

#### Reliable

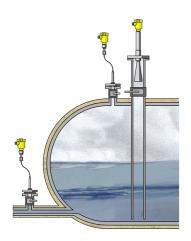
Highly overload-resistant measuring systems

#### **Cost effective**

Accurate level measurement for optimal utilization of the container volumes

#### **User friendly**

Easy instrument selection: one sensor version fits all tank sizes



### Expansion tank in a thermal solar plant

# Level and pressure measurement of heat transfer fluid(HTF) in expansion tanks

The solar heat captured in the mirror system of a thermal solar plant is transported via a heat transfer fluid (HTF) to the steam generator at the central turbine. The HTF normally has a temperature between 300 °C and 400 °C. There are different containers for the fluid across the plant and the varying temperatures cause volume changes to the HTF that need to be accurately measured to operate the plant safely and profitably.

#### More details



#### **VEGAPULS 6X**

Non-contact level measurement with radar in the expansion vessel for heat transfer fluid

- Reliable function, even at high temperatures
- High-resistance materials guarantee long service life
- Wear-free operation ensured through non-contact measuring method

#### **Show Product**



#### **VEGABAR 81**

Pressure measurement in the thermal solar plant pipeline systems

- Highly resistant to overloading due to pressure surges
- Long service life thanks to seal-free measuring cells
- Wear and maintenance-free due to high-resistance diaphragm materials

**Show Product** 



# **VEGAPULS 6X Show Product**



Measuring range - Distance

120 m

Process temperature

-196 ... 450 °C

Process pressure

-1 ... 160 bar

Accuracy

± 1 mm

Frequency

6 GHz 26 GHz

80 GHz

Beam angle

≥ 3°

Materials, wetted parts

PTFE

PVDF

316L PP

PEEK

Threaded connection

 $\geq$  G<sup>3</sup>/<sub>4</sub>,  $\geq$  <sup>3</sup>/<sub>4</sub> NPT

Flange connection

≥ DN20, ≥ ¾"

Hygenic fittings

Clamp  $\geq 1\frac{1}{2}$ " - DIN32676, ISO2852

Slotted nut ≥ 2", DN50 - DIN 11851

Varivent ≥ DN25

hygienic fitting with tension flange DN32

hygienic fitting F40 with compression nut

Hygienic screw connections  $\geq$  DN50 tube ø53 -

DIN11864-1-A

Hygienice flange connection ≥ DN50 DIN11864-2

Hygienic clamp connection  $\geq$  DN50 pipe Ø53 - DIN11864-

3-A

DRD connection ø 65 mm

SMS 1145 DN51

### **VEGABAR 81**

**Show Product** 



Measuring range - Distance

-

Measuring range - Pressure

-1 ... 1000 bar

Process temperature

-90 ... 400 °C

Process pressure

-1 ... 1000 bar

Accuracy

0.2 % 0.1 %

Materials, wetted parts

Alloy C22 (2.4602)

Alloy 400 (2.4360)

Tantalum

Alloy C276 (2.4819)

Duplex (1.4462)

Titanium Grade 2 (3.7035)

1.4435

316/316L

Titanium Grade 7 (3.7235)

Threaded connection

≥ G½, ≥ ½ NPT

Flange connection

≥ DN25, ≥ 1"

Hygenic fittings

Clamp ≥ 1" - DIN32676, ISO2852

Slotted nut  $\geq 1\frac{1}{2}$ ",  $\geq$  DN40 - DIN 11851

hygienic fitting with tension flange  $\ensuremath{\mathsf{DN32}}$ 

hygienic fitting F40 with compression nut

Hygienice flange connection ≥ DN50 DIN11864-2

Hygienic fittings ≥ DN40 - DIN11864-1-A

Seal material

no media contact

