

OHMART VEGA



**VEGAPULS
& VEGASON
Series 50**

**Pulse Radar
and Ultrasonic
Level**

Series 50 Features & Benefits

Loop Power/2-Wire

All models except long range ultrasonic (VEGASON 54) are available in loop power/2-wire configuration.

Intrinsic Safety

When used through proper barriers, the Series 50 meets intrinsically safe requirements for all classes, divisions and groups. (Long range ultrasonic [VEGASON 54] not available intrinsically safe)



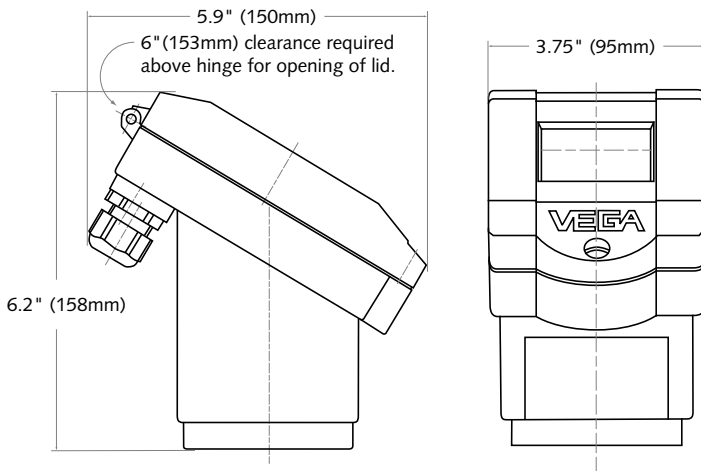
Remote display housing

Integral or Remote Display

LCD display features large characters and bar graph for high visibility. Maximum distance with remote version is 80 ft. (25m) while still maintaining intrinsically safe design.

Compact Design & Low Weight

Miniature electronics allows full capabilities in a housing constructed of UV stabilized plastic. Without flanges, radar units weigh approximately 3 lbs. (1.4kg) and ultrasonic units weigh 5 lbs. (2.3 kg).



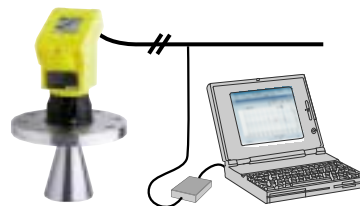
Programming Options

• Minicom® Module



Push-button LCD module allows menu driven programming at the instrument. The single Minicom® module is removable and can be used on multiple instruments. Module can be mounted directly on instrument or in remote display housing.

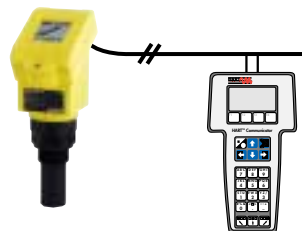
• PC/Laptop With EchoFox® 50



For maximum capabilities in more difficult applications, a streamlined version of EchoFox® software is available. This software is used

by connecting a Laptop/PC (using a VEGACONNECT 2) to the 4 to 20mA line. This software allows the user to see obstructions and other false echoes, ensuring tracking of the actual level.

• HART® Hand Held Terminal



Programming available via HART® Hand Held Terminal #275 without a special Device Description (DD) required.

VEGAPULS Series 50 Pulse Radar Transmitters

The VEGAPULS Series 50 Radar Transmitter is available in three models for varying application types and mounting connections.



VEGAPULS 81

For applications that are extremely difficult, the high performance VEGAPULS 81 Series is available. See full VEGAPULS brochure for detailed information.

VEGAPULS 52

- 1½" NPT mounting.
- 2- or 4-wire operation.
- 66 ft. range.
- Maximum pressure: 45 psig.
- PTFE (Teflon®) rod waveguide with PVDF (Kynar®) mounting fitting.
- All parts exposed to process PTFE (Teflon®) or PVDF (Kynar®).
- Process temperature: -40°F (-40°C) to +266°F (+130°C).

VEGAPULS 53

- 2" flange and larger.
- 2- or 4-wire operation.
- 66 ft. range.
- PTFE (Teflon®) rod waveguide with PTFE (Teflon®) flange facing.
- All parts exposed to process PTFE (Teflon®).
- Process temperature: -40°F (-40°C) to +302°F (+150°C).

