

VEGAFLEX 81

4 ... 20 mA/HART - four-wire, 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 G $\frac{3}{4}$, $\frac{3}{4}$ 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	
– Version for low voltage	9.6 ... 48 V DC, 20 ... 42 V AC, 50/60 Hz
– Version for mains voltage	90 ... 253 V AC, 50/60 Hz

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 double chamber version in plastic, stainless steel or Aluminium. They are available in protection class IP 66/ IP 67.

Electronics versions

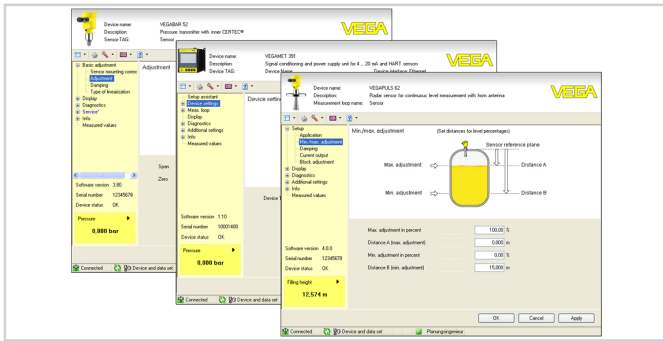
The instruments are available in different electronics versions. Apart from the two-wire electronics with 4 ... 20 mA/HART, a four-wire version and two purely digital versions with Profibus PA and Foundation Fieldbus are available.

Approvals

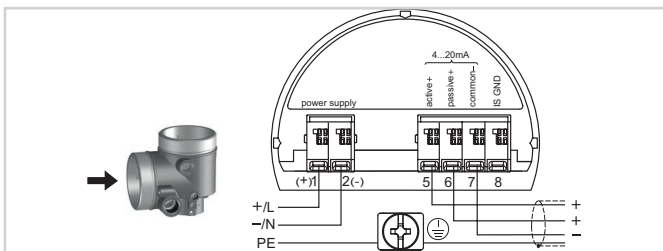
The instruments are suitable for use in hazardous areas and are approved e.g. according to ATEX and IEC. The instruments also have various ship approvals such as e.g. GL, LRS or ABS. You can find detailed information at www.vega.com/downloads and "Approvals".

Operation

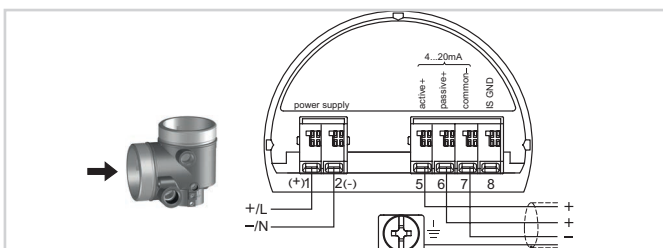
The adjustment of the instrument is carried out via the optional display and adjustment module PLICSCOM or via a PC with the adjustment software PACTware and corresponding DTM. Further adjustment options are available via HART communicator as well as manufacturer-specific programs such as AMS™ or PDM.



Electrical connection



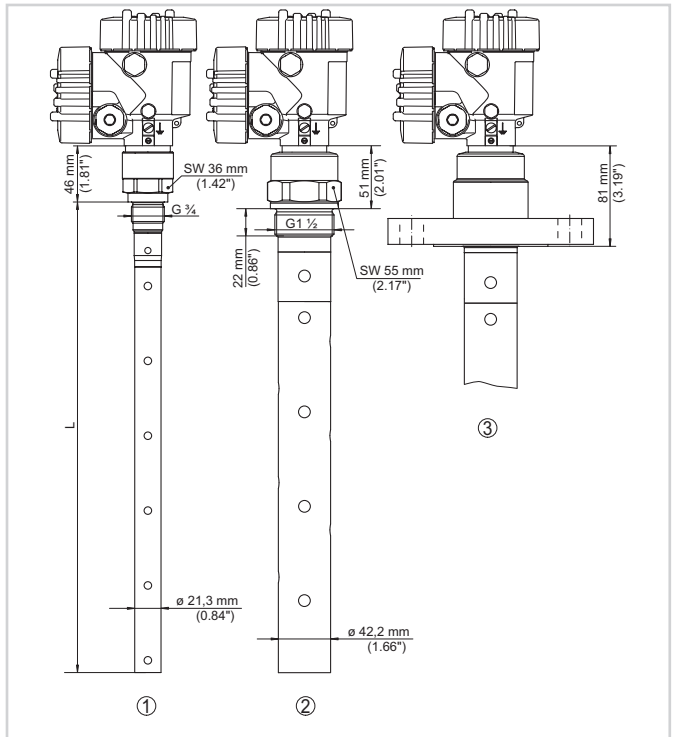
Connection compartment with double chamber housing - mains voltage



Connection compartment with double chamber housing - low voltage

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

Dimensions



VEGAFLEX 81

- 1 Coaxial version \varnothing 21.1 mm (0.831 in)
- 2 Coaxial version \varnothing 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.