Application area

The VEGAWAVE 61 is a level switch for universal use in powders and fine-grained bulk solids. The VEGAWAVE 61 detects reliably and robust the min. or max. level. The tuning fork is ideal for use either in adhesive and abrasive products as well as in bulk solids with very low density.

Your benefit

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

Function

With the VEGAWAVE 61 series, the tuning fork is used as sensor element. If the medium covers the tuning fork, the amplitude is damped. The electronics detects this damping and converts it into a switching command.

Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process pressure</td>
<td>-1 ... +25 bar/-100 ... +2500 kPa (-14.5 ... +363 psig)</td>
</tr>
<tr>
<td>Process temperature</td>
<td>-50 ... +250 °C (-58 ... +482 °F)</td>
</tr>
<tr>
<td>Density</td>
<td>&gt; 0.008 g/cm³ (0.0003 lbs/in³)</td>
</tr>
<tr>
<td>Ambient temperature on the housing</td>
<td>-40 ... +80 °C (-40 ... +176 °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 G1½, 1½ NPT, flanges from DN 50, 2&quot;</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>20 ... 253 V AC, 50/60 Hz; 20 ... 72 V DC</td>
</tr>
<tr>
<td>Power consumption</td>
<td>1 ... 8 VA (AC), approximately 1.5 W (DC)</td>
</tr>
<tr>
<td>Switching delay</td>
<td>When being covered: 0.5 s, when being uncovered 1 s</td>
</tr>
<tr>
<td>SIL qualification</td>
<td>Optionally up to SIL2</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. 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 - relay output
1 Potentiometer for switching point adaptation
2 DIL switch for mode adjustment
3 Ground terminal
4 Connection terminals
5 Control lamp

Electrical connection

Wiring plan
1 Relay output
2 Relay output
3 Voltage supply

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

Dimensions

1 Threaded version G1½
2 Threaded version G1½ up to 250 °C

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.