

## VEGAFLEX 86

Modbus and levelmaster protocol, rod and cable probe

-20 ... +250 °C

TDR sensor for continuous level and interface measurement of liquids and bulk solids



### Application area

With VEGAFLEX 86 you can measure virtually all kinds of bulk solids and liquids, also under extreme pressure and temperature conditions essentially maintenance free. The sensor delivers precise and reliable measured values even in applications with buildup, foam generation or condensation. In saturated steam applications, the special reference probe ensures a density-independent measurement. VEGAFLEX 86 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 allow maintenance-free 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	
– Cable probe	up to 75 m (246.1 ft)
– Rod 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 ... +100 bar/-100 ... +10000 kPa (-14.5 ... +1450 psig)
Process temperature	-20 ... +250 °C (-4 ... +482 °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 either made from FFKM or graphite. You will find a complete overview of the available materials and seals in the "configurator" on our homepage at [www.vega.com/configurator](http://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

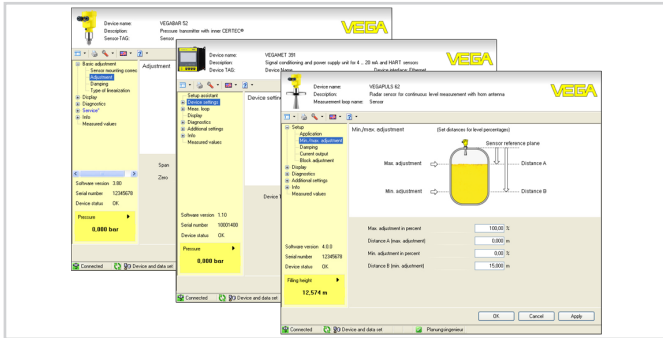
The instruments are available in different electronics versions. Apart from the two-wire electronics with 4 ... 20 mA/HART, a four-wire version and two purely digital versions with Profibus PA and Foundation Fieldbus are available.

### Approvals

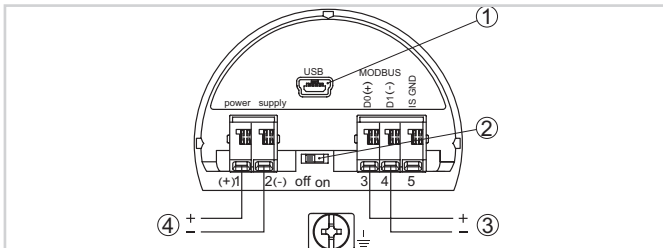
The instruments are suitable for use in hazardous areas and are approved e.g. according to ATEX and IEC. The instruments also have various ship approvals such as e.g. GL, LRS or ABS. You can find detailed information at [www.vega.com/downloads](http://www.vega.com/downloads) and "Approvals".

## 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

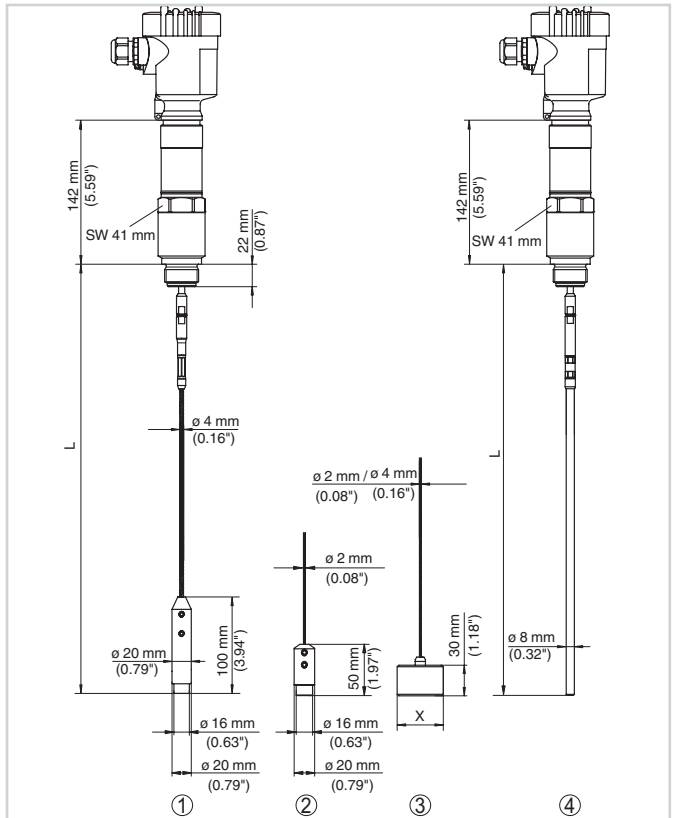


Terminal compartment

- 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](http://www.vega.com/downloads).

## Dimensions



VEGAFLEX 86 - threaded version (-20 ... +250 °C)

- L Sensor length
- 1 Cable version ø 4 mm (0.157 in) with gravity weight
- 2 Cable version ø 2 mm (0.079 in) with gravity weight
- 3 Cable version with centering weight
- 4 Rod version

## Information

You can find further information about the VEGA product line on [www.vega.com](http://www.vega.com). In the download section at [www.vega.com/downloads](http://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](http://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](http://www.vega.com/configurator) and "VEGA Tools".

## Contact

You can find the VEGA agency serving your area on our homepage [www.vega.com](http://www.vega.com).