# **VEGAFLEX 83**

## 4 ... 20 mA/HART - four-wire, polished rod probe TDR sensor for continuous level and interface measurement of liquids



### **Application area**

With VEGAFLEX 83 you can measure aggressive liquids or liquid media with highest hygienic requirements essentially maintenance free. The sensor delivers precise and reliable measured values even in applications with steam, buildup, foam generation or condensation. VEGAFLEX 83 is a truly cost-effective and perfectly adapted solution for your measuring task.

#### Your benefit

- The guided adjustment enables a simple, time-saving and reliable setup
- The gap-free hygienic design ensures simplest and reliable cleanability
- · The maintenance-free operation increases the efficiency of the plant

#### 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.

| nent of liquids                                |   |
|--|---|
| Technical data                                 |   |
| Measuring range<br>– Rod probe - polished      | up to 4 m (13.12 ft)                              |
| Measuring accuracy                             | ± 2 mm  |
| Process fitting                                | Flanges from DN 25, 1", hygienic connec-<br>tions |
| Process pressure                               | -1 +16 bar/-100 +1600 kPa<br>(-14.5 +232 psig)    |
| Process temperature                            | -40 +150 °C (-40 +302 °F)                         |
| Ambient, storage and transport temperature     | -40 +80 °C (-40 +176 °F)                          |
| Operating voltage<br>- Version for low voltage | 9.6 48 V DC, 20 42 V AC, 50/60 Hz                 |

age

- 9.6 ... 48 V DC, 20 ... 42 V AC, 50/60 Hz
- Version for mains volt- 90 ... 253 V AC, 50/60 Hz

#### Materials

The wetted parts of the instrument are made of PA and 316L (1.4435). 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

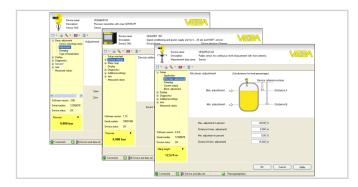
The instruments are suitable for use in hazardous areas and are approved e.g. according to ATEX and IEC. The instruments also have various ship approvals such as e.g. GL, LRS or ABS. You can find detailed information at www.vega.com/downloads and "Approvals".



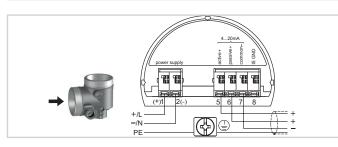
#### Operation

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 manufacturerspecific programs such as AMS<sup>™</sup> or PDM.

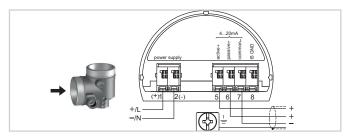




#### **Electrical connection**

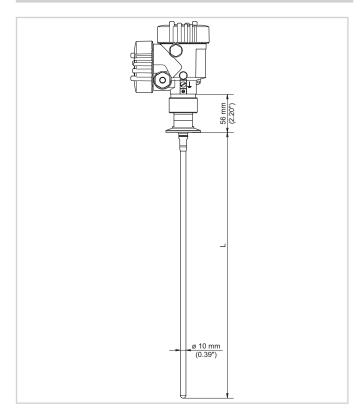


Connection compartment with double chamber housing - mains voltage



Connection compartment with double chamber housing - low voltage You can find details on electrical connection in the instrument operating instructions at <u>www.vega.com/downloads</u>.

#### Dimensions



#### VEGAFLEX 83

1 Rod version, polished with Clamp

#### Information

You can find further information about the VEGA product line on <u>www.</u> <u>vega.com</u>.

In the download section at <u>www.vega.com/downloads</u> 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 <u>www.vega.com/finder</u> 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 <u>www.vega.com/configurator</u> and "*VEGA Tools*".

#### Contact

You can find the VEGA agency serving your area on our homepage www.vega.com.