

COMPACT ULTRASONIC LEVEL TRANSMITTER ALIT

LEVEL MEASUREMENT IN SOLIDS and LIQUIDS!

The series is an compact 2-wire series ultrasonic level meter for continuous non-contact level measurement in liquids and solids.

Chemical Storage Tanks

Sewages

Pump Station

Water Tanks, Lakes, Ponds common use

- Level or Distance mode
- 4-20 mA output
- Continuous non-contact level measurement with compact version
- LC Display
- Exproof version
- All metal outer cover (IP67),
airproof and alkali-resisting



Gaktek
Endüstriyel Ekipman ve Enstrümantasyon Ltd.Şti.



RELIABLE MEASUREMENT AND CONTROL

ULTRASONIC LEVEL TRANSMITTER ALIT

GENERAL SPECIFICATIONS

Power Supply:	24 VDC ($\pm 20\%$) 30mA
Display:	4 digit LCD
Display resolution:	For 4-6-8 m; 1 mm- others 1 cm
Accuracy:	% 0.2 F.S (in air)
Output:	4-20 mA, 2 wire, (0-500 ohm), (0-600 ohm Ex model)
Output Accuracy:	% 0.03 F.S
Temperature Range:	-40...+75°C , (LCD: -20...+70°C)
Temp. Compensation:	Otomatic
Pressure Range:	± 1 bar
Measuring Period:	1 s
Configuration:	3 keys
Cable Connection:	PG 13.5
Beam Angle:	For 4-6-8-10-15-20-30 m 8° ,for 20-30 m 5° (3db)
Material:	Electronic Part Housing: ABS, Aluminium
Sensor:	ABS and PVC (Ex. Model St. St. ve PVC)
Protection:	IP 67
Process Connection:	G2" (for 4, 6 and 8m), others M94x2

Measuring Range	ALIT4 : 4m (Liquid)
	ALIT6 : 6m (Liquid)
	ALIT8 : 8m (Liquid)
	ALIT10: 10m (Liquid)
	ALIT12: 12m(Liquid)
	ALIT15: 15m(Liquid)
	ALIT20: 20m(Liquid)
	ALIT30: 30m(Liquid)
	ALIT40: 40m(Liquid)

ALIT8: 3m (Solid)
ALIT10: 4m (Solid)
ALIT12: 5m (Solid)
ALIT15: 6m (Solid)
ALIT20: 10m (Solid)
ALIT30: 15m (Solid)
ALIT40: 20m (Solid)

Blacking list	ALIT4 : 0.20m
	ALIT6 : 0.25m
	ALIT8 : 0.30m
	ALIT10: 0.40m
	ALIT12: 0.45m
	ALIT15: 0.80m
	ALIT20: 0.80m
	ALIT30: 1.20m
	ALIT40: 1.60m

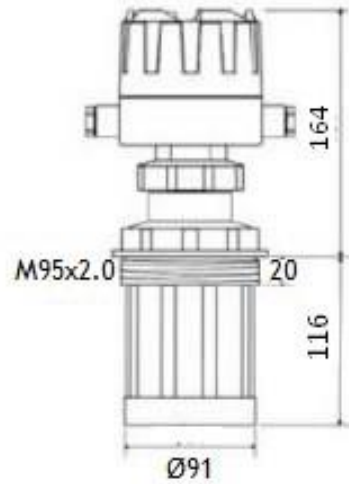
Note: While in solids level measurement, ultrasonic energy is absorbed or scattered by the solid surface and a small amount of ultrasonic signal waves turn back to sensor. Therefore, measurement range of solids is approximately half of fluids. Valid measurement distance in solids depends on installation location, and spacing

Codification:

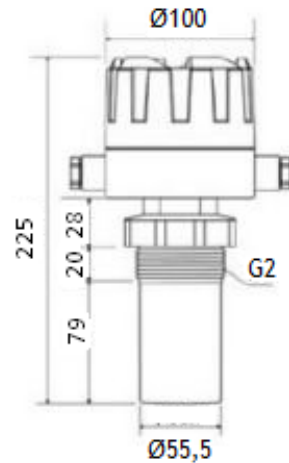
Type	Material	Electrical Connection	Ex-Proof	Measuring Range
ALIT	B: Blue, Window, IP67	T: 2 wire	-	6m, 8m, 12m
	G: green, No Window, IP67		-	
	IF: Cream, No Window, IP67		Exia II, C T6	



Dimensions for 12 m;



Dimensions for 6 and 8 m;



Measuring Principle:

The sensor of the meter pulses in the direction of the product surface. There, they are reflected back and received by the sensor. The meter measures the time t between pulse transmission and reception. The meter uses the time t (and the velocity of sound c) to calculate the distance D between the sensor membrane and the product surface:

$$D = \frac{c \cdot t}{2}$$

As the device knows the empty distance H from a user entry, it can calculate the level as follows:

$$L = H - D$$

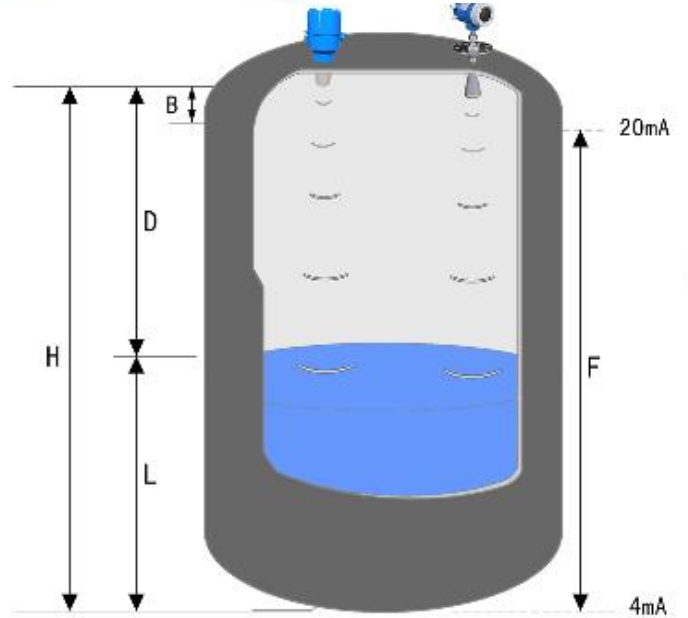
An integrated temperature sensor compensates for changes in the velocity of sound caused by temperature changes.

Calibration:

Calibration Enter the empty distance H and the span F to calibrate the device.

Application:

The series is an compact 2-wire series ultrasonic level meter for continuous non-contact level measurement in liquids and solids. It consists of probe and electronic units, both of which are leak-proof structure. This series can be widely applied to the metallurgical, chemical, electricity and oil industries.



F: level full scale

D: distance value

H: installation height

B: blacking distance

Application Areas:

- Waste Water Treatment Plants
- Potable Water Treatment Plants
- Mining, Pulp and Paper Mills
- Food, Beverage & Industries
- Chemical, Petrochemical Industries
- Pools, Lakes and Dams
- Pump Stations
- Hydro-Electric Power Plants



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