Appliance information

The Vibro level indicators are indicating the filling level as a limit switch in silos and containers.

any mounting position

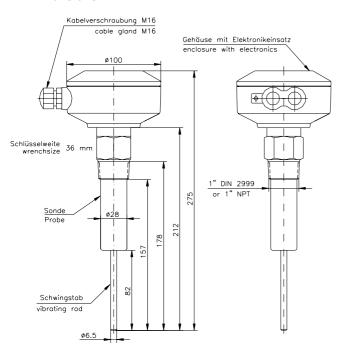
Use

The VF06 vibrating limit switch is used for indicating the level in silos and containers, which are filled with bulk goods resp. granules.

Due to the compact design and little internal length the VF06 is especially well qualified for use in small containers and vessels or hoppers and everywhere limited mounting space is dedecated.

A typical application is e.g. the use of two VF06 as full- and empty indicator in small dosing hoppers.

Dimensions



Function

The electronics of the **VF06** excites the vibrating rod to vibrate on its resonance frequency of approx. 460 Hz.

If material covers the vibrating rod, the vibration will be attenuated. This is sensed by the electronics and it will actuate a relay.

If the filling level sinks, the vibrating rod will swing on its resonance frequency again and the relay will switch back.

Technical Data

Materials

housing

Aluminium

Process connection and probe

1.4301 stainless steel

Process connection

G1 DIN 2999 or 1" NPT

Ambient temperature

-20 °C ... +60 °C

Bulk goods temperature Option E1 -20 °C ... +80 °C -20 °C ... +150 °C

max. process pressure

Supply voltage (multivoltage)

20 ... 250 V AC / DC

Power consumption

3 VA

Signal contact (relay) change-over contact, potentialfree

Capacity of the contact Response delay

attenuation

1 second

5 A / 250 V AC

start of vibration

2 up to 5 seconds

min. density of material Cable entry

0,05 kg/l

cable gland M16

Type of protection

IP 66 acc. to DIN EN 60529

Maintenance

Option

none

max. load upon the

80 N

R1

end of the vibrating rod

Minimum-/Maximum alarm

The VF06 can be used as maximum or minimum switch.

The way of function is adjusted by jumpers on the circuit board.

The status of the relay is shown at the circuit board by a red LED, corresponding to the drawings adjacent.

Minimum alarm L (Failsafe low)

The relay is deenergized (position NC, red LED off), when the filling level is as low as the probe is not covered with material and it is vibrating freely or it's a failure of the supply voltage.

Maximum alarm H (Failsafe high)

The relay is deenergized (position NC, red LED off), when the filling level is as high as the probe is covered with material or it is a failure of the supply voltage.

Maximum alarm H Minimum alarm L LED LED relay contact NC COM