8.2 mA
Switching delay	When being covered: 0.5 s, when being uncovered 1 s
SIL qualification	Optionally 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 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

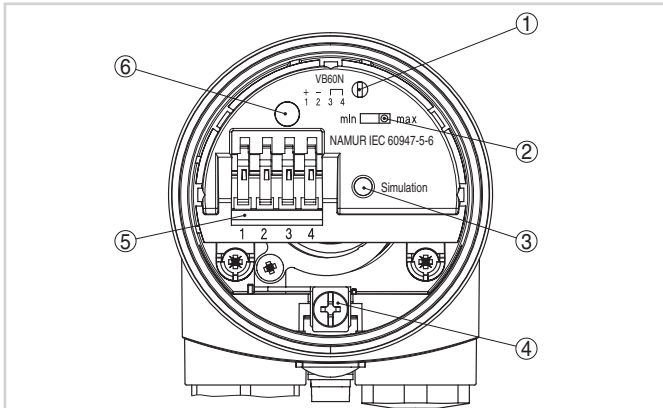
The instruments are available in different electronics versions. Apart from the versions with transistor output, contactless electronic switch and relay output, a two-wire version for connection to a signal conditioning instrument and a NAMUR version are also available.

Approvals

The instruments are suitable for use in hazardous areas and are approved, for example, according to ATEX, FM, CSA and IEC. You can find detailed information on the existing approvals in the "configurator" on our homepage at www.vega.com/configurator.

Operation

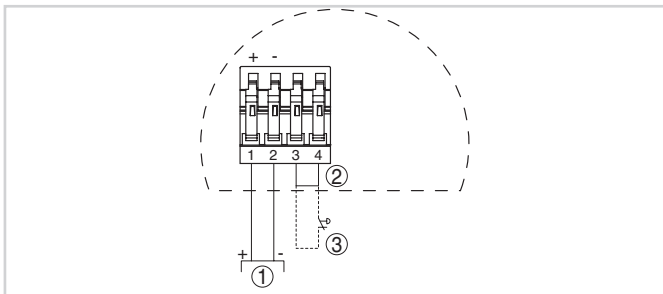
The mode and sensitivity of the level switch can be adjusted on the electronics module. A signal lamp shows the switching status of the instrument.



Electronics and connection compartment - NAMUR output

- 1 Potentiometer for switching point adaptation
- 2 DIL switch for characteristics reversal
- 3 Simulation key
- 4 Ground terminal
- 5 Connection terminals
- 6 Control lamp

Electrical connection

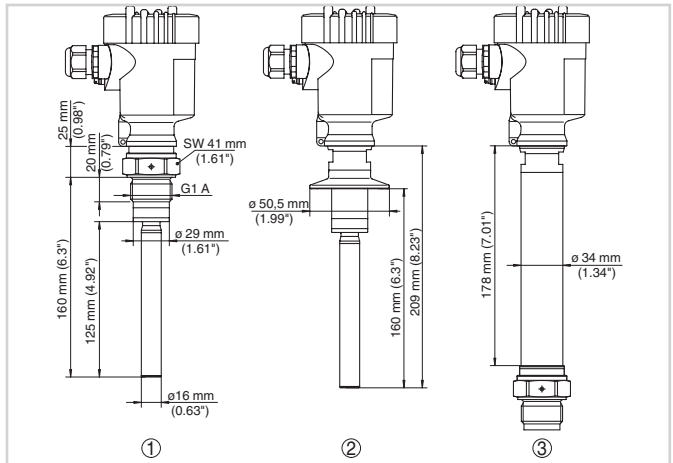


Wiring plan

- 1 NAMUR amplifier
- 2 Bridge
- 3 External simulation key

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

Dimensions



- 1 Threaded version G1
- 2 Clamp version
- 3 Temperature adapter

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.