

## EMA Signal ES8

### *Sludge sensor*

### Ultrasonic sludge sensor.

- ATEX certified
- Failsafe design

#### Function

Ema Signal type ES8 is an ATEX certified ultrasonic sensor for use to detect sludge, sand or other type of solid material in tanks containing liquids as wastewater tanks etc.

The sensing element consists of a ultrasonic transmitter and a receiver. The unit is transmitting ultrasonic pulses which travels to the receiver, as long as there is only water between the transmitter and the receiver the unit will be able to detect the signal. As soon as the transmission is blocked by solid material the unit will be able to give an alarm via the connected control unit OSA3.

#### Application

The sludge probe is mounted at a suitable height in the tank and connected to the control unit.

The control unit is universal and can be used for both high or low level alarms. The design is failsafe which means that the unit will give alarm for different faults in the sensor connection circuit.

The control unit has one voltage free switching relay output which can be used for lamp connections or pump control etc.



Technology for Environmental Protection  
Measuring. Controlling. Monitoring.

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### Technical specifications:

IS Parameters:	$U_i = 25,0 \text{ V}$ $I_i = 185 \text{ mA}$ $P_i = 1,12 \text{ W}$ $C_i = 704 \text{ nF} + C_c: 338 \text{ pF/m}$ $L_i = L_c: 0,48 \text{ }\mu\text{H/m}$ (Max cable length 300m)	Cable length:	5 m.
		Temperature medium:	0° - +50°C.
		Certificate no ES8:	TÜV 07ATEX553975X II 1 G Ex ia IIA T4 Ga
Dimensions:	160 x 85 x 32 mm (B x H x D).		
Weight:	700 g.		
Protection:	IP68.		

## Accessories

### Electronic Unit type OSA 3

Power supply:	230 VAC.
Relay output:	2 switching/voltage free.
Operating temperature:	0°C - + 40°C.
Protection:	IP65.
Dimensions:	125 x 75 x 75 (B x H x D).
Weight:	0,75 kg.
Certificate no:	SP 11ATEX3644X II (I)G [Ex ia Ga] IIA