Reliable

Reliable measurement even with oxygen and hydrogen gasses

Cost effective

Precise measuring results for efficient regulation of the process

User friendly

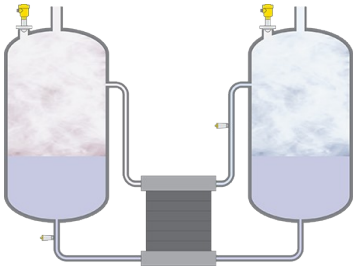
Direct installation in small tanks with internal structures

PEM electrolyser

Level and pressure measurement in the PEM electrolyser

In the electrolyser, renewable energy is used to split water (H2O) into its individual components hydrogen (H) and oxygen (O). Green hydrogen is thus produced in a CO2-free cycle. The PEM electrolyser, uses a proton exchange membrane that is continuously flushed with ultrapure water. An electrical potential causes protons to migrate through the membrane. Hydrogen is produced on the cathode side and oxygen on the anode side. On the oxygen side, level measurement is used to regulate the ultrapure water. On the hydrogen side, it monitors the excess water. The pressure sensors monitor the pressure in the feed line on the oxygen side and in the discharge line on the hydrogen side.

More details



VEGABAR 28

Pressure measurement in the inlet and outlet of the PEM electrolyser

- Reliable measurement of hydrogen and oxygen
- Simple setup and commissioning via Bluetooth
- Resistance to internal ignition in oxygen applications available as per 'BAM assessment'

Show Product

VEGAPULS 6X

Level measurement with radar for regulation of water quantities

- Reliable measurement thanks to non-contact measuring principle
- High plant availability, because sensor is wear and maintenance free
- Sensor version for high-purity oxygen applications (EIGA 33/18 and ASTM G93) also available

Show Product

BASIC

VEGABAR 28

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Measuring range - Pressure
-1 ... 60 bar

Process temperature
-40 ... 130 °C

Accuracy
0.3 %

Materials, wetted parts
PVDF
Duplex (1.4462)
Ceramic
316/316L

Threaded connection
≥ G½, ≥ ½ NPT

Hygenic fittings
Clamp ≥ 2", DN50 - DIN32676, ISO2852
Clamp ≥ 1" - DIN32676, ISO2852
Clamp ≥ 1½" - DIN32676, ISO2852
Slotted nut ≥ DN25 - DIN 11851
Slotted nut ≥ DN32 - DIN 11851
SMS 1145 DN51
SMS DN38
Hygienic fittings ≥ DN25 - DIN11864-1-A
Hygienic fittings ≥ DN40 - DIN11864-1-A
Varivent N50-40
SMS DN25
Ingold connection PN10
Varivent F25

Seal material
EPDM
FKM
FFKM

Protection rating
IP65
IP68 (0,5 bar)/IP69

Output
4 … 20 mA
Three-wire (PNP/NPN, 4 … 20 mA)
IO-Link

Ambient temperature
-40 ... 70 °C

PRO

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