

# SENSOR

TYPE R5

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*Retain these instructions for future use.*



**STANDARD PROBE FOR OVERGROUND TANKS CONTAINING HEATING OIL, DIESEL, PETROL, ETHANOL AND E85.**

- Temperature range -25°C to +50°C
- Probe for electronic level detection
- Probe for overfill prevention

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## Mounting instructions

Version with R 1/2"-thread for mounting in R 1/2"-connector.

### Mounting

In 1/2"-connector on top of tank or on tank lid minimum 350mm from inlet in tank or tank wall. If a connector does not exist use a counter nut and a rubber seal to fixate the probe in the hole directly on the tank lid. When mounted in connected tanks always mount the probe in the tank that is filled first. In a cone shaped tank or in a tank with big tilt the probe have to be mounted in the lowest position or be adjusted downwards accordingly.

### Length

The length of the probe should give 95% filling. The table shows the probe length (L-measure) from thermistor marking to the flange. Minimum length =70 mm. Maximum length 360 mm. The marking of the cutoff-level for the probe can not be higher than 25mm below the ventilation pipe in the tank.

### Length adjustment

When mounting in flange or tank lid increase the L-measure with the height of the flange/tank lid.

## Adjustment

1. Unscrew the adjustment nut on the connector of the probe.
2. Adjust the length to the correct L-measure.
3. Tighten the adjustment nut.

## Mounting

Use teflon tape in the 1/2" connector to ensure that the mounting will be tight.

## Cable

Use 2 x 1,5 mm<sup>2</sup> screened cable f ex Ölflex SY. Cable in ground our when passing house grounds etc cable should be mechanicly protected with a non corrosive material (f ex PVC- or PVDF-pipe). Connection cable is not to be placed in filling- or ventilation pipes.

## At connector

The connector is to be mounted close to the filling point at a suitable height. Cable should be properly protected when put above ground. Cable is to be mounted from below into the connector.

- Black wire to plus-pin - blue wire to minus-pin. Make sure that the connector is properly marked in order to prevent mix-up with other equipment.

## SENSOR TYPE R5

Standard probe for petrol- and oil tanks • Installation instructions



### Testing

Test the sensor using a thermistor tester. When testing in EX-zone tester must be EX-certified.

### Repair

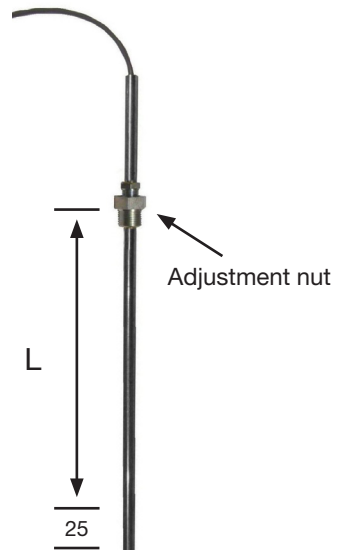
Repair and rebuilding of probe is not allowed since the approval for the probe will not be valid. Replace the probe with a new.

### Installation

During installation and maintenance must respective laws regarding the equipment be observed.

### MOUNTING TABLES

VERTICAL CYL. TANKS		BOX SHAPED OR STANDING CYL. TANKS			
1000	135	1000	105	3600	215
1100	145	1100	105	3700	220
1200	155	1200	105	3800	225
1300	165	1300	105	3900	230
1400	175	1400	105	4000	235
1500	185	1500	110	4100	240
1600	195	1600	115	4200	245
1700	205	1700	120	4300	250
1800	215	1800	125	4400	255
1900	225	1900	130	4500	260
2000	235	2000	135	4600	265
2100	245	2100	140	4700	270
2200	255	2200	145	4800	275
2300	265	2300	150	4900	280
2400	275	2400	155	5000	285
2500	285	2500	160	5100	290
2600	295	2600	165	5200	295
2700	305	2700	170	5300	300
2800	315	2800	175	5400	305
2900	325	2900	180	5500	310
3000	335	3000	185	5600	315
3100	345	3100	190	5700	320
3200	355	3200	195	5800	325
3300	365	3300	200		
		3400	205		
		3500	210		



**Declaration thermistor probe R5**

Declaration of conformity

Thermistor probe type R5

The above name product is considered to be "simple apparatus" according to the ATEX directive (2014/34/EU). The ATEX directive is not applicable to simple components that consists of well defined and simple semiconductor devices.

The probes design is verified according to the requirements of the ATEX-directive

EN 60079-0 (2018)  
EN 60079-11 (2012)

Equipments - General requirements  
Explosive atmospheres - Equipments protected  
by intrinsic safety "i"

Intrinsically Safe Design : II 1 G Ex ia IIB T3

Electrical Parameters : Ci: 1 nF, Li: 10 uH, Ii: 200 mA  
Ui: 30,0 V, Pi: 1,25 W

Operating temperature : -25 to +50° C

Conditions for use : Must be connected to a barrier isolated from earth.  
With electrical parameters not exceeding the maximum  
value of the intrinsically safe output parameters of the  
connected barrier.

Afriso Ema AB declares under our sole responsibility, that the equipment specified  
above conforms to the above mentioned Directives and Standards.

Date: 2021-05-24

Signed:

  
Jonas Ericson Nihlstorp  
CEO

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