

VEGAPOINT 21

Transistor (PNP/NPN)

Capacitive level switch



Application area

The VEGAPOINT 21 is a capacitive level sensor for level detection of water-based liquids.

Typical applications are overflow and dry run protection. The small sensor can also be used in thin pipelines.

Your benefit

- Simple setup via Bluetooth adjustment
- High plant availability, because wear and maintenance free
- Exact switching function independent of process condition

Function

An alternating electric field is generated at the tip of the measuring electrode. If the sensor is covered with medium, the capacitance of the sensor changes. This change is detected by the electronics and converted into a switching command.

Any buildup is ignored to a certain degree and therefore has no influence on the measurement.

Technical data

| | |
|---|--|
| Output signal | Transistor (PNP/NPN) |
| Process fitting | Thread G $\frac{1}{2}$, G $\frac{3}{4}$, G1, M24 x 1.5 Thread $\frac{1}{2}$ NPT, $\frac{3}{4}$ NPT, 1 NPT Clamp 1", 1 $\frac{1}{2}$ ", 2" Further hygienic fittings |
| Process pressure - Standard version | -1 ... 25 bar/-100 ... 2500 kPa (-14.5 ... 363 psig) |
| Process pressure - Full metal version (stainless steel) | -1 ... 64 bar/-100 ... 6400 kPa (-14.5 ... 928 psig) |
| Process temperature | -40 ... +115 °C (-40 ... +239 °F) |
| Ambient temperature | -40 ... +70 °C (-40 ... +158 °F) |
| Operating voltage | 12 ... 35 V DC |

Materials

The wetted parts of the instrument are made of PEEK and stainless steel 316L. The process seal is made of FKM.

You will find a complete overview of the available materials and seals in the "Configurator" at www.vega.com and "Products".

Housing versions

The housing is made of stainless steel 316L or Valox and is available in protection classes IP66/IP67 and up to IP69.

Electronics versions

The instruments are available in two different electronics versions. Apart from the electronics with transistor output (PNP/NPN), a transistor version with IO-Link output is also available.

Approvals

Worldwide approvals are available for VEGA instruments, e.g. for use in hazardous areas, on ships or in hygienic applications.

The technical data in the respective safety instructions are valid for approved instruments (e.g. with Ex approval). In some cases, these data can differ from the data listed herein.

You can find detailed information on the existing approvals with the appropriate product on our homepage.

Adjustment

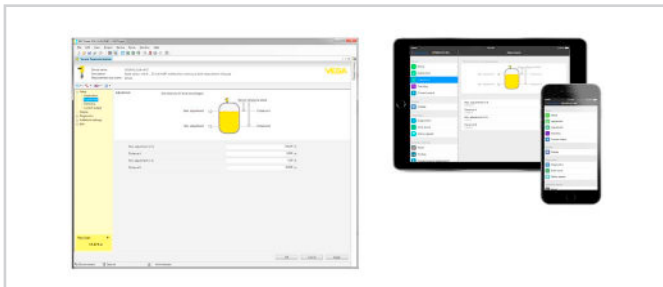
Wireless adjustment via Bluetooth

The Bluetooth version of the device enables wireless connection to smartphones/tablets (iOS/Android) or Windows PCs.



Wireless connection to standard adjustment devices with integrated Bluetooth LE or alternatively Bluetooth USB adapter.

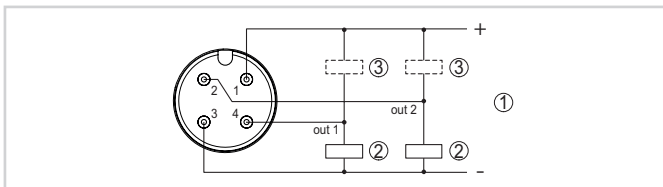
Operation is via a free app from the "Apple App Store", the "Google Play Store" or the "Baidu Store". Alternatively, adjustment can also be carried out via PACTware/DTM and a Windows PC.



Adjustment via PACTware or app

Electrical connection

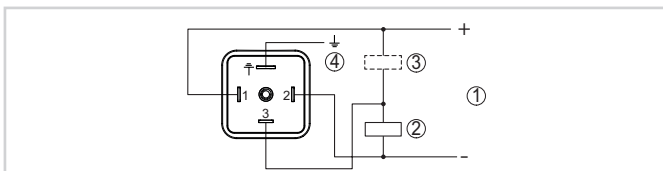
M12 x 1 plug



Wiring plan M12 x 1 plug - Transistor output, three-wire

- 1 Voltage supply
- 2 PNP switching
- 3 NPN switching

Valve plug ISO 4400

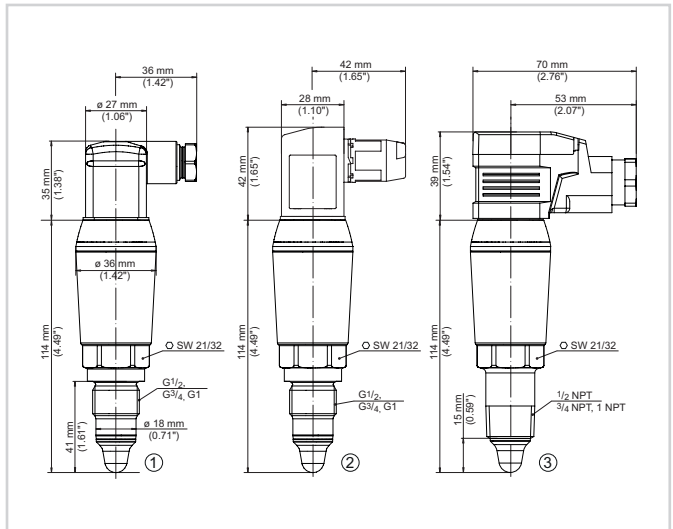


Wiring plan ISO 4400 plug - Transistor output, three-wire

- 1 Voltage supply
- 2 PNP switching
- 3 NPN switching
- 4 PA - Potential equalisation

Details on the electrical connection can be found in the operating instructions of the device in the download area on our homepage.

Dimensions



VEGAPOINT 21, standard version - thread with valve plugs acc. to ISO 4400

- 1 Thread $G\frac{1}{2}$, $G\frac{3}{4}$, $G1$ (DIN ISO 228/1) with ISO 4400 valve plug
- 2 Thread $G\frac{1}{2}$, $G\frac{3}{4}$, $G1$ (DIN ISO 228/1) with ISO 4400 valve plug with IDC method of termination
- 3 Thread $\frac{1}{2}$ NPT, $\frac{3}{4}$ NPT, 1 NPT with ISO 4400 valve plug with hinged cover

Information

You can find further information on the VEGA product line on our homepage.

In the download section of our homepage you'll find operating instructions, product information, industry brochures and approval documents as well as device and adjustment software.

Instrument selection

On our homepage under "Products" you can select the suitable measuring principle and instrument for your application.

There you will also find detailed information on the available device versions.

Contact

You can find your personal contact person at VEGA on our homepage under "Contact".