VEGAPULS 54

- 2" & 3" flange mounting for stilling well applications.
- 4" & 6" flange mounting for stilling well or through air applications.
- 2- or 4-wire operation.
- 66 ft. range in calm or mildly agitated liquids.
- PTFE (Teflon®) antenna housing with 316TI flange and cone waveguide.
- Process temperature: -40°F (-40°C) to +302°F (+150°C).

VEGAPULS 50 Common Specifications

- Housing:** UV stabilized plastic; designed to meet NEMA 4X
- Accuracy:** ±0.1% of span.
- Power:** 2-wire: 20-36VDC; 4-wire: 20-250VAC maximum consumption 0.2 Watts
- Output:** 4 to 20mA, 500 Ohm load; or digital to VEGAMET/VEGALOG
- Temperature:** Housing -4°F (-20°C) to +140°F (+60°C)
- Rating:** Designed for intrinsic safety: all classes, divisions and groups when used with appropriate barriers. Meets Division II specification barriers.

VEGAPULS Series 50 Application Benefits

VEGAPULS 50

With its lower cost, 2-wire operation and compact design, the VEGAPULS Series 50 allows proven radar level technology to replace many existing level systems with significant benefits.

DP Cells

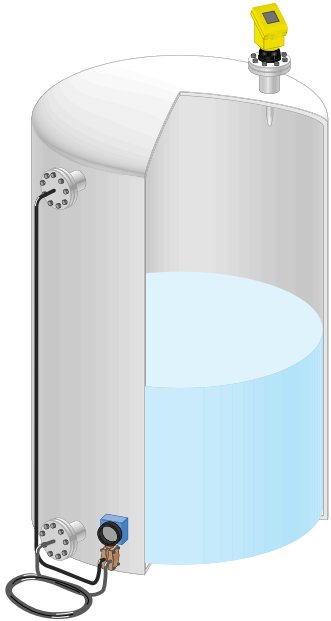
Eliminate Valve Manifolds

- No multiple leak paths below liquid surface.

Eliminates Remote Seals With Fill Fluids

- No leak paths at diaphragm below liquid surface.
- No problems of cracking and outgassing in vacuum service.
- Greater reliability while lowering maintenance associated with remote seals.

No Error In Level Output Due To Specific Gravity Shifts Or Temperature Shifts



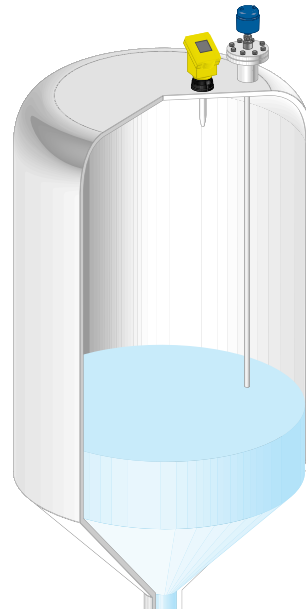
RF Capacitance & Admittance

No Contacting Element

- Eliminates fouling of probe.
- Eliminates errors from viscous and adhesive buildup.

No Errors Due To Dielectric Constant Shift

Calibration Does Not Require Actual Level Change In Vessel



Ultrasonic Transmitters

No Errors Due To:

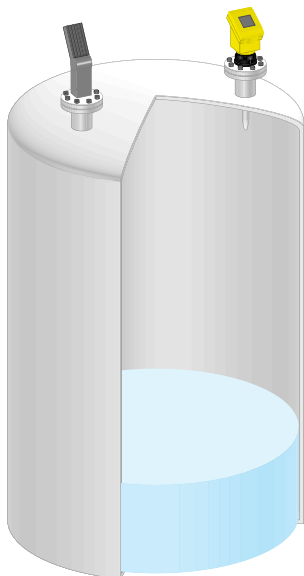
- Gas and vapors off liquid.
- Vacuum and pressure shifts.
- Temperature changes and gradients.

No Near Zone (unsensed area) In Front Of Sensor

- Able to measure level to the end of instrument.

Higher Temperature Rating Than Standard Ultrasonics

No Problems In Measurement Due to Air Turbulence And Filling Noise.



