



## Steam generation under hygienic conditions

### Reliable

Reliable measurement independent of the process conditions

### Cost effective

Optimal plant operation

### User friendly

Simple mounting and setup

The application Steam sterilization processes are always used in industry to sterilize solid objects: clothing, device components, filters, parts of production equipment, etc. Telstar, one of the largest engineering companies in Spain, specializes in pharmaceutical production systems and biotechnology. The company develops and produces equipment to the highest standards, and also provides extensive customer support. The steam generators used in the systems separate out the contaminants contained in the process water and produce pure, high-quality steam. The container or the expansion chamber have the form of a column. A heat exchanger heats or evaporates the water inside. This mechanical configuration generates the so-called thermosiphon effect and allows simple, efficient control of steam generation. The column is basically an energy storage device, which, thanks to its water reserves, ensures a constant production flow even at peak times.



### VEGAFLEX 83

#### The solution

The strict hygienic regulations on pure steam generators and steam autoclaves make continuous operation necessary. Reliable detection of the level of the process water is thus very important for proper functioning.

Telstar relies on VEGAFLEX 83 for precise level measurement in the steam generator. The TDR sensor detects the level of the process water in the bypass tube of the steam generator. The analogue level data are adapted to the various switching points and level alarms via the control system (HMI).

Unlike float gauges or magnetic measuring systems, guided radar requires no additional components and does not have to be mechanically adjusted.

Compared to float solutions, VEGAFLEX offers crucial advantages, especially in media with fast changing levels.

#### User benefits

- Universal application – independent of process pressure and temperature
- Compliance with the strict hygiene requirements
- High plant availability thanks to reliable measurement data
- Cost savings through multiple, freely definable switching Points





## VEGAFLEX 83

### Measuring range - Distance

32 m

### Process temperature

-40 ... 150 °C

### Process pressure

-1 ... 16 bar

### Accuracy

± 2 mm

### Version

Rod ø 10 mm, PFA-coated

Exchangeable rod ø 8 mm, polished

Exchangeable rod ø 8 mm, electropolished

Exchangeable rod ø 8 mm, electropolished, can be autoclaved

Cable ø 4 mm with gravity weight, PFA-coated

### Materials, wetted parts

PFA

316L

TFM-PTFE

### Flange connection

≥ DN25, ≥ 1"

### Hygienic fittings

Clamp ≥ 2", DN50 - DIN32676, ISO2852

Clamp ≥ 3", DN65 - DIN32676, ISO2852

Slotted nut ≥ 1½", ≥ DN40 - DIN 11851

Slotted nut ≥ 2", DN50 - DIN 11851

Varivent ≥ DN25

Hygienic flange connection ≥ DN50 DIN11864-2

Swagelok VCR screwing

Hygienic socket. ≥ DN33 – DIN 11864-3

Safety ingold

### Seal material

EPDM

FKM

FEPM

### Housing material

Plastic

Aluminium

Stainless steel (precision casting)

Stainless steel (electropolished)