

#### Reliable

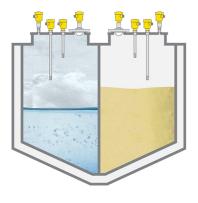
Precise measurement regardless of the medium

#### Cost effective

Multi-sensor flange reduces costs in planning and commissioning

#### **User friendly**

Simple installation of the radar, pressure and high level alarm sensors in one multi-sensor flange



### Cargo tank

# Measurement of level, point level and pressure in the cargo tanks on board

The levels in storage tanks, especially those on board chemical tankers must be continuously measured. This is especially important to monitor during loading and unloading operations, because of strict safety and environmental requirements. Any overfilling or product discharge on deck or into the sea could have devastating consequences for human life as well as the wider environment. Also, to prevent damage to the tanks caused via external temperature fluctuations, or overpressure and underpressure created by charging and discharging procedures, the internal tank pressures require continuous monitoring.

#### More details



#### **VEGAPULS 6X**

Radar sensor for continuous level measurement in cargo tanks

- Independent of medium properties, temperature, pressure or gas overlay
- $\blacksquare \ \, \mathsf{PTFE}\text{-}\mathsf{protected}, \, \mathsf{front}\text{-}\mathsf{flush} \, \, \mathsf{antenna}\text{: optimal chemical resistance even in aggressive media}$
- Measurement all the way to the tank bottom, also in media with low dielectric constant
- Strong focusing of the radar beam allows accurate measurement even in tanks with heating coils

#### **Show Product**



#### **VEGABAR 82**

Pressure transmitter for monitoring gas pressure in the cargo tank

- Precise measurement of the internal tank pressure by capacitive CERTEC® ceramic measuring cell
- Capacitive ceramic CERTEC® measuring cell offers excellent chemical resistance even in aggressive media

### **Show Product**



#### **VEGASWING 63**

Vibrating level switch for high alarm (95 %) and high-high alarm (98 %)

- Robust sensor in alloy or stainless steel, resistant to aggressive media
- Test key on instrument allows fast and secure verification of function
- Exact switch point even with changing media optimises tank capacity

**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

≥ G¾, ≥ ¾ NPT

Flange connection

≥ DN20, ≥ ¾"

Hygenic fittings

Clamp ≥ 1½" - 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 ≥ DN50 tube ø53 -

DIN11864-1-A

Hygienice flange connection ≥ DN50 DIN11864-2

Hygienic clamp connection ≥ DN50 pipe Ø53 - DIN11864-

3-A

DRD connection ø 65 mm

SMS 1145 DN51

VEGABAR 82

**Show Product** 



Measuring range - Distance

-

Measuring range - Pressure

-1 ... 100 bar

Process temperature

-40 ... 150 °C

Process pressure

-1 ... 100 bar

Accuracy

0.05 %

Materials, wetted parts

PVDF

316L

Alloy C22 (2.4602)

PP

1.4057

1.4410

Alloy C276 (2.4819)

Duplex (1.4462)

Titanium Grade 2 (3.7035)

Threaded connection

≥ G½, ≥ ½ NPT

Flange connection

≥ DN15, ≥ ½"

Hygenic fittings

Clamp ≥ 1" - DIN32676, ISO2852

Slotted nut ≥ DN25 - DIN 11851

hygienic fitting with tension flange DN32

hygienic fitting F40 with compression nut

DRD connection ø 65 mm

SMS 1145 DN51

SMS DN38

Swagelok VCR screwing

Varivent G125

Varivent N50-40

for NEUMO BioControl D50 PN16 / 316L

Seal material

EPDM

FKM FFKM VEGASWING 63

**Show Product** 



Process temperature

-50 ... 250 °C

Process pressure

-1 ... 64 bar

Version

Standard

Hygienic applications

with gas-tight leadthrough

with tube extension

with temperature adapter

Materials, wetted parts

PFA

316L

Alloy C22 (2.4602)

Alloy 400 (2.4360)

ECTFE

Enamel

Threaded connection

≥ G3/4, ≥ 3/4 NPT

Flange connection

≥ DN25, ≥ 1"

Hygenic fittings

Clamp ≥ 1" - DIN32676, ISO2852 Slotted nut ≥ 1½", ≥ DN40 - DIN 11851

Varivent ≥ DN25

hygienic fitting F40 with compression nut

SMS 1145 DN51

SMS DN38

Hygienic fittings ≥ DN25 - DIN11864-1-A

Hygienic flange connection DIN11864-2-A;

DN60(ISO)ø60,3

SMS socket piece DN38 PN6

Seal material

no media contact

Housing material

Plastic

Aluminium

Stainless steel (precision casting)

Stainless steel (electropolished)

Protection rating

IP66/IP67

IP66/IP68 (1 bar)

IP65

