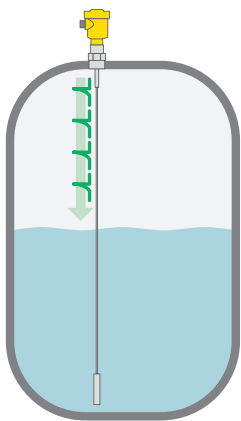


Level I Guided Wave Radar



Measurement of level and interface with guided wave radar (GWR)

In level measurement with guided wave radar, microwave pulses are conducted along a cable or rod probe and reflected by the product surface. The measuring probe of the TDR sensor ensures that the signal reaches the medium undisturbed. Liquids, bulk solids and separation layers (interfaces) in liquids are commonly measured with this measuring technique.

The advantages

- ✓ Measurement operates independently of noise, pressure or temperature fluctuations and is completely unaffected by changes in density, foaming, steam or dust
- ✓ Buildup on the probe or on the container wall hardly affects the measurement
- ✓ Menu-driven adjustment allows simple, fast and confident setup

PRO

VEGAFLEX 81



PRO

VEGAFLEX 82



Application	All kind of liquids, applications with steam, buildup, foam generation, condensation as well as ammonia
Measuring range	Cable probe up to 75 m of 316 or Alloy C22 or Duplex Rod probe up to 6 m of 316L, Alloy C22, Alloy C276, Duplex, 304L or Alloy 400 Coax probe up to 6 m of 316L, Alloy C22 or 304L
Version	Exchangeable cable (ø 2 mm, ø 4 mm) Exchangeable rod (ø 8 mm, ø 12 mm) Coax (ø 21.3 mm, ø 42.2 mm)
Process fitting	Thread from G $\frac{3}{4}$, $\frac{3}{4}$ NPT, flanges from DN 25, 1"
Process temperature	-60 ... +200 °C
Process pressure	-1 ... +40 bar (-100 ... +4000 kPa)
Accuracy	±2 mm
Signal output	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus, Modbus
Display/adjustment	PLICSCOM, PACTware/DTM, VEGADIS 81, VEGADIS 82, VEGA Tools app
Approvals	ATEX, UKEX, IECEx, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, FDA, INMETRO, NEPSI, KOSHA, CCOE
Benefit	✓ Unaffected by temperature, pressure and dust generation

Application	For light to heavy-weight bulk solids of all kinds, applications with strong dust generation, condensation or buildup
Measuring range	Cable probe up to 75 m of 316 or 316 PA coated Rod probe up to 6 m of 316L or Alloy C22
Version	Exchangeable cable (ø 4 mm, ø 6 mm, ø 11 mm) Exchangeable rod (ø 16 mm)
Process fitting	Thread from G $\frac{3}{4}$, $\frac{3}{4}$ NPT, flanges from DN 25, 1"
Process temperature	-40 ... +200 °C
Process pressure	-1 ... +40 bar (-100 ... +4000 kPa)
Accuracy	±2 mm
Signal output	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus, Modbus
Display/adjustment	PLICSCOM, PACTware/DTM, VEGADIS 81, VEGADIS 82, VEGA Tools app
Approvals	ATEX, UKEX, IECEx, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, INMETRO, NEPSI, KOSHA, CCOE

Level I Guided Wave Radar

PRO

VEGAFLEX 83



PRO

VEGAFLEX 86



Application	Aggressive liquids or liquid media with stringent hygienic requirements, applications with steam, buildup, foam generation or condensation	Virtually all liquids under extreme pressure and temperature conditions, applications with buildup, foam generation or condensation
Measuring range	Cable probe up to 32 m of PFA Rod probe up to 4 m of PFA or 1.4435 (BN)	Cable probe up to 75 m of 316 or Alloy C22 Rod probe up to 6 m of 316L, Alloy C22, Duplex or Alloy C276 Coax probe up to 6 m of 316L or Alloy C22
Version	Cable (ø 4 mm) Rod (ø 8 mm, ø 10 mm)	Exchangeable cable (ø 2 mm, ø 4 mm) Exchangeable rod (ø 8 mm, ø 16 mm) Coax (ø 21.3 mm, ø 42.2 mm)
Process fitting	Flanges from DN 25, 1", hygienic fittings, clamp, slotted nut	Thread from G $\frac{3}{4}$, $\frac{3}{4}$ NPT, flanges from DN 25, 1"
Process temperature	-40 ... +150 °C	-196 ... +450 °C
Process pressure	-1 ... +16 bar (-100 ... +1600 kPa)	-1 ... +400 bar (-100 ... +40000 kPa)
Accuracy	±2 mm	±2 mm
Signal output	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus, Modbus	4 ... 20 mA/HART, Profibus PA, Foundation Fieldbus, Modbus
Display/adjustment	PLICSCOM, PACTware/DTM, VEGADIS 81, VEGADIS 82, VEGA Tools app	PLICSCOM, PACTware/DTM, VEGADIS 81, VEGADIS 82, VEGA Tools app
Approvals	ATEX, UKEX, IECEx, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2, EHEDG, 3-A, FDA, INMETRO, NEPSI, KOSHA, CCOE	ATEX, UKEX, IECEx, FM, CSA, EAC (GOST), UKR Sepro, steam boiler, Overfill protection, Ship, SIL2, INMETRO, NEPSI, KOSHA, CCOE
Benefit	✓ Gap-free hygienic design ensures good cleanability with simple methods	✓ Comprehensive diagnostic options guarantee low-maintenance operation and thus high plant availability

