

Level by Sound Knowledge



SUMPI LR
ULTRASONIC LEVEL MEASUREMENT



Principle of Operation

The SUMPI LR is an Ultrasonic Level Transmitter capable of measuring liquid and solid applications up to range of 60m. It is available in a single or dual channel mode. The unit is available with 2 x 4-20mA and 5 relay outputs. The system usually comprises of two transducers and a single transmitter. The transducer is fitted to the top of the silo and faced down towards the material being measured. The microprocessor in the Transmitter fires an electronic pulse which the Transducer converts in to an acoustic pulse. This pulse travels to the material and is reflected back from the material. The transducer then converts this energy back into a signal and stops a counter in the microprocessor which then, knowing the speed of sound through air, can accurately determine the distance. The powerful software removes false echos and the electronic filter removes ambient noises.

Display

2 LINE 16 CHARACTER ALPHA DISPLAY

The SUMPI LR comes with a 2 line alpha-numeric display which allows the user to set up the Instrument with ease.



Picture 1 shows the display in the normal run mode. The display shows the Level or Distance. This could be in Meters, Percentage or any Engineering Units (i.e. TON, KG, M3) It also indicates the Relays status.



Picture 2 shows the prompt for the security code. The user must enter this code correctly before any further changes can be made.



Picture 3 shows where a selection can be made. This selection is to set up the SUMPI LR in Meters.



Picture 4 shows the mA output that the SUMPI LR is giving out and the counter, which counts down, to the loss of echo routine.



Picture 5 shows an example of the diagnostic feature being displayed. The user can use this feature when setting up the SUMPI LR. It shows the instant distance, the echo size, the gain used and the output power levels. It also displays if it is receiving a credible echo.

THIS MAKES THE INSTRUMENT "EASI" "EASI" "EASI"

KAB 10 COVERED WITH MATERIAL



With the extremely high powered range of transducers designed for the SUMPI LR, the transducer face is always kept clean by the high energy pulse emitting from the face of the transducer.

With the combination of state of the art electronic transmitters and the high powered and efficient transducers, the SUMPI LR can work on applications unheard of before.

KAB 10 WORKING ON FOAM



With the matched electronics containing state of the art amplifiers and filters the SUMPI LR can work on liquids that may have a layer of foam on the surface.





Specifications

Enclosure
Polycarbonate with clear hinged lid IP65

Power Supply
110Vac or 220Vac +/-15% 50/60 Hz 8VA

Dimensions
213 mm x 185 mm x 118mm

Weight
1.6 kilograms

Temperature range
-30 to 65°C

Output Analogue
2 x 4-20mA Isolated
Maximum Impedance 750 Ohms
16 Bit resolution

Relay Output
5 x SPDT relays with 8 Amps 230 VAC
Contacts. Fully configurable.

Range
Up to 60m depending on transducer.

Accuracy
0.25% with temperature sensor

Local Indication
2 x 16 alphanumeric display

Fail-safe
2mA, 4mA, 20mA, 22mA or last reading

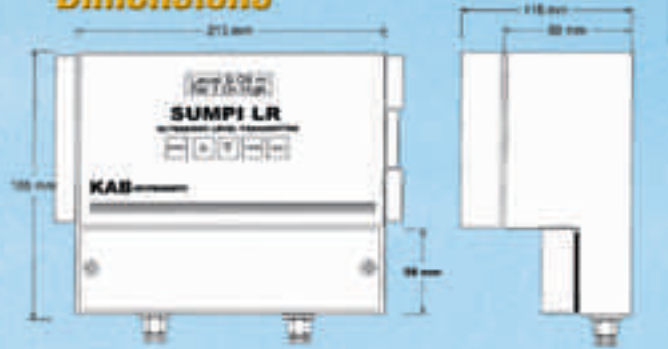
Configuration
5 touch button keys or by KABSCOPE

Blanking distance
0.3m on KAB 10

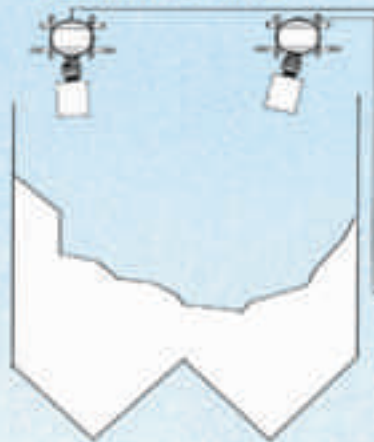
Rate of change
0.1 to 10 m/min

Approvals
CE compliant to EN 50081, EN 50082

Dimensions



Applications



Solids



Outputs to PLC or Control Room

Features

21 point lineariser
Single or dual channel
Plug in terminals
Ease of Installation and Configuration

Options

Aiming Kits
KABSCOPE

Liquids

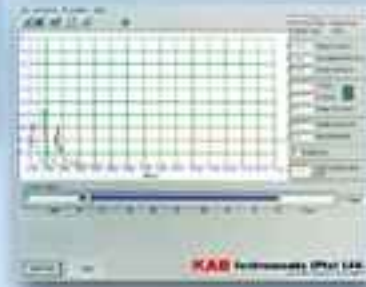


Outputs to PLC or Control Room

With KAB Instruments It's EAZI, EAZI, EAZI. EAZI to install with the aiming kit. EAZI to configure with the menu display. EAZI to fault find with the KABSCOPE.



The SUMPI LR is available with the multi-use windows based software package for programming and bin mapping. This versatile package can help set up a SUMPI LR in seconds.



Aiming kits

It is advisable to purchase an Aiming kit when a SUMPI LR is to be used on any solid application. This helps to position the Transducer correctly to maximise the return echo.



Ordering code

Choose Single or Dual Instrument

Choose KAB 10, KAB20 or KAB60 Transducer

SUMPI LR	D	KAB10
SINGLE		
DUAL		
KAB 10		
KAB 20		
KAB 60		

Transducer Ranges

KAB 10 Liquids 15m Solids 5m	KAB10 T Corrosive Liquids 15m	KAB 20H Powders 30m
KAB10 F Solids 15m	KAB 20 Liquids 30m Solids 30m	KAB 60 Liquids 60m Solids 60m

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