



**Reliable**

Reliable and safe measurement in all media

**Cost effective**

Full utilization of the tank volume

**User friendly**

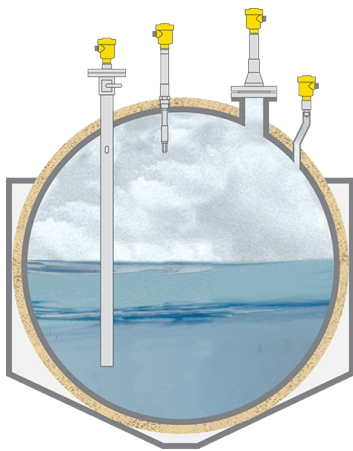
Simple planning and commissioning

## Cargo tanks on LNG carriers

### Pressure, level and point level detection in Liquefied Natural Gas (LNG) applications

Liquefied gas is transported in insulated cargo tanks on LNG carriers at temperatures of  $-162\text{ }^{\circ}\text{C}$ . The instrumentation used must be specially designed for these extreme temperatures. Pressure, level and point level of LNG in the cargo tanks must be reliably measured for the transport.

[More details](#)



#### VEGAPULS 6X

Radar sensor for non-contact level measurement in LNG tanks

- Front-flush PTFE antenna means no additional sealing material is required
- Reliable measurement even at very low temperatures down to  $-200\text{ }^{\circ}\text{C}$
- Exact measurement data despite low relative permittivity of the liquefied gas

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#### VEGABAR 82

Pressure transmitter for monitoring the pressure in the liquid gas tank

- High plant availability through maximum overload resistance of the ceramic measuring cell
- A special seal material and the dry measuring cell enable measurement at temperatures down to  $-50\text{ }^{\circ}\text{C}$

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#### VEGASWING 66

Vibrating level switch for point level detection in liquid gas tank

- Sensor for applications down to a temperature of  $-196\text{ }^{\circ}\text{C}$
- Switching point independent of changing media
- Reliable even with adhesive buildup


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PRO
<b>VEGAPULS 6X</b> <a href="#">Show Product</a>

<b>Measuring range - Distance</b> 120 m
<b>Process temperature</b> -196 ... 450 °C
<b>Process pressure</b> -1 ... 160 bar
<b>Accuracy</b> ± 1 mm
<b>Frequency</b> 6 GHz 26 GHz 80 GHz
<b>Beam angle</b> ≥ 3°
<b>Materials, wetted parts</b> PTFE PVDF 316L PP PEEK
<b>Threaded connection</b> ≥ G¾, ≥ ¾ NPT
<b>Flange connection</b> ≥ DN20, ≥ ¾"
<b>Hygienic fittings</b> 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 Hygienic flange connection ≥ DN50 DIN11864-2 Hygienic clamp connection ≥ DN50 pipe Ø53 - DIN11864-3-A DRD connection ø 65 mm SMS 1145 DN51

PRO
<b>VEGABAR 82</b> <a href="#">Show Product</a>

<b>Measuring range - Distance</b> -
<b>Measuring range - Pressure</b> -1 ... 100 bar
<b>Process temperature</b> -40 ... 150 °C
<b>Process pressure</b> -1 ... 100 bar
<b>Accuracy</b> 0.05 %
<b>Materials, wetted parts</b> PVDF 316L Alloy C22 (2.4602) PP 1.4057 1.4410 Alloy C276 (2.4819) Duplex (1.4462) Titanium Grade 2 (3.7035)
<b>Threaded connection</b> ≥ G½, ≥ ½ NPT
<b>Flange connection</b> ≥ DN15, ≥ ½"
<b>Hygienic fittings</b> 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
<b>Seal material</b> EPDM FKM FFKM

PRO
<b>VEGASWING 66</b> <a href="#">Show Product</a>

<b>Process temperature</b> -196 ... 450 °C
<b>Process pressure</b> -1 ... 160 bar
<b>Version</b> Compact version with gas-tight leadthrough with tube extension
<b>Materials, wetted parts</b> 316L Alloy C22 (2.4602) Inconel 718
<b>Threaded connection</b> G1, 1 NPT, R1
<b>Flange connection</b> ≥ DN50, ≥ 2"
<b>Seal material</b> no media contact
<b>Housing material</b> Plastic Aluminium Stainless steel (precision casting) Stainless steel (electropolished)
<b>Protection rating</b> IP66/IP67 IP66/IP68 (1 bar) IP65
<b>Output</b> Relay (DPDT) Transistor (NPN/PNP) Two-wire