VEGA

VEGAFLEX 81

Modbus and levelmaster protocol, coax probe

TDR sensor for continuous level and interface measurement of liquids

Application area

With VEGAFLEX 81 you can measure all kinds of liquids essentially maintenance free. The sensor delivers precise and reliable measured values even in applications with steam, buildup, foam generation or condensation. VEGAFLEX 81 is a truly cost-effective level and interface sensor for your measuring task.

Your benefit

- The guided adjustment enables a simple, time-saving and reliable setup
- Comprehensive diagnosis options ensure maintenance-friendly operation and thus high plant availability
- Shortenable probes allow simple standardization and maximum flexibility in planning

Function

High frequency microwave pulses are coupled onto a cable or rod and guided along the probe. The pulse is reflected by the product surface. The time from emission to reception of the signals is proportional to the level in the vessel.

Technical data

Measuring range	
− Coax probe	up to 6 m (19.69 ft)
Measuring accuracy	± 2 mm
Process fitting	Thread from G¾, ¾ NPT, flanges from DN 25, 1"
Process pressure	-1 … +40 bar/-100 … +4000 kPa (-14.5 … +580 psig)
Process temperature	-40 … +200 °C (-40 … +392 °F)
Ambient, storage and transport temperature	-40 … +80 °C (-40 … +176 °F)
Operating voltage	8 … 30 V DC

Materials

The wetted parts of the instrument are made of stainless steel. The instrument seal is made either of FKM, FFKM or EPDM.
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 as single chamber or double chamber version in plastic, stainless steel or aluminium.
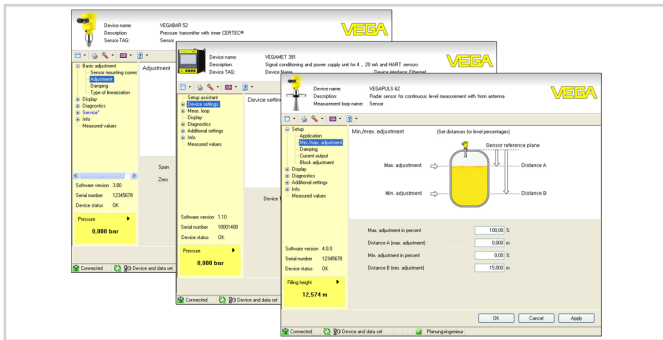They are available with protection ratings up to IP 68 (1 bar).

Electronics versions

The instruments are available in different electronics versions.
Apart from 4 … 20 mA/HART in two and four-wire version, there are also digital versions with Profibus PA, Foundation Fieldbus and Modbus protocols. Another HART version is available with integrated accumulator.
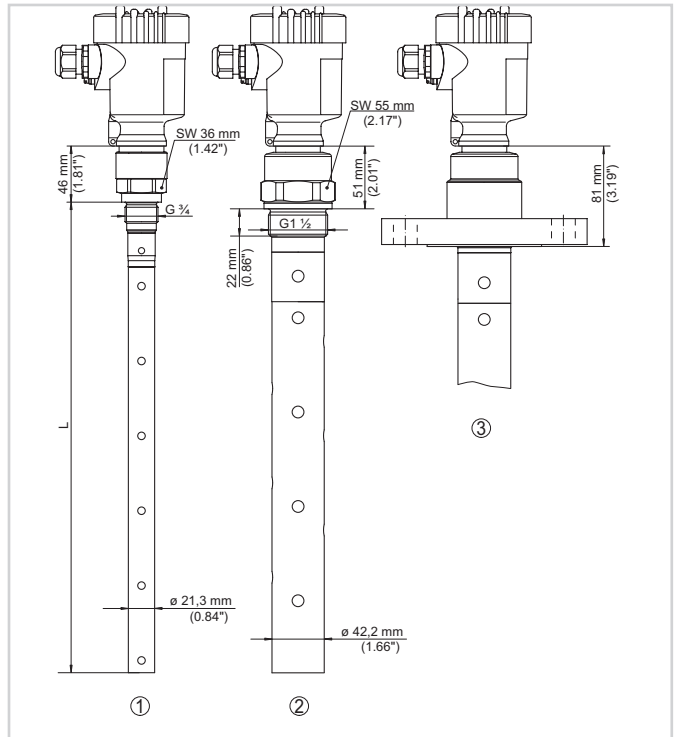
Approvals

The instruments are suitable for use in hazardous areas and are approved e.g. according to ATEX and IEC. The instruments also have various ship approvals such as e.g. GL, LRS or ABS.
You can find detailed information at www.vega.com/downloads and "*Approvals*".

Operation

The adjustment of the instrument is carried out via the optional display and adjustment module PLICSCOM or via a PC with the adjustment software PACTware and respective DTM. An alternative adjustment possibility is the manufacturer-specific adjustment program PDM.
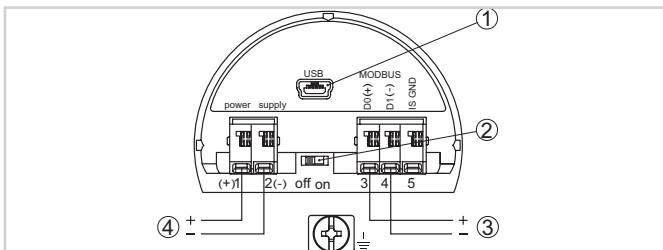

Electrical connection

Terminal compartment

1 *USB interface*
2 *Slide switch for integrated termination resistor (120 Ω)*
3 *Modbus signal*
4 *Voltage supply*

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

Dimensions

VEGAFLEX 81

1 *Coaxial version ø 21.3 mm (0.839 in)*
2 *Coaxial version ø 42.2 mm (1.661 in)*
3 *Flange version*

Information

You can find further information about the VEGA product line on www.vega.com.
In the download section at www.vega.com/downloads you'll find operating instructions, product information, brochures, approval documents, instrument drawings and much, much more.
There, you will also find GSD and EDD files for Profibus PA systems as well as DD and CFF files for Foundation Fieldbus systems.

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.