Magnetostriuctive & Other Float Gauges

Non Contact

- Eliminates corrosion of contacting elements.
- Able to install in agitated services without any anchoring of an intrusive element.

No Moving Parts

- No float mechanism to wear or bind.

Ease Of Installation (Especially Taller Vessels)

- No long element to lower through vessel top.

VEGASON Series 50 Ultrasonic Transmitters

The VEGASON Series 50 Ultrasonic Transmitter is available in three models for varying application ranges:

VEGASON 51

- 1½" NPT mounting (1½" flange & larger).
- Intrinsic Safety available.
- 2- or 4-wire operation.
- 13 ft. range in calm or mildly agitated liquids.
- 6 ft. range in reflective solids with little or no dust.
- PVDF (Kynar®) sensor material.

VEGASON 52

- 2" NPT mounting (2" flange and larger).
- Intrinsic Safety available.
- 2- or 4-wire operation.
- 23 ft. range in calm or mildly agitated liquids.
- 11 ft. range in reflective solids with little or no dust.
- PVDF (Kynar®) sensor material.

VEGASON 53

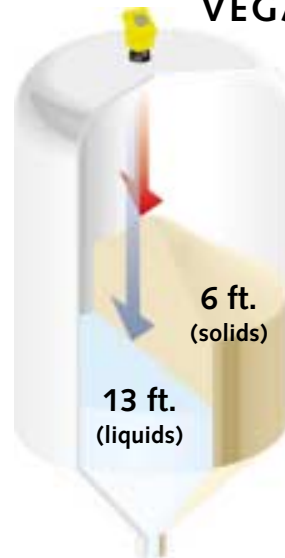
- 4" flange or clamp mounting.
- Intrinsic Safety not available.
- 4-wire operation (2-wire VBUS only).
- 49 ft. range in calm or mildly agitated liquids.
- 23 ft. range in reflective solids with minor dust and turbulence allowable.
- PVDF (Kynar®) sensor material with 320 stainless steel facing.

Any ultrasonic sensor requires attention to off-gassing of product, turbulence, vacuum, pressure and dusting within the application.

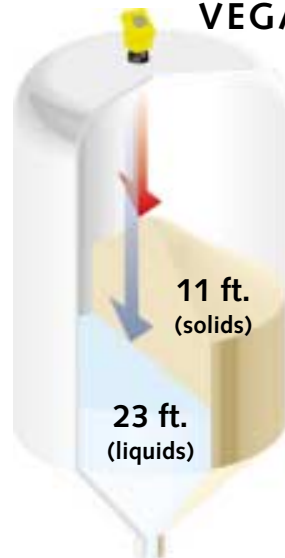
VEGASON 50 Common Specifications

- Housing:** UV stabilized plastic: designed to meet NEMA 4X
- Accuracy:** ±0.1% of span.
- Power:** 2-wire: 20-36VDC; 4-wire: 20-250VAC
maximum consumption 0.2 Watts
- Output:** 4 to 20mA, 500 Ohm load; or digital to VEGAMET/VEGALOG
- Temperature:** Process -40°F (-40°C) to +176°F (+80°C)
Housing -4°F (-20°C) to +140°F (+60°C)
- Pressure:** Atmospheric to 30 psig
- Rating:** Designed for intrinsic safety; all classes, divisions and groups when used with appropriate barriers.

