Reliable

Reliable measurement resistant to highly-corrosive potash lye

Cost effective

Precise level and pressure measurement for efficient output regulation

User friendly

Direct installation in the tank or in a bypass tube

Alkaline electrolyser (AEL)

Level and pressure measurement in the alkaline electrolyser

In the electrolyser, renewable energy is used to split water (H_2O) into its individual components hydrogen (H) and oxygen (O). Green hydrogen is thus produced in a CO_2-free cycle. In the alkaline electrolyser, potash lye acts as the electrolyte, which is not consumed in the process. Oxygen is produced as a by-product. Level measurement is used to regulate both the concentration of electrolyte and the inflow of water. Highly resistant pressure sensors are used to monitor the overpressure in the two electrolyte tanks, as well as the differential pressure between the two tanks.

More details
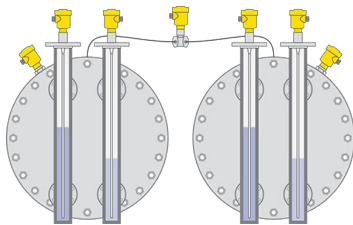
VEGAFLEX 83

Level measurement with guided radar for regulating the electrolyte level and the water intake

- Reliable measurement, even with small measuring ranges
- High resistance to aggressive potash lye
- Sensor version for high-purity oxygen applications (EIGA 33/18 and ASTM G93) also available

Show Product

VEGABAR 82

Pressure sensor for pressure monitoring in an electrolyte tank

- Long-term stability on pressure measurement up to 100 bar
- Highly resistant process fittings of PVDF or PEEK
- Reliable pressure monitoring via oil-free ceramic measuring cell

Show Product

VEGADIF 85

Differential pressure measurement between the two electrolyte tanks

- Suitable for oxygen and hydrogen
- Optional gold coating of the diaphragm reduces diffusion
- Output of differential as well as static pressure through a second current output

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VEGAFLEX 83 — Show Product

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"

Hygenic 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
Hygienice flange connection ≥ DN50 DIN11864-2
Swagelok VCR screwing
Hygienic collar clamp ≥ DN33 - DIN 11864-3
Safety ingold

Seal material
EPDM
FKM
FEPM

Housing material
Plastic
Aluminium
Stainless steel (precision casting)
Stainless steel (electropolished)

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

VEGADIF 85 — Show Product

Measuring range - Pressure
-40 ... 40 bar

Process temperature
-40 ... 105 °C

Process pressure
-1 ... 400 bar

Accuracy
0.065 %

Materials, wetted parts
316L
Tantalum
Alloy C276 (2.4819)
Monel

Threaded connection
¼ - 18 NPT

Flange connection
≥ DN32, ≥ 1⅜"

Seal material
EPDM
FKM
Copper

Housing material
Plastic
Aluminium
Stainless steel (precision casting)
Stainless steel (electropolished)

Protection rating
IP66/IP68 (0,2 bar)
IP66/IP67
IP66/IP68 (1 bar)