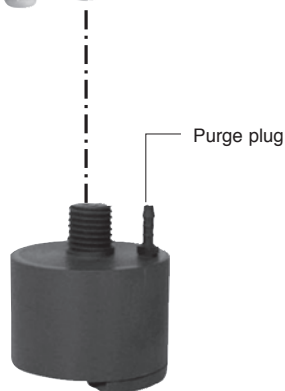


Continuous measuring of sludge level MUDSENS



- Ultrasonic sensor
- Level monitoring of sludge in sedimentation tank
- Advanced software, innovative algorithm
- Output signal 4-20 mA: representative image of sludge level
- Auto-cleaning with self-purge by compressed air
- Friendly using menu

PRINCIPLE

MUDSENS monitors sedimentation of biological solids in tanks up to 12 metres deep.

The ultrasonic detection combines with the advanced algorithm allows detection of interface between water and sludge, discarding the effects of existing suspended particles, as well as effect of increasing turbidity alga growth or electric interferences.

APPLICATIONS

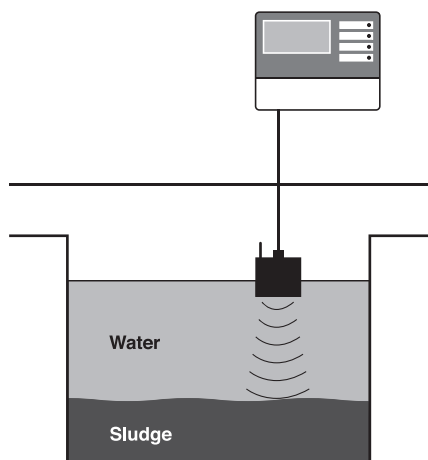
- Primary sludge basin
- Clarifiers
- Storage tanks, isolated plants
- Sludge level monitoring
- Telemetry options for lagoons and ponds monitoring

INSTALLATION

The ultrasonic sensor is immersed just below the surface of the supernatant pointing directly towards the bottom of the tank. Operator just captures the tank depth on the monitor. The system calibrates itself and sends the 4-20 mA signal proportional to sludge level.

Cleaning: According to the application, particles, algae, etc. exist during the process and could affect efficiency of measuring signal by sticking on the sensor. For minimizing incidence of fouling interference an auto-cleaning accessory with self-purge by compressed air is available in option and controlled by the monitor.

The friendly using menu allows a quick configuration with alarm signal for sensor default and high sludge level.



CODES NUMBERS AND REFERENCES

Code	Reference	Designation
599 200	MUDSENS	Sludge level monitoring system
599 250	Stainless steel MUDSENS probe holder	Immersion probe holder

BAMO MESURES

22, Rue de la Voie des Bans - Z.I. de la Gare - 95100 ARGENTEUIL
 Tél : (+33) 01 30 25 83 20 - Web : www.bamo.fr
 Fax : (+33) 01 34 10 16 05 - E-mail : info@bamo.fr

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TECHNICAL FEATURES

OPERATING CONDITIONS

Sensor: Ultrasonic sensor, immersed probe for sludge level measurement
Range: 0.7 to 12 m depth

MEASURING FEATURES

Accuracy: ± 0.03 m
Resolution: 0.003 m
Response time: Adjustable
Sensor output signal: Digital, 32 bits (specific monitor input necessary)
Main power supply: 115/ 230 V AC

MONITOR OUTPUTS

Analogue output: 4-20 mA, 750 Ohm, directly proportional to distance of sludge blanket
ON/OFF: 4 contacts NO; 5 A - 230 V AC
2 contacts to configure on site; 1 contact for cleaning purge; 1 contact for defective sensor alarm

CONFIGURATION

User interface: Keyboard, 3 keys, LCD display, friendly using menu
Backscattered signal: Diagram printed on LCD display
Safety: Keyword access to programme
Data: EEPROM

MONITOR FEATURES

Ambient temperature: -20 ... +60 °C
Housing: Polycarbonate, inflammable class PL94-5V
Protection: IP65, external mounting
Cable connections: 1 x M12; 1 x PG19; 5 x M20
Dimensions: 280 x 219 x 156 mm
Weight: 1.4 kg approx.

SENSOR FEATURES

Cable length: 10 m long (extra length on request; 35 m as a maximum)
Cable specification: Shielded coaxial cable
Ambient temperature: -20 ... +60 °C
Dimensions: \varnothing 50 mm, height 75 mm
Fitting: 1" NPT thread, male
Protection: IP68, PVC housing
Measuring angle: 6°
Pulses: Ultrasonic at 12 MHz
Auto-cleaning: Socket to fit air compressed hose
Purge frequency: Adjustable from 1 to 720 min
Cleaning compressed air: up to 3 bar

MOUNTING ACCESSORIES:

As a standard assembly we supply a probe holder with a 3 m long tube (\varnothing 43 mm) with all parts in Stainless steel 1.4404 to fit the instrument at correct immersion depth.
On request we manufacture any specific probe holder.

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