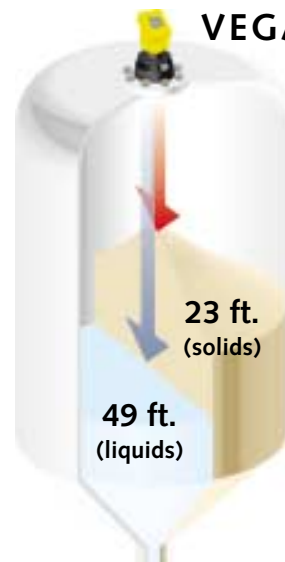
VEGASON 51



VEGASON 52



VEGASON 53

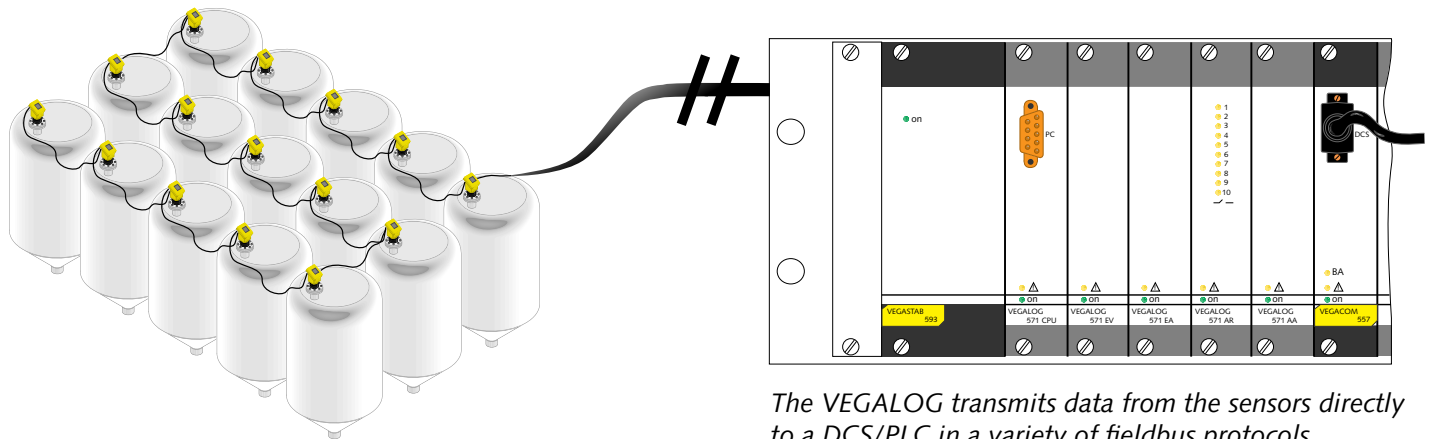


Electronics Configuration & Specifications

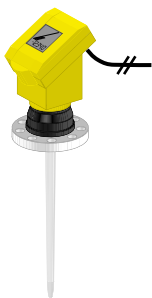
VBUS Digital Output To VEGALOG or VEGAMET

Power and digital signal are both carried over a single 2-wire line to a maximum of 15 gauges (maximum of 5 for intrinsic safety) from the VEGALOG. A single VEGALOG system is able to connect up to 255 instruments

(radar, ultrasonic and others) on multiple loops. The VEGALOG provides digital output in a variety of Fieldbus protocols or multiple 4 to 20mA outputs. Programming by PC/Laptop using a VEGACONNECT 2™.

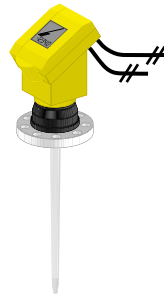


The VEGALOG transmits data from the sensors directly to a DCS/PLC in a variety of fieldbus protocols.



Loop Powered/2-Wire

20-30VDC power and 4 to 20mA signal carried by 2-wire loop. Appropriate barrier used for intrinsically safe operation. Division 2 specifications met without barriers. Programming via HART® hand-held, Minicom™ in housing or VEGACONNECT 2™ using a PC or laptop.



Line Powered/4-Wire

20-36VDC or 90-250VAC power used with independent 4 to 20mA output. Meets Division 2 specifications. Programming via HART® hand-held, Minicom™ in the housing or a VEGACONNECT 2™ using a PC or laptop.

Nuclear • Radar • Ultrasonic • Hydrostatic • Vibration • Nuclear Interface • Ultrasonic Gap • RF Capacitance • Microwave Barrier • Electromechanical • Weigh Scale • Density



大连爱克新仪器有限公司

www.actionio.com.cn

辽宁省大连市中山区七七街23号海鹰大厦403室

电话: (0411)82650498 传真: (0411)82650478

Email: Sales@actionio.com.cn Support@actionio.com.cn



The Leader In Radar Level Technology

4241 Allendorf Drive
Cincinnati, Ohio 45209
USA

(800) FOR LEVEL [800 367-5383] Toll Free
(513) 272-0133 Fax

<http://www.ohmartvega.com> URL

Kynar® is a registered trademark of Elf Atochem North America, Inc.
Teflon® is a registered trademark of E.I. DuPont, Inc.
HART® is a registered trademark of HART Communication Foundation