VEGA

VEGASWING 51

Transistor (PNP)

Vibrating level switch for liquids

Application area

The VEGASWING 51 is used as a universal level switch in liquids with small dimensions. 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 overfill protection, dry run protection or pump protection in vessels and pipelines. The VEGASWING 51 is an economical solution with maximum reliability and safety.

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 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 - Standard	-40 … +100 °C (-40 … +212 °F)
Process temperature - High temperature version	-40 … +150 °C (-40 … +302 °F)
Viscosity - dynamic	0.1 … 10000 mPa s
Density	0.7 … 2.5 g/cm^3 (0.025 … 0.09 lbs/in^3)
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 G½, ½ NPT, hygienic fittings
Operating voltage	9.6 … 35 V DC
Power consumption	max. 0.5 W
Load current	< 250 mA
Voltage loss	< 3 V
Switching voltage	< 34 V DC
Blocking current	< 10 µA
Switching delay	500 ms (on/off)

Materials

The wetted parts of the instrument are made of stainless steel 316L.
The supplied process seal is made of Klingersil 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 instruments are available in different temperature versions and as hygienic version.
The housing is made of 316L and plastic PEI.
The different versions are available up to protection IP 67.

Electronics versions

The instruments are available in two different electronics versions. Apart from the electronics with transistor output (PNP), a version with contactless electronic switch is also available.
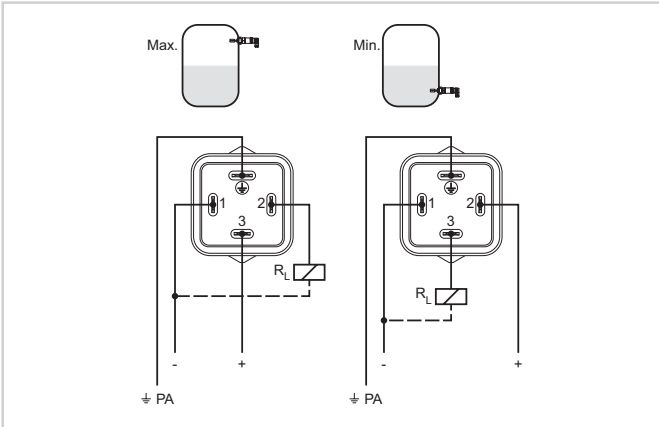
Approvals

The instrument is approved as overfill protection according to WHG and has also different ship approvals such as e.g. GL, LRS or ABS. You can find detailed information on the existing approvals in the "*configurator*" on our homepage at www.vega.com/configurator.
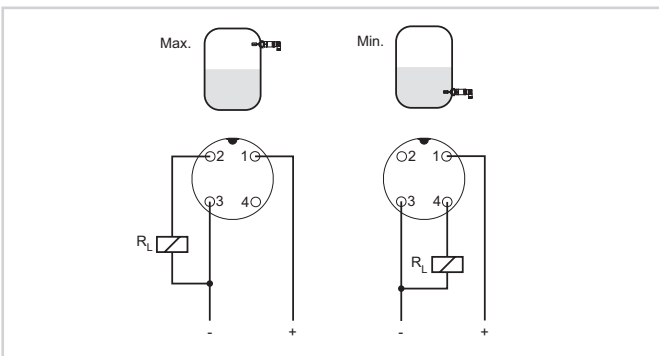
Operation

No adjustments on the instrument are necessary. The switching function is determined by the electrical connection.
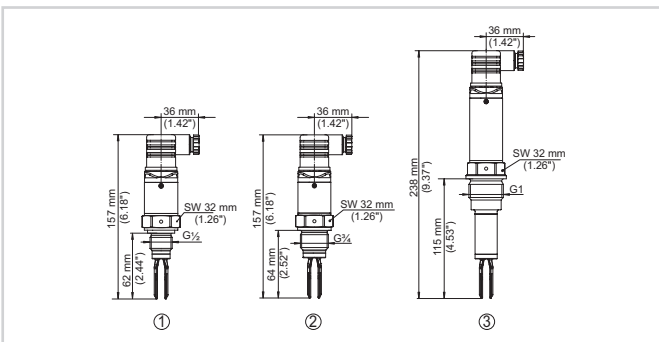
Electrical connection

VEGASWING 51 with valve block according to ISO 4400

VEGASWING 51 with M12 x 1 plug connection

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

Dimensions

1   *Threaded version G¾ up to 100 °C*
2   *Threaded version G1 up to 100 °C*
3   *Threaded version G1 up to 150 °C and switching point like SWING 71A*

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.