Application Area

VEGASWING 63 is used as a universal level switch in liquids. It detects reliably with millimetre accuracy when a certain level is reached. It can be used in vessels independent on the installation position. The instrument can be used as empty or full detector, as approved overfill protection, dry run protection, or pump protection.

Advantages

• Setup without adjustment
• Product-independent switching point
• Very high reproducibility
• Wear and maintenance-free

Function

Using 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 optimized screw connection is used.

Technical Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Pressure</td>
<td>-1 ... +64 bar/-100 ... +6400 kPa (-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/cm³ (0.018 ... 0.09 lbs/in³)</td>
</tr>
<tr>
<td>Ambient Temperature on 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>Approximately 2 mm (0.08 in.) with vertical installation</td>
</tr>
<tr>
<td>Process Fitting</td>
<td>Thread from G¾ A, Flange from DN 25</td>
</tr>
<tr>
<td>Operating Voltage</td>
<td>20 ... 253 V AC, 50/60 Hz, 20 ... 253 V DC</td>
</tr>
<tr>
<td>Load Current</td>
<td>Min. 10 mA/Max. 400 mA</td>
</tr>
<tr>
<td>Switching Delay</td>
<td>500 ms (on/off)</td>
</tr>
</tbody>
</table>

Materials

The wetted parts of the instrument are made of stainless steel 316L. The supplied process seal is made of Klingersil C-4400.

Housing Versions

The housings are available in plastic, stainless steel, or aluminum. They are available in 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 according to FM, CSA, ATEX, and IEC. The instruments also have different ship approvals such as GL, LRS, or ABS and are approved as overfill protection according to WHG.
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 with single chamber housing

1 Control Lamp
2 DIL Switch for Mode Adjustment
3 DIL Switch for Switching Point Adaptation
4 Ground Terminal
5 Connection Terminals

Electrical Connection

Wiring Plan

Dimensions

VEGASWING 63

1 Threaded Version
2 Tri-Clamp Version
3 Bolting
L Sensor Length

Information
You can find additional information about VEGA product offerings from our home page, www.vega-americas.com. Brochures, operating instructions, quick reference guides, specification sheets, and drawings are also available from the Downloads section of our homepage.

Device Selection
The Downloads section of our home page, www.vega-americas.com provides application data sheets so you can select the measuring principle or product for your particular application.

Contact
Please call 1-800-543-8668, Monday through Friday, 8:00 A.M.-5:00 P.M., EST (Eastern Standard Time) if you have any questions. For emergencies after hours, call the number above and follow the voice mail instructions.