



**Reliable**

The measuring systems protect against mechanical overload, thereby ensuring smooth, trouble-free operation

**Cost effective**

Enabling smoother continuous production guarantees economical operation

**User friendly**

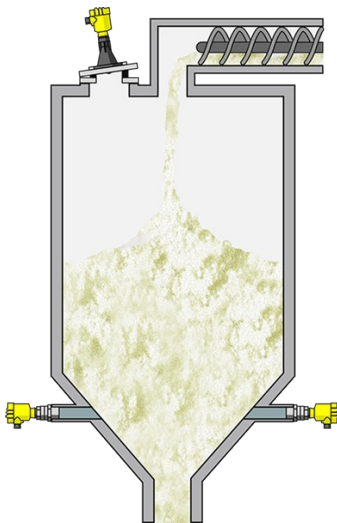
In case of extreme dust build up on the sensor, automatic cleaning can be enabled via the air purge connections on the sensor

## Buffer silo for raw materials in the ethanol plant

### Level measurement and point level detection in buffer silos

In order to always have enough material available for downstream processes in the ethanol plant, the crushed raw materials are held ready to use in buffer silos. The ground-up grain 'flour' for the production of ethanol is transported directly from the mill into a silo, where it is temporarily stored. The vast material throughput can lead to extreme mechanical loading of the silos and the associated equipment and high levels of dust are generated in the process. Level sensors are deployed to optimise the throughput, reduce overloading and ensure continuous, economical production and operation of the plant.

[More details](#)



**VEGAPULS 6X**

Non-contact level measurement with radar in the buffer silo

- No wear on the sensor thanks to non-contact measurement
- Reliable measurement despite intense dust generation
- Lower costs due to simple, fast installation and commissioning

[Show Product](#)



**VEGAMIP 61**

Point level detection with microwave barrier in the buffer silo

- No mechanical wear thanks to non-contact measurement
- Simple mounting with different mechanical options
- Maintenance-free operation and simple adjustment

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PRO

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"

**Hygienic 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

Hygienic flange connection ≥ DN50 DIN11864-2

Hygienic clamp connection ≥ DN50 pipe Ø53 - DIN11864-  
3-A

DRD connection ø 65 mm

SMS 1145 DN51

**VEGAMIP 61**[Show Product](#)**Measuring range - Distance**

100 m

**Process temperature**

-40 ... 80 °C

**Process pressure**

-1 ... 4 bar

**Version**

hygienically encapsulated horn antenna

for separate horn antenna

with horn antenna ø 40 mm

with horn antenna ø 48 mm

with horn antenna ø 75 mm

with horn antenna ø 95 mm

with plastic horn antenna ø 80 mm

Horn antenna ø 1½"

with encapsulated horn antenna

**Materials, wetted parts**

PTFE

316L

1.4848

PP

**Threaded connection**

G1½, 1½ NPT

**Flange connection**

≥ DN50, ≥ 2"

**Hygienic fittings**

Slotted nut ≥ 2", DN50 - DIN 11851

Varivent ≥ DN25

DRD connection ø 65 mm

for NEUMO BioControl D50 PN16 / 316L

**Seal material**

FKM

FFKM

**Housing material**

Plastic

Aluminium

Stainless steel (precision casting)

Stainless steel (electropolished)