VEGASWING 63
NAMUR

Vibrating level switch for liquids with tube extension

Application area
The VEGASWING 63 is used as universal level switch in liquids. Independent of the installation position, it detects reliably and with millimetre precision when the level is reached.

The instrument can be used as empty or full detector, as approved overfill protection, dry run protection or pump protection in vessels.

Advantages
- Setup without adjustment
- Product-independent switching point
- Very high reproducibility
- Wear and maintenance free
- SIL qualified

Function
Via the piezo drive, 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. To ensure a secure and reliable fastening of the piezo drive, an optimised screw connection is used.

Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process pressure</td>
<td>-1 … +64 bar (-14.5 … +928 psig)</td>
</tr>
<tr>
<td>Process temperature</td>
<td>-50 … +250 °C (-58 … +482 °F)</td>
</tr>
<tr>
<td>Viscosity - dynamic</td>
<td>0.1 … 10000 mPa.s</td>
</tr>
<tr>
<td>Density</td>
<td>0.5 … 2.5 g/cm² (0.018 … 0.09 lbs/in²)</td>
</tr>
<tr>
<td>Ambient temperature on the housing</td>
<td>-40 … +70 °C (-40 … +158 °F)</td>
</tr>
<tr>
<td>Storage and transport temperature</td>
<td>-40 … +80 °C (-40 … +176 °F)</td>
</tr>
<tr>
<td>Hysteresis</td>
<td>approx. 2 mm (0.08 in) with vertical installation</td>
</tr>
<tr>
<td>Process fitting</td>
<td>Thread from G½ A, flanges from DN 25, Tri-Clamp from 1”, cone from DN 25, bolting from DN 25, hygienic fittings</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>for connection to an amplifier according to NAMUR IEC 60947-5-6, approx. 8.2 V</td>
</tr>
<tr>
<td>Off-load voltage</td>
<td>Uo approx. 8.2 V</td>
</tr>
<tr>
<td>Shortcircuit current</td>
<td>Io approx. 8.2 mA</td>
</tr>
<tr>
<td>Current consumption</td>
<td>≥ 2.2 mA uncovered/≤ 1 mA covered</td>
</tr>
<tr>
<td>– Falling characteristics</td>
<td>≤ 1 mA uncovered/≥ 2.2 mA covered</td>
</tr>
<tr>
<td>– Failure message</td>
<td>≤ 1 mA</td>
</tr>
</tbody>
</table>

Materials
The wetted parts of the instrument are made of stainless steel 316L. The supplied process seal is made of Klingerisol C-4400. You will find a complete overview of the available materials and seals in the "configurator" on our homepage under 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 overfill protection according to WHG. You can find detailed information on the existing approvals in the "configurator" on our homepage under 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.
Instrument selection

With the "finder" you can select the most suitable measuring principle for your application: www.vega.com/finder.
You can find detailed information on the instrument versions in the "configurator" on our homepage under www.vega.com/configurator.

Contact

You can find the VEGA agency serving your area on our homepage www.vega.com.

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

Electrical connection

Wiring plan

You can find details on the electrical connection in the operating instructions of the instruments on our homepage under www.vega.com/downloads.

Dimensions

VEGASWING 63

1 Threaded version
2 Flange version
3 Bolting
L Sensor length

Information

You can find further information about